

Chapter One

Implementing and Evaluating Systems of Care

Symposium

Changing Complex Systems: Leveraging Change in Systems of Care

Acknowledgements: Case Studies of System Implementation is a five-year research project through the Rehabilitation Research and Training Center on Children's Mental Health in the Department of Child and Families Studies, Louis de La Parte Florida Mental Health Institute, University of South Florida. This study is jointly funded by the National Institute on Disability and Rehabilitation Research, U.S. Department of Education and the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration under grant number H133B040024.

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Symposium Introduction

Sharon Hodges

The systems of care (SOC) concept has been described as an explicit organizational philosophy that is intended to create and provide access to an expanded and coordinated array of community-based services and supports for children with serious emotional disturbance and their families (Stroul, 1993; Stroul & Friedman, 1986). Although SOC's have been found to positively affect the structure, organization and availability of services (Hoagwood, Burns, Kiser, Ringeisen, & Schoenwald, 2001; Rosenblatt, 1998; Stroul, 1993), the implementation of SOC's is significantly challenged by a lack of understanding regarding the factors that contribute to system implementation and how these factors interact to establish well-functioning systems (Hernandez & Hodges, 2003).

This symposium reported initial findings of a five-year study of SOC implementation that is part of the Research and Training Center for Children's Mental Health, titled *Case Studies of System Implementation*. Drawing on the work of Meadows (1999), a leverage points framework was used to explore how systems of care leverage change. Leverage points can be thought of as places within a complex system where relatively small shifts in one aspect of the system affect big changes across the system. The papers presented in this symposium framed SOC's as complex adaptive systems—complex in that they are made up of multiple interconnected elements, and adaptive in that there is action and reaction among these elements over time. The use of applied ethnographic field methods, identification of key points of leverage in SOC implementation, and specific examples of system implementation strategies used by established SOC's are presented in these summaries.

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Systems of Care as Complex Adaptive Systems

Allison Pinto

Introduction

Studies indicate that even with substantial funding and support, many communities have experienced significant difficulties creating and sustaining systems of care (SOCs) for children's mental health (Brannan, Baughman, Reed & Katz-Levy, 2002; Vinson, Brannan, Baughman, Wilce & Gawron, 2001). The consequences of failed efforts are grave; former Surgeon General David Satcher concluded, "Growing numbers of children are suffering needlessly because their emotional, behavioral and developmental needs are not being met by those very institutions which were explicitly created to take care of them" (U.S. Public Health Service, 2000, p.1). Challenges faced by communities seeking to develop SOCs are similar to challenges experienced by a broad range of organizations, industries and sectors in today's world. Many new frameworks and approaches have been proposed in order to understand and address these challenges more effectively (Stacey, 2003), and the concept of complex adaptive systems has been identified as particularly useful in efforts to make sense of and navigate change efforts in a variety of organizations and systems (Lissack, 1999; Olson & Eoyang, 2001; Plsek, 2003; Schultz, 2002). This concept also proves useful when applied to SOCs for children's mental health.

Complex Adaptive Systems (CAS): The Concept

In the past ten years, the organizational development field has begun to use complexity science to research, consult with, and practice in a variety of organizations, systems and sectors (McKelvey, 1999; Stacey, 2003). Complexity theory is helpful because it provides a coherent framework for making sense of organization and systems development occurring in an ever-changing context. As Vaill noted, "Without a theory or model of the organization that is adequate to the situation the organization is in, planned change is always going to be a kind of random jabbing at the system" (Vaill, 2001, p. xxvi).

Complexity science offers an alternative to the more traditional scientific approach used to study and navigate the development of human systems and organizations. In traditional science, systems and organizations are like machines with a set of parts that fit together to produce the whole, and the environment is assumed to be generally stable and predictable. Much attention is focused on detailing action plans and practice guidelines, ensuring quality, adherence and fidelity to these plans and guidelines, and then evaluating whether predicted outcomes were achieved as evidence of success (Olson & Eoyang, 2001). As Olson and Eoyang (2001) note, "When we are operating in the machine paradigm, overspecification of designs or plans seems natural. We need to think of everything and work things out to the finest detail because the machine cannot think for itself" (p. 2).

Consider instead the complexity approach to understanding systems. Complexity theory posits that a system is more like a living organism than like a machine. The whole is more than the sum of its parts, as structures and processes grow together in order to adapt to an ever-changing environment. Using this approach, attention is focused on strategies to facilitate a system's self-organization, coherence, and goodness-of-fit with the local context rather than focusing on mechanistic adjustments. System properties are dynamic rather than static, so systems change efforts are recognized as an ongoing process of facilitation rather than as a set of strategies implemented according to a predetermined plan.

A particularly useful concept that has emerged out of complexity science is that of complex adaptive systems (CAS). A complex adaptive system is understood in terms of the interactions among the agents that comprise the system. Examples of agents include electrons in an atom, plants and animals in a jungle, and human beings in an organization. As the agents in a system interact with one another across time and space, complex patterns of behavior result. Unlike traditional science, which posits that complex effects result from complex causes, complexity science posits that simple causes result in complex effects (Phelan, 2002). Agar (2005) succinctly outlined this shift in logic by describing a CAS in terms of four key characteristics: networks, interdependence, feedback and emergence.

Networks. As agents in a CAS interact, they form connections to one another that result in networks. Networks facilitate the flow of information within the system. Subsystems self-organize and the uniqueness of the system as a whole is reflected in the web of agents and subsystems that exist within it.

Interdependence. Agents who are networked and in relationship mutually influence one another. The same is true for the groups and subsystems they form. As such, complexity science emphasizes that change does not only occur “top down” but also “bottom up” and “every which way.” Agents learn from and are changed by one another.

Feedback. As networked, interdependent agents respond to one another and their environment, feedback processes occur. Through both naturally occurring and intentional feedback loops, conditions and processes can become amplified or muted. Due to feedback, sensitivity to initial conditions can occur, meaning that small changes in initial conditions might lead to major changes in later outcomes, as the impact of the initial changes moves throughout the network and agents change in response. Because it is never possible to recognize all relevant conditions within a system, feedback processes often lead to unpredictable results. As such, planning specific outcomes is difficult, if not impossible, in complex adaptive systems.

Emergence. Evolution occurs within a system as a function of “the dynamic interplay of structure and agency over time” (Agar, 2005). The combined decisions and resulting actions of the various agents, groups and subsystems determine the patterns that form, which in turn affect how agents interact and how future patterns are formed. Through constant, co-evolutionary processes, system coherence is enabled.

Systems of Care as Complex Adaptive Systems

CAS is a useful construct in conceptualizing SOC for children’s mental health. The following examples are presented to illustrate the qualities of CAS as they manifest in SOC.

SOCs are Networked

By definition, a SOC is “a comprehensive spectrum of mental health and other necessary services which are organized into a coordinated network” (Stroul & Friedman, 1994, p. 3). Within a SOC, networks exist at multiple levels. Formal service providers, informal helpers, family members and children are networked in the form of treatment/service planning teams. In community mental health centers professionals from multiple disciplines network to serve families with identified mental health challenges. The SOC as a macro-system is a network of agents from various children-serving sectors such as mental health, child welfare, education, juvenile justice and family advocacy. A SOC network might stretch across a town, a city, a region or a state.

Agents in SOC are Interdependent

In some SOC a panel is set up to review all requests for residential placement before a child is actually removed from his or her home. This is a strategy for reducing the unnecessary institutionalization of children. At review meetings, the SOC panel asks the family to describe their situation and preferences regarding placement options and then facilitates a discussion to brainstorm together and decide upon a plan to address the child and family’s needs. These meetings provide powerful evidence of the interdependence of agents within the SOC. As family members share their personal accounts of the challenges they face, panelists’ responses convey that they recognize and resonate with the difficulties described. The interdependence of the subsystems impacting the family becomes apparent as well: panelists from mental health, education and child welfare describe the ways in which each is constrained in their ability to assist the family due to the expectations and limitations placed upon them by other systems. This process of storytelling facilitates an enriched understanding of the challenges the family and community face, which then leads to the tailoring of an individualized plan for the family as well as the identification of systems-level modifications to prevent other families from experiencing similar challenges in the future. Through this process, families rely upon and elicit support from the community

while the community relies upon and elicits information from families to determine how to expand and refine available services. As such, agents within the SOC are mutually influencing one another.

Feedback Processes Influence SOC Development

In one sense, SOC efforts seek to capitalize on feedback processes inherent in CAS. Communities typically identify several priority populations at the start of the SOC effort and then focus on developing a network of resources and supports for this population. The hope and intention is that as the network grows and the agents who are involved with these children and families mutually influence not only one another but also other agents in the community, then the SOC effort will evolve to meet the needs of all children and families in the community who are experiencing mental health challenges. The hope is that (relatively small) initial changes will ultimately lead to a massive transformation of mental health care in the community.

Sometimes changes have major unanticipated and unintended effects within a SOC. Consider a community in which case managers are introduced in order to ensure that all families receive support in accessing and coordinating services. Once this role is explicitly assigned, therapists and psychiatrists assume that the tasks associated with care coordination are being addressed by the case manager and reduce the emphasis they place on coordinating services when working with families. They decrease contact with one another and assume that the case manager will inform them if there are any issues that need to be addressed. Families begin to perceive their therapists and psychiatrists as less interested in their global well-being and case managers feel frustrated that therapists and psychiatrists do not seem to value domains other than symptom reduction. Case managers and family members develop a pattern of meeting together to discuss psychosocial supports for the family while therapists or psychiatrists and family members develop a pattern of addressing psychosocial skills development and symptom monitoring. Thus, with the addition of case managers, families now receive more fragmented rather than more integrated care. Through naturally occurring feedback processes, a well-intended change within the system has led to an unanticipated negative outcome for families.

Processes Emerge in SOC's

Even if a community has formalized its strategies for SOC development from the start, the SOC will emerge in unpredictable ways. Consider this example: In a community that has been focusing its SOC efforts on the adoption of evidence-based interventions for children with serious emotional disturbance, there is a dramatic increase in the use of methamphetamine. With this increase, more of the child abuse and neglect cases presented before the court relate to parental substance abuse. This increase heightens judges' awareness of the challenges methamphetamine poses for families, so the judges seek resources on the topic at an annual legal system conference. The judges bring these resources back to their community and begin distributing them both to families who come before the court and to professionals in other service sectors with whom they meet in the bi-monthly SOC meeting. These materials prompt a small group of guardian grandparents waiting together in the courthouse lobby to decide to form a local family support group. In the support group caregivers share stories regarding the impact of methamphetamine on their families and the strategies they find useful to cope. Mental health program managers give the materials they received from the judges to clinicians in their agencies, who seek further training on assisting families coping with parental substance abuse, leading to the establishment of a local early intervention program for methamphetamine users. Over time, the rate of methamphetamine use among parents decreases. In this example, families and formal service providers mutually influence one another in response to an emerging substance abuse problem in the community, thereby affecting the evolution of the system.

Implications

As illustrated in the examples presented above, CAS is a useful concept when applied to understanding and developing SOC, with implications for both research and practice. Regarding research, it is helpful to consider methodologies that conceptualize SOC holistically and accommodate their emergent and self-organizing properties. Ethnography has been noted as one such methodology (Agar, 2004a; Agar, 2004b), and will be detailed in the next paper as a means of better understanding the complex adaptive nature of SOC (see Mazza, this symposium). Methods of evaluation that assess a SOC's networking, communication processes, and goodness-of-fit with its local context could be useful to communities as they seek to navigate change efforts. Regarding practice, SOC leadership could emphasize change strategies that focus on facilitating adaptation, rather than achieving control. This is more likely to release the wisdom and creative potential of all groups and individuals within the SOC (e.g. policy makers, managers, direct service providers, community supporters, families and children) so that a community evolves in a manner that truly meets the mental health needs of its children and families.

Systems transformation is not impossible, but it is complex. Complexity science provides a paradigm that simply makes sense when applied to SOC for children's mental health. Let's begin using it and see what emerges...

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Applying Case Study Design to Study System Implementation

Jessica Mazza

Introduction

This paper describes methods used to study systems of care (SOCs) in Case Studies of System Implementation, a five-year study of the Research and Training Center for Children's Mental Health. The purpose of this study is to identify factors that support system implementation and to understand the relationships among these factors.

Research Design

This study assumes that the processes contributing to system development cannot be adequately understood in terms of linear progress toward a goal. Given the complexity of SOCs, the structures, processes, and relationships contributing to system implementation should be studied holistically in order to understand the relationships among factors that support system implementation. To accomplish this, the Case Studies of System Implementation study used a multiple-case embedded case study design (Yin, 1994) to investigate how communities operationalize and implement strategies that contribute to the development of community-based SOCs for children with severe emotional disturbance (SED) and their families.

A case study design explores a bounded system over time through detailed and in-depth data collection that makes use of multiple sources of information (Creswell, 2003; Stake, 1995; Yin, 1994). Case studies are particularly useful when phenomena are investigated within their real-life context and when the boundaries between phenomena and context are not clearly evident (Yin, 1994). They can be useful in the investigation of phenomena that are greatly influenced by the overall socio-cultural-geographical context, and in studies that intend to provide information about important processes as they evolve over time.

The unit of analysis in a case study design determines how the study relates to a broader body of knowledge. In this study, the unit of analysis is the community-based SOC at participating sites. Each site is the subject of a separate case study, and this study is covering multiple sites. Specific strategies related to the system implementation factors serve as the embedded units of study within each individual site.

Site Selection

A national nomination process was conducted to identify established SOCs. This process included the solicitation of nominations through the Children, Youth and Families Division of the National Association of State Mental Health Program Directors, Center Dissemination Partners, Center Advisory Board, Department of Child and Family Studies staff, and an 18-member panel of national experts on well-functioning SOCs. The site selection process yielded 12 formal SOC nominations and 14 systems suggested for future consideration.

Using document review, these nominations were narrowed to six systems to be considered for year 1: (a) Hampton County, Virginia; (b) State of Hawaii; (c) Humboldt County, California; (d) Placer

County, California; (e) Region 3, Nebraska; and (f) Santa Cruz County, California. Detailed document review and telephone interviews were used as the basis for final site selection. Site selection criteria included sites that have identified needs for a local population of children with SED; have a set of goals for this population that were consistent with SOC values and principles; are implementing strategies to achieve progress towards these goals; and have demonstrable outcomes related to achieving those goals. In addition, system stakeholders had to have the ability to reflect on key transitions during system development. Placer County, California (CA) and Region 3, Nebraska (NE) were selected as Year 1 sites, and both sites agreed to participate in the study.

Data Collection

Data collection used a multi-method approach to gain a comprehensive understanding of participating systems. Document review was used to provide organizational-level data about the development and implementation of each system. A brainstorming and rating exercise was conducted with stakeholders (administrations, managers, direct service staff, and families) to identify local factors believed to be critical to the implementation of their SOC. Semi-structured interviews with key stakeholders were conducted to further understand personal perceptions and beliefs about the process of SOC implementation, and the role of identified implementation factors in local system development. Direct observation of service delivery structures and processes allowed the research team to actively observe aspects of system implementation. Aggregate outcome data were used to review progress toward system goals and to better understand linkages between specific strategies and outcomes. Placer County, CA data collection was completed in October 2005, and included interviews with 29 system stakeholders and observations of five naturally occurring meetings. Region 3, NE data collection was completed in November 2005, and included interviews with 27 system stakeholders and observations of five naturally occurring meetings.

Data Analysis

Narrative data, including interviews and direct observation, are being transcribed and analyzed for emergent themes using Atlas.ti qualitative software (Scientific Software Development, 1997). Analysis is in process and will involve independent review and coding of the data by multiple investigators and the identification of themes that are common across sites and specific to individual sites. Initial data analysis related to the identification and definition of local system implementation factors was completed prior to and in preparation for site-based data collection. Analysis of data resulting from document review, interviews, observations and factor ratings continues to be analyzed for cross-site emergent patterns. Triangulation of data was used to build explanations through convergent evidence. Continued iterative analysis seeks to confirm or disconfirm the existence of meaningful patterns in actions, interactions, activities, language, and symbols. The findings presented at this symposium resulted from analysis of the cross-site data and are presented by Ferreira, this symposium.

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Leveraging Change in Systems of Care

Nathaniel Israel

Introduction

This paper proposed a framework for understanding how system planners and implementers leverage change for the purpose of developing systems of care (SOCs) for children with serious emotional disturbance. The development of the leverage points framework resulted from the initial analysis of Phase I data for Case Studies of System Implementation, a five-year study that is part of the Research and Training Center for Children's Mental Health. In this study, SOCs are defined as both complex and adaptive in that in that they are made up of multiple interconnected elements and there is action and reaction among these elements over time. The concept of leverage points as it applies specifically to SOCs was proposed by the research team (Hodges, Ferreira, Israel, & Mazza, 2006; Meadows, 1999) as a way to understand the strategies that local system developers identified as most successful in developing their SOCs. This paper focused on the identification and definition of leverage points for SOCs; detail about the study design, methods, and findings can be found in other papers that were presented in this symposium.

Leverage Points Framework for System of Care Implementation

Leverage points are places within a system where a small shift in one area can produce big changes throughout the system (Meadows, 1999). Persons may choose to expend resources at any, many, or none of these leverage points. Table 1 lists four levels (Structure, Information, Goals, and Values and Beliefs) at which change can be leveraged in SOCs and lists specific points of leverage available within each of these levels. Similar to an actual lever, each ascending level (from Structures up to Values and Beliefs) has greater power to leverage change.

Table 1
System of Care Leverage Points

Structures Leverage Points	1. Structure of the SOC
	2. SOC Stabilizers
	3. Parameters of the SOC
Information Leverage Points	4. Structure of SOC Feedback
	5. SOC Feedback
Goals Leverage Points	6. SOC Goals
	7. SOC Self Organizing
	8. SOC Rules
Values/Beliefs Leverage Points	9. Power to Transcend Paradigms
	10. Mindset of the System of Care (SOC)

Level 1: Structural Leverage Points

Structural Leverage Points are related to specified roles, responsibilities, and authorities that define system boundaries and enable a system to perform its functions. Within this level, people may choose to act on the Parameters, Stabilizers, and Structures within a system. Parameters refer to constants external to the system that are expected to be relatively fixed over time. These parameters may include federal, state, local and guild parameters for service delivery and are generally outside of the control of individual SOCs. Parameters can change, but such change is rare.

Stabilizers are the structures and processes that maintain the SOC in its current state and act to buffer against change. Stabilizers may act to retain the changes that have been made. For instance, policy and funding put in place to support family organizations are stabilizers. In other instances, stabilizers may have to be disrupted to create systems change. Managed care eligibility guidelines, professional guilds and unions, and Medicaid regulations all can work to create a status quo which works against systems change.

Structures include the physical arrangements, relationships, and decision points within the SOC that determine the breadth of environments in which a child and family can access supports. Examples of structures include points of entry, locations of services, locations of staff, and relationships between sectors allowing services to “port over” across environments, such as from home to school.

The leverage points at the Structures level are notable for: (a) the high difficulty of intervention at these places, and (b) the fact that changes at these leverage points often result in business as usual, only more or less of it. Thus, changes in structures are important and effective only if they kick off change at levels of greater abstraction such as goals, values and beliefs, and ultimately result in new actions and approaches to serving families. (Meadows, 1999).

Level 2: Information Leverage Points

Information leverage points are related to the availability of feedback to system stakeholders. Information leverage points include Positive and Negative Feedback Loops, and the Structure of Feedback. Feedback about the SOC refers to the circulation of information about system performance. Positive feedback loops consist of circulating information that reinforces current system behavior. An example of a positive feedback loop is indicating that out of home placements have been reduced, resulting in cost savings to the system and increased child and family satisfaction, and ultimately, additional workers being hired or additional funds being appropriated to do similar service delivery.

Negative feedback loops are information loops that indicate that the system is failing in some respect, and needs to change. Examples of negative feedback loops could include information about low rates of parent and child satisfaction, or information indicating that the use of restrictive placements is increasing in the system. Each indicates that the system is not functioning as intended and needs to be corrected.

Structure of feedback refers to the structures put in place to deliver information where and when it is needed. Examples include: a process put in place to deliver timely information to judges on the availability of services; processes put in place to deliver outcome data in a timely manner to funders; processes to deliver useful data on the effectiveness of particular services to caseworkers and therapists for clinical decision making.

This set of leverage points may initially be difficult to institutionalize—setting up who collects data, about what, and delivers it to whom, at what intervals. However, systems are more likely to be able to generate and circulate system information than they are able to change policy at the state and federal level.

Level 3: Goals Leverage Points

Goals leverage points are related to the expectations and intended outcomes of system change. Goals leverage points include Rules, Self-Organizing, and Goals. Rules refer to the explicit and implicit rules that define the scope of action and boundaries of the SOC and determine how people act on a day-to-day basis. Examples of rules that can create change include: rules creating interagency policy boards, rules that add family members to key policy councils, and rules that govern the ways funds can be spent. Rules speak to how a system works. For rules to be most effective in creating change, they must be in service of a clear goal.

SOC Self-Organizing is a critical leverage point. SOC Self-Organizing refers to the power of stakeholders to change how the system responds or adapts to its environment. Self-Organizing is about people getting together as a group to reach system goals and to respond to questions confronting the system. Self-Organizing can affect system structure, system information, and system rules. Ongoing SOC development effort can be considered system self-organizing. Similar to rules, self-organizing best facilitates change when in service of a clear goal. System Goals refer to broad level goals that direct the SOC and bring it under the control of a single plan. Broad level goals are agreed-upon targets for action that span across all the partners in the SOC, and which everyone works together to achieve. Systems will always evolve goals. Without clear, consensual broad-level goals, organizations may emphasize system priorities over the priorities of children and families.

Level 4: Values and Beliefs Leverage Points

Values and Beliefs Leverage Points refer to the mental models and attendant assumptions that drive our decision-making. In a SOC, these mental models refer to the intrinsic philosophy (e.g., the value of collaborative relationships with families, youth, formal supports, and informal supports; the belief that the whole of the person and system are unique and cannot be reduced to merely their parts, etc) that is fundamental to the SOC. As one moves from Structures to Values and Beliefs, the leverage points become increasingly internal to persons within the local SOC. The final leverage points are the most internally-driven of all the leverage points.

Within the category of Values and Beliefs are two distinct leverage points. Mindset refers to the shared understanding from which the SOC is developed. These are the commonly held values and beliefs about what is important for children, youth and families. Examples of possible commonly held values and beliefs include: the belief that supports should be culturally competent, the belief that home based supports are more appropriate than institutional care, and cross-agency commitment to the idea that the needs of the family and child come before the needs of the agency.

The other leverage point refers to how people approach system problem-solving in an ever changing environment. The Power to Transcend SOC Paradigms includes the ability to reflect on system assumptions, tolerate discomfort, and be open to new ways of thinking and acting.

Examples of this approach include the ideas that there is always room for new growth and system development; no one discipline, philosophy, or person has all of the answers; and that no matter how committed a system has become to a goal or course of action, the system may need to reconsider its direction.

The Values and Beliefs Leverage Points have great power for change because they potentially determine all other actions taken by persons and systems. When SOC Values and Beliefs align with actions, the result is a system that is oriented to doing whatever it takes to make the system work for families.

Conclusion

The ten leverage points proposed for SOC's represent the possible places in a system in which system planners and implementers may choose to intervene for change. Often, people think that systems change begins with structural change; and yet the leverage points most under our control typically start at the level of values and beliefs and work down (Meadows, 1999). For instance, systems may expend enormous energy on improving the physical infrastructure of services, changing written standards of practice, or similar Structure change efforts. These types of efforts may prove ineffective if they are not generated in a context in which people value change and desire to use such changes to create a more effective way of supporting families and children. Data from our initial sites indicate that systems concentrated their efforts on actions taken at the level of Values and Beliefs, which, in turn, kicked off change at other levels of the system. These data are explored more fully in the following paper.

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Leveraging Implementation in Established Systems

Kathleen Ferreira

Introduction

This paper examined stakeholder identified factors affecting implementation of systems of care (SOCs) and described how system planners and implementers in two established systems used specific points of leverage to maximize their system change efforts. Local system implementation factors, defined as “structures, processes, and relationships” that are used strategically by local system planners and implementers to build a SOC (Hodges, Ferreira, Israel, & Mazza, 2006), were identified as part of data collection for Phase I of Case Studies of System Implementation, a five-year study through the Research and Training Center for Children’s Mental Health. The purpose of this study is to understand how stakeholders facilitate SOC development and what factors, conditions, and strategies contribute to the development of SOCs for children with serious emotional disturbance.

Building upon the leverage points concept proposed by Meadows (1999), the research team developed a leverage points framework unique to SOCs (Hodges, Ferreira, Israel, Mazza, 2006) that was introduced in Israel, this symposium. Within a SOC, leverage points are defined as “places of influence” where system planners and implementers intervene strategically in their existing system context in order to affect the development of their SOC (Hodges et al., 2006).

Initial analysis of data from the Phase I sites of Placer County, CA and Region 3 Behavioral Health Services, NE indicated that stakeholder-identified system implementation factors have served as points of leverage in creating system change and that each site actively made an effort to create change within the system. Further data analysis revealed several instances of parallel characteristics across the stakeholder-identified factors of the Phase I sites. This paper highlights specific examples of factors identified by local stakeholders as critical to SOC implementation and discusses the local implementation factors within the broader leverage points framework. However, due to space limitation, only a few examples will be discussed. Details about the overall study design, methods, and the leverage points framework are described in other papers presented in this symposium.

Method

Local SOC implementation factors were initially identified by a core group of stakeholders from each of the Phase I sites through a brainstorming exercise. These factors and definitions were then validated by a broader group of stakeholders via interviews and a factor ratings exercise. For further detail on this study’s research methods, see Mazza, this symposium.

Findings: Local Strategies for Leveraging Change

Phase I sites of this study illustrate the development of SOC within remarkably different contexts. Placer County, California is a small county 20 miles north of Sacramento. Conversely, Region 3 Behavioral Health Services in Nebraska is a 22 county region in south central NE that includes a significant amount of rural and frontier area. Each of these systems, concerned with the fragmentation of services and supports and their inability to serve children and families in their communities, committed themselves to changing their systems to better meet the needs of children with serious emotional disturbance and their families.

A total of 10 points of leverage for creating change were identified in these SOCs and organized into four levels: Values and Beliefs Leverage Points, Goals Leverage Points, Information Leverage Points, and Structures Leverage Points. Definitions of each leverage point as it relates to SOCs were presented in Israel, this symposium. As indicated in Israel’s discussion, the power to leverage change is greatest at the Values and Beliefs Level, and least at the Structures Level. As a result, in this paper, these leverage points will be discussed in order of greatest to least impact. Table 1 describes Phase I sites’ System Implementation Factors, organized by level.

Table 1
Use of Leverage Points for Systems Change: Cross-site Findings

<i>System of Care Leverage Points Levels</i>	<i>Stakeholder Identified System Implementation Factors</i>	
	<i>Placer County, CA</i>	<i>Behavioral Region 3, NE</i>
Values and Beliefs Leverage Points	Vision and mission	Shared vision
	Family voice	Family & youth participation
	Leadership	Leadership
	Commitment to change	Responsiveness to change
		Collaboration
Goals Leverage Points	Relationship with State	State-level support
	Strategic planning	Resource commitment
	Delegation of power & authority	
	Cross system training & educ.	
Information Leverage Points	Outcome data	Evaluation
Structures Leverage Points	Integrated infrastructure	

Values and Beliefs Leverage Points relate to using the intrinsic philosophy that is fundamental to the SOC as a strategy for creating systems change. Phase I sites identified the importance of a *Vision* and *Family* participation as critical to system implementation. Although each site's vision and mission are shared and widely held, implementers within each site could identify times when system partners did not share the same vision, and they identified strategies used to work around these obstacles. Each site has clearly adopted the values and principles of an SOC. As stated by one stakeholder within the Placer County System of Care, "It's an attitude... They're all our kids."

The deeply engrained values and beliefs related to their vision of serving children with serious emotional disorders and their families are core to the goals and subsequent actions of each of the Phase I sites. This was also true regarding the core belief that family members should be active participants in all aspects of the system. These beliefs are exemplified by actions within each of the systems. For example, in Region 3, families and youth are very active partners within the system. Family members have meaningful roles on most (if not all) boards, including state-level boards. In addition, there is a successful youth-run organization. The Placer County Children's System of Care includes family voice; however, implementers have identified more thorough engagement of families as an area for improvement. Both sites feel that a SOC is more complicated for staff but easier for families, and that services should appear seamless to families. Furthermore, there is shared responsibility for children and families across each system. These examples are noteworthy, because a system can engage in the above behaviors, but without these core values, the role of family members within the system will not be meaningful and may be viewed as "token." Thus, it is vital that the actions are aligned with the values and beliefs of the system.

Also associated with Values and Beliefs Leverage Points are the implementation factors of Leadership and Commitment/Responsiveness to Change. These are structures or processes that support the vision and family participation. Stakeholders in both systems referenced leadership and a perceived capacity to change as critical factors in their SOC development. At both sites the definitions for Leadership included the idea that there are better ways to do things and that they have the power to make a change. Leaders at each site embraced a vision for change and recognized that for successful change, sharing the vision with other stakeholders within the system was vital.

Goals Leverage Points relate to the expectations and intended outcomes of system change, and include the system's goals, self-organizing behaviors, and rules.

Both Phase I sites identified the involvement of the state as important to their system development. Placer County identified their Relationship with the State as necessary but challenging at times. During system development, Placer County received support from the state against SOC opponents, and county

leaders worked closely with state lobbyists to pass SOC legislation. However, barriers such as multiple state reporting requirements create inefficiencies within the system. Region 3 stakeholders perceived State Level Support as a critical factor and a positive aspect of their system, as they receive needed resources and support from the state.

Both Placer County and Region 3 have clear goals that are strongly linked to the vision and mission of their systems. Although only Placer County identified Strategic Planning as a critical implementation factor, each site has regular, strategic planning that is an integrated process of re-evaluating the system and making needed changes.

Although Placer County stakeholders discussed resource and emotional commitment to the system, Region 3 actually identified Resource Commitment as an implementation factor that was critical to their system's development. Region 3 demonstrated its ability to pool funding between different agencies and gave examples of other resources that were shared across agencies, such as training to all agency partners and assistance in grant writing.

Information Leverage Points address the availability and receipt of feedback to system stakeholders. This type of feedback includes formal and informal, and written and verbal feedback. This often includes formal structures such as management team meetings, client staffings, and outcome/evaluation data as well as informal feedback. In Placer County and Region 3, these feedback loops did not occur in a hierarchy, but were cross-agency and across levels of personnel. Placer County identified Outcome Data as a critical implementation factor, and Region 3 identified Evaluation as a critical factor. Although the factors are similar, Placer County stakeholders acknowledged the need to develop strategies to more effectively utilize the collected data. Evaluation data in Region 3 is comprehensive and used strategically to make decisions within the SOC. The evaluation staff educates clinical staff about the data and is able to create needed reports.

Finally, **Structure Leverage Points**, relate to specified roles, responsibilities, and authorities that define system boundaries and enable a system to perform its functions. This includes structures, stabilizers, and parameters of the SOC. Placer County identified an *Integrated Infrastructure* as a critical factor in their system's development. The importance of an integrated system was evident in Region 3's day-to-day operations. Both sites felt that co-location of staff was vital to the success of their systems. Placer County's SOC had one location that housed mental health, child welfare, and juvenile justice staff, with education staff located nearby. Because Region 3 is quite rural, child welfare and mental health personnel were co-located in offices and within a few schools throughout the region.

Within the Structure level are parameters, such as current laws or the political climate. Both Placer County and Region 3 felt that it was important to attempt to change these parameters, and their attempts were met with some success. Placer County was successful in getting SOC legislation passed, and Region 3 became an active partner with the state in implementing a SOC grant and working throughout the state to expand SOC programs and services. When discussing the importance of being proactive in a constantly changing political climate, one stakeholder stated, "We make sure we educate [politicians] so they don't get educated the wrong way."

Discussion

The examples noted within this paper illustrate actions within each of the Phase I sites that stem from an evolving sense of how to operationalize the values and beliefs within their SOC. In addition, each site used a variety of leverage points and made strategic choices about how and where to invest their resources to have the most impact on system change. Each site invested most of their resources in the Values and Beliefs Leverage Points and the stakeholder identified factors that corresponded with these leverage points. Finally, it is important to note that there is no linear formula for creating an ideal system. Instead, these systems were opportunistic in their actions and took a long-term perspective in developing and implementing their strategies for change, realizing that deep change takes time.

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Symposium Discussion

Sharon Hodges

The papers in this symposium reported initial findings from a five-year study of system of care (SOC) implementation. The paper presented by Nathaniel Israel proposed a framework for understanding how system planners and implementers leverage change for the purpose of developing SOC for children with serious emotional disturbance. These included the levels of Structures Leverage Points, Information Leverage Points, Goals Leverage Points, and Values and Beliefs Leverage Points. An important note regarding leverage points is that they represent potential places of action, and system implementers may or may not use them in their change efforts. For example, a system may have well established information structures; however, reporting evaluation results to system funders or governance boards should be distinguished from actively using information as a strategy to leverage system change. The systems that participated in this study used many components of normal organizational functioning as strategies to bring about change. In contrast to the potential places for creating change that were discussed in the leverage points framework, the paper presented by Kathleen Ferreira reported findings related to the tangible action taken by systems in their efforts to create system change. These locally identified system implementation factors represent strategies that local system planners and implementers believed were critical to their system development efforts. Analysis of the data indicate that the leverage points framework provides a useful tool in understanding how the local implementation factors relate to one another and are used together to create system change.

An important finding with regard to leveraging change is that the impact of change efforts are a result of actions related to values and beliefs. Implementation efforts related to values and beliefs use the intrinsic philosophy of the SOC to create systems change. Data confirm that values and beliefs factors were critical contributors to system change through shifts in the fundamental beliefs of system stakeholders. These factors are closely associated with stakeholder belief that change is possible and that it is possible to transcend the initial conditions of the system. Moving beyond the initial conditions of the system requires the ability to reflect on system assumptions, tolerate discomfort, and be open to new ways of thinking and acting.

This is not to suggest that changes in system structure did not contribute to system change. Data suggest that participating systems accomplished important change through shifts in structures and rules. However, structures- and rules-generated actions are only effective in initiating system change when they are in service of clearly articulated and widely held values, beliefs, and goals. In addition, the data suggest that sequence is critical and that important work must be done around values and beliefs before undertaking structural change. This finding could help explain, for example, why statewide SOC initiatives that structure blended funding mechanisms or regional structures for interagency collaboration see variable results. In the absence of widely held local values and beliefs that support such changes, they are not likely to be implemented fully or with consistency.

Another preliminary theme suggested by the data is that leverage points related to values and beliefs seem more generative than those related to structure. Regulatory processes can be understood as those that rely on power for decision making authority, employ standardization of work practices, filter out information that would provide feedback, and treat actions as final rather than conditional. Generative

processes are those that rely on information for decision making authority, allow for idiosyncratic or contextual design, incorporate information that will provide feedback, and treat actions as experimental and open to adaptation when necessary.

Although both may be necessary in a system, the systems participating in this study were very grounded in generative processes. This generative quality allowed system planners and implementers to recognize and accept ambiguity and change as a given in their local contexts. As a result, they demonstrated the ability to be very adaptive, flexible, and responsive as conditions within their systems changed.

The sites participating in this study can be described as opportunistic in how their systems developed. Both took advantage of opportunities to leverage system change when and where they could find them. The actions of planners and implementers were strategic and proactive, but they did not use a linear or stepwise approach to change. Each clearly tried a variety of strategies, some of which worked, some did not, regrouped and tried again. What they shared was a commitment to the idea that things really could be done differently and better, and that they had the power to make the change. In addition, the system implementation efforts of both systems were grounded in widely shared SOC values and principles. This commitment was a constant, regardless of the challenges faced.

Finally, there is a tendency to frame SOC implementation in terms of discrete stages—there is the process of establishing a SOC and then there is the process of sustaining a SOC. We identified the systems participating in our study as “sustained” because each had been established for more than 10 years and were able to clearly articulate their identified populations of concern, their service delivery strategies, and their ability to tie these strategies to documented results over time. The data indicate that although stakeholders acknowledged themselves as established systems and discussed their strategies to sustain the progress they had made, they believed there was still much to accomplish in terms of improving and expanding their systems. Our initial distinction between the process of establishing and sustaining a SOC was far less clear-cut and discrete as we expected it would be. In this sense, SOC development can be considered a process of emergence. The data indicate that system development is iterative, responsive to local needs and conditions, and occurs within the parameters created by the values and principles of systems of care.

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Using Change Theories to Assess System of Care Development

**Vicki Sprague Effland
Janet S. McIntyre
Shannon Van Deman**

Introduction

Over forty-five counties in Indiana have begun developing or have implemented a local system of care. This development is supported financially through small (i.e., under \$50,000) grants provided by Indiana's Family and Social Services Administration, Division of Mental Health and Addiction (DMHA) and through coaching, training and assistance by Indiana's Technical Assistance Center for Systems of Care and Evidence Based Practices for Children and Families (TA Center). As systems of care continue to emerge throughout the state, it is important to understand the level of development these systems of care are able to achieve and the rate at which they develop.

Change theories (e.g., Prochaska, Norcross, & DiClemente, 1994; Rogers, 2003) provide a framework for measuring system of care development. Prochaska, et al. (1994) proposed five stages of change (i.e., precontemplation, contemplation, preparation, action, and maintenance) which individuals move through as they contemplate and prepare for change. Rogers (2003) identified five similar stages for both individuals (i.e., knowledge, persuasion, decision, implementation, and confirmation) and organizations (i.e., agenda-setting, matching, redefining/restructuring, clarifying and routinizing) as they decide whether to adopt a new innovation. The communities, child-serving systems, and individuals that make up systems of care move through similar stages of change. By identifying the characteristics of systems of care within each of these stages, the level of system of care development can be assessed. Specifically, the elements of systems of care proposed by Pires (2002) as requiring structure (e.g., system management, benefit design/service array, system entry/access, decision making and oversight at the policy and service delivery levels, care coordination, crisis management, staffing structure, financing, evaluation and system exit) were used to identify the knowledge, attitude, behavior and activities that systems of care at each of the stages proposed by Prochaska, et al. (1994) and Rogers (2003) exhibit. This article summarizes the development and application of these tools and presents results based on three years of data collected on system of care development in Indiana.

Method

The Strengths-Based Site Assessment (Sprague Effland, 2004) was originally developed by the TA Center in 2002 based on the work of Pires (2002) and later revised to incorporate the work of other authors (i.e., Walker, Koroloff, & Schutte, 2003) and improve the usefulness of the tool for providing ongoing technical assistance, training, coaching, and support to system of care communities throughout the state. The site assessment collects qualitative and quantitative data on several system of care elements, which address community resources, representation (e.g., involvement by child-serving agencies, families, advocacy groups and other community members in the system of care), system of care structure (e.g., the structure of the system of care's coordinating committee, project staff, fiscal issues, and outcomes), and service-delivery processes.

The site assessment is completed annually by TA Center staff and local system of care representatives. Assessments were completed for 16 communities in 2002, 28 communities in 2003 and 37 communities in 2004. A coding template based on the stages of change proposed by Prochaska, Norcross, & DiClemente (1994) and Rogers (2003) was used to identify the level of system of care development of each community after each administration of the site assessment. A team of raters assigned stage of change scores (i.e., 1 to 5 consistent with the five stages of change) at the system and service-delivery levels to each site. These scores were used to assess the stages of change at Time 1 (Fall 2002), Time 2 (January, 2004) and Time 3 (March, 2005).

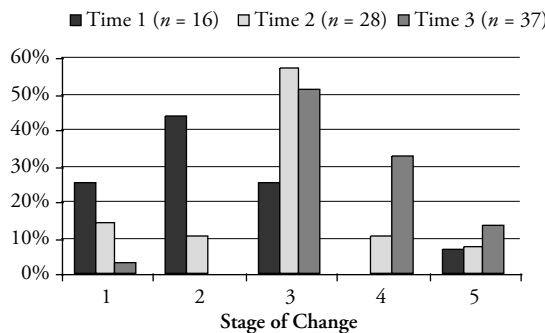
Analyses of the stage of change scores were conducted using SPSS Statistical Software (1999). Paired-sample *t*-tests were conducted to compare the mean stage of change scores between Time 1 and Time 2 and between Time 2 and Time 3 at both the system and service-delivery levels. Only communities that had completed site assessment and stage of change ratings available at each time period being compared were included in the analyses.

Results

System level

The average stage of change ratings for sites at the system level were significantly different, $t(16) = -4.038$, $p < .05$, between Time 1 ($M = 2.19$, $SD = 1.05$) and Time 2 ($M = 3.13$, $SD = 1.15$). Stage of change ratings were also significantly different between Time 2 ($M = 2.86$, $SD = 1.04$) and Time 3 ($M = 3.61$, $SD = 0.88$), $t(28) = -3.473$, $p < .05$. Figure 1 presents the percent of sites that were assigned each of the five stage of change ratings for the system level during Time 1, Time 2 and Time 3.

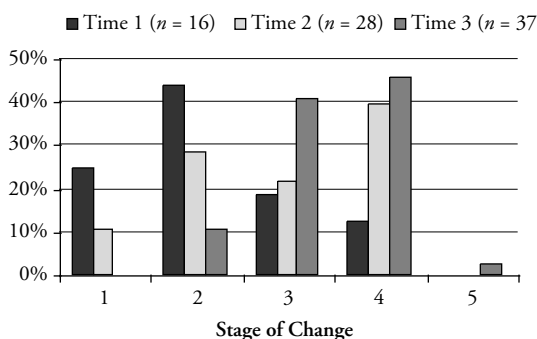
Figure 1
Percent of Sites in Each Stage of Change at the System Level



Service level

System of care sites showed significant improvement between Time 1 ($M = 2.19$, $SD = 0.98$) and Time 2 ($M = 3.56$, $SD = 0.81$), $t(16) = -5.745$, $p < .05$, and between Time 2 ($M = 2.89$, $SD = 1.07$) and Time 3 ($M = 3.54$, $SD = 0.74$), $t(28) = -3.576$, $p < .05$. Figure 2 presents the percent of sites that were assigned each of the five stages of change ratings for the service-delivery level during Time 1, Time 2 and Time 3.

Figure 2
Percent of Sites in Each Stage of Change at the Service-Delivery Level



Conclusion

The results of this study reflect a significant level of development at both the system and service-delivery levels in systems of care throughout Indiana in just three years. These results have been used to:

- Help individual system of care communities understand how they compare to other Indiana communities
- Create plans for ongoing training, coaching, and support from the TA Center
- Provide information to DMHA and other child-serving systems on the effectiveness of local systems of care
- Identify system and service-delivery level issues that are common across communities that need to be addressed

Additionally, this study demonstrates the usefulness of applying change theories to assess the level of system of care development. Several tools were developed for use in this study and have provided a wealth of information to inform ongoing system of care development efforts in Indiana. Further refinements to the tools are needed to maximize their utility in assessing the level of system of care development both across sites and over time.

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Symposium

Multi-Level Systems Evaluation: Selected Projects from Hawaii

Symposium Introduction

Charles W. Mueller, Eric L. Daleiden, & Brad J. Nakamura

The State of Hawaii Child and Adolescent Mental Health Division's (CAMHD) strategic plan describes five broad goals: (a) shared ownership of vision, mission, initiatives, and outcomes; (b) consistent adherence to the Hawaii Child and Adolescent Service System Program (CASSP) principles; (c) application of evidence-based services knowledge in the development of individualized plans; (d) routine evaluation of performance data and the application of findings to guide management decisions and practice development; and (e) the implementation of business principles that insure high quality and accountability.

As part of an effort for continuously striving toward these goals, CAMHD has established an ongoing commitment toward developing and applying valid, feasible, and useful evaluation strategies throughout its system. Countless individuals at all levels of the organization, be they information management personnel, office staff, case managers, providers, students, youth and families, supervisors, or administrators, help drive and actualize our commitment toward research and evaluation.

The three selected papers composing this symposium reflect our focus on research and evaluation across the system, be that at the specific client level (such as our first paper on validating a new measure of client improvement), the mid-level of the system (such as the second paper on client outcomes in intensive in-home services), or the large system-level (such as our third paper that looks at cost-efficiencies across community centers).

Validity of Treatment Target Progress Ratings as Indicators of Youth Improvement

Brad J. Nakamura, Eric L. Daleiden, & Charles W. Mueller

Introduction

Practitioners are increasingly required to demonstrate and document intervention outcomes (Callaghan, 2001; Ottenbacher & Cusick, 1990). This demand frequently is tempered by the idiographic nature of treatment and meaningful treatment outcomes. As such, some researchers have suggested individualized outcome measures for use in clinical settings (Mintz & Kiesler, 1982), such as goal attainment scaling (Kiresuk, Smith, & Cardillo, 1994) and target complaint methods (Battle, Imber, Hoehn-Sario, Nash, & Frank, 1966). Hawaii's Child and Adolescent Mental Health Division (CAMHD) currently utilizes a clinician-report measure, the Monthly Treatment and Progress Summary form (MTPS; Child and Adolescent Mental Health Division, 2003), that lends itself to the target complaints measurement strategy.

The purpose of the present investigation was to examine the relationship between MTPS scores (i.e., therapist ratings of improvement on idiographic treatment targets) and a standardized measure of functional impairment, the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1998). To make this initial validity assessment we examined the degree of change over the course of treatment as assessed by both measures and compared changes in mean MTPS scores to changes in CAFAS scores over this same period of time.

Chair

Charles Mueller

Discussants

Charles Mueller et al.

Authors

Brad J. Nakamura et al.

Deborah Roberts et al.

T. Orvin Fillman

Method

Participants

Participants included 74 youth registered for mental health treatment services with CAMHD between June 30, 2003 and September 30, 2005 with completed CAFAS and MTPS scores at both intake and six months after receiving CAMHD treatment services.

The mean age of the sample was 13.82 years ($SD = 2.99$; range = 4.40 to 18.19), with 42 males (56.8%) and 32 females (43.2%). Most participants were classified as multiethnic (44.6%). Principle diagnoses included mood/anxiety (37.8%), disruptive behavior (24.3%), attentional (23.0%), and other disorders (14.9%). The sample was comparable to non-selected CAMHD youth on the variables of age, intake CAFAS score, gender, ethnicity, and principle diagnoses.

Measures

The CAFAS is a 200-item scale that measures youth's level of functional impairment. The MTPS is a locally constructed clinician report form designed to measure the service format, service setting, treatment targets, clinical progress, intervention practice elements, and provider outcomes on a monthly basis. Regarding treatment targets, clinicians select up to 10 target competencies or concerns (from a longer list) that were the focus of treatment during the reporting month. Clinicians then provide a progress rating comparing the youth's current status to his/her baseline status using a (0-6) 7-point scale with the anchors of *Deterioration* < 0%; *No Significant changes* = 0 – 10%; *Minimal Improvement* = 10 – 30%; *Some Improvement* = 31 – 50%; *Moderate Improvement* = 51 – 70%; *Significant Improvement* = 71 – 90%; and *Complete Improvement* = 91 – 100%.

Procedure

Data on youth with CAFAS scores within 45 days of system entry, CAFAS scores within 45 days of their six-month follow-up (or 180 post-intake date), MTPS progress ratings within 30 days of the CAFAS intake date, and MTPS progress ratings within 30 days of the six-month follow-up CAFAS were pulled from CAMHD's management information system.

Intake and six-month MTPS mean progress rating scores were derived by averaging the progress rating scores for all *stable* targets (i.e., targets reported at both intake and six-month follow-up)¹.

Results

As can be seen in Table 1, mean intake CAFAS scores (109.9) indicated significant levels of impairment, comparable to those generally seen in CAMHD. On average, 6.39 ($SD = 2.51$) treatment targets were identified for each youth at intake, and 4.15 ($SD = 2.16$) of these targets remained stable (i.e., selected both at intake and six-month assessments). The five most common stable targets were Positive Family Functioning, Anger, Oppositional/Non-Compliant Behavior, Depressed Mood, and Academic Achievement.

Table 1 also shows that both CAFAS and MTPS scores indicated improvement over the course of treatment. CAFAS scores decreased significantly (indicative of improved global functioning), $t(73) = -5.06, p < .001$, and MTPS ratings rose significantly (indicative of greater improvement on idiographic treatment targets), $t(73) = 4.77, p < .001$.

Figure 1 depicts the cross-lag panel correlations between measures and time. As can be seen, there was little to no relationship between the two measures at intake; MTPS scores at intake did not predict later scores and the cross-lag correlations were small and non-significant. As expected, CAFAS intake scores were correlated with CAFAS scores at six-months. Most importantly for the present paper, the six-month

¹Parallel analyses to those reported below were run on mean MTPS scores for all targets (stable and unstable) and the results were nearly identical.

Table 1
Mean Scores at Intake and Six-Month
Follow-Up for CAFAS and MTPS Measures

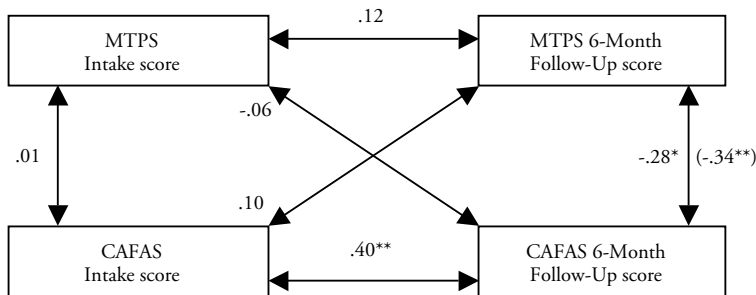
	<i>Intake</i>		<i>6-Month Follow Up</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
CAFAS	109.90	30.90	88.00	36.60
MTPS	2.02	1.22	3.08	1.62

Note. CAFAS = Child and Adolescent Functional Assessment Scale score, MTPS = Monthly Treatment Provider Summary score.

MTPS scores were correlated with the six-month CAFAS scores in the predicted direction. Youth judged by the MTPS to be making greater improvements were rated as functioning better (on CAFAS) than those with smaller MTPS improvement ratings.

In order to isolate any influence of intake scores on six-month correlations, a partial correlation was calculated between the six-month CAFAS and MTPS scores, controlling for intake scores on both measures. As can be seen in the far right side of Figure 1, this correlation remains significant ($r = -.34$).

Figure 1
Zero-Order and Partial-Correlations for CAFAS and MTPS
Scores on Stable Targets at Intake and 6-Month Follow-Up



Note: Score in parenthesis indicates partial correlation controlling for intake scores. CAFAS = Child and Adolescent Functional Assessment Scale, **CAFAS Intake score** = CAFAS score within 45 days of intake into CAMHD, **CAFAS 6-Month Follow-Up** = CAFAS score approximately 6 months after the date of a youth's CAFAS intake score, **MTPS Intake score** = MTPS score within 30 days of the date of a youth's CAFAS intake score, **MTPS 6-Month Follow-Up** = MTPS score within 30 days of the date of a youth's CAFAS 6-month score.

* $p < 0.05$ (2-tailed). ** $p < 0.01$ (2-tailed).

Conclusions

The present findings suggest that nomothetically calculated change scores for youths' improvements on idiographic treatment targets (i.e., MTPS scores) may serve as valid measures of client change. Improvement ratings at six-months were correlated with global functioning scores at the same time, directly and when the influence of intake scores was controlled. Additionally, the magnitude of this relationship ($r = -.34$) suggests some level of specificity for both the CAFAS and MTPS measures; they do not seem to be capturing identical constructs.

Despite promising results, further work is indicated. This investigation was limited to a sample of 74 CAMHD-registered youth for which both CAFAS and MTPS data were available at two separate times. While not appearing to bias the sample (see earlier comments), we have yet to study all factors that might

influence data completion and we do not yet know much about which targets are more or less likely to be stable, to be quickly addressed, or to be dropped for other reasons.

Another limitation surrounds the notion that this study examines the MTPS/CAFAS relationship only at six-month follow-up. Ongoing CAMHD analyses indicate partial MTPS/CAFAS correlations (controlling for intake scores) similar in magnitude and significance at three- ($r = -.29, p < .001$) and nine-month ($r = -.43, p < .001$) follow-up to the partial correlation reported above at six-month follow-up. Collectively, these results indicate that youth judged to make more improvements on idiographic treatment targets at three-, six-, and nine-month follow-up were rated as functioning better than those with smaller improvement ratings.

Regarding future research directions, benefit may be accrued from examining the relationship between the MTPS and other standardized measures of symptoms and/or impairment (e.g., the Child Behavior Checklist; Achenbach & Rescorla, 2001). Again, without time and space for review, ongoing CAMHD analyses are currently examining the relationship between the MTPS and another standardized measure, the Child and Adolescent Level of Care Utilization System (CALOCUS; American Academy of Child and Adolescent Psychiatry, 1999), a measure used to inform youth level of care decisions. Preliminary results indicate a significant inverse MTPS/CALOCUS relationship at three-month follow-up (i.e., youth judged as making more idiographic improvements are rated as requiring higher levels of care than those with smaller improvements at three-month follow-up, but no relationship at six- or nine-month follow-up. Subsequent research may usefully focus on factor or cluster analytic strategies of targets and diagnostic-specific relations for elucidating common patterns of treatment and change.

Despite the limitations and directions for future research indicated above, the present findings point to the potential utility and validity of the monthly treatment progress summary approach to tracking client treatment outcomes.

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Intensive Home and Community Services within Hawaii's System of Care for Youth

Deborah Roberts, Eric L. Daleiden, Lesley Slavin, Dawn Pang, S. Peter Kim, & Alfred Arensdorf

Introduction

The State of Hawaii Child and Adolescent Mental Health Division has developed a range of service options within its system of care for youth and their families. Intensive Home Based Services (IHBS) are frequently provided upon referral to CAMHD with the goal of meeting the needs of youth and families in the community and avoiding the disruption of an out-of-home placement. This study examined data collected over a period of three years for all youth in the State of Hawaii system who received IHBS as their first CAMHD service. These youth were followed for a year to see whether this level of care (LOC) prevented out-of-home placement, and whether it was effective in reducing the use of other services. The study also compared the characteristics of those youth who were successful with IHBS to those who received out-of-home placement or other types of services during their first year.

The needs of the youth served by CAMHD vary in intensity, and the services offered include an array ranging from traditional outpatient care to hospital based residential services. While out-of-home services are available if needed, CAMHD is guided by Child and Adolescent Service System Program (CASSP) principles. CASSP principles state that services need to be child and family centered, strengthen and build upon the natural strengths of the youth, family, and community, promote healthy functioning, and be provided within the least restrictive and most natural environment that is appropriate, with removal from home used only when other options have been exhausted.

In concert with CASSP principles, CAMHD designed its IHBS with the intention of providing family centered treatment in the most natural setting with the goal of stabilizing and preserving the child's functioning in his or her family environment (Interagency Performance Standards and Practice Guidelines; Child and Adolescent Mental Health Division, 2002). IHBS is a time-limited approach incorporating evidence-based interventions. The services include crisis management, links to other supports, evidence-based treatment interventions, training in self-help and living skills for the youth, parenting skills training, and development of behavioral support plans for the home. The youth and family can be seen initially up to four hours a day or 20 hours a week as needed. As the family utilizes these supports and skills, service hours are decreased, with the goal of transitioning either to traditional outpatient services or out of mental health services completely.

This type of service (i.e., more intensive outpatient services designed to support youth and families and avoid the need for out-of-home placements) can be compared to programs developed in the context of other child-serving systems such as juvenile justice, child welfare, and other mental health systems. In addition, similar services have been applied in a variety of other human service settings including special education and developmental disabilities.

Method

Participants

The study utilized the Child and Adolescent Mental Health Management Information System (CAMHMIS) database to identify all youth ($N = 163$) who were admitted to CAMHD for the first time between July 1, 2001 and June 30, 2003, whose first recorded service was through IHBS, and who began receiving IHBS within 60 days of registration. All changes in services were tracked through the system for one year following each admission. Within this period, all service transitions were coded as progressing to (a) higher LOCs (therapeutic foster home, therapeutic group home, community based residential, hospital based residential), (b) lower LOCs (Multisystemic Therapy, intensive day stabilization, partial hospitalization), or (c) discharge from CAMHD either for school based services or no services.

Measures

The Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1998) and the Child and Adolescent Level of Care Utilization System (CALOCUS; American Academy of Child and Adolescent Psychiatry, 1999) were administered periodically to all CAMHD youth as additional outcome measures. Demographic information about the sample such as age, gender, ethnicity, educational status, and diagnosis were also retrieved from CAMHMIS.

Results

Who Received IHBS?

The mean age of the sample was 11.1 years ($SD = 4.7$), including 90 males (55.2%) and 73 females (44.8%). Ethnicity information was available for 88% of the sample. For those youth, 33% were reported as White, 23% as Native Hawaiian or Pacific Islander, 22% as Multiethnic, 17% as Asian, 5% as Black or African-American, and 1% as American Indian or Alaskan Native. These CAMHD youth experienced high rates of co-morbidity (55%) and primary diagnoses for this sample included mood/anxiety disorders (35%), disruptive behavior disorders (15%); pervasive developmental disorders (12%), attention disorders (10%), adjustment disorders (9%), miscellaneous (7%), psychotic disorders (5%), and substance-related disorders (2%). The average CAFAS 8-scale Total scores at intake were 98.3 ($SD = 39.7$). This reflects functioning in the range of moderate psychosocial impairment, well above the clinical cutoff of 40. The average CALOCUS scores at intake were 3.7 ($SD = 1.3$). A CALOCUS score of 2 describes outpatient service needs, while 3 and 4 move up the level of care ladder from intensive services to an array of coordinated intensive services.

Services at 12 months

Analyses of youth status at 12 months post admission indicated that 32% ($n = 52$) remained active within the CAMHD system (i.e., received intensive case management, IHBS, or a higher LOC), 20% ($n = 32$) were discharged for Department of Education school-based services, and 49% ($n = 79$) were discharged altogether. Of the total 69% ($n = 111$) who were discharged from CAMHD services, 56% left due to treatment success and/or achieved treatment goals. Other reasons for discharge included refusal or withdrawal (16%), moved (14%), graduated or aged out (5%), or received private services (3%), etc.

During the 12-month study period, 18.0% ($n = 29$) of the sample required a higher LOC than IHBS at some point in time. Youth who moved into a higher LOC differed significantly from youth who did not move to a higher LOC on several key variables (see Table 1). Of significant note, those youth who entered higher LOCs displayed higher CAFAS and CALOCUS scores at time of IHBS intake, were older, and were more likely to have a primary diagnosis of a disruptive behavior disorder than those youth not moving to higher LOCs. The following additional variables did not significantly differ across groups: geographic region, ethnicity, presence of co-morbid diagnosis, and primary diagnosis in the categories of adjustment disorder, anxiety disorder, attention disorder, mood disorder, and psychotic spectrum disorder.

Conclusion

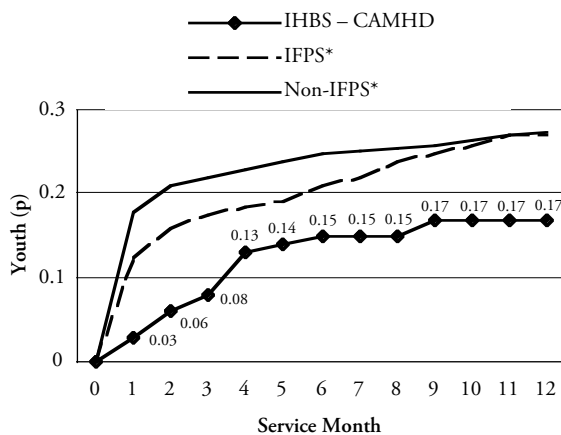
CAMHD's IHBS were successful overall in keeping youth in their home communities. Only a minority of youth (29 of 163) initially served with IHBS progressed to higher LOC's within the CAMHD system. Youth who utilized a higher LOC during their first year displayed higher CAFAS and CALOCUS intake scores, were older, and were more likely to have a disruptive behavior disorder as a primary diagnosis than those youth not utilizing a higher LOC. Even those youth who were placed in a residential care setting at some point following initial assignment to IHBS generally did not remain in these placements at the end of the first year. At the 12-month mark, only 3.6% of youth were in out-of-home placements.

Table 1
Significant Differences ($p < .05$) between Youth who Received a Higher Level of Care within 12 Months of Admission to Intensive Home-Based Services Compared to Youth who Did Not Receive a Higher Level of Care within 12 Months

Variable	Higher Level of Care	No Higher Level of Care	Test	p
Age in Years (SD)	14.2 (2.7)	10.4 (4.8)	$F(1, 161) = 16.59$.0001
Primary Disruptive Behavior Disorder	28%	13%	$\chi^2(1, N = 163) = 4.08$.043
Primary Pervasive Developmental Disorder	0%	15%	$\chi^2(1, N = 163) = 4.93$.026
Primary Substance Use Disorder	0.7%	7%	$\chi^2(1, N = 163) = 4.99$.025
CAFAS 8-Scale Total at Intake (SD)	122.1 (31.1)	91.7 (39.3)	$F(1, 161) = 14.28$.0002
CALOCUS Level of Care at Intake (SD)	4.3 (1.2)	3.5 (1.3)	$F(1, 161) = 8.58$.004

These findings provide clues for system assessment and management. First, although tentative, the fact that 18% of youth initially receiving IHBS services went on to a higher LOC may serve as a comparison benchmark for the Hawaii system of care, or for other state systems. As an example, Figure 1 shows a survival curve for youth remaining in their homes, and compares our current data to data presented by Kirk and Griffith (2004). Our finding that about 18% of youth in IHBS were placed out of home during the first year compares favorably with the Kirk and Griffith (2004) figure of about 27% of youth in their large state child welfare system being placed out of home at some point during their first year in services.

Figure 1
Proportion of Youth Receiving More Intensive Service than IHBS by Month



*Kirk & Griffin (2004)

Note: IHBS - CAMHD = Intensive Home Based Services; State of Hawaii Child and Adolescent Mental Health Division; IFBS = Intensive Family Preservation Services (Kirk and Griffin 2004)

Second, based on our findings that there are significant demographic and diagnostic differences between those youth who subsequently utilized and those who did not utilize higher LOCs, youth beginning treatment at the IHBS level may receive additional benefit by having treatment service teams assess for these key variables systematically and treat them as potential risk factors. For example, youth with high risk factors might be offered more intensive wraparound services on intake to IHBS, or the system might require referral for Multisystemic Therapy instead of generic IHBS for youth with a particular profile of risk factors.

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Cost-Quality Efficiencies: An Illustration of Data Envelopment Analysis for Mental Health Delivery

T. Orvin Fillman

Introduction

This presentation introduced an application of the Data Envelopment Analysis (DEA; Steering Committee for the Review of Commonwealth/State Service Provision, 1997) methodology for evaluating and managing mental health systems with multiple decision-making units sharing similar functions. The DEA provides a methodology for examining the relative efficiency with which various work units leverage their multiple resource inputs (e.g., operating expenses, staffing patterns, etc.) into multiple quality outputs (e.g., youth outcomes, quantity of services, etc.). The DEA converts multiple and disparate input and output measures into a single comprehensive measure of efficiency (Andes, Metzger, Krlewski, & Gans, 2002). The DEA methodology is an adaptation of the standard input/output ratio while incorporating and differentially weighting a variety of variables for evaluating relative efficiency. The DEA uses a linear programming technique that compares the extreme outputs and inputs of a sample. These extreme points have been called best practices and represent the management and work practices which result in the highest potential, quality, or combination of outputs for a given quantity and combination of inputs. The DEA may be an important decision support tool for administration of an evidence-based mental health delivery system.

Method

Participants

The population of study included youth served through CAMHD mental health centers statewide. The period of study was for the two-quarter period from October 2004 through December 2004, and January 2005 through March 2005. The numbers of youth served for each quarter were 1,265 and 1,314, respectively. The mean age of the entire CAMHD population at that time was around 14 (range 3 to 20), with about two-thirds male and one third female. Additionally, approximately 64% self-reported as Multiracial, 17% as White, 10% as Native Hawaiian or Pacific Islander, 6-8% as Asian, 2% as Black and 1% as Other. Taken as a whole, these CAMHD youth experienced high rates of comorbidity (71-73%), with major diagnostic categories including Disruptive Behavior (44-45%), Attentional (44-45%), Mood (36%), Anxiety (19%), Substance Related (15-16%), and Adjustment (12%) (State of Hawaii, Department of Education and Department of Health, 2005).

Procedure

The DEA computations followed the methodology described by Taylor (2002), using the Solver tool in Microsoft Excel 2003. Indicators of quality outputs were compiled from CAMHD's usual performance monitoring reports (State of Hawaii, Department of Education and Department of Health, 2005). Input indicators were taken from CAMHD's routine staffing and financial summary reports. The constraints for the DEA calculations were as follows: the input and output weights were ≤ 1.0 ; the input and output weights were maximized; the sum of the input products equaled 1.0; the sum of the output products was less than or equal to the sum of the inputs; and all maximized weights were constrained to be ≥ 0 . Also, the input and output products were defined as the product of the measured inputs and outputs times the maximized input and output weights, respectively; and the outputs were constrained to be less than or equal to the inputs.

Results

Table 1 displays data reflecting resource input and quality output for each of the six mental health centers used in the analysis. Following Taylor's (2002) DEA methodological calculations, five of the six mental health centers were rated as efficient. Mental health center D was rated as relatively inefficient,

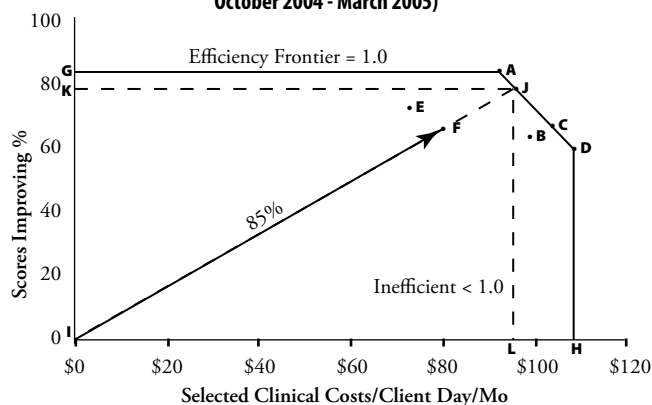
with a score of 83.8%. This result quantified the observation that while mental health center D had the *lowest* percentage of clients showing improvement by the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1998) or Achenbach System for Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2001), it had the *highest* input of resources/client day for three of the five resource inputs. For illustrative purposes, Figure 1 provides a visual representation of the six centers' relative efficiencies based on only two variables (i.e., selected summary costs of therapeutic services per average client day per month, and percentage of youth showing CAFAS or ASEBA improvement).

Table 1
Indicators of Resource Input and Quality Output

	Resource Input Indicators					Quality Output Indicators				
	Office	Salary	MHCC FTE	Clinical Services	OOH Services	IIH	CSP	CAFAS / ASEBA	Complaint	DEA Score
MHC A	\$0.64	\$34.40	0.05	\$91.88	\$76.52	67.1	94.6	84.0	100.0	1.0
MHC B	\$0.71	\$51.65	0.06	\$100.01	\$76.37	70.3	87.3	64.3	100.0	1.0
MHC C	\$0.90	\$37.39	0.05	\$106.36	\$93.73	56.0	92.8	67.0	98.5	1.0
MHC D	\$0.99	\$57.09	0.06	\$109.50	\$86.23	65.3	91.8	63.4	99.7	83.8
MHC E	\$1.64	\$46.72	0.05	\$72.35	\$53.98	69.3	85.0	72.9	98.4	1.0
MHC F	\$1.18	\$36.85	0.05	\$81.53	\$69.35	58.8	80.7	66.7	99.8	1.0

Note. CAFAS/ASEBA = percentage of youth showing improvement per the Child and Adolescent Functional Assessment Scale or Achenbach System for Empirically Based Assessment reports, **Clinical Services** = selected summary costs of therapeutic services per average client day per month, **Complaint** = percentage of youth with no documented complaint or grievance, **CSP** = percentage of youth with Coordinated Service Plans meeting quality standards, **DEA Score** = Data Envelope Analysis percentage score, **IIH** = percentage of youth receiving Intensive In-Home Treatment (i.e., not removed from their home setting), **MHC** = Mental Health Center, **MHCC FTE** = number of full-time equivalents of care coordinators per average client day per month, **Office** = office expenses per average client day per month, **OOH Services** = selected costs of Out-of-Home treatment services per average client day per month, **Salary** = salary expenses per average client day per month.

Figure 1
Efficiency Frontier and Individual Clinic Performance
for CAFAS/ASEBA Improvement and Selected Summary Costs
of Therapeutic Services
(CAMHD DEA Analysis Using Two Variables:
October 2004 - March 2005)



Conclusion

The application of the DEA to operations management within CAMHD elicited three noteworthy process observations. First, it was novel for managers to compare themselves to those with the lowest costs and highest outputs rather than evaluating against means or minimum benchmarks. Second, when the DEA efficiency frontier was described as “best practice” (State of Hawaii, Department of Education and Department of Health, 2005), this term was confusing and emotionally charged to managers. For example, a center with a high vacancy rate would have a resulting high efficiency in the staffing indicator. Although this center would represent a best practice as the low-cost leader in staffing as long as outputs were maintained, understaffing is not a management best practice over the long term. Therefore, the term “efficiency frontier” was preferred for referring to the extreme boundaries of inputs and outputs. Third, when a conscientious management team was deemed inefficient, this elicited further data and operational evaluations. Finally, in the context of a multilevel evaluation, the DEA provides important information about both overall system functioning and specific program functioning within the system. The efficiency frontier is defined as a composite of the best functioning across programs in the system; therefore improved system functioning is reflected by an expanding efficiency frontier.

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Symposium Discussion—Multi-Level Systems Evaluation: Hawaii's Commitment to Informed and Applied Research

Charles W. Mueller, Brad J. Nakamura, & Eric L. Daleiden

Together the papers in this symposium reflect the State of Hawaii Child and Adolescent Mental Health Division's (CAMHD) strong and ongoing commitment to develop and apply valid and useful evaluation strategies. At the client level, we see significant progress made toward validating an idiographic client-tailored measure against two standardized measures. At the program level, the second paper linked client characteristics of youth receiving intensive in-home services with differential outcomes. Finally, at the system-level, data envelopment analyses were used for investigating cost-quality efficiencies of six case management centers. These papers nicely reflect the tension between practice and research in systems settings and the empirical and conceptual gains that can be had when empirical science is brought to bear on clinical planning and delivery. Each paper found its own way to balance rigor and relevance while contributing new insights about the system of care.

Although only a handful of authors are listed on these papers, many more individuals helped actualize these investigations. Moving forward, CAMHD and its stakeholders are committed to continued development of informed and applied research and evaluation, effectively working toward CAMHD's ultimate vision statement: "Happy Children, Healthy Families, Helpful Communities."

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Topical Discussion

Translation in Systems of Care: Methods and Issues

Sylvia Fisher
Anika Keens-Douglas
Michelle Schurig

Background

According to the U.S. Census Bureau, the Hispanic population reached 41.3 million as of July 1, 2004. The Hispanic growth rate between July 1, 2003, and July 1, 2004, of 3.6% was more than three times that of the total population (1.0%; U.S. Census Bureau, 2005). Hispanics represent a diverse array of cultures and, although they share a common language, there are substantial variations in their written and spoken Spanish.

Effective oral and written translation is increasingly important throughout systems of care, particularly with regard to programs and evaluation. When a translation fails to convey the intended information, clients do not understand what their healthcare providers are telling them and quality of health care can be compromised (Anderson et al., 2003). From a programmatic perspective, ensuring that diverse populations have access to services requires communities to think creatively to develop effective outreach and recruitment strategies. It is also important to address linguistic barriers to ensure reliable and valid data collection for the national evaluation of the systems of care program.

A fundamental principle of systems of care is the importance of cultural and linguistic competence, which is essential to the delivery of quality care and program services. The National Center for Cultural Competence defines linguistic competence as:

“...the capacity of an organization and its personnel to communicate effectively, and convey information in a manner that is easily understood by diverse audiences including persons of limited English proficiency, those who have low literacy skills or are not literate, and individuals with disabilities” (Goode & Jones, 2004).

The need for effective oral and written translation is becoming increasingly common throughout systems of care, as more communities report the need for culturally sensitive and linguistically appropriate translations to guide their local efforts. In response, the system of care national evaluation program has demonstrated a significant commitment to the importance of translation by providing guidance for local efforts and planning processes, especially in the translation of materials and documents into Spanish. The national evaluation team recognizes the vital role translation plays in the success of evaluation activities, particularly data collection.

Translation Methods

Translation is a complex process laden with numerous challenges, including (a) preserving the integrity and semantic equivalence between the original written or oral text and the translated text; and (b) maintaining a culturally sensitive translation that ensures that cultural traditions and typical language idioms are addressed in a respectful manner. In addition, successful oral and written translations reduce the potential for statistical and other forms of bias whenever possible, somewhat minimizing the potential for error in data collection activities (Fisher & Gerber, 2002).

Several translation approaches are available, including back translation, expert groups (such as a translation advisory committee), cognitive interviews, focus groups, item response theory, respondent and interviewer debriefings, certified translators, use of the decentering method, and behavior coding. Marín and Marín (1991) especially favor translation-by-committee approaches for Spanish translations because Spanish is spoken in nearly 25 nations and, accordingly, is subject to many idioms and variations both in meaning and pronunciation. These variations and cultural idioms and differences can result in translations that have radically different meanings. Additionally, if a translation is not well-designed from its inception, formidable efforts often become necessary to disentangle the roots of the translation problem, which is difficult once a translation is completed.

The literature on translation helped justify a decision for the national evaluation to develop an iterative process of review and feedback, through the establishment of a translation committee with strong links to the audience for translated evaluation products. The processes undertaken by the translation committee served as the early steps in translating evaluation training manuals and materials into Spanish.

Development and Use of National Evaluation Glossary of Spanish Terms: Translation-by-Committee

Marín and Marín have specified at least four groups of native Spanish speakers that should be represented on any Spanish-language translation committee: (a) Mexican, (b) Caribbean, (c) Central American, and (d) South American. The inclusion of participants from these four groups will help secure a more culturally appropriate Spanish language translation.

A translation-by-committee process was deemed a credible choice for translation activities and feasible to implement within the timeframe and resources available. Although there was potential for wider Hispanic and Latino representation, audiences from system of care communities were identified as majority Mexican, Puerto Rican, and Cuban. Accordingly, native Spanish speakers of similar backgrounds, experts in child mental health and systems of care, and individuals who would be interacting with the final translated products were invited to be part of the translation committee. Their main objective was to review an English–Spanish glossary of important terms used in national evaluation materials and to offer feedback in an effort to generate the most culturally appropriate, yet semantically accurate, translation of the English terms.

A survey was developed that asked reviewers to rate their opinions of glossary terms as 1, *no opinion*, 2, *translation needs improvement*, or 3, *in complete agreement with translation*. Responses were scored accordingly. They also provided text responses to explain their selection additions, and to provide alternate vocabulary for terms used. Members of the translation committee were later invited to join a conference call to go over the more controversial terms, and to provide additions they felt were important.

Members of the translation committee used the scheduled conference call to further discuss terms that had received a lower score. This activity resulted in consensus for nearly all of the glossary terms and for the ongoing development of the glossary, and, most significantly, resulted in increased consistency across translated materials. This promising approach permits consumers to be directly involved in shaping and developing the glossary of terms.

Putting It in Perspective: Discussion Topics Identified by Participants

The following topics were identified and discussed by participants as important themes during the Translation in Systems of Care: Methods and Issues roundtable session.

Translation, in general:

- The role of culture—as it extends to understanding family, literacy levels, socioeconomic factors, and other differences—in translating products for particular audiences.
- The importance of building collaborative relationships between stakeholders, gatekeepers (e.g., visible community leaders, potential interviewers/translators, and data collectors), and the audience to better assess cultural and linguistic needs. This would include bringing stakeholders and community gatekeepers together early in the evaluation and service planning phase to begin preparing a culturally appropriate translation.

For evaluation:

- The importance of considering translation costs and resources as part of the evaluation budget and initial local evaluation planning.
- The need to raise awareness about the benefits of having a translation process toward increasing

stakeholder input, maintaining community response, and ensuring quality data collection.

- The value of working toward common criteria for both local and national evaluation efforts in order to build a broader network and consensus on translation in evaluation.
- The value of creating and maintaining a central, common glossary for system of care terms to ensure cross-site, cross-project, and cross-agency consistency.
- The importance of developing a regular process for continuous quality monitoring of translated materials since culture and language can continually evolve.

Resulting Recommendations

The following recommendations can be considered next steps to improve the quality of translations in systems of care and the national evaluation. Participants set the following priorities for continued focus later:

1. Emphasize the importance of culture as a basis to start and build collaborative relationships with audiences of national and local evaluation efforts. In order to know the audience, involve community gatekeepers and members early in evaluation planning.
2. Promote the message of working toward establishing common criteria at the evaluation planning table in order to achieve translation consistency throughout systems of care.
3. Establish a centralized “location” for ongoing discussion about terminology. Include program partners and utilize existing networks. These system-wide efforts would contribute to a central glossary of terms for systems of care.
4. Work to consolidate existing Spanish-language glossaries. Use the centralized network to incorporate existing networks focused on linguistic issues.
5. Incorporate continuous quality monitoring (QM) procedures for keeping a dynamic and relevant glossary. This will identify the most culturally and linguistically appropriate translations for system of care concepts. Also, build in a communication feedback loop for newer concepts. Educate communities on this terminology in both English (the source language) and Spanish (the target language).
6. Locate dissemination avenues (through national partner efforts, social marketing, and other existing networks) to raise awareness of the importance and benefits of a translation process for evaluation instruments and materials used in service delivery.
7. Encourage the allocation of funds and sharing of resources by sites and the system of care program for coordinated translation activities and use of translation services.⁹

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Topical Discussion

Applying Empowerment Evaluation and Getting to Outcomes to Systems of Care

Introduction

This discussion addressed the potential benefits of utilizing empowerment evaluation and the Getting to Outcomes evaluation approach within systems of care. Dr. Osher is a Managing Director at American Institutes of Research. Lindsey Stillman, MA and Jennifer Duffy are doctoral students in the University of South Carolina Clinical-Community Psychology graduate program. They have worked extensively with Dr. Wandersman, an expert in empowerment evaluation and the developer of Getting to Outcomes (Fisher, Imm, Chinman & Wandersman, 2005).

Researchers and practitioners have cited numerous challenges to evaluating and implementing systems of care (SOC). Despite the clearly articulated system of care principles, each SOC is unique to the needs and resources of the community in which it is being implemented. SOC is a complex, multidimensional, and comprehensive change strategy rather than a single “prepackaged” intervention (Hernandez & Hodges, 2003). In addition, SOC are implemented within service delivery environments that are complex and continually changing (Hernandez, 2002).

The complexity and variability of SOC has made large-scale effectiveness evaluation daunting. Although the Center for Mental Health Studies has conducted national evaluation efforts and various other researchers have evaluated the effectiveness of the approach, the results are mixed. Reasons suggested for these mixed findings include too much focus on individual level outcomes, lack of attention to community factors, variability due to local decision-making, and lack of adaptation of evaluation methodology to local needs and resources (Cook & Kilmer, 2004; Friedman & Hernandez, 2002, Hernandez & Hodges, 2003). This mixed evidence is not necessarily an indication that the approach is not effective, but that new models for implementation and evaluation need to be explored in order to increase and document their effectiveness.

Empowerment Evaluation with GTO: A Good Fit for SOC

A number of authors suggest the importance of building planning and evaluation capacity and processes within SOC. Friedman (2005) and Friedman and Drews (2005) suggest that SOC need to develop “ongoing internal evaluation procedures” and strong performance measurement procedures that focus both on process and outcome data to inform decision making. All of these challenges and suggested solutions lead to the conclusion that developing local planning and evaluation capacity can increase the effectiveness of SOC. Two approaches that appear ideal for building this capacity are empowerment evaluation and Getting to Outcomes. Although use of these approaches with SOC has not been documented, they could address the identified gaps in current SOC practice.

Empowerment evaluation has been defined as, “an evaluation approach that aims to increase the likelihood that programs will achieve results by increasing the capacity of program stakeholders to plan, implement, and evaluate their own programs” (Wandersman et al., 2005, p. 27). Empowerment evaluation is based on the idea that evaluation should not be owned by a professional evaluator/researcher, but should be a collaborative process whereby an organization or community learns to evaluate its own work. Evaluation is focused on providing information for program improvement. The evaluator’s role is as a coach or facilitator, with stakeholders taking ownership of the evaluation process.

While the empowerment evaluation approach is still new, there is some evidence that it can be effective in building capacity to evaluate and improve programs. A number of case studies have described the successful use of this approach in practice (Wandersman et al., 2005). In addition, one empirical

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study showed that the empowerment evaluation approach was successful in helping state funded sexual assault prevention programs and victims' services programs to develop and carry out their own program evaluations (Campbell et al., 2004).

The empowerment evaluation process can be facilitated by the use of Getting To Outcomes (GTO), which provides practitioners with the information and tools necessary for evaluation in an accessible way (Fisher, Imm, Chinman & Wandersman, 2006). GTO provides a practical guide for planning, implementing, evaluating, and sustaining programs or strategies. The process is based on 10 accountability questions (Table 1). Each question involves a number of self-assessment steps. With careful consideration of each question, an organization should significantly increase the likelihood that it will achieve desired outcomes. Recent research has examined the effect of using GTO with substance abuse prevention coalitions (Fisher, et al. 2006). While more research is needed, these findings suggest that GTO is a promising approach for making planning and evaluation accessible to practitioners.

Table 1
The 10 Accountability Questions of GTO

<i>The Accountability Questions</i>
1. What are the needs and resources in your initiative?
2. What are the goals, target population, and desired outcomes (objectives) for your initiative?
3. How does the intervention incorporate knowledge of science and best practice in this area?
4. How does the intervention fit with other programs already being offered?
5. What capacities do you need to put this intervention into place with quality?
6. How will this intervention be carried out?
7. How will the quality of implementation be assessed?
8. How well did the intervention work?
9. How will continuous quality improvement strategies be incorporated?
10. If the intervention (or component) is successful, how will the intervention be sustained?

The principles and processes of empowerment evaluation and Getting to Outcomes fit well with the stated needs in current implementation of systems of care. Friedman (2005) describes the aspects of creating an effective SOC as: (a) defining and understanding the population of concern, (b) achieving agreement on values and principles, (c) establishing a theory of change, (d) developing an implementation plan and (e) developing a performance measurement plan. Getting to Outcomes provides stakeholders with a systematic way to complete these tasks including definition of the target population (Question 1), definition of the goals (Question 2), creating a connection between goals, strategies, and outcomes (Question 3), how the program will be carried out (Question 6), and how well the program works (Question 8).

The Research and Training Center for Children's Mental Health articulates fourteen implementation factors that lead to effective systems of care. Many of these are congruent with the steps of GTO and the principles of empowerment evaluation. For example, they emphasize the need to define and describe the population, clearly state the theory of change, develop an implementation plan, and implement performance measurement. In addition, they emphasize provider accountability and transformational leadership, both of which fit well with the goals of empowerment evaluation (Research and Training Center for Children's Mental Health, 2005).

Empowerment evaluation which utilizes the Getting to Outcomes process seems a natural fit with the systems of care approach because of its focus on developing local capacity, strategic planning, and performance measurement. Building the capacity of SOC to systematically plan, implement, and evaluate their initiative using the ten GTO steps may be an ideal way to improve the implementation of SOC and collect evidence of their effectiveness. Utilizing GTO and empowerment evaluation can increase the capacity of stakeholders to plan and modify their SOC to maximize effectiveness.

Discussion

In order to illustrate the potential applicability of empowerment evaluation and GTO to SOC, we described how these two approaches could be implemented within a system of care. During the discussion portion of the session, we solicited input from participants regarding the perceived utility of these approaches as well as their experiences with evaluation.

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Chapter Two

Implementing and Evaluating Evidence-Based Practices

Topical Discussion

Implementing Evidence-Based Practices at the State Level: Challenges, Successes and Lessons Learned

Robert P. Franks

Jean Adnopoz

Introduction

The purpose of this session was to provide a forum to discuss lessons learned from the implementation of evidence-based practice at the state level. The presenters described their experience in the State of Connecticut, which has adopted a range of evidence-based practices over the past five years. The presenters have been engaged in an ongoing analysis of lessons learned from the state-wide implementation of Multisystemic Therapy (MST), which at the time of this writing included 25 teams across the state. The discussion included an in depth exploration of the experiences in Connecticut, after which session participants related these experiences to other settings.

The Connecticut Experience

In the State of Connecticut, MST services target primarily juvenile justice involved youth who access the services both through the child welfare system and judicial branch. In order to achieve this large-scale implementation of MST, state agencies partnered with an independent institute and with major academic institutions to form the Connecticut Center for Effective Practice (CCEP; the Center). This unique partnership, housed at the Child Health and Development Institute of Connecticut, brings together the resources of the two major state agencies serving children in Connecticut, the Department of Children and Families and the Court Support Services Division of the Judicial Branch, with two academic institutions, the Yale University Child Study Center and the University of Connecticut Health Center. The Center, by leveraging the resources of its partners, acted as an “incubator” for the implementation of MST across the state. The Center worked with MST Services and employed its own training and quality assurance team to develop the first MST teams over five years ago. Having built the capacity within the state, the Center has turned over the management and quality assurance of MST services to another entity, Advanced Behavioral Health, but continues to provide consultation, evaluation and quality assurance services to state agencies, policy makers, providers and consumers.

This summary provides some initial data on the process of statewide implementation and begins to examine systemic barriers and lessons learned from this process. The Center is planning a comprehensive qualitative and quantitative review of MST services in the state, which will be completed next year.

The mission of the CCEP is to enhance Connecticut’s capacity to improve the effectiveness of treatment provided to all children with serious and complex emotional, behavioral and addictive disorders through development, training, dissemination, evaluation and expansion of effective models of practice. The Center’s primary activity in its early years was to work with its partners to build the capacity of the state and to implement MST as a statewide evidence-based practice. Although it is no longer actively involved in the management or quality assurance of MST services within the state, the Center continues to provide consultation services to state agencies and promote the identification, adoption and evaluation of evidence-based practices, including MST.

The contextual factors and reasons as to how and why the state of Connecticut chose to implement MST as a statewide evidence-based practice include policy and fiscal issues as well as consumer need. The state recognized the need for improved care for children in the mental health and juvenile justice services following several reviews in the late 1990s. In the year 2000, innovative legislation was passed, entitled “Kidcare,” which aimed to enhance the traditional delivery of services to children. This legislation included a goal of improved in-home services to keep children in their communities and to prevent more intensive, out of home placements. This provided, in part, the impetus for the introduction of MST. In addition to these policy changes, grant funds became available, and resources were reallocated to support the implementation of evidence-based practices as the growing need for improved services was recognized at the consumer and community level.

Other contextual factors leading to systems change within the state included two major consent decrees for the Connecticut Department of Children and Families impacting child protection and juvenile justice (Juan F and Emily J.), as well as a statewide evaluation of juvenile justice programs that called for major systems change. Further, ongoing media coverage of problems at the state's Department of Children & Families led to an impetus for change in the way services were being delivered across the state.

Despite the range of incentives for system level change, the state lacked the capacity to implement such large scale changes until the Center was created. By leveraging the resources of state agencies, academic institutions and external expert consultants, the Center was able work toward systems change over a several year period. The goals of this implementation were to improve outcomes for youth in the juvenile justice system as well as to change the landscape of practice in mental health, juvenile justice and child welfare.

MST was selected as the evidence-based practice due to an increased push for accountability by state stakeholders, an increased interest in research driven practice, and adoption of models that could lead to systematic fidelity and consistency in provision of services. MST demonstrated a strong research base and relevance to the needs of the juvenile justice population in Connecticut.

Review of the Implementation of MST in Connecticut

The presenters reviewed the development of evidence based practices (EBPs) in Connecticut from 2005 to the present, detailing the expansion of services in two state agencies; this led to 25 teams currently providing services across the state, with four additional teams being added. MST services are also being expanded in Connecticut to include specialty teams designed to target problem sexual behavior, adult substance abuse, trauma, and an MST aftercare model. Currently over 1,100 children across the state are served annually through these services.

The rapid expansion of MST services in Connecticut resulted in some difficulties including some problems with implementation. Many stakeholders questioned whether this expansion was too radical or insufficiently planned, resulting in disenfranchised and at times frustrated providers within the state and mixed reactions from consumers and community leaders. Changes at the state level included systemic, economic, practice and consumer level issues.

Ongoing economic changes included public agencies and private insurance working together to develop billing codes and mechanisms for reimbursement. State contractual services have also changed dramatically (from 25 providers to five). A statewide behavioral healthcare carveout for Medicaid is being implemented that will lead to further economic changes.

Qualitative reports indicated that systems change was difficult for many. Many providers were disenfranchised, old ways of working were often disrupted, and these changes had pervasive effects throughout the juvenile justice system. At the practice level, providers had to develop increased capacity and in many cases the change in practice was not an easy adaptation of existing resources. Many practitioners were unable to develop sufficient capacity to provide MST services and those that did adopt MST continue to struggle with issues of workforce development and staff turnover. In addition, fidelity issues across the MST network are an ongoing area of concern.

At the consumer level, families are becoming increasingly aware of evidence-based practices. In many cases, families report favorable experiences and outcomes—however initial satisfaction data are mixed. In the absence of reported outcome data, consumers tend to respond to anecdotal reports, which in some cases are negative and can derail the process of effective implementation and systems change.

Finally, available initial outcome data at the child and family level show incremental improvements but with mixed results. Further analysis and examination of both qualitative and quantitative data sources is planned for the upcoming year as the Center for Effective Practices conducts a statewide MST Progress Report.

Discussion of Experiences in Other States

Many group participants resonated with the experiences in Connecticut and drew comparisons to their own states. In particular the link between policy changes and practice changes was seen as relevant. The influence of lawsuits and consent decrees was also seen as a shared contextual factor that contributed to change. The recent consent decree in the State of Massachusetts was discussed within the context of lessons learned from Connecticut. In particular, the challenge of translating a consent decree to practical applications and systems change across the State was explored.

Group participants in this discussion asked questions to learn more about the presenters' experiences and to understand the lessons learned in Connecticut. Attendees identified similar issues in their states that seemed to "ring true" with regard to their experience of implementing EBPs. These factors included:

- contextual factors that were an impetus for changing practice
- provider capacity
- workforce development issues
- training issues
- reimbursement issues
- fidelity to the EBP model
- gaps between policy and practice

Many group participants reported that whether they were considered working within their state to implement EBPs or had already begun the process of doing so, there were significant challenges at both the state agency and provider levels that acted as potential barriers to systems change. Most agreed that state bureaucracies were resistant to change and that there were significant barriers to changing practice at the provider level. Many reported that providers did not have the capacity or resources to devote to the appropriate training and supervision of staff and that providers often regressed to traditional models of treatment. Workforce development emerged as a significant issue, both for recent graduates from training programs and for "seasoned" providers who may be resistant to change. All of these factors contributed to sustainability issues and raised policy concerns for how state agencies can facilitate and support systems change.

Lessons Learned and Recommendations

A variety of lessons learned and recommendations for other states are evident. Lessons learned from the statewide implementation of MST include:

- systems change is not easy and multiple barriers were encountered;
- systems change that occurs too quickly or without proper planning can have negative consequences;
- stakeholders can be fickle in their support if results are not evident;
- quality assurance and evaluation are vital;
- reporting back of ongoing progress is critical;
- workforce development and sustainability are major issues that impede implementation; and
- despite challenges and barriers, many positive systems changes are occurring leading to better outcomes for children and families.

Recommendations to other states include:

- "look before you leap;"
- you need to not only identify best practice, but determine your capacity for its adoption and implementation;
- identify mechanisms within the state for adopting EBPs and collaborate closely with state agencies and academic institutions;

- the shifting of resources can lead to resentment and impede implementation if not handled carefully;
- do not lose sight of incremental changes that lead to positive outcomes and set benchmarks along the way;
- explore mechanisms for systems change (value of independent institute); and
- recognize that change from within state agencies is extremely difficult without outside forces and systems of checks and balances.

Conclusions and Future Directions

Group participants concluded that these lessons learned could be further explicated by more in depth research and that they presented an opportunity to develop models for statewide implementation. Further, a shared commitment to the implementation of EBPs was expressed by attendees as well as a desire to engage in ongoing collaborative work to continue to develop the research base and science of EBP implementation in child mental health.

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Symposium

Various Strategies for Promoting, Implementing, and Surviving System Change: Steps Toward Transformation

Symposium Introduction

Kay Hodges

National, state and local efforts to change systems of care and to introduce evidence-based practices are discussed. Goldman describes an extensive training program for an evidence based practice, the Parent Management Training Oregon Model, in which the agency is building capacity to sustain training and fidelity monitoring. Two presenters discuss very different approaches for meeting the mental health needs of youths referred to juvenile justice and child welfare. Shackelford discusses the development of a system of care for juvenile justice youth with emotional/behavioral problems by implementing the Juvenile Inventory for Functioning (JIFF). Hansen discusses the implementation of a training program for frontline staff within three components of the juvenile justice system in Pennsylvania: probation, juvenile detention, and secure facilities.

Chair

Kay Hodges

Authors

Shari Goldman et al.
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Agency Level Steps Involved in Implementing Evidence-Based Practices within a System of Care

Shari Goldman, Mary McLeod, & Bobette A. Schrandt

Introduction

The Michigan Department of Community Health identified the Parent Management Training-Oregon Model (PMTO; Patterson, 2005) as an evidence-based practice for targeting a large population at-risk for mental health problems. Analysis of data on youths served by the public mental health system revealed that 50.4% of the youths had moderate or severe behavioral problems (Wotring, Hodges, Xue, & Forgatch, 2005). Outcomes for these youths, as evaluated by the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2000), showed successful outcomes for approximately 50% of the youths despite an average length of stay of 11 months (Hodges, Xue, & Wotring, 2005). These data were instrumental in the state's decision to introduce statewide training in PMTO. Prior to the state's mandate for training in PMTO, Easter Seals - Michigan, a contract agency of Oakland Community Mental Health Authority, made the decision to move forward with training in the model, based on CAFAS data and fit between the model and the strengths-based orientation of the organization. The training program is outlined below, followed by the outcome data leading to the implementation decision.

Training Program

Ten staff initiated training in PMTO conducted by the Implementation Sciences International, Inc. (ISII), which is affiliated with the Oregon Social Learning Center (OSLC), where PMTO was developed. ISII is located in Oregon and Easter Seals is in Michigan; this required a long-distance relationship over the training period of 18 months (thus far). It is anticipated that all trainees will complete the program within 30 months.

Staff selected to participate in the training to certification in the PMTO model were all master's level clinicians. They included eight supervisory staff and two mental health clinicians. Three higher level administrators attended the didactic training days in order to develop an understanding of organizational changes that might need to be implemented to support the model.

Training activities included attendance at workshops, videotaping of therapy sessions, receiving feedback on the videotaped sessions, and participation in consultation over the phone. There were a

total of 18 workshop days, spread over six sessions and led by three staff from ISII, who are referred to as “mentors.” Each of the mentors had been associated with OSLC for more than a decade and are experienced clinicians. Two have doctoral degrees in psychology and the other has a master’s degree in social work.

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, each trainee was required to videotape sessions of their work implementing the PMTO Model with a minimum of five families. Tapes were sent to the trainers on a weekly basis. Feedback was provided by the mentors via written feedback and bi-monthly phone supervision sessions. The trainees also received instruction in the measure used to assess treatment fidelity for PMTO, the Fidelity of Implementation Rating System (FIMP; Forgatch, Patterson, & DeGarmo, 2005; Knutson, Forgatch, & Rains, 2003).

ISII utilized a collaborative approach. Training materials were adapted to meet the needs of the organization and community. The trainees met monthly for support and administrative trouble-shooting in a group facilitated by the project coordinator at Easter Seals.

The data that led to the implementation of the evidence based practices are presented below. Collection of outcome data is a routine activity at Easter Seals, and as a result, Easter Seals will be able to compare this baseline data to data collected after the training is completed.

Participants

The sample included 313 youths served at Easter Seals in 2003-2004, the fiscal year prior to the training. The age range was 5 to 18 years old, with a mean age of 11.65 years. The population was 66.8% Caucasian, 22.7% African American, 5% multiracial, and approximately 1% or less each Arab American, Asian, Hispanic, or Native American. Approximately half (48.6%) of the families had single caregivers. For 32.3% of the families, the highest educational level attained by any caregiver was high school.

Measures

The measure used to evaluate outcomes was the CAFAS; it measures a child’s functioning across eight domains—School or Work; Home; Community; Behavior toward Others; Moods and Emotions; Self-harmful Behavior, Substance use; and Thinking. Based on the rater’s endorsements of behavioral items, the youth’s level of impairment in functioning is determined, using a 4-point scale, as follows: *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, Xue & Wotring, 2004). The CAFAS is administered at intake, then quarterly and at exit for all of the children served.

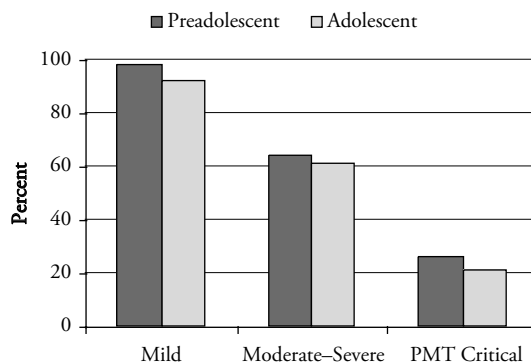
Results

Indicators of Need for PMTO Training

Data on the percentages of the preadolescents and adolescents served at Easter Seals who could benefit from PMTO are presented in Figure 1. Up to 98.1% of all preadolescents (and 92.4% of adolescents) served at Easter Seals could be impacted by PMTO, as this is the frequency of youth who have at least mild impairment on the Home or Behavior Toward Others subscales of the CAFAS. The Home subscale assesses noncompliance in the home, whereas the Behavior Toward Other subscale mostly captures behavioral excesses that offend or annoy others. If the case were made that PMTO is only needed for more serious cases of noncompliance, then a more conservative estimate would be that 64.4% of the preadolescent (and 61.9% of adolescent) cases could be impacted, as this is the frequency of severe or moderate impairment on either of these two subscales. If the goal were to identify cases in which PMTO would almost certainly be the treatment module of choice from the onset of services (see “PMT Critical” in Figure 1), a conservative estimate would be 26.3% of preadolescents and 21.9% of adolescents. This is the percentage of youths who

display serious noncompliance in the home (i.e., severe or moderate impairment on the Home subscale), have behavioral problems across settings (i.e., also moderately or severely impaired on the School or Behavior Toward Others subscale), and are absent behaviors that might evoke at intake another treatment as the primary treatment module (i.e., no severe impairment on Community [e.g., delinquent-like behaviors], Moods/Emotions, Self-Harmful [e.g., suicidal], Substance Use or Thinking [e.g., rational thought]). These cases could be considered “target PMTO cases,” in that it would be reasonable to ask why the family did not receive PMTO as the primary treatment endeavor.

Figure 1
Percentage of Preadolescents and Adolescents
Who Could Benefit from Parent Management Training (PMT)



Discussion

Implementation of an evidence-based practice with fidelity requires an organization to make an investment of time, staff, and financial resources, all of which tend to be limited within human service organizations. Appropriate outcome data are critical to the decision making process if an agency is to target populations at greatest risk. Easter Seals was able to utilize data from the CAFAS to advocate with funding sources for the resources to undertake staff training in Parent Management Training - Oregon. As an early adopter within the state, Easter Seals - Michigan is now in the program installation stage, using the framework proposed by Fixsen, Naoom, Blase, Friedman, and Wallace (2005) for the stages involved in the implementation of evidence-based practice. Moving into the initial implementation stage over the next two years, CAFAS data will continue to be utilized as a valuable outcome measure for PMTO within the organization. It will also undoubtedly lead to identification of additional priority populations for other evidence-based models.

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The Brown County Story: Baby Steps

Scott Shackelford & Jim Hermans

Introduction

Beginning in 2004, the Brown County Human Services Department (BCHSD) began a journey of self-scrutiny with the assistance of a number of consultants. The goal was to improve the system of care for youths and families served across child serving agencies. This initiative began by looking into using empirically-based outcome and screening tools, which could be used to determine treatment needs, including the match between youth impairment and specific evidenced-based treatments. We decided that the Child and Adolescent Functional Assessment Scales (CAFAS; Hodges 1994) and the Juvenile Inventory for Functioning (JIFF; Hodges 2004), a screening interview for the CAFAS, would be ideal tools to help the Department “get a better handle on” who is referred to us, what they really need, and what differences our well-intentioned interventions make in their lives.

Around this time the Department began talking about systems of care and asking one another, “do we have one here?” We were fairly certain that we did not, especially for children with serious emotional and behavioral problems. BCHSD contracted with the Louis de la Parte Florida Mental Health Institute (FMHI) at the University of South Florida in Tampa to assist us in learning about how to build a system of care. Last year BCHSD sent a small delegation to the Annual Research and Training Center Conference to bring home new ideas about how to develop a system of care. Ideas included System of Care Practice Reviews (SOCPR; Hernandez, Worthington, & Davis, 2005) and Substance Abuse and Mental Health Service Administration (SAMHSA) grant opportunities.

In the spring of 2005, the FMHI team helped us conduct a SOCPR. We took a random sample of cases from our child protection and juvenile justice program areas. The findings confirmed for us the need to transform our system in a number of ways, including: seeking out evidence based practices, developing a system that is family driven and culturally competent, and establishing a collaborative relationship between juvenile justice, child welfare/foster care and mental health/alcohol and other drug abuse, in both the Department and the community.

Since that time, BCHSD conducted cultural competency training for staff, and actions were taken to more deeply involve parent advocates. In addition, we began to incorporate routine administration of the JIFF with all new juvenile justice intakes. In this report, we present results for the data that we have collected thus far.

Method

Subjects

The sample consists of 70 youths who were referred to the Brown County Juvenile Court because of alleged crimes, which ranged from theft, battery, disorderly conduct, sexual assault, auto theft, and other delinquent acts. The mean age was 14 years old (range: 9-16 years old). The sample was primarily male (85.7%). The racial and ethnic makeup of the sample was 74% Caucasian, 10% Native American, and 9% African American. This sample included all youths who received an intake assessment between July and December 2005. The data presented here reflect the JIFF interviews conducted with the caregivers of these youths. At least one caregiver per youth participated. If there were more than one caregiver who attended the intake assessment, they were invited to participate.

Measures

Each family was interviewed with the JIFF: Caregiver Informant Version (Hodges, 2004). The JIFF was designed to be a screening tool for the CAFAS (Hodges, 1994). It contains questions about 10 domain areas: School, Home, Community, Behavior Toward Others, Moods and Emotions, Self-harmful Behaviors, Substance Use, Thinking, Family Life, and Health. Both strengths and problems were elicited in this brief interview. The response options primarily consist of *yes*, *no*, *maybe/suspect*, and *not applicable*. The interview addressed the prior three months, except for one question asking about whether the youth had *ever* experienced a trauma. For the items in the Family Life subscale, the response of *maybe/suspect* is not an option. The directionality of scoring is such that a *yes* response indicates the presence of dysfunction. Training for the administration of the JIFF includes a PowerPoint presentation and role-playing.

Procedures

The staff of the Brown County Juvenile Court provide intake assessments for the purpose of determining appropriate court dispositions as well as service needs. It also serves a diversionary role by keeping kids out of the juvenile court system if possible by utilizing community-based services and working with families to develop case plans. The case management function incorporates monitoring ongoing court cases, preparing court reports, and monitoring the progress of clients and families.

In this study, four intake workers were chosen to administer the JIFF, three males and one female. Two workers had master's degrees in counseling and two had bachelor's degrees. All were highly experienced, working in juvenile justice for an average of 21.7 years (ranging from 18 to 25 years).

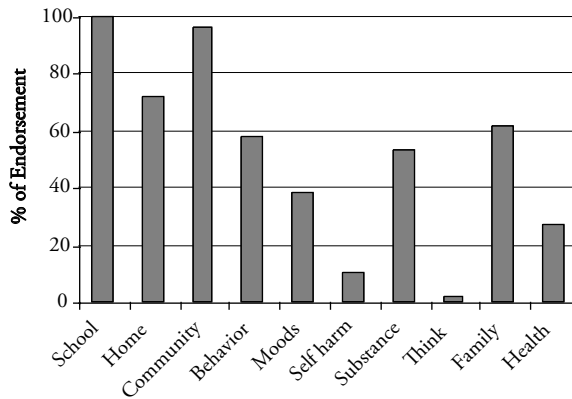
Results

Figure 1 illustrates the percent of caregivers who endorsed one of more items on each of the JIFF subscales. As seen in the figure, more than 70% of caregivers endorsed more than one item in each of the following subscales: School, Community, and Home. More than half of the caregivers revealed that their youth had one or more problems in the following domains: School, Home, Behavior Toward Others, Family Life, and Drugs and Alcohol. Problems with the serious psychiatric symptoms of suicide risk and irrational thought applied to less than 10% of the sample.

Endorsements for specific items were also examined, as they provide guidance regarding the types of services that are needed to serve these youths. At school, the majority of the youths were noncompliant, with 45.7% described as disobedient. At home, 45.7% reported that youths went places they were not supposed to go. Over one-third of the parents (37.1%) wished that their children had friends who were a better influence. Over one-third (37.10%) of the youth had experienced a traumatic event in the past, with 17.2% (*yes*) to 25.8% (*yes* and *maybe*) reporting that they still experience discomfort from the past trauma.

Underage drinking characterized almost half of the children (47.2%), and 28.5% reported use of other drugs during the last three months. In terms of the home environment, caregivers reported that

Figure 1
Percent of Caregivers Who Endorsed
One or More Items on Each of the JIFF Subscales



the child's behavioral problems interfered with the caregiver's roles at home, at work, or with family life. Financial burdens (25.7%), missed days at work (22.9%), and conflicts with spouse/partner (22.9%) were the most frequently endorsed family problems. Parents also disclosed serious problems at home involving other family members (i.e., not the juvenile), including domestic violence (8.6%) and substance use issues in the home (7.1%).

Conclusion

Our experience with the JIFF leads us clearly in the direction of system transformation. Based on the data reported by these families, there are many needs not sufficiently met by community resources. Successfully linking youths and families with appropriate services would require more integrated services. In addition, the creation of a new service unit separate from child welfare and juvenile justice, which can respond more effectively to serious emotional/behavioral problems, is being considered. It is anticipated that this service would team closely with our traditional service units whenever these youth are impacted by abuse or neglect or become involved in delinquent activities. The use of the JIFF has documented these needs and has also been very useful clinically in making treatment decisions. We believe that these changes will help us partner with the larger community of stakeholders, families and providers to form an effective continuum or system of care for children in Brown County.

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Staff Education and Training for Systems Change: Joint Efforts of Mental Health and Juvenile Justice

Marsali Hansen

Introduction

Children and youth with mental health needs who participate in the juvenile justice system are a growing concern. The President's New Freedom Commission on Mental Health (2003) calls for quality screening and assessment for mental health problems for youths served by juvenile justice as well as links with treatment and supports to help prevent mental health problems from worsening. This is a challenging task from a number of perspectives, including the high rates of mental health problems in this population, the organization of services which creates "silos" rather than integrated care, and the lack of training or training opportunities for staff who work with juvenile justice.

It is estimated that at least one in five youths served by the juvenile justice system have a mental health disorder, even when conduct disorder is excluded. Teplin and her colleagues (Teplin, Abram, McClelland, Dulcan, & Mericle, 2002) determined the prevalence of psychiatric disorders in a large sample of youths in juvenile detention. The rates varied by gender, with the ranges by disorder as follows: affective (16% to 23%), anxiety (21% to 29%), attention deficit-hyperactivity (11% to 16%), and substance use (51% to 47%). Rates of comorbidity were also examined, with 18% to 25% of youths having two or more types of disorders, when the types were defined as affective, anxiety and attention deficit-hyperactivity disorder/behavioral (Teplin, Abram, McClelland, & Dulcan, 2003). Domalanta, Risser, Roberts, and Risser (2003) used a questionnaire to assess depression in another large sample of detainees and found that 22% had severe symptoms of depression and another 25% had a moderate level.

Studies from the systems of care literature have found that youths receiving services through juvenile justice tend to be as impaired, or significantly more impaired, than youths being served by other child-serving agencies, including mental health. Referral source differences in functional impairment were studied for 6,073 youths served by the grantees receiving awards through a federal initiative, the Comprehensive Community Mental Health Services for Children and Their Families Program (Walrath, et al., 2001). The Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2000) was used to assess impairment. Youths whose care initiated with a referral to juvenile justice had rates of impairment in functioning comparable to youths whose care initiated in mental health or the schools, and they were significantly more impaired than youths referred by their families or social services.

This paper describes an innovative cross-agency initiative, the goal of which was to provide training to increase awareness of mental health problems, to encourage linking youths with appropriate care, and to foster healthier interactions with these youths when incarcerated. The Pennsylvania CASSP Training and Technical Assistance Institute, which is nationally recognized for its efforts at improving the skills of frontline workers who work with children and youth with mental health concerns, has launched an effort at multiple levels to improve the preparation of workers in the juvenile justice system to better meet the needs of this population.

Background

The Institute was invited to assist in staff preparation within three components of the juvenile justice system in Pennsylvania: probation, juvenile detention, and secure facilities. In Pennsylvania each program functions independently of the other and therefore each request had separate parameters. However, the Institute's involvement and preparation of the materials resulted in consistency of the content and delivery, not only among staff in the juvenile justice system but also with mental health workers trained by the Institute to work with youth in this population.

Training

Training for Probation Staff

The Institute developed and delivered its first training on the juvenile justice system for mental health workers in 1999. The curriculum, developed in collaboration with the Juvenile Court Judge's Commission, focused on the cultural shift to balanced and restorative justice and was delivered by probation officers familiar with both the mental health and juvenile justice system. Though intended for mental health workers, many probation officers attended these trainings as well. This shared experience, and the networking that occurred among the staff of both systems, was an additional unforeseen benefit. In addition, the juvenile probation's training program subsequently requested the development and delivery of training on children's mental health for probation officers. As in so many venues, training in mental health had been previously delivered by independent contractors who specialized in juvenile justice but were unfamiliar with the advances in the current children's mental health system. Providing a structured training program jointly developed at the state level by both systems created a level of mutual understanding and a shared knowledge base. The curriculum continues to be offered on a regular basis throughout the state and programs are featured at each system's annual conference.

Training for Detention Center Staff

For the second project within the juvenile justice system, the Institute was contracted by the Juvenile Detention Centers' Association of Pennsylvania to develop a train-the-trainer program for detention center staff. Pennsylvania has 23 detention centers located throughout the state; all were invited to participate in the four-day training program. The Institute, in partnership with the Dimensions Training Institute, developed and delivered a mutually agreed upon training agenda beginning in the spring of 2002. Thirteen of the 23 centers participated in the first or second delivery of the curriculum (the second was delivered in the spring of 2004). The Institute was subsequently contracted to evaluate the delivery of the training program at the actual detention centers.

The evaluation of the training program highlighted some specific challenges to implementing statewide training efforts when attendance is voluntary. First, centers found significant difficulty delivering the training program in its entirety as designed. Specific modules were selected due to time constraints of both staff and trainers. Interestingly, there was no consistency in the modules that were selected. Independent observation by Institute staff raised concerns about using detention center staff to deliver the curriculum. The trainers were perceived as lacking the depth of knowledge needed to deliver the material and adequately address the questions of the participants. These discrepancies are consistent with the Institute's move from the train-the-trainer model and increased attention to trainer knowledge and qualifications in children's mental health.

Another challenge was the voluntary nature of participation and delivery of the program. Unfortunately, all programs that sent people to the training were already actively involved and committed to including some training of their own in staff development programs.

The Institute included an attitude measure of staff toward youth with mental health concerns in the juvenile justice system as a component of the staff evaluation packet. The results of this measure reflect an interesting trend. Staff tended to perceive the need to maintain physical distance from such individuals and regard their prognosis as poor for positive outcomes in the individual's personal and social life. However, the staff did perceive them as entitled to the same rights as others and felt benevolence towards them. Though the number completing this measure was small ($n = 80$), such measurement has the potential for identifying a specific focus of training (e.g. decreasing misinformation and increasing personal comfort with the population).

Training for Secure Juvenile Justice Facilities

In the third area of training, the Institute was invited to develop training programs for the staff at secure juvenile facilities. Pennsylvania, like many states, has developed specialized units for specific populations within these facilities. The Institute developed training programs for two programs as part of the staff orientation to the new units. The first unit specialized in youth with mental health concerns; the second specialized in the needs of youth with mild mental retardation and subsequent mental health concerns. Both curriculum include approximately five days of training and modules on such topics as parent involvement, mental health diagnosis, cultural competence, writing skills and objective observation. In addition, many modules were individualized for the specific setting. Though the secure facilities are located in different regions in the state, administrative oversight and staff development were provided by an office within the Department of Public Welfare which is the same department (but a different office), that contracts with the Institute. Such sharing at the administrative level resulted in unforeseen opportunities for consultation such as development of practice standards for one of the units.

Conclusion

These three joint efforts are beginning to assure that youth with mental health concerns involved in the juvenile justice system encounter (a) probation staff grounded in current mental health practices, (b) detention staff with a general understanding of mental health concerns, and (c) experience specialized services in secure facilities from staff who approach mental health concerns with an appreciation of the youth's individual struggles. These three projects have resulted in polished tangible products recognized at all administrative levels as examples of the partnership needed for positive systems change. They also provide consistent content on children's mental health among the continuum of juvenile justice services.

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Multiple Stakeholder Perspectives on Evidence-Based Practice Implementation

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Introduction

Effective implementation of evidence-based practices (EBPs) into real-world mental health (MH) service settings is an important priority for improving the quality of services and outcomes for youth (Hoagwood & Olin, 2002; Jensen, 2003). Current research is far from conclusive regarding the most effective manner in which to implement EBPs (Henggeler, Lee, & Burns, 2002; Morgenstern, 2000), however new models are being developed (Aarons, 2005) and there are some findings. For example, lack of funds for continuing education is one barrier to change (Simpson, 2002). Multiple strategies such as abstracting services, evidence-based clinical guidelines, incentives for better care systems, and increasing the effectiveness of quality improvement programs can improve implementation (Haynes & Haines, 1998). Implementation can be facilitated at multiple levels including policies, program, clinician, and consumer levels (Dixon et al., 2001). In addition to interventions being evidence-based, implementation efforts should also be evidence-based. Clear, comprehensive, measurable, and testable implementation models are needed to guide research on organizational change. This study is developing such a model. The goal of the present study was to identify barriers and facilitators of adoption of EBPs for organizations serving youth with mental health disorders and related problems and to examine how they vary by organizational level and stakeholder perspective.

Methods

Participant Selection. Participants were drawn from six organizational levels: (1) County Mental Health Officials (including the director of children's MH, an assistant deputy director, and the chief of quality and outcomes ($n = 6$); (2) Organization/Agency Directors ($n = 5$); (3) Program Managers ($n = 6$); (4) Clinicians ($n = 7$); (5) Administrative Staff ($n = 3$); and (6) Consumers of mental health services ($n = 5$).

Selected programs were either operated by the county or provided contract services to the county. These two types of programs have different organizational structures that vary by level of bureaucracy and fiscal constraints on services delivered (Aarons, 2004). Further, the administrative processes and availability of resources needed to implement new practices can vary markedly in these two types of programs. In addition, programs (within agencies) were selected based on the types of services provided (i.e., outpatient, day treatment, case management, residential), size of agency (number of programs), size of program (number of staff), and location (urban vs. rural).

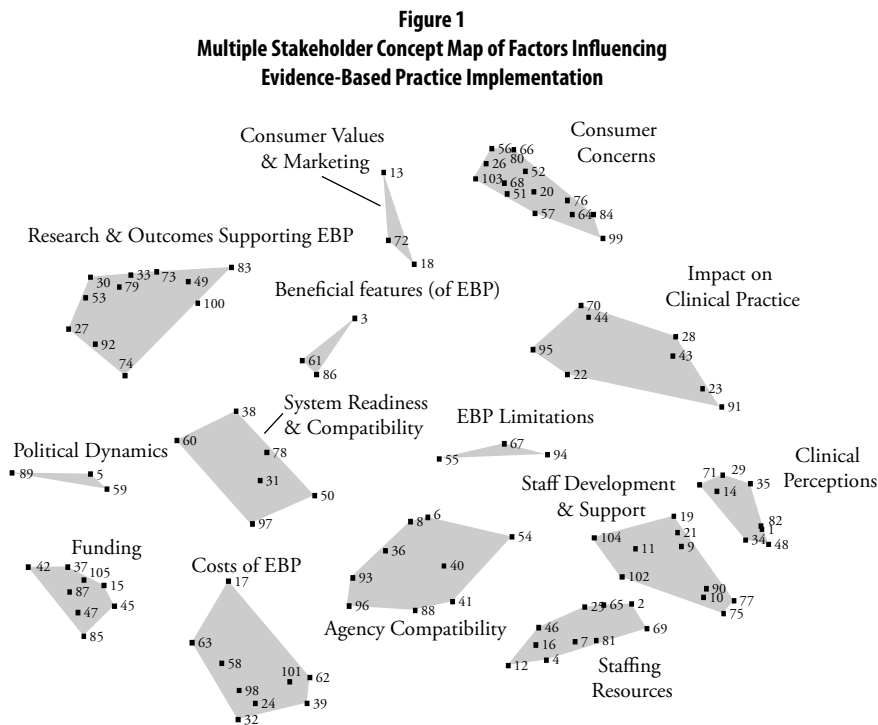
Participant Demographics. The mean age of participants was 44.4 years and over half were female (61.3%). The race/ethnicity of the sample was 74% Caucasian, 9.7% Hispanic, 3.2% African American, 3.2% Asian American, and 9.7% "other." Almost three-quarters of the sample had direct experience with one or more evidence-based practices.

Procedures. The project used concept mapping (CM; Concept Systems, Inc., 2002), a mixed qualitative-quantitative method whereby qualitative procedures are used to generate data that can then be analyzed using quantitative methods (Trochim, Cook, & Setze, 1994). We began CM with a structured brainstorming process in which stakeholder groups met separately and were given the focus for generating statements. The focus statement was "What are the factors that influence the acceptance and use of evidence-based practices in publicly funded mental health programs for families and children?" Next, each participant was provided with a complete set of 105 statements generated in the brainstorming sessions and completed an "unstructured sort" in which they sorted the statements into piles based on similarity. In addition to sorting the statements, each participant was given a list with all of the statements and asked to rate each of them using a 0 to 4 point scale on "Importance" (from 0, *Not at all important*, to 4, *Extremely important*) and "Changeability" (from 0, *Not at all changeable*, to 4, *Extremely changeable*).

Analysis. A square symmetric similarity matrix was generated for each participant based on the card sorting results. The data for all participants are then analyzed using multidimensional scaling (MDS) where a stimulus space is generated. When psychological “distance” or similarity between concepts is entered into MDS, the result is a map of the conceptual space with similar issues or constructs appearing clustered within the space. Similar statements were grouped together in non-overlapping categories called clusters based on their proximity to one another. Using “hierarchical cluster analysis” and MDS, the CM program groups statements into clusters. Therefore, through the use of MDS and cluster analysis, the CM program provides a graphic depiction of a construct that can be immediately evaluated by investigators and/or stakeholder groups. MDS allows for one overall solution for all participants as well as individual configurations for each stakeholder group.

Findings

A systematic approach was used to reach consensus about the “optimal” number of clusters that should be used for the concept map. The point and cluster map shows the 14 clusters derived through our data analysis. A number of solutions were reviewed by the investigative team (e.g., 12 clusters, 16 clusters). Each investigator independently examined solutions with fewer and more clusters and made a determination about the “best” number of clusters balancing parsimony with representation of important constructs. The team then reconvened and reached consensus on the final 14 cluster solution. As shown in Figure 1, the 14 Clusters are: Clinical Perceptions, Staff Development & Support, Staffing Resources, Agency Compatibility, EBP Limitations, Consumer Concerns, Impact on Clinical Practice, Beneficial features (of EBP), Consumer Values & Marketing, System Readiness & Compatibility, Research & Outcomes Supporting EBP, Supporting EBP, Political Dynamics, Funding, and Costs of EBP. Figure 1 also shows that clusters that are closer together are more conceptually similar.



Based on participant's Importance and Changeability ratings of individual statements, cluster rating maps were created overlaying the relative importance and changeability of each of the clusters. Changeability refers to the average ease or difficulty to altering the elements of a given dimension. Higher scores indicate higher changeability.

As shown in Figure 2, clusters having more "layers" were rated as more important relative to clusters with fewer layers. Although Funding, Staff Development, and Staffing resources were rated as most important, the range is very narrow indicating that differences are not large. In Figure 3, clusters with more layers were perceived as more changeable than those with fewer layers. The three clusters rated as being most important were, Funding, Staff Development, and Staffing Resources and those rated most changeable were Clinical Perceptions, Consumer Values & Marketing, and Impact on Clinical Practice.

Figure 2
Importance Ratings of Factors Influencing Evidence-Based Practice Implementation

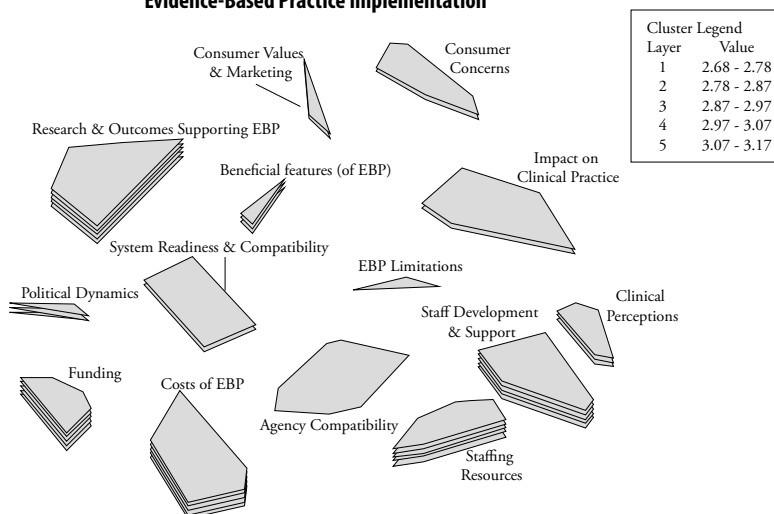


Figure 3
Changeability Ratings of Factors Influencing Evidence-Based Practice Implementation

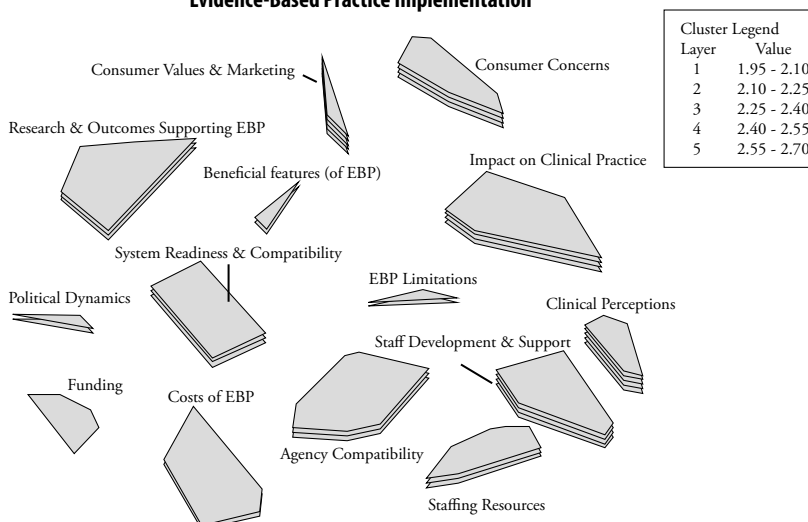
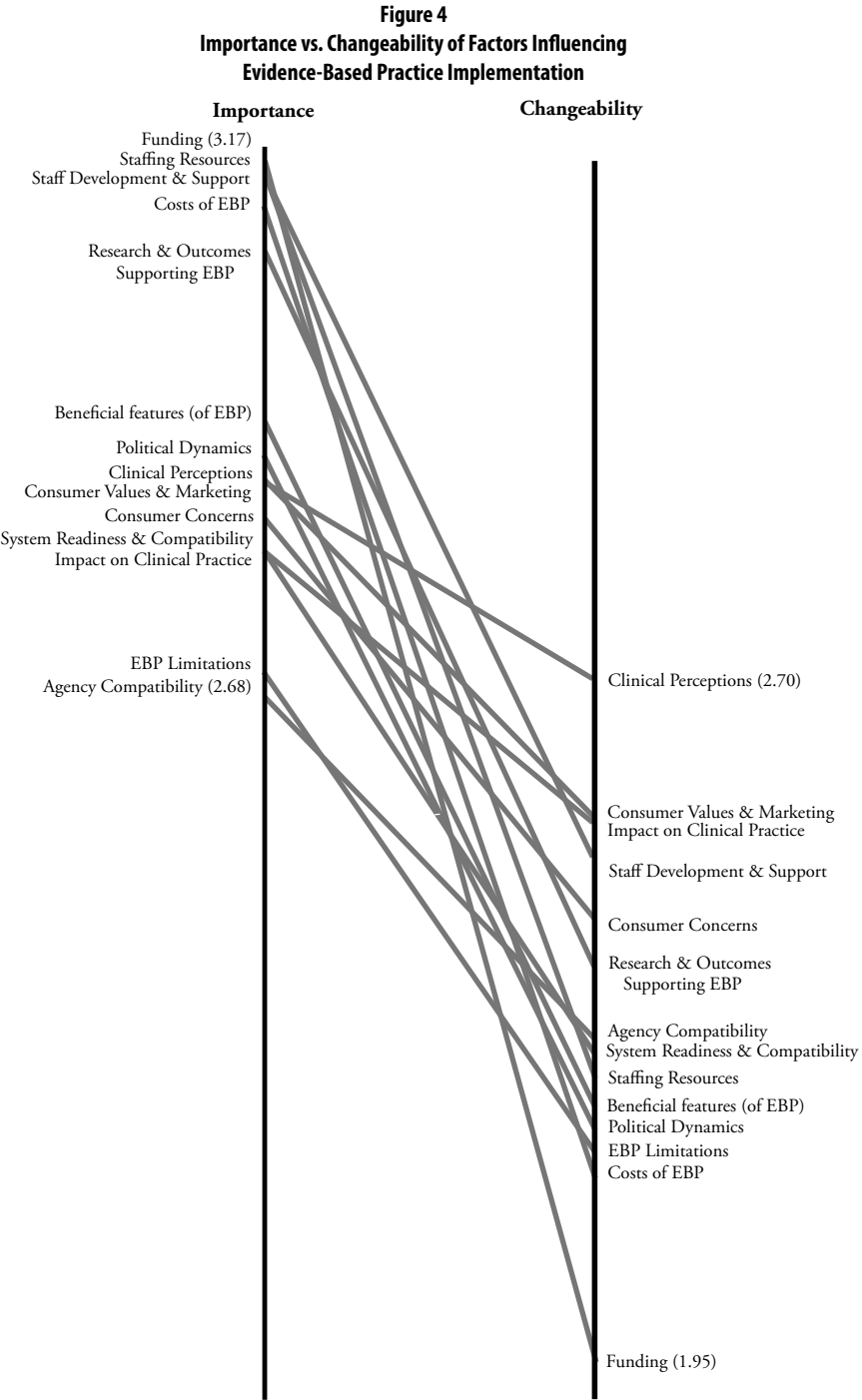


Figure 4 compares Importance and Changeability ratings and this has implications for identifying priorities for implementation improvement. For example, Funding was rated as being the most important (1) and the least changeable (14). Staffing Resources was ranked as being important (2) and not as changeable (9). On the other hand, Clinical Perceptions was ranked at being highly changeable (1) and not as important (8). Most importantly for this project Staff Development & Support were ranked highly as being important (3) and changeable (4). This implies that this may be an area for attention in the implementation process. Figure 4 suggests that a practical and balanced approach must be taken for successful implementation. It will likely be most fruitful to address issues that are important but have a realistic probability of being changed to facilitate implementation.

Conclusion

This study demonstrates that there are a number of multiple stakeholder concerns that may impact implementation of EBPs in real world service settings. Data analyses also demonstrated variability across stakeholder groups and stakeholder groups varied on Importance and Changeability ratings for barriers and facilitators of evidence-based practice implementation. These findings suggest that it will be important to consider the concerns of multiple stakeholders in EBP implementation. Processes for egalitarian multiple stakeholders input can facilitate such exchange. Contrasting stakeholder group perceptions suggests that these different perspectives can inform implementation process. For example optimizing message content and delivery method for particular stakeholders may promote more positive attitudes toward implementation of change in service models. Further research is needed to better understand how factors identified in the present study impact actual EBP implementation efforts.



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Implementation in the Real World: Factors that Impact Implementation of Evidence-Based Programs and Practices

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Introduction

For some time now, a number of practitioners and researchers have been actively developing, evaluating, and replicating evidence-based programs and practices. However, the factors involved in successful replication and implementation of model programs in new settings are not as well understood as the processes used to develop and evaluate the interventions. The formal and scientific information (*episteme*) on effective implementation strategies and issues is, at best, in its infancy. Thus, at a time when many more programs and practices are science-based, effective pathways to broad-scale implementation are dimly lit and rocky. The goal of this research was to capture the craft knowledge (*phronesis*) in this nascent arena of implementation.

Methods

Concept mapping was used to record the wisdom and experience of evidence-based program developers and implementers. There were 23 participants representing a variety of different evidence-based practices and programs that are being implemented nationally. As part of the concept mapping process, the participants generated responses to the following focus prompt, “Thinking at the practice, agency, and system level, one specific factor that influences or impacts implementation of a new program or practice is...” Participants generated approximately 124 statements. Each participant was then provided with a complete set of the statements and asked to sort the statements into piles in a way that made sense to them, and to name each pile according to the type of statements included. In addition to sorting the statements, each participant was asked to rate each of the 124 statements from 1 to 5 in terms of *importance*, *feasibility* and *dependency* dimensions. The analysis of these data was conducted using the Concept System software package (Concept Systems, Inc., 2002), which makes use of key multivariate statistical techniques including multidimensional scaling and cluster analysis. This analysis was used to create a conceptual map of statements generated by the participants.

Results

When we combined both implementer and program developer sort data (i.e., the 124 statements), the result was an eleven-cluster solution. Figure 1 shows the resulting cluster map. The resulting conceptual domains for the program developer and implementer clusters are shown in Table 1, along with the mean rating across groups for the dimensions of importance, feasibility, and dependency. The following sections compare implementer and program developer results on the dimensions of importance, feasibility, and dependency.

Importance

When comparing the statements that implementers and program developers rated as the top ten most *important* implementation factors of the 124 generated, seven were endorsed by both groups. Items of importance were:

- Evidence-based interventions that can be taught, modeled, evaluated and replicated,
- Major stakeholder and leadership buy-in and support of the new model,
- Available, ongoing training and technical assistance,
- Staff commitment to the program model, and the availability of ongoing training and technical assistance,
- Support from the developer in terms of ongoing training, evaluation, and constructive feedback,

Figure 1
Implementer Plus Program Developer Concept Map—11 Cluster Solution

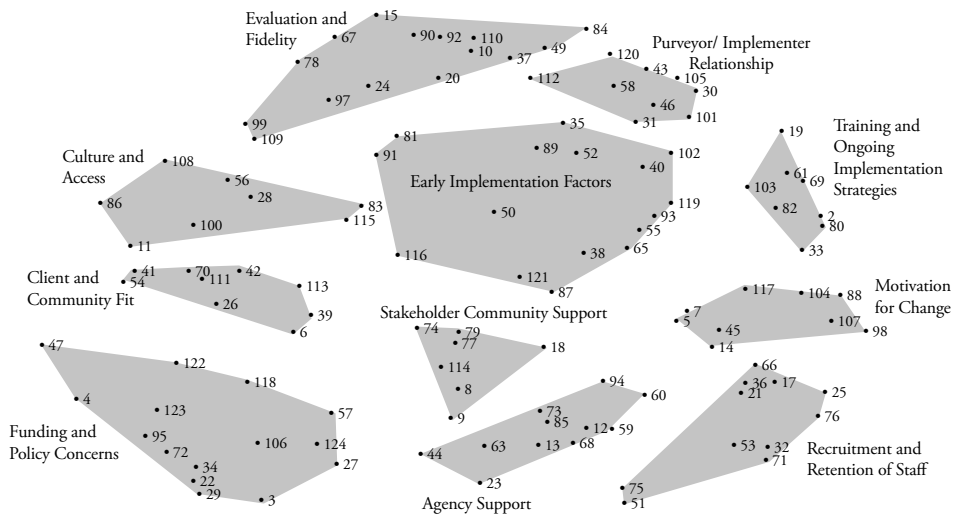


Table 1
Average Importance, Feasibility, and Dependence Ratings
for Implementer Plus Program Developer Cluster Solution

Cluster	Importance	Feasibility	Dependence
Purveyor/Implementer Relationship	4.30	4.30	2.07
Recruitment and Retention of Staff	4.29	3.13	2.49
Evaluation and Fidelity	4.29	4.21	2.68
Stakeholder/Community Support	4.29	3.38	2.63
Motivation for Change	4.19	3.65	2.22
Agency Support	4.18	3.14	2.53
Early Implementation Factors	4.17	3.98	2.24
Training and Ongoing Implementation Strategies	4.08	3.81	2.02
Funding and Policy Concerns	4.07	2.93	3.86
Client and Community Fit	3.83	3.17	2.50
Cultural and Access	3.80	3.67	2.36

- Adequate funding to support implementation as well as ongoing operation of the program after implementation, and
- Support from the agency.

Of implementation factors that were rated differently on importance (i.e., one of the groups did not list them within the top ten), program developers perceived *quality control*, *fidelity*, and *adapting the model* as more important, whereas implementers were more concerned with *staff selection*, *staff training*, and with *creating a bond between program developers and themselves*.

Feasibility

Implementers and program developers agreed on 5 out of the top 10 implementation factors rated as most *feasible* for impact by program developer. These factors were:

- Evidence-based interventions that can be taught, modeled, evaluated and replicated,
- The availability of ongoing training and technical assistance,
- Support from the developer in terms of ongoing training, evaluation, and constructive feedback,
- Clear information from the start about fidelity, and
- A link between the evaluation of fidelity and training.

The implementation factors that program developers thought they could most feasibly impact, but implementers did not endorse for the top ten, were primarily about future planning issues like having realistic timelines for implementation, identifying reasonable goals for implementers, and preparation for any potential or future problems. As for implementers, they thought it more likely that program developers could impact practitioners' understanding of the core components of the program, the need to emphasize fidelity, initial staff training, and setting up data feedback systems.

Dependence

From the top ten lists of implementation factors rated as most *dependent* on state/federal policy and funding, implementers and program developers agreed on the following six:

- Adequate funding to support implementation as well as ongoing operation of the program after implementation,
- Regulations at the county, state, federal, or agency level,
- State aid for programs that are struggling, rather than imposing sanctions on them,
- Flexibility of funding, and funding methods that embrace quality of services versus quantity of services, and
- Modification of state statutes to support interventions of the program.

Their lists differed as follows: Implementers perceived start up costs, paperwork requirements, and monies to ensure program success as more dependent on policy and funding, whereas program developers perceived alignment of billing codes with evidence-based practices, adequate funding for technical assistance and information technology, accreditation, and a focus on human resources as more dependent on state/federal policy and funding.

Implementer Plus Program Developer Pattern Match Results on Feasibility

Pattern matches are an extension of concept mapping techniques that allows the viewer to get a visual picture (shown thru a ladder graph) of amount of agreement between two groups or two scales. A pattern match consists of two elements: a visual picture of the match and a correlation coefficient associated with the match. In this study, we conducted a consensus pattern match (not shown here) in which the ratings of implementers were compared with those of program developers. The correlation between implementer and program developer ratings of feasibility of program developers' ability to impact implementation factors as they help sites implement evidence-based programs and practices is .90. There appears to be overall agreement between implementers and program developers on the work of program developers in implementation.

Implementer Plus Program Developer Go-Zone Results on Feasibility

In order to get a detailed picture of the differences between implementer and program developer ratings on the feasibility of program developers' to impact implementation factors we conducted a go-zone analysis (see Figure 2). The Go-Zone analysis allows the viewer to look inside each cluster of statements and see the feasibility rating data from participants on each implementation factor. The Go-Zone is represented as a simple bivariate plot, divided into 4 quadrants with implementer ratings on the

vertical axis and program developer ratings on the horizontal axis. The following section describes what implementation factors were considered most feasible by implementers, but less feasible by implementers, and those factors considered most feasible by program developers, but less feasible by implementers.

When we look at the statements individually, although implementers thought the following factors were most feasible for program developers to impact, program developers thought they had less impact on these same factors (i.e. the implementers had high expectations of the program developers, but the program developers were not so sure they could deliver, see Figure 2, Quadrant I). Individual statements (statement number in parentheses) falling in this quadrant included:

- the program manager's ability to advocate for the program both within the agency and outside the agency (36);
- motivation for change (45);
- a system that supports and encourages collaboration (74);
- to take consumer input through the entire implementation process and use it (91);
- computer and technical assistance (99);
- the use of technology (109);
- that legal or liability issues are addressed prior to implementation (116), and;
- having a sense of humor (117).

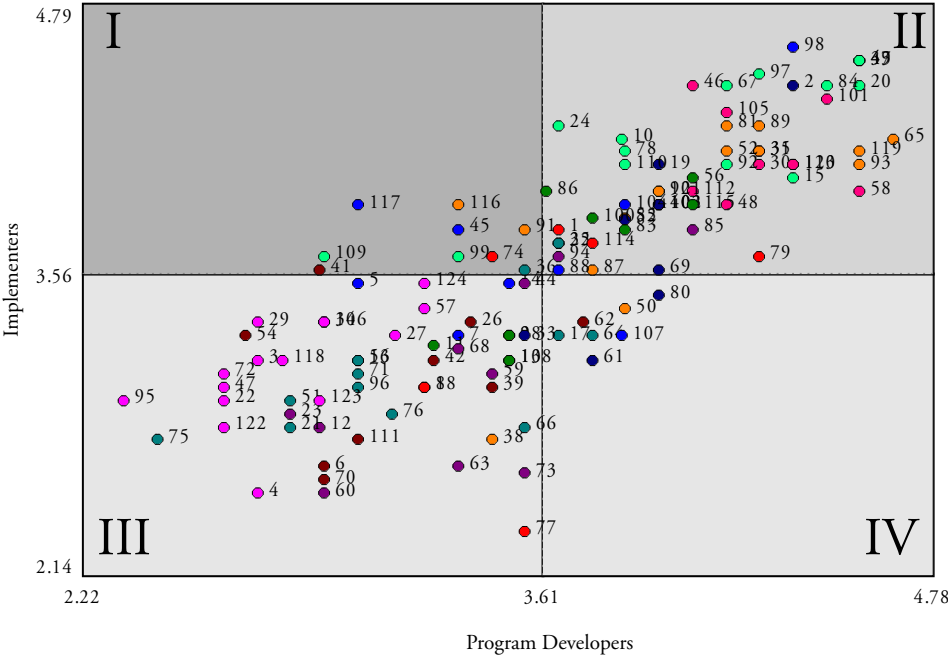
Conversely, program developers thought it was most feasible for them to impact the following factors, while implementers thought the program developers might have less of an impact (i.e. the program developers were pretty sure they could deliver but the implementers were not so sure; see Figure 2, Quadrant IV, lower right):

- work expectations that are reasonable (17);
- to identify naysayers and to positively supervise and train them on the model (33);
- recognizing that implementation covers areas that the evidence-based intervention does not cover (e.g. marketing) (50);
- facilitate regular off-site leadership meetings to address the challenges and barriers which arise during implementation and beyond (61);
- the quality of the screening of referrals including client commitment to participate (62);
- identification of key skills of staff and service providers to be used in selection processes (64);
- the understanding and application of appropriate learning theories (i.e. early childhood, adolescent and adult; (80); and
- implementation with newly hired staff is different than implementation with current staff (107).

Conclusion

Concept mapping is a unique tool in that it allows individual participants and groups to describe their ideas about some topic in a pictorial form. Concept mapping allowed us to study and present visually how implementers and program developers perceived factors related to the implementation of a new program or practice. The results from this concept mapping study demonstrate that a disconnect exists between implementer and program developer perceptions of roles and responsibilities. Additionally, the data shows us that what implementers valued and needed (guidance on staff selection, staff training) was markedly different from what program developers valued and needed (quality control, fidelity). In order to move the field of implementation of evidence-based practices and programs along there needs to be greater clarity around the roles and responsibilities of both parties.

Figure 2
Go-Zone Analysis of Implementer and Program Developer Ratings on Feasibility
($R = .8$)



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Staff Selection as a Core Component of Evidence Based Practices Implementation: Findings from Ohio's Study of Integrated Dual Disorders Treatment (IDDT) Program Development

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Acknowledgements: The authors wish to acknowledge support for article preparation provided by the Center for Evidence Based Practices at Case—a partnership between the Mandel School of Applied Social Sciences and the Department of Psychiatry, School of Medicine, at Case Western Reserve University, Cleveland—as well as by the Ohio Department of Mental Health. Findings presented in the article derive from data collected in Ohio during the National Implementing Evidence Based Practices project, coordinated by the New Hampshire-Dartmouth Psychiatric Research Center (PRC). The PRC received funding for the project from the Substance Abuse and Mental Health Services Administration (Center for Mental Health Services contract # 280-00-8049) as well as from the Robert Wood Johnson Foundation and the West Institute.

Introduction

Of the many requirements for moving evidence based practices (EBPs) in behavioral health care from the research setting to routine practice, successfully matching interventions and staff selected to deliver them has emerged as salient. Although preferred practitioner qualifications and hiring methods are discussed in the literature, there has been a dearth of research on the subject, especially in the area of services for adults in the community mental health system. The authors review some of Ohio's early findings from a national demonstration project studying the implementation of EBPs. Findings specific to staff characteristics and selection methods for the implementation of one EBP, Integrated Dual Disorders Treatment (IDDT), designed to serve adults with co-occurring mental and substance use disorders, suggest the importance of the issue for successful program development.

Method

Ohio was one of eight states to participate in the National Implementing Evidence Based Practices Project, coordinated by the Dartmouth Psychiatric Research Institute and funded primarily by the Substance Abuse and Mental Health Services Administration (SAMHSA). Four Ohio community mental health centers implemented the Integrated Dual Disorders Treatment model, using the Implementation Resource Kit or Toolkit developed specifically for the practice (SAMHSA, 2003). Overarching goals of the project were to test the utility of the Toolkit and to extend knowledge of IDDT implementation processes in real-world settings. In addition to the printed materials and videos included in the Toolkit, all sites received intensive and ongoing technical support from an expert Consultant/Trainer from the Ohio Substance Abuse and Mental Illness Coordinating Center of Excellence (SAMI CCOE). The SAMI CCOE was created by the Ohio Department of Mental Health to provide implementation technical assistance for programs serving co-occurring disorders in Ohio.

Qualitative data were gathered by a trained qualitative researcher, also a SAMI CCOE staff person, who observed treatment team meetings, client treatment groups, practitioner training sessions, and in vivo practitioner activities. Qualitative data were also gathered through semi-structured interviews with practitioners, team leaders, administrators, consultants/trainers, clients, and family members. Evaluations of the program's progress in implementing the model were conducted at baseline and at six-month intervals thereafter, using the General Organizational Index (US Department of Health and Human Services, 2003) and the IDDT Fidelity Scale (Weider, Boyle & Hroudka, 2006).

All data, including observation notes, evaluation report narratives, and verbatim interview transcripts were entered into an Atlas.ti (Scientific Software Development, 1997) database and subjected to preliminary coding using a range of broad thematic categories determined by national project protocol. To examine data relevant to staff selection, the database was queried for quotations pertaining to staff hiring or re-assignment, agency personnel policies, staff skills and understanding, staff attitudes, and aspects of job responsibilities. From these categories, quotations relevant to team member and team leader selection were extracted. Data across all four sites were subjected to further thematic analysis and additional themes and constructs were suggested by the data.

Results

Two major topic areas suggested by the literature resonate with the themes emergent for IDDT: (1) specific professional abilities and professional and personal attitudes that appear to impact practitioner uptake of IDDT in community settings; and (2) methods for identifying practitioner characteristics likely to facilitate IDDT uptake.

With regard to practitioner characteristics, a well-developed IDDT practitioner profile had not generally been developed at sites prior to staffing the positions. Due to ubiquitous turnover, however, staff selection was an iterative process and lessons were learned along the way. Credentials, educational backgrounds, knowledge about and exposure to the IDDT population varied widely. Case managers' experience in the field seemed to be more important than familiarity with the IDDT model. A lack of credentials, skills, and experience appeared to be ameliorated by intelligence, enthusiasm, and strong supervision.

For team leaders, excellent clinical supervisory skills seemed to be pivotal, especially where team members were inexperienced. Capacities for promoting team cohesiveness and engaging important community stakeholders in the implementation were important. Managerial and leadership capabilities played an important part in team leaders' real and perceived effectiveness although in general, those skills had not been adequately considered during the selection process. It was observed that strong administrative support/supervision for the team leaders and expert coaching from the consultant/trainer combined to compensate for missing managerial skills.

The degree to which practitioners were motivated, enthusiastic, open to change, and otherwise receptive to the practice changes asked of them seemed to have a notable influence on the uptake of the training. Although experience and skills were important, a willingness to take on IDDT appeared to be primary.

There was considerable variation across sites in all aspects of the staff selection process. Explicit and detailed methods for selecting IDDT practitioners that included both criterion- and behavior-based approaches were not observed at any of the sites. The use of role plays and behavioral vignettes to assess staff-model compatibility were not in evidence. It was observed that criteria for team member selection were better defined than were those for team leader selection. Characteristics relevant to IDDT were not consistently well understood. Not surprisingly, hirers with more understanding of IDDT appeared to be better able to select practitioners whose clinical skills "fit" the model.

Identifying the pool of prospective practitioners seemed to be a salient aspect of the selection process. Two of the sites were able to advertise for and recruit external applicants for their new IDDT teams but at the other two sites, there was little to no discretion afforded for staff selection and existing practitioners and/or team configurations were assigned to the implementation by agency administration. Where existing staff comprised the pool of prospective IDDT practitioners, recruitment appeared to be a better method than assignment. Internal recruitment presented its own challenges, however, depending on the agency's political climate and other employees' perceptions of favoritism. Early or pre-training for the purpose of screening prospective practitioners was demonstrated as useful.

The staff selection process was observed to be functionally intertwined with other core implementation components and it appeared that elements of selection could impact other components either negatively or positively. Elements of staff training and supervision were observed to compensate for deficits in staff selection process. Training staff with fewer skills required more intensive sessions initially from the consultant/trainer. Failing to accurately assess practitioners' attitudes about the model and the population as well as their openness to change seemed to have the most potential for impeding implementation progress. Practitioners who had been assigned to learn and deliver IDDT services appeared to have more difficulty mastering core skill sets, such as motivational interviewing, than those who enthusiastically volunteered. Lessons learned from this endeavor were used to enhance the SAMI CCOE's implementation operations for new programs interested in implementing the evidence based practice.

Conclusions

These findings indicate the need for more empirical examination of issues around staff selection for the implementation of IDDT and other evidence based practices in behavioral healthcare. Defining criteria for the desirable IDDT practitioner and team leader and then testing the relationships among practitioner characteristics and implementation and intervention outcomes is a needed next step. In addition, developing interview protocols that incorporate tested methods of assessing for desirable criteria and evaluating their effectiveness would advance the field. It will be important to measure the interaction and relative importance of practitioner characteristics, selection methods, and preconditions impacting the staff selection process. Implications abound for developing and improving technical assistance services.

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Evaluation of Community-Based Aggression Management Programs

Acknowledgements: This project was funded by The Ontario Mental Health Foundation.

Introduction

Aggressive behaviours, such as getting into fights, stealing and victimization, are a common problem among children (Offord & Lipman, 1996). Aggressive behaviours often co-occur with other emotional and behavioural problems, academic problems and with difficulties in social relationships, and commonly persist beyond childhood. There are substantial financial costs associated with these difficulties by multiple service systems (e.g., schools, courts, health). Regrettably, many children who suffer from these difficulties do not get assistance with their problems. When these children do receive attention or assessment, it is common for agencies dealing with them to recommend attendance at an anger management program. This substantial demand for anger management programs is met by a lack of well-evaluated programs that are readily available in the community, schools or clinics.

We present the results of a randomised controlled trial (RCT) of community-based aggression management groups for children 7 to 11 years of age and their families. We adapted a promising manualized CBT-based clinical program with available training (Williams, Waymouth, Lipman Mills & Evans, 2004) and used an effectiveness ("real-world") evaluation framework. The primary objective of the RCT was to evaluate whether, among children 7 to 11 years old, anger and aggressive behaviours improved in those who were randomized to participate in an anger management group vs. control. Improvements in other associated child feelings and behaviours (e.g., hostility) and parent-child relationships were evaluated as secondary objectives.

Method

Families with children 7 to 11 years old were recruited through community advertisements. Interested families phoned in, and eligibility determined. Inclusion criteria were (a) child in age range living in area, (b) identified by a parent as having difficulties with anger or aggressive behaviours, (c) parent(s) agreement to RCT participation, and (d) sufficient command of English to participate. Exclusion criteria were (a) significant intellectual impairment or severe psychiatric problems (e.g., autism, current severe depressive disorder), (b) child unwilling to participate, and (c) changeable home situation (e.g., child in and out of foster care). Children meeting these criteria also had a telephone behavioural screen (Brief Child and Family Phone Interview, BCFPI; Cunningham, Pettingill & Boyle, 2004). Children scoring ≥ 1.0 *sd* above the population mean and ≤ 1.0 *sd* above the clinical mean on the externalising scale were selected.

Children and families randomised to the intervention group participated in a 16-session program (10-weekly child group sessions, 3 parent/caregiver psycho-education/skill-building group sessions, and 3 in-home family practice sessions). Those randomised to control received a standard information booklet.

The children's group used a problem-solving process, based on cognitive behaviour therapy principles, to help children become aware of and learn to manage their temper. Group size was 6-10 children. Parent group sessions, held prior to the start of the children's group, focused on learning about developmentally normal expressions of aggression, becoming aware of the strategies learned in the children's group sessions and how to support the child's use of these strategies, and appropriate behaviour management techniques. In-home family practice sessions allowed individualization of content.

Groups were led by two trained leaders, were manual-driven, sessions were videotaped, and weekly supervision provided.

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Nine intervention groups were run. Assessment data were collected during home visits and telephone calls (BCFPI only) pre-group and post-group by naïve interviewers. Measures included the BCFPI (Cunningham et al., 2004), Children's Inventory of Anger (Finch & Eastman, 1983), Child Behaviour Questionnaire (Robin & Foster, 1989), Children's Hostility Index (Kazdin, Rodgers, Colbus & Siegel, 1987), Parenting Stress Index (Abidin, 1992), and the Centre for Epidemiologic Studies Depression Scale (Radloff, 1977). All scales were parent response, except the child-response anger measure.

Over 400 families (425) phoned for information, 401 received detailed information, and 123 entered the trial. This sample size was selected to provide adequate power to detect medium size standard effects, as found in preliminary work (Williams et al., 2004). Ineligibility accounted for most of the exclusions (e.g., 63 outside age range, 12 out of area, 19 parents unwilling to be randomized, 8 child intellectual/psychiatric problems, 6 unstable living situations, 11 children unwilling to participate, 18 BCFPI too high, 10 BCFPI too low). Post-group data were collected from 99 (80.5%) families. Analyses were completed using SPSS version 12.0. An intent-to-treat approach was used. Bivariate and multivariate analyses were performed.

Results

Participants in the trial were mostly male (102/123 = 82.9%) and 39.8% (49/123) lived in single parent families. Income was varied. There were no significant differences between intervention and control families at baseline on demographic characteristics or outcome measures either at study entry (123) or those participating in post evaluations (99).

Pre-post outcome measures are shown in the Table 1. Children in the intervention group appeared to improve more than control children on all parent-rated measures (small effect sizes 0.27–0.29), but not for child-rated anger. Pre-post comparisons using repeated measures ANOVAs indicate no significant intervention effects.

Table 1
Pre-Post Outcome Measures

<i>Outcome</i>		<i>n</i>	<i>Pre (SD)</i>	<i>Post (SD)</i>	<i>F</i>	<i>p</i>	<i>ES</i>
Anger	I	46	51.5 (13.6)	48.0 (13.4)	$F_{(1,88)} = 0.07$	0.79	-0.06
	C	47	55.4 (10.3)	50.4 (9.8)			
Hostility	I	51	23.2 (4.2)	20.8 (4.8)	$F_{(1,93)} = 1.55$	0.22	0.29
	C	47	23.9 (4.4)	22.6 (5.9)			
Aggression	I	50	26.6 (9.6)	20.6 (10.2)	$F_{(1,92)} = 1.84$	0.18	0.27
	C	47	26.8 (8.9)	23.1 (10.6)			
Parent-child Relationship	I	50	7.9 (4.5)	6.2 (4.7)	$F_{(1,92)} = 1.80$	0.18	0.27
	C	47	7.7 (3.5)	6.8 (3.7)			
Parenting Stress	I	51	102.4 (20.4)	93.4 (20.8)	$F_{(1,93)} = 3.34$	0.07	0.28
	C	47	99.1 (19.6)	95.0 (18.3)			
Externalizing (BCFPI)	I	48	71.1 (6.6)	65.6 (9.0)	$F_{(1,90)} = 1.01$	0.32	0.28
	C	48	70.8 (6.0)	66.8 (9.6)			

Conclusion

We adapted a promising manualized CBT-based clinical program with available training (Williams et al., 2004), with the intent of providing a community-based service for aggressive children, and undertaking a rigorous evaluation of the real-world impact of the program.

The results of this RCT indicate that there are small positive effects on parent-rated outcomes for children allocated to the intervention group, but these effects are not statistically reliable, falling short of the medium size effects anticipated in the study.

Is there still potential for this to be a useful community-based intervention for families and children with aggressive behaviour? Issues such as shortages of or long waiting lists for clinic-based services, parental decision-making about participation, and an available training program are compelling. Factors such as regression to the mean (families call in crisis), overestimates of possible effects (based on clinical vs. community populations) and impact of self-regulatory difficulties may be important to consider in future work.

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Topical Discussion

Applying Evidence-Based Practice in Real World Settings I: Does It Work? Can It Work? Voices from the Field

Acknowledgments: This research was partially funded by the Center for the Advancement of Children's Mental Health at Columbia University and also supported by participant tuition.

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Introduction

In the last decade, there has been an exponential increase in references to evidence-based interventions in the scientific literature (Hoagwood & Johnson, 2003). However, a disparity exists between the treatments used in research and in clinical practice as there are more than 550 named psychotherapies in existence; yet over 90% of these treatments have never been studied empirically (Kazdin, 2000; Kazdin & Weisz, 2003; Weisz, 2004). Similarly, the majority of psychotherapies that are provided in clinical settings are not supported by empirical research or have been found to be ineffective (Weisz et al., 1995). Although there are various treatments that have demonstrated efficacy in research settings, they have shown limited applicability in clinical settings. While studies have documented a moderate to large effect with regard to utilizing evidence-based treatments in university-based research settings, there appears to be little to no effect of using such psychotherapies in clinical settings (Smith & Glass, 1977; Weisz et al., 1995)

As a result of the discrepancy between the research development and actual practice of evidence-based psychotherapies, a team of expert psychotherapy researchers, with the support and input of the Center for the Advancement of Children's Mental Health (CACMH) at Columbia University, developed a unique training model in order to train practicing clinicians in the implementation of evidence-based interventions.

The training model developed at CACMH is geared to train clinicians from a variety of disciplines in utilizing evidence-based interventions for children and adolescents with anxiety, disruptive, depression, and post-traumatic stress disorders. The trainings consist of face-to-face workshops led by nationally recognized experts, followed by a year-long consultation and support period.

Topics Addressed

This topical discussion presented the background of the development and research evidence of the four integrated psychotherapy manuals, and discussed and reviewed the actual development of these evidence-based methods from the perspective of researchers, psychotherapy developers, clinical supervisors, and clinic-administrators who were actually participating in these programs.

This discussion aimed to provide an educational and stimulating platform regarding the use of evidence-based interventions in clinical practice. Please note, this presentation was accompanied by another topical discussion (Goldman, this volume) which provided an in-depth review of evidence based practices in one treatment area (disruptive behavior disorders) as well as specific training, implementation and clinical practice issues.

The topical discussion highlighted the experiences of researchers, clinicians, and clinician administrators who employed evidence-based treatments in a research setting and in clinical practice. Some of the key issues to be discussed included the need for the adaptation of "user-friendly" manuals, whether or not the manualized therapy is flexible enough to adapt to individual cases, and issues pertaining to whether evidence-based practices have demonstrated efficacy beyond the realm of the research setting and into clinical practice.

An overview of the training model that was developed at the CACMH was presented. Specifically, the model aims to train clinicians in utilizing evidence-based interventions with children and adolescents through four psychotherapy manuals, which were developed to target anxiety, depression, post-traumatic stress, and disruptive behavior disorders.

One of the treatment manual developers for the disruptive behavior disorders intervention outlined the process of developing the psychotherapy manuals. Specifically, the process of adapting the evidence-based treatment into a “user friendly” format was addressed.

Next, a clinical director addressed the administrative issues surrounding the incorporation of evidence-based treatments into clinical practices. Specifically, the incentives and disincentives of providing clinical training in empirically supported treatments for fellow staff members was addressed. Issues discussed included clinician resistance and the feasibility of clinician fidelity. Additionally, the financial considerations in the implementation of evidence-based treatments were also discussed.

Finally, a clinician on the receiving end of the training in using the disruptive behavior intervention discussed the application of evidence-based interventions into clinical practice. Training issues, as well as patient outcome, were discussed.

Discussion

From their experiences implementing the training model, the panel members discussed the outcomes of the dissemination of evidence-based intervention strategies. Topics covered included long-term clinician fidelity, patient outcome, and a general overview of the incentives and disincentives of incorporating empirically-based treatments into clinical practice. Future steps to facilitate the employment of such intervention tools into clinical practice were also addressed.

Specific issues addressed were geared toward the feasibility of employing evidence-based interventions in clinical practice. For example, one issue that permeated the discussion concerned whether manualized treatments could really address all children’s problems, given the complex nature of many clinical cases. Training issues were also addressed, with a focus on the duration of training needed for clinicians to successfully employ treatments and the feasibility of such trainings given the financial constraints within clinical settings. Overall, the panel/audience members were generally optimistic about employing evidence-based treatment.

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Topical Discussion

Applying Evidence-Based Practice in Real World Settings II: Hands-On Demonstration, Practice, and Discussion

Acknowledgments: This research was partially funded by the Center for the Advancement of Children's Mental Health at Columbia University and also supported by participant tuition.

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Introduction

Over the past decade, research has supported the efficacy of a number of manualized treatment interventions for children and adolescents in comparison with no treatment or treatment as usual. However, their applicability on a community wide basis has been limited due to factors such as intervention research designs that are difficult to replicate in real world settings, reliance on specific, intensive clinical training and supervision, and focus on singular disorders. Further, many manualized efforts have been applied in an inflexible manner that were poorly adapted to existing clinical situations or client populations (Nock, Goldman, Wang & Albano, 2004). Due to these obstacles, many clinicians resist adopting these treatment methods.

However, there is much to recommend empirically supported, manualized interventions to practicing clinicians. Treatment manuals often include a focused, structured approach that may be carefully monitored for content and process fidelity. They also encourage both clinician and client to set clear, measurable goals with relevant session exercises and homework. Overall, they are well suited for brief, symptom focused, interventions. Recent studies have suggested that manual based treatments may be effective in both controlled research settings and in clinical practice (Addis & Waltz, 2002). Therefore a key issue is a delineation of steps that may be taken to improve the applicability of these empirically proven interventions. These include flexible application of manual content, individualizing and adapting intervention structure to individual client needs and situation, and addressing issues of severe pathology and comorbidity (Connor-Smith & Weisz, 2003).

In response to these challenges, four integrated treatment interventions (for anxiety, depression, disruptive and PTSD symptoms) were developed by a group of expert clinician/researchers convened by the Center for the Advancement of Children's Mental Health at Columbia University. The interventions, based on empirically supported intervention research, include a number of key modifications to traditional manual construction and training that incorporate recent thinking about manual development and training. Overall, the manuals were developed to reflect a uniform look and feel that allowed for modular, interchangeable parts that can "travel" between intervention manuals. For example, while working with a child displaying conduct problems with anxiety features, particular portions of the anxiety intervention could be readily inserted into the primary module addressing the child's conduct problems. Further, core intervention elements were "front loaded" in each of the manuals, allowing for flexible insertion of optional intervention strategies in a second treatment stage.

These modifications were rooted in work described by Chorpita et al. (2002), wherein feasibility, generalizability and cost-benefit, were analyzed to determine core intervention elements. This technique allows the clinician/researcher to better gauge the transportability and ultimate usefulness of a particular intervention. Further, flexibility is assured through use of a modular approach to intervention structure. For example relaxation training may be covered in a self contained, three session module, that is not essentially dependent on previous sessions. Once core intervention elements are defined, a path is cleared for the addition of optional, self-contained intervention elements. In our project, this permits a flexible degree of parent and family involvement, borrowing from other interventions and optional session elements that were related to clinical utility and trauma related symptoms.

This topical discussion reviewed the development of these manuals with particular reference to one of the interventions: the disruptive behavior disorders intervention. The participants helped to clarify the link between current research and intervention development, training issues and the modifications in manual content to improve treatment dissemination and clinical utility.

Topics addressed

After a brief introductory overview and discussion, picking up the themes from the Topical Session I (Raishevich, this volume), this topical session offered demonstration and hands-on role play with audience members and faculty, using actual manual content. Then, the last period in this topical discussion focused on audience participants' reactions and responses to the demonstration and role play, and addressed lingering concerns initially addressed during the first topical session, but now informed by more experience with the actual interventions.

Key issues that were covered during the discussion included an introduction to the manual's modular two phase structure, and hands-on training by role play in two sessions, one session drawn from each of the two phases. The hands-on demonstration illustrated not just the intervention content, but also its flexibility in relation to co-morbidity, as well as the handling of unforeseen external events. Further, strategies for increasing client engagement and commitment were also demonstrated.

Discussion

The application of evidence-based treatments in clinical practice is a topic of great interest among researchers and practitioners alike. Therefore, issues such as the flexible application of manual content, individualizing and adapting intervention structure to individual client needs and situation, and issues of severe pathology and comorbidity were addressed (Connor-Smith & Weisz, 2003).

Specifically, the audience/panel members addressed their remaining worries or concerns with regard to applying evidence-based interventions. Audience/panel members discussed the feasibility of applying evidence-based interventions in clinical settings. Moreover, the panel members/audience discussed how to adjust to the needs of the individual child within a manualized treatment approach. Another issue that was addressed was how to employ manualized approaches in such a way that they do not seem too scripted or stilted, and enhance the client/therapist relationship.

Overall, it appeared that clinicians, administrators, and researchers alike were generally positive about incorporating evidence-based treatments into their respective clinical practices, although the awareness of the aforementioned issues highlights further considerations to be applied to future dissemination research.

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Chapter Three

Strengths and Family-Driven Services

A Typology and Narrative Illustration of Procedures for Following a Strengths-Based Approach in a Children's Community Mental Health System of Care

This work was supported in part by a grant from the Center for Mental Health Services (CMHS) Grant # 5-HS5-SM52250

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Introduction

This paper types, explains, and illustrates techniques that direct service providers can use to follow a strengths-based approach with children and families enrolled in a children's mental health system of care. A major challenge in the human service field is identifying strengths and using them as interventions or change agents. A strengths-based approach assumes "people are already competent or... have the capacity to become competent" (Dunst, Trivette, and Deal, 1994a, p. 3), and focuses on personal development of the family's strengths rather than treatment of deficits. In this sense, then, this is an empowerment approach that supports people's ability to help themselves and to build on their competencies (Dunst, et al., 1994a; Dunst, Trivette, and Mott, 1994; Durrant and Kowalski, 1993).

In the strengths approach, language is transformed to transcend problems and to acknowledge wisdom, abilities, and resources through reframing an individual's personal narrative and identity from one of deficiency to one of capability, and of identification of existing sources of support in the person's natural environment (Bronfenbrenner, 1979; Saleebey, 1996). People practicing a strengths-based philosophy don't ignore problems; they assess the needs behind problems and focus on strengths as pathways to solutions. It's important to understand that system-of-care principles do not imply that problems and needs do not exist. In fact, child and family problems do exist and may never go away completely. What is suggested, however, is that there are alternative strategies to addressing needs, and one such strategy is to identify, develop, and use child, family, and team strengths and resources that may be able to meet the needs of the child and families.

Simply listing strengths can be a good assessment tool, but by itself, does not effectively address needs. Strengths assessments help teams find out what resources are available and what potential interventions can be used in a strengths-based plan. Rather than simply listing strengths, teams are most effective when they specifically tailor a strength to a family's plan, identifying those specifically relevant to a family's needs. Tying strengths to needs also ensures that the family and the team agree on what the actual needs really are, as a lack of consensus on needs is a source of family-team conflict (Dunst, et al., 1994a). Strengths used effectively give a child and family and their service providers hope (Davis, 2005).

The purpose of this research is to define functional ways a service provider can use strengths in treatment planning, and to provide case illustrations of each of those ways.

Method

This research is based on a longitudinal case study of one system of care, the Tampa Hillsborough Integrated Network for Kids "THINK" program, in Hillsborough County, Florida. The THINK program was funded by a grant from the Child and Family Branch of the Center for Mental Health Services (CMHS) in the Federal Substance Abuse and Mental Health Services Administration (SAMHSA) to implement and enhance systems of care.

This paper analyzes the results of two separate sub-studies of the CMHS National Evaluation, a longitudinal study measuring outcomes of children and families enrolled in THINK-funded services. The first sub-study included in this research is called the Team Meeting Observation study. Families enrolled in the longitudinal study who were involved in child and family teams were invited to take part in this sub-study. This research involved a combination of a quantitative checklist adapted from the Wraparound

Observation Form (Epstein et al. 1998; Epstein et al. 2003), and a qualitative, ethnographic component in which one to two observers attended child and family team meetings and took detailed field notes on the meetings. Our research team observed 118 child and family team meetings. The meetings observed represent five different agencies providing team facilitation and leadership.

The second sub-study that informs this paper is called the THINK System of Care Practice Review (Hernandez, Gomez, Lipien, Greenbaum, Armstrong, & Gonzalez, 2001). This study used a case method of interviews and record reviews with 65 child and family teams across four different agencies to assess fidelity to system of care principles.

In order to identify types of strengths and to develop narrative illustrations of each type, field notes from the Team Meeting Observation study and open-ended interview responses from the System of Care Practice Review were analyzed. The analysis used a variation on the constructivist approach to a grounded theory (Charmaz, 2000; Glaser & Strauss, 1967; Strauss & Corbin, 1990), in which a targeted interpretive thematic analysis categorized themes related to strengths, based on observed patterns in the notes and interview responses (Bulmer, 1979; Stake, 1995). The data were examined for examples of strengths, and were coded for categories, which were collapsed into seven types of strengths. Each strength-type was substantiated by case stories derived from the interviews and observations.

Results

We identified seven key types of strengths that can be identified and used in assessment, planning, and intervention: child and family talents, child and family resilience, child and family possibilities, available family and team resources, borrowed strengths, past or historical strengths, and hidden strengths.

Talent Strengths or Competencies

Examples of talent strengths are musical and sports talents. Dunst, Trivette, Davis, and Cornwell (1994) call these “competencies.” Focusing on family or child competencies reminds everyone that children and families are greater than their problems, and it gives the family a foundation on which to build goals and plans. This is the most straightforward and simple way to connect needs and goals to strengths. Talent strengths can be used in powerful ways. A talent can also be used to form or enhance a relationship. They give hope because they show the child or family is good at something that can be used to help them (Davis, 2005).

Resiliency Strengths

The next type of strength is a “resiliency” strength. Resiliency strengths would include: the ability to survive in the face of chronic stressful situations; having a sense of humor; a mother’s desire to keep her family intact; a parent’s persistence in obtaining help for her family; and having a strong spiritual or religious faith. Resiliencies tend to be thought of as personality traits that enable a child or family to have survived thus far in the face of difficult life circumstances (Dunst, et al., 1994; Richardson, 2002). Like talent strengths, resiliency strengths give hope because they remind everyone the situation is not all bad or bleak (Davis, 2005).

Possibility Strengths

“Possibility” strengths, also referred to as “solution talk” (Berg & DeShazer, 1993; Fanger, 1993), refer to goals or dreams set in the future toward which the family and team are working. These types of strengths use imagery to orient the family toward what they have to look forward to, or toward what they can accomplish (Fanger, 1993). Possibility strengths also move the family out of a present-time focus, which is often problem and deficit laden, into a future-time focus, which may be seen as a time of hope.

Tying possibility strengths to goals or needs moves the child, family, and team from the past and present to the future. This consists of answering the question, “What will it look like when things are better?” Possibility strengths focus the team away from problems or deficits and toward positive, concrete alternatives. They move families out of an “either/or” orientation that limits their options, to a “both/and” orientation that opens up options and solutions (Lipchik, 1994). Possibility strengths turn negatives into positives.

Resource Strengths

Resource strengths include financial, time, and knowledge resources available to help the family and team achieve their goals. Other types of resources include environmental, food/clothing, medical, vocational, transportation, educational, recreational, emotional, cultural, and social resources (Dunst, Trivette, and Deal, 1994b). Resource strengths are hopeful because they remind everyone working with the family they’re not in this alone—there are resources they can all rely on for help.

Borrowed Strengths

Borrowed strengths can be taken from an exemplary other person, or by the strengths of the intervention or treatment itself, such as in medical treatments (Groopman, 2004). Strengths can be borrowed from a mentor, from another child or family who has overcome similar circumstances, or from the experience of a service provider. A teacher’s intervention in a classroom could be borrowed from other work he or she had done in other schools, and a school staff’s success in controlling a child’s behavior could be borrowed from their experience with other children at their school. Borrowed strengths are hopeful because they also borrow hope—someone else could do this; this helped in another situation, therefore this will help here. Borrowed strengths are the experiences of other people’s lives whether it is a success or a lesson learned from a failure or mistake.

Past or Historical Strengths

Past or historical strengths are actually borrowed from the family’s own history. Past strengths are hopeful because they remind everyone the family accomplished something before, therefore they can do it again. In addition, past strengths help remind the family what they did to achieve their goals and successes, and these skills can generalize to the future.

Hidden Strengths¹

Hidden strengths are strengths that are manifested, on the surface, through undesirable behaviors. For example, a youth belonging to a gang could be exhibiting several strengths: commitment, leadership, inclusiveness, interpersonal skills. The challenge is to identify these strengths and help the child channel them into more productive activities.

Conclusion

Fully adhering to a strengths-based approach in providing services for children and families is quite a challenge. In the “real world,” attempts to do this are derailed by problem-saturated language, the seemingly innate need for people in the helping profession to jump quickly to solutions, and an inability to identify family strengths and resources that can address problems without calling in formal system assistance. The secret to moving beyond these challenges toward a system of care orientation is to continually reframe and model the desired behaviors. The difference made in the lives of the children and families is worthwhile.

¹The authors would like to recognize the contribution of Allison Pinto, Ph.D., Dept. of Child and Family Studies, Louis de la Parte Florida Mental Health Institute, for her contribution of the label and definition of “hidden strengths.”

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Topical Discussion

Is There a Theoretical and Empirical Basis for Strengths-Based Planning?

Introduction

Susan McCammon

The development and implementation of a strengths-based plan for providing services to children with a serious emotional disturbance and their families is recommended in system-of-care approaches. Panelists addressed the following questions: while a strength-based approach is conceptually appealing, what theory and guidelines exist for operationalizing such plans? Is there empirical research examining the degree to which service provision is strength-based and the impact of using that model? What further research is needed in this area?

Use of a strengths-based service plan is identified as an essential element of the wraparound approach to care planning, as recommended in the system of care (SOC) model for serving families with a child with serious emotional disorder (Pires, 2002). However, while strengths-based service provision is conceptually appealing, is there a theoretical framework for guiding the development and implementation of strengths-based plans? Further, in today's practice settings, there is a stated value of the use of empirically supported interventions, but is there a body of empirical study that evaluates the use of the strengths-based service model? What resources are available to support the model's implementation? Does its use result in improvements in mental health outcomes and functioning? What research needs to be done to address these questions? In this topical discussion a panel of university-based faculty and a parent who have been involved in SOC implementation and evaluation share the result of a literature review and their experience in addressing these questions.

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Theoretical Models that Provide Rationale and Approaches for Implementation of Strengths-Based Planning

Susan McCammon & Ryan P. Kilmer

Introduction

Traditionally, the field of mental health has been problem-focused, targeting pathology with after-the-fact treatment models, asking "goes wrong" and how do we "fix" it? (see for example, Cowen, 1994; 1999; Cowen & Kilmer, 2002). In recent decades, there has been growing recognition that this medical model approach is insufficient and has significant shortcomings and, in turn, there has been increased attention paid to approaches that focus on building or enhancing health and well-being, developing competence, preventing problems, and, importantly, emphasizing the positives, including strengths and growth. This shift in focus has taken a number of forms, including *positive psychology* (Seligman & Csikszentmihalyi, 2000), which builds on prior efforts in primary prevention, wellness enhancement, and competence enhancement, to name just a few.

A focus on strengths in assessment and service planning is justified on multiple conceptual grounds. For instance, when assets and risks are both assessed, clients are more likely to experience the interaction

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or situation as affirming or empowering (Cowger, 1994; Saleebey, 1996). Furthermore, a focus on strengths yields a more balanced view of the child and family, sending the message that the provider, the team, and the system recognize and acknowledge an individual's identity and competencies beyond his or her presenting concerns or diagnostic profile (e.g., Saleebey, 1996; Tedeschi & Kilmer, 2005). Similarly, as Tedeschi and Kilmer (2005) noted, attending to and working to build upon strengths can have relational benefits, such as creating a different, more positive set and, in turn, impacting rapport, influencing the client-professional power differential, and fostering supportiveness and trust. Identifying strengths, skills, and resources (as well as need areas) can also provide team members with direction in developing a given plan of care. Thus, rather than "fixing" a problem, the emphasis becomes one of enhancing or building upon a characteristic, asset, or skill set; this also facilitates the use of solution-focused approaches (Handron, Dosser, McCammon, & Powell, 1998; Harniss, Epstein, Ryser, & Pearson, 1999). In sum, numerous theorists have posited that it may be more fruitful in the long term, to work to establish means of building on clients' strengths and to harness and promote the development of empirically-identified factors associated with positive adjustment (Tedeschi & Kilmer, 2005). Indeed, such efforts may be the most efficacious way of enhancing wellness and reducing dysfunction (and the need for formal mental health services) in the future (Cowen & Kilmer, 2002; Tedeschi & Kilmer, 2005).

Positive Youth Development

The Positive Youth Development perspective notes that structured voluntary youth activities provide a fertile context for positive development, especially the development of initiative and the promotion of intrinsic motivation (Larson, 2000). The typical experiences of youth during their school day and unstructured leisure are not usually conducive to promoting the development of initiative. In contrast, such structured leisure activities as the arts, sports, hobbies, and organizations provide a context in which youth develop an operating language of initiative. In structured voluntary activities youth may become highly engaged and involved, and exert effort over time toward an outcome (e.g., skill development over the course of a season). They practice facing setbacks obstacles and challenges ("how to get 11 band members into a van when the insurance only covered 9 people," Larson, 2000, p. 177), and learn contingency thinking ("If we rent the band shell, will the city give us access to electric jacks and bathrooms?" Larson, 2000, p. 177). According to Larson, this learning of initiative is foundational for other elements of positive development: creativity, leadership, altruism, and civic engagement. Building on the interests of youth by including structured leisure activities into care plans offers a platform for the development of these important qualities.

Broaden and Build Model

Another theoretical basis for positive focus in serving youth is the Broaden and Build model, articulated by Fredrickson (2000). She notes that while negative emotions narrow one's thought-action repertoire (e.g., think of the narrow ranges of responses you might offer when angered by being cut off in traffic), experiencing positive emotions not only broadens people's habitual modes of thinking, but also builds their physical, intellectual and social resources. Fredrickson notes that the broadening effect of positive emotion "can increase an individual's receptiveness to subsequent pleasant or meaningful events, increasing the odds that the individual will find positive meaning in these subsequent events and experience additional positive emotions. This can in turn trigger an "upward spiral" (Fredrickson, 2000, p. 16). Programming and care planning designed to increase positive emotions could include activities designed to help youth feel connected to others and cared about; have an opportunity to be distracted from everyday cares; feel a sense of achievement, pride, or self-esteem; feel hope or optimism; and receive affirmation or validation from others.

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Use of Applied Behavior Analysis in Strengths-Based Planning

Terri L. Shelton & Libby Jones

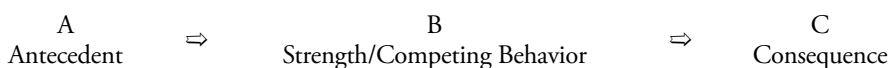
There is a growing interest in the use of strengths-based approaches, partly due to the rise in system of care service delivery frameworks. One challenge to this approach, besides changing the zeitgeist of problem-oriented approaches, has been the lack of validated measures that specifically tap strengths. However, with this increased interest, has come the development of validated approaches to assessments that focus specifically on strengths, such as the Behavioral and Emotional Rating Scale (BERS; Epstein & Sharma, 1997), or include strengths while assessing behavioral challenges, such as the Behavior Assessment System for Children, Second Edition (BASC-2; Flannagan, 1995), and PsyberCare-Youth (Toche-Manley, Nankin, & Dietzin, 2004). The increased options in strengths-based discovery/assessment have led to a growing research base of empirical approaches that translate these strengths into treatment planning, implementation and review (see <http://cecp.air.org/interact/expertonline/strength/transition/1.asp>).

Why use strengths-based approaches? Where is the empirical support?

- Focusing on strengths is *more motivating* (e.g., see Motivational Enhancement Therapy in substance abuse treatment; Center for Substance Abuse Treatment, 1999)
- Strengths are not just the absence or reverse of risks and research (such as the resiliency literature) strongly indicates the importance of considering both risk and *resilience or protective factors/processes in treatment* (e.g., Masten, 2001)
- A strengths focus can be used not only in treating serious emotional disturbance but also in *preventing problems* in youth at risk (e.g., Farmer et al., 2005); see also the extensive literature on Developmental Assets at <http://www.search-institute.org/research/>)
- Identifying strengths can produce important clues as to what needs to be done in treatment to:
(a) *ensure that the treatment does not unwittingly undermine existing strengths* (“first do no harm;” may not be helpful to take away participation in sports if that’s the only venue where the child is successful) and (b) identify those *triggers and payoffs that are maintaining strengths* even in the face of serious emotional disturbance. Two approaches that have research support lend themselves to this approach to treatment, as follows.

One is *solution-focused therapy* (SFT) which until recently had more of a clinician following than a research base of support but does have a growing literature demonstrating its effectiveness. SFT typically seeks to use existing coping strategies and amplify existing strengths, discovering ways in which the “solution” is already operating in the clients’ life.

The other is *functional behavioral analysis*, but instead of applying it to understanding the triggers (antecedents) and payoffs (consequences) of a behavior that’s targeted to be reduced or is problematic, one should *use the same tools to understand what sets up and maintains strengths*. This can be used in two ways. First, is to understand those antecedent conditions (e.g., time of day, person, activity) that give rise to the strength as well as those consequences that are truly rewarding (e.g., feeling efficacious, praise of a valued coach) so that strengths can be maintained. Second, it can be used to pinpoint a strength that directly competes with the expression of the problem behavior. Resources found at <http://cecp.air.org/fba/default.asp> can be helpful in conducting a functional behavioral analysis for strengths as well as problem behaviors.



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Building on Cultural Strengths: Using Cultural Assessment Tools and Resources

Kathy Lazear

Introduction

What do we mean by “cultural strengths”? We use the term “cultural strengths” to refer to cultural characteristics or qualities of an individual that are associated with a set of ideas, behaviors, beliefs and values which are shared by a family, a community, or a group of people that may be considered and/or incorporated into the development of an individualized support plan or plan of care. While research indicates that caregivers think it is important that services are culturally appropriate (Walker, 2000), the importance of considering a family’s and youth’s culture in treatment and service intervention has also been documented at the national policy-making levels (U.S. Department of Health and Human Services, 2001; New Freedom Commission on Mental Health, 2003).

As system of care communities develop from a values-based framework that includes being family centered and youth focused, community-based and culturally competent (Stroul & Friedman, 1986), it has been a challenge to operationalize the principle of cultural competence and translate it into effective practice (Vinson, Brannan, Baughman, Wilce & Gawron, 2001; Brannan, Baughman, Reed & Katz-Leavy, 2002; Holden & Santiago, 2003). This paper focuses on operationalizing the value of culturally competent strengths focus, within a system of care, at the practice level.

Cultural Assessment Tools, Interventions and Resources

The National Wraparound Initiative model for developing individual service plans/care plans identifies four major phases of wraparound, a practice approach that is based on the system of care values and principles. These phases are: (1) Engagement and Team Preparation, (2) Initial Plan Development, (3) Plan Implementation, and (4) Transition (National Wraparound Initiative, 2005). During the Engagement and Team Preparation, a care coordinator or family support partner conducts an initial meeting with the family and youth. Screening, assessment and evaluation are among the most important areas for providing planning and services that are culturally strengths-based during this phase. A comprehensive base of information regarding cultural background and history will help the family and service providers to develop an effective plan of care. Several instruments and resources are available to

assist in conducting assessments that are culturally strengths-based. These tools and resources include the following:

- Strengths Discovery—Finding families' strengths: A multiple-choice test. Vandenberg, J. & Grealish, E.M., (1997) available at: <http://cecp.air.org/wraparound/famstren.html>
- Techniques for Assessing Social Supports (Armstrong, 2006). Components include: Eco-map; Social Network Map; EMQ Connectedness Model; Inventory of Socially Supportive Behaviors; and the Quality of Relationships Inventory.
- *Building on Strengths in Community Settings* (Focal Point, 2002).
- *A culturally receptive approach to community participation in system reform* (Gutierrez-Mayka, & Contreras-Neira, 1998).
- *EQUIPO: The Partnership Between Natural Helpers and Formal Service Providers to Support and Strengthen Families in Our Community* (Orrego, & Lazear, 2000).
- *Organizational and Individual Self-Assessment Tools to Enhance Cultural and Linguistic Competence*. (Georgetown University Center for Child and Human Development, <http://gucchd.georgetown.edu/nccc>)
- *Cultural Competence Self-Assessment Instruments*. Child Welfare League of America, <http://www.cwla.org> and <http://www.cwla.org/pubs/pubdetails.asp?PUBID=8404>)
- National Wraparound Initiative; www.rtc.pdx.edu/nwi

The next phase, Initial Plan Development, focuses on meeting the needs of the family and youth by selecting strategies to meet those needs. Below are several examples of how child and family teams have integrated culturally strengths-based planning into individualized service plans/care plans.

- Having bilingual staff and translation services available.
- Identifying specific provisions to maintain confidentiality about service provision, such as holding meetings after school, due to very strong stigma about mental health in the community.
- Recognizing that a family did not have a telephone or easy access to transportation, so phone contact was not part of the plan and the expectation for face-to-face contact was placed on the care manager to conduct more home visits, not for the family to come to the office or school.
- Recognizing that many families in the community have limited literacy, so all information and material is usually read out loud by care managers as regular practice.
- Establishing relationships with a number of groups who serve and support specific racial and ethnic populations.
- Switching traditional counseling to Christian counseling, on a trial basis, to meet the family's desire to work with someone from their church.
- Scheduling services and support activities based on the family's religious activity schedule.

With many formal services, such as individual or family therapy, attention to culturally strengths-based treatment intervention can also be challenging as professionals rely on the more traditional methods and approaches they learned in school. Examples of culturally strengths-based clinical interventions, where therapists have moved from strict traditional approaches, are included in Gibbs and Huang (2001), *Children of Color: Psychological interventions with culturally diverse youth*. The chapters highlight several approaches to consider for certain youth of color. For example, the chapter on American Indians references an intervention where traditional Indian techniques, such as sweat lodge and talking-circle ceremonies, are combined with more conventional group and social cognitive therapies. The chapter on Chinese Americans and Southwest Asian refugees identifies the concept of active exchange in collaboration with conventional individual and family therapy to counter the stigma of obligation in these cultures. For Puerto Rican youth, interventions that combine the established family therapy techniques with cultural reframe techniques are highlighted. And, the chapter on African-American adolescents highlights the need for treatment providers to consider blending interpersonal competence with an instrumental, task orientation to overcome the African-American youth's initial mistrust and internalized negative experiences with mainstream institutions.

Conclusion

In spite of the challenges of operationalizing the values and principles of providing service planning, interventions and services and supports that are culturally competent and strengths-based, there are examples of effective outcomes associated with culturally focused strengths-based systems of care. For example, there have been very encouraging outcomes in communities where a *broad range of services* are offered and *families are provided a choice*, such as: Wraparound Milwaukee (VanDenBerg & Grealish, 1996); The Dawn Project (Anderson, Wright, Kooreman, Mohr, & Russell, 2003); and the Massachusetts-Mental Health Services Program for Youth (Grimes & Mullin, 2006). In addition to an extensive array of services, these approaches include the incorporation of *individualized service planning* and the *inclusion of both clinical treatment services and natural supports* (Pires, 2002). As Kluckhohn and Murray (1956) observed, all people are in certain respects like all other people, like some other people, and like no other people.

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Evaluation of Strengths-Based Approaches: What Research is Needed?

James Cook & Ryan Kilmer

In addition to the key tools and resources discussed by Lazear, key needs include:

- Better ways of conceptualizing strengths. While service planning teams often merely “list” strengths, the types of strengths identified may be important. For instance, a distinction can be made between strengths as “personal characteristics or abilities” (e.g., good verbal ability, interpersonal skills) versus strengths as “interests” (e.g., likes basketball, likes to read). Does it matter if we focus on characteristics or interests, or some combination of the two?
- Better ways of measuring (a) factors reflecting the process of strengths-based planning (i.e., assessing the degree to which strengths are actually being identified and used in the planning process) and (b) outcomes (both child and family) related to this work.

Multi-method assessment approaches are warranted to best examine the degree to which child and family teams are functioning in a way that reflects ‘best practice’ of the wraparound approach to care planning (Burns & Goldman, 1999; VanDenBerg & Grealish, 1996), particularly in developing SOC. Strategies can involve multiple forms of inputs and levels of assessment.

Process-Oriented Strategies: Assessing Implementation and Fidelity

1. *Child and Family Team Assessment*
 - a. Participant Rating Forms – After each meeting, participants rate the meeting process, what happened, and what was accomplished.
 - b. Observations of team meetings by trained observers (e.g., Wraparound Observation Form; Nordness & Epstein, 2003) – Attending to multiple key dimensions of SOC and the Wraparound approach.
2. *Assessment of Planning Process via Record Review* – i.e., to ensure that strengths have been identified and incorporated into a written plan of care.
3. *Assessment of Services Provided* – The Wraparound Fidelity Index (WFI: Bruns, Suter, Burchard, Force, & Leverentz-Brady, 2004) provides a broader assessment of process and services at, for example, 6-month intervals. Can be completed by caregivers, care coordinators/case managers, etc.
4. *System-level Assessment* – Part of the national evaluation includes site visitors who assess system, including utilization of strengths

Outcome-Oriented Strategies: Assessing the Impact of the Process on the Child(ren) and Family

1. *Child Outcomes: Sample Measures*
 - Caregiver-Completed Measures: Parent-Child Rating Scale, Behavior Assessment System for Children-2 (BERS-2; Buckley Ryser, Reid & Epstein, 2006).
 - Child-Completed Measures: Child Rating Scale (Hightower, Cowen, Spinell, & Lotyczewski, 1987).
 - Teacher-Completed Measures: Teacher-Child Rating Scale (Weissberg, et al., 1987); the Behavior Assessment System for Children-2 (BASC; Flanagan, 1995).
 - Record Review – i.e., to what degree is child attaining goals of plan? Are services less restrictive?
2. *Family Outcomes: Sample Measures*
 - Family Functioning – e.g., Family Environment Scale (FES; Moos & Moos, 1994); Family Assessment Device (FAD; Kabacoff, Miller, Bishop, Epstein, & Keitner, 1990).
 - Family Resources – Family Resource Scale (FRS; Brannan, Manteuffel, Holden & Heflinger, 2006).

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Conclusion

Susan McCammon

Strengths-based planning fits within the contemporary framework of Positive Psychology. The field of Positive Youth Development offers ideas about activities that promote youth development, and has begun to identify the developmental processes involved. The Broaden and Build Model and Applied Behavior Analysis offer rationales and ways to apply a positive focus in working with youth. Strength based planning is enriched by the use of cultural assessment and resources. Outcome-oriented evaluation strategies can assess the degree to which service planning goes beyond merely listing strengths of a child and family, and builds on them in care plans in meaningful ways.

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Strengths that Matter: An Empirical Investigation of Elementary School Student Success

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Introduction

The use of the constructs of resilience and within-child strengths to guide the practice of assessment and intervention in education and child psychology is a relatively new approach. As a consequence, the literature discussing strength-based approaches at the practice level is sparse and often anecdotal. The lack of empirical direction for the practical use of resilience in educational and treatment planning exists despite the President's New Freedom Commission on Mental Health (2003) stating that the transformation of the mental health delivery system relies on our ability to focus on the consumer's "ability to cope with life's challenges, facilitate recovery, and build resilience" (p.5). The gap between mandate and practice was further emphasized when the strength-based perspective was incorporated into law when the Individuals with Disabilities Education Improvement Act (IDEIA) reauthorization regulations were adopted in July, 2005. The revision requires that strengths be considered in the development of an Individualized Education Plan (IEP) and that a greater emphasis be placed on prevention services (allowing school systems to use up to 15% of their federal money for early intervention instead of for traditional special education services or out of district placements). The spending of this early intervention money is required to be for scientifically based behavioral and academic interventions that make use of technologically sound assessments. The value of strength-based practice has been widely propagated, and by mandate, strength-based practices have been "adopted." But is the field ready to use individual strengths in a scientifically and technologically sound manner?

To initially investigate this hypothesized disparity, forty client files were randomly selected in March of 2003 from three different mental health service programs, including a wrap-around program for children with developmental disabilities, a special education day treatment program for children with social skills deficits and affective disorders, and a residential treatment setting for boys with oppositional defiant and conduct disorders. Upon reviewing each child's current and previous treatment plans, assessments, educational reviews, and individualized education plans, a total of 329 statements of strengths were found. Statements ranged from ones that seemed like potential assets to recovery (e.g., "likes to be around others," "enjoys drawing"), to those that seemed only indirectly relevant to his or her mental health (e.g., "well nourished," "motivated to have cyst treated") and then to those that actually seemed like potential concerns (e.g., "likes to be clean - 4 showers/day"). Other strength-statements seemed entirely inappropriate (e.g., "adjusts well to tranquil environment," "light-skinned"). These exploratory findings led to a thorough review of the literature and a series of focus groups with multi-disciplinary professional teams to determine what strengths are theorized to promote wellbeing. After generating a list of 765 uniquely phrased potential within-child protective factors, we collapsed similar content, operationalized the items, and devised an empirical study to determine the degree of clinical utility which exists for a final set of 156 hypothesized characteristics.

Method

To empirically investigate the relationship between the 156 theorized strengths and children's actual social and emotional well-being, a contrasted group study was designed. Parents and teachers provided ratings of the observed frequency of the positive behaviors in children who had either already been identified as having significant social and emotional problems ($n = 86$) or who had not been so identified ($n = 322$). The criteria used to determine an "identified" child/adolescent was the presence of one or more of the following: a referral to the school disciplinary office for aggressive or violent behavior during the academic year; a referral to a mental health professional for an evaluation regarding emotional/behavioral problems during this academic year; treatment by a mental health professional for emotional/behavioral problems during the academic year; a program or plan developed to manage his/her behavior problems; a psychiatric diagnosis; or special education services for emotional/behavioral problems.

Data were collected on 408 children in Kindergarten through 7th grade attending 35 schools and after school programs in 26 states. The children comprised a diverse sample and included Black ($n = 67$, 16%), Latino ($n = 61$, 14%), and socio-economically disadvantaged children ($n = 68$, 16%). Teachers provided 58% of all ratings, and parents or guardians provided the rest. The data collection form asked them to indicate on a 5-point Likert-type scale ranging from *never* to *very frequently* how often they had observed the 156 strengths in the past four weeks. Informants were also given the opportunity to indicate that the item was unclear, or that they felt the item did not apply to the child being rated.

Results

A multi-stage data analysis plan was used to reduce the initial pool of 156 potential strengths to a more manageable, useful, reliable, and valid list of strengths. As a first step in the analysis, those items that were frequently marked as *unclear*, *does not apply*, or left blank, were eliminated. The items with the highest percentages of unclear ratings were, “look for deeper meaning in daily routines” (7%), and “delay gratification” (6%). A larger percentage of informants, especially teachers, indicated that certain items were not applicable. These items included, “participate in religious activities” (22%), “recycle or do something to help the environment” (12%), and “spend time on a hobby” (10%).

The next criterion applied to the potential strengths was the ability of the item to differentiate between the identified and non-identified samples. In addition to *t*-tests, effect sizes (*d*-ratios) were also examined. Those items where the mean scores differed significantly, and were separated by at least half a standard deviation ($d \geq .50$) were retained. Only 7 of the original 156 items did not differentiate significantly between the two groups. In addition, only 30 items had effect sizes of less than half a standard deviation. Examples of items that did not differentiate include, “participate in after school or community activities,” “show talent in athletics, the arts, or in a technical/mechanical area,” and “engage in cultural activities or traditions.”

The third step was to examine the corrected item-total correlations. Very few items were eliminated on this basis. Fourth, item raw scores were correlated with the student's age, gender, and race. To avoid strengths that seemed biased across these dimensions, 10 additional items were eliminated. As a final step, redundant or very similar items were eliminated. These five steps winnowed the pool of potential strengths from 156 items to 81 items. Using a discriminate analysis function, these 81 strength-based items correctly classified children based on their referral status in 87.6% of all cases, suggesting that strength-based indicators can empirically predict well-being.

Items were then conceptually categorized in a way that would most readily support prevention and treatment efforts. Through this alternative approach, items were grouped together logically based on the framework suggested by the Collaborative for Academic, Social, and Emotional Learning (CASEL). The study was replicated with the 81 items across a nationally representative sample of 2,500 subjects, which resulted in a data-based decision to remove nine additional items, including a scale of Optimism, and divide two of the five CASEL scales into independent parts, creating eight scales with very high internal consistency. These results are displayed in Table 1.

Discussion and Conclusions

This study advances our knowledge of within-child strengths in many ways. First, it provides a comprehensive review of our existing knowledge about within-child strengths. Second, it investigates which of these 156 operationalized potential strengths have contextual validity to both parents and teachers. Third, it explores which of these strengths differentiate between students already identified with significant emotional and behavioral disorders and those without. Interestingly, some of the strengths that are widely recognized in the literature as protective were not validated through this study. This was most strikingly the case for items related to religion/spirituality.

Table 1
Internal Reliability (Alpha) Estimates for DESSA Scales Based on CASEL Framework

<i>Scale (Number of Items)</i>	<i>Alpha</i>	<i>Example Item</i>
Self-Awareness (7)	.87	Describe how he/she was feeling
Social Awareness (9)	.89	Resolve a disagreement
<i>Self Management</i>		
Management of Emotions (11)	.90	Adjust well to changes in plans
Goal-Directed Behavior (10)	.92	Take steps to achieve goals
<i>Responsible Decision-Making</i>		
Responsibility (10)	.90	Handle his/her belongings with care
Problem solving (8)	.90	Seek advice
Relationship Skills (10)	.93	Compliment or congratulate somebody
Optimism (7)	.87	Say good things about him/herself

This study identifies of a robust set of student strengths that are related to social and emotional development. The field will benefit from an empirically based measure to assess student strengths and resilience known as the Devereux Elementary Student Strengths Assessment (DESSA). Further studies will scrutinize this 72 item-set to explore issues of reliability, validity, and how the strengths lend themselves to intervention planning and progress monitoring. Such findings will help identify students at risk for social and emotional dysfunction and to support the healthy social and emotional development of all children.

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Application of Appreciative Inquiry to Evaluating Family Satisfaction in Two Publicly-Funded Behavioral Health Systems

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Introduction

The Family Satisfaction Team (FST) employs caregivers who have children who have received services in the behavioral healthcare system to conduct evaluations of family satisfaction with publicly-funded behavioral health services. After developing and using traditional tools to measure satisfaction, the FST decided to develop tools using the Appreciative Inquiry approach (AI; Hammond, 1996). AI is based on a positive, strength-based format to facilitate change, progress and quality improvement where all stakeholders benefit.

Application of AI to obtain youth and family evaluations of behavioral health services is a promising approach for advancing program evaluation and quality improvement efforts. Although it is now accepted that family members should be included in program evaluation efforts, publicly-funded behavioral health services are still typically evaluated using traditional consumer and family satisfaction tools. Typical satisfaction surveys emphasize a problem-finding approach.

Additionally, it has been well documented that traditional satisfaction surveys are of limited utility because respondents tend to report fairly high levels of satisfaction even in services known to be rife with problems (Lebow, 1982). Traditional satisfaction surveys have also yielded less impact on service system improvements than possible because of failures to adequately incorporate the results into dynamic continuous quality improvement processes. One of the impediments to doing so is that the problem-focused approach of typical quality improvement methods can elicit defensiveness, leading stakeholders to emphasize typically high overall satisfaction rates and fall short of addressing problems.

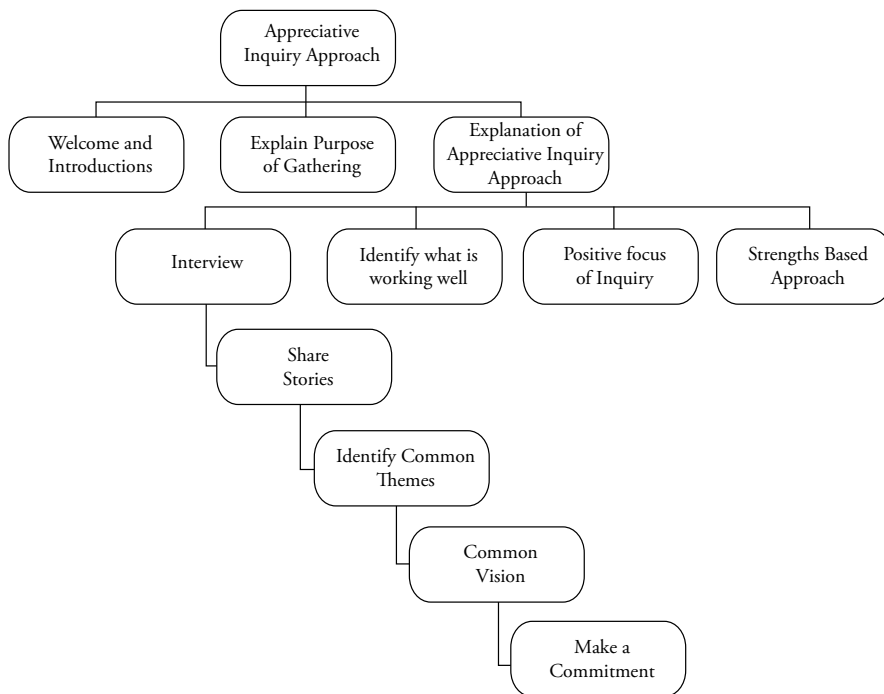
One reason that traditional satisfaction surveys have proven problematic for evaluations of service packages or systems' performance is because respondents are often directed to focus on a particular service provider or service aspect in order to give opinions about accessibility, effectiveness, and quality. We adopted an AI approach that gives a wider view of the experiences of families receiving services while still allowing empirical rating of specific aspects of service delivery that are useful in directing goal-focused quality improvement efforts. AI has been used extensively in other areas of organizational development (e.g. Cooperrider & Srivastva, 1987) because of its ability to rejuvenate quality improvement efforts.

Method

The Family Satisfaction Team employed the AI process (e.g. Cooperrider, 1996) to measure family satisfaction with family-based services in the public system of behavioral health care. The AI approach ensures that one obtains information about what works well and builds on strengths rather than focusing on deficits or problems. Previously, we would usually look for issues to resolve, problems to fix, barriers to overcome. Instead, we decided to try something different, to look at "what is working," and try to do more of it, model it, and in this way improve behavioral health services. Appreciative Inquiry was developed by David Cooperrider of Case Western Reserve University. Appreciative Inquiry utilizes a 4-stage process focusing on: (1) *Discover*: The identification of organizational processes that work well. (2) *Dream*: The envisioning of processes that would work well in the future. (3) *Design*: Planning and prioritizing processes that would work well. (4) *Destiny* (or Deliver): The implementation(execution) of the proposed design. See Figure 1.

The Parents Involved Network/Family Satisfaction Team (PIN/FST), the Mental Health Association of Southeastern Pennsylvania (MHASP), Behavioral Health Administrators and Family Based Providers collaborated on the family satisfaction project by holding focus groups specific to family based services to determine what was working well within the service.

Figure 1
Evaluating Family-Based Services Using an AI Framework



The FST facilitated focus groups utilizing an AI approach. The focus groups consisted of parents/ caregivers of children and adolescents who receive publicly-funded behavioral health services and specifically asked what was working well within the services. The questions asked were: Tell me about a time when services worked really well for your child and family. How did things change? What do you think contributed to the change?

Results

In November and December of 2005, several dozen family members were invited to participate in focus groups. Four family members agreed to participate, 3 in person and 1 by telephone. This was an initial small pilot (trial run) incorporating the Appreciative Inquiry Approach. The focus groups were scheduled during the winter holiday season which many families said made it difficult to attend. Family members cited already scheduled family based services, medication checks and family activities as conflicting with the scheduled focus groups. Recommendations were based on responses from the family members that the FST contacted through letters of invitation, follow up phone calls, and other outreach efforts. Recommendations came from participants in a focus group or an interview format who were receiving family based services at the time or had received family based services.

Family members made some of the following statements about times when family based services worked exceptionally well:

- “The make-up of the team”
- “Team created the opportunity for their child to open up”
- “Learned to advocate”
- “Team includes family as part of the team”
- “Able to see how services effect change”

“Realistic environment in real time”
“Empowering the parent”
“Encouragement”

Additionally, participants reported that the treatment team is important to providing exceptional family based services; and that the makeup of the team can create success. The focus group was helpful and enabled families to provide feedback. The teams provided support, encouragement, and tools (approaches, methods) for the family, and the families welcomed creativity and physical movement outside of the home.

The information the FST obtained from the focus group evaluation form suggested that the family participants found the focus group helpful, liked the small group format and liked that the positives were stressed. The families who participated in the Family Based focus groups also wanted to be involved in creating more positive family-based experiences. They stated that they intend to demonstrate this by being active participants of the family and team and by being committed to the Family Based therapy. The families also stated that they will give positive feedback to the team when they are doing a good job.

Discussion

Interestingly enough, there was a great deal of excitement generated by using this approach. The families who participated in the interviews enjoyed the process, though at first they were doubtful. When we explained to the providers what we intended to do, we met with a great deal of support and interest. All stakeholders were engaged, excited, and enthusiastic, as well as very intrigued. There was strong collaboration on everyone’s part from County administrators to managed care organizations to providers and families. There is rich, qualitative information generated from the interviews being done in an AI way and there is commitment from all stakeholders to create more of “what works.”

The FST will be applying the AI approach in all our endeavors to ascertain family satisfaction with children’s behavioral healthcare services. FST will reframe the question of satisfaction, whenever appropriate, to ask what is working and to inquire how success can be replicated. We feel that this approach can yield new information and fresh insight into satisfaction levels while still capturing informants’ primary concerns regarding services provided.

This is a study in progress and worth pursuing as an innovative approach to evaluating family satisfaction with behavioral health services. Our goal is to elicit information, housed in a positive inquiry framework that promotes change, gives ownership to all stakeholders such that the quality of services for children and adolescents and their families is enhanced. The methodology used to gather the information is multi-modal and multi-informant. Multi-modal uses both qualitative and quantitative methods. Multi-informant gathers information from family members; youth, when appropriate; and providers of service (see Table 1).

Table 1
Mental Health Association of Southeastern PA
Approach to Youth & Family Evaluations of Services/Systems of Care
within an Appreciative Inquiry Framework

<i>Multi-Informant</i>	<i>Multi-Method*</i>
<ul style="list-style-type: none">• Parents/Caregivers• Youth ages 14+• Direct Service Providers—“front line,” e.g., TSS, MT, BSC• Behavioral Health System Policy Makers & Administrators (County Authority, MCO• Behavioral Health Provider Administrators• Other child-serving systems stakeholders	<ul style="list-style-type: none">• Semi-Structured Peer Interviews (Quantitative & Qualitative)• Structured survey (Quantitative)• Participatory Dialogues & Focus Groups (Qualitative)• Unstructured Interviews, e.g. PIN (Qualitative)

* All methods can be done via different modalities—face-to-face, written, phone, web/chat. High preference is given to convenience for participants.

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Parents as Navigators: How Caregivers of Children with Mental Health Difficulties Find Supports in the Workplace

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Acknowledgements: This study was funded through the Research and Training Center on Family Support and Children's Mental Health, NIDRR Grant H133B40038.

Introduction

For some parents, the gap between the demands of work and family and the resources they have available to meet these responsibilities is too great, particularly for employed parents of children with emotional or behavioral disorders (Brennan & Brannan, 2005). While responding to the increasing demands of the workplace for dedicated performance and significant face-time, parents must also arrange for their children's treatment, see that their educational needs are met, and provide enrichment opportunities in the community (Huang et al., 2005). Despite challenges, these parents have used creative approaches to "cobble together" flexible arrangements that work for both their families and employers (Rosenzweig, Brennan, & Ogilvie 2002). We report the results of six focus groups of employed parents of children with mental health difficulties. This research was conducted as part of a federally funded five-year research project investigating work-life integration for this group of families. Two major research questions guided our analyses of focus group transcripts:

1. What are the employment-based strategies used by family members of children who have emotional disorders that increase work-life integration and reduce workplace barriers?
2. How do family members collaborate with supervisors and human resources professionals in their workplace to combat barriers, and to secure the resources and benefits they need?

Method

Purposive sampling (Patton, 1990) was used with the goal of reaching employed family members from different employment settings and with varied experience. Participants were recruited through parent support and advocacy networks, and through the Research and Training Center on Family Support and Children's Mental Health website. Information was distributed with an invitation to contact the research team with questions and to sign up for the study.

Twenty-eight female family members, with a mean age of 41.5 years ($SD = 9.1$), and a median family income between \$30,000 and \$39,000, participated in the research. Family members cared for a total of 59 dependents, of whom 43 (75%) had emotional or behavioral disorders. Approximately half (54%) shared parenting duties with another adult. Participants were generally European American (68%), and had a high school diploma as their highest level of education (57%). Other ethnic groups represented were African-Americans (15%), and Hispanics (7%). Parents reported spending between 5 and 83 hours per week in care activities, and between 7 and 60 hours in paid work. Of those who reported a job with benefits (68%), most had flexibility (79%), sick leave (75%), vacation time (71%), medical leave (64%), and health insurance (61%).

The selection of topics for discussion in the focus group was informed by the results of the project team's previous research, and a review of the literature. Topics addressed were availability and use of formal and informal workplace support, dealing with crises related to their child during work hours, communication in the workplace about family needs, and suggestions to improve work-based support for parents.

A focus group script prepared in consultation with project advisors, was used to guide the discussion in each of the six groups that were held in the same city in the Pacific Northwest. Researchers welcomed participants, introduced the study, addressed participant questions, and followed procedures for informed consent. Prior to the focus group discussion, participants completed a short questionnaire to collect demographic, job-related, and caregiving information. During the 60-minute audio-recorded focus

groups, participants were encouraged to share their individual experience and to build on the discussion of the other family members. The focus group moderators supported the discussion and used probes to clarify responses as appropriate (Krueger, 1998).

Transcripts were prepared from the taped focus group discussions, and the text was entered into NUD*IST (Qualitative Solutions and Research Pty. Ltd., 1993) to manage the qualitative coding and analysis. Qualitative data were coded systematically using an iterative approach, beginning with a careful reading of each transcript by two or more researchers working independently. The identification of preliminary codes was followed by meetings of the research team to discuss and compare interpretations of the first level of data coding, and to develop more substantive coding based on themes.

Results

Five major themes emerged from our analysis of focus group transcripts: (a) communicating at the boundaries of work and family, (b) managing flexible work arrangements, (c) developing and carrying out crisis plans, (d) attaining informal workplace supports, and (e) navigating the formal benefit system.

A primary issue for participants was how much they should communicate to their supervisors and co-workers regarding their children's mental health difficulties. Some decided on full disclosure, even in the initial job interview, so their need for flexible work arrangements would be well known. Other participants practiced self-censorship, disclosing only what supervisors or co-workers needed to know at a particular time. *"I try to limit what I tell people in the workplace, mostly for self-preservation."* Repeatedly, parents spoke of the stigma they encountered in the workplace, reporting worries about the workplace chill that could result from full disclosure, and their fear of negative evaluations.

Parents discussed disclosing enough about their situation to obtain workplace flexibility: *"being able to take the time off to do whatever it is I am needing to do for my child."* They reported flexible work scheduling, working from home, telecommuting, and shifting job duties. For some flexibility came with a price: exhaustion after working for extended hours to compensate for work interruptions the previous day, being taken advantage of by school personnel who called on them to manage their children's problems, and reducing work hours to the point that they lost benefits.

Flexibility was made necessary for many of the participants by the crises brought about by their children's acute emotional or behavioral difficulties in childcare or school settings. *"That... was the most difficult thing, because when a crisis does come up, it is hard to leave [work]."* Crisis plans involved: having school personnel lined up to step in when other staff could not manage, having the other parent respond if the participant could not leave work, and obtaining coverage from co-workers so that the parent could take care of the child's immediate needs.

Informal workplace supports made it possible for some to hold paid employment. Understanding co-workers gave moral support, covered for each other in times of greatest need, and even let the parent bring the child to work. Supervisors also provided support through flexibility, arranging coverage, and allowing the parent to respond to crises. *"[My boss said]... Any time you need to take time off, we understand."* In a few cases, participants mentioned that they faced backlash from co-workers who resented providing coverage.

Finally, the parents discussed their search for formal supports, sometimes through human resources professionals. They took advantage of sick leave to care for children with short-term problems, the Family Medical Leave Act to assist their children in extended crises, and when acute episodes went on for a period of months, used intermittent leave. Employee Assistance Programs were used for counseling or referrals, and insurance was used to provide access to treatment for their child for a limited time. Participants spoke about their gratitude to other parents who helped them use formal work supports to their greatest advantage, and one mother labeled this assistance as *"peer advocacy for navigation."*

Conclusion

The results of this research make an important contribution to our understanding of parents' experiences of work-life integration when they care for children with mental health needs. These data indicate that the stigma associated with mental illness in the family (Hinshaw, 2005) has a profound effect on the experiences of employed family members. Stigma leads to communication barriers and reduced access to resources and support. It is clear that in addition to redesigning workplace supports to meet dynamic needs of families, other changes are necessary. Stigma reduction efforts are required to increase understanding of how children's mental health affects family and work life. It is also important to examine ways in which schools and employers might collaborate to create more supportive arrangements for families, and new ways in which service providers in systems of care can support families in their efforts to engage in paid employment.

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Family Voice in the Mental Health Services Program for Youth (MHSPY)

Katherine E. Grimes
Lauri D. Medeiros

Introduction

Family “voice and choice” is a key Child and Adolescent Services System Program (CASSP) principle (Stroul & Friedman, 1986) and a major design element of the Mental Health Services Program for Youth (MHSPY). Recognizing that traditional child psychiatric approaches have historically failed to recognize the power of family-driven care (McKay, Stoewe, McCadam, & Gonzales, 1998), MHSPY actively engages and relies on the family voice to help create effective change. Based on eight years of experience in the Boston area, this unique program model, which integrates traditional and non-traditional services for families whose children have serious emotional disorders (Grimes & Mullin, 2006), not only seeks to improve the care of individual children, but to help families create sustainable community-based systems of care. This summary describes how MHSPY seeks to integrate family voice at every level of the program to create a family-driven service delivery system.

Method

From the beginning design phase, the MHSPY program has included parents and family members in a collaborative model. Despite the genuine interest across stakeholder groups in hearing from families, standard operating procedures within state agencies and health care settings are rarely “family friendly” and it is easy for professionals to begin to take over the conversation, even if unintentionally. In order to provide counter pressure against business as usual, MHSPY has worked with family members to build multiple mechanisms for participatory governance into the model (see Figure 1). By creating reinforcing layers of system influence at the state agency leadership level (Steering Committee), the local community resources level (Regional Steering Committee), the program level (the Family Leadership Council and the Parent Support Group) and the child and family team level (Care Planning Team), the family voice can be heard and integrated throughout the MHSPY process.

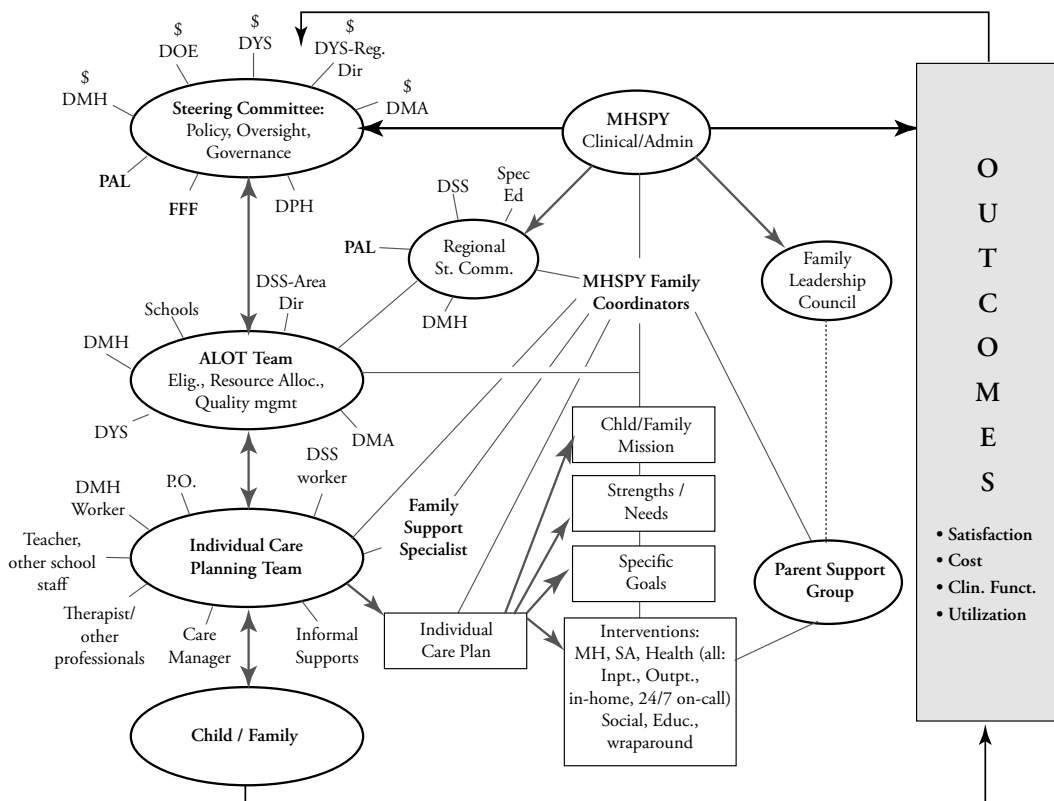
Care Planning Team Process

Building on strengths. From the perspective of a family referred to the program, the first step is for parent/caregivers to sit down with their MHSPY Care Manager (a Master’s level clinician with experience in child and family service delivery) and identify what their needs and strengths are and whom they want on their child and family team. The Care Planning Team then hammers out a “mission” for themselves and the child. The Care Planning Team identifies goals to support the mission, and strength based services and necessary interventions are assigned to each goal.

Meeting the need. The parent/caregiver is “CEO” of the process, with the Care Manager acting as “consultant.” The larger system of care goal being addressed is for sustainability of the process in the community after MHSPY. The first order of business is to determine who else the family wants on their team. The Care Planning Team starts with the family, then with existing providers and natural supports. A Family Support Specialist (parent professional) may be invited onto the team. Many times MHSPY Care Managers and Family Support Specialists encounter providers who may have “known” the family for years but little progress has been made. Frequently, the family does not realize they can pick someone else or a different treatment option. Unlike other models, where a clinician might only be able to “coordinate” services from elsewhere (case manager model) or provide temporary direct support (family stabilization team model) the MHSPY Care Manager authorizes (i.e. contracts, pays for and manages) all services, traditional mental health, medical and wraparound resources.

Shifting perceptions. Through this structural authority, the family has the power to say: “I don’t want to work with that person” or, “can I try acupuncture for my son?” and that plan can be implemented.

Figure 1
Family Voice in MHSPY



The MHSPY Care Manager can locate individualized providers and add them to the “network” so they can be paid. These providers might just work with one family or go on to work with several. This applies to both standard clinical services (e.g., therapists), and non-traditional resources (e.g., karate lessons with a clinically trained sensei). The family increasingly perceives that they are being heard by their team and that their opinions matter.

Ownership. MHSPY has incorporated structures that ensure that the focus remains on family preferences and continuous improvement. This service system’s governance included the Family Leadership Council that provides program wide advice and guidance from involved parents, and a Parent Support Group which offers family-to-family connections and support. In this way, MHSPY is different from many home-based models; there is no standard service package, such as a family stabilization team, that is imposed, with a set time frame and intrinsically determined therapists. Instead, MHSPY care planning offers an individualized process of engagement, ownership, empowerment and change that “takes as long as it takes.”

Discussion

There are challenges to this approach, in that these collaborations are relatively new and unfamiliar to clinicians and agency personnel. Therefore staff and families simultaneously work together to help individual children while also creating new models of parent/professional partnership. There are also challenges for professionals across agencies in defining and sustaining new roles within family teams.

At the same time, qualitative evaluations of both parents and professionals, using standardized interview tools, such as the Family Centered Behavior Scale (Allen, Petr & Brown, 1995) and agency satisfaction surveys, indicate multiple rewards from family-focused work in an intensively coordinated, multidimensional system of care.

Parent professionals associated with the MHSPY program identify, respect and understand the real life experiences of families with children that have mental health needs as the foundations for a successful system of care. They note that systemic progress for families can be seen when they encounter mental health professionals who listen to their needs and build solutions using their strengths and the strengths of their child. Voices recorded in a filmed meeting of the Parent Support Group report that receiving support through their communities and in their schools assists families with the challenges they experience daily and gives them hope.

Conclusions

MHSPY relies on the active preferences of the family voice to facilitate engagement. Successful engagement of multiple challenged caregivers is a key outcome of the MHSPY model and a necessary step in creating partnerships for change. Interviews of families, youth and public agency staff suggest that this unique approach to family driven care, with its emphasis on multiple opportunities for family voice, offers tangible rewards for children, families, providers and communities.

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First Findings from the Family-Driven Study of Family Involvement in Systems of Care

Introduction

The national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program (Holden, Friedman, & Santiago, 2001) provides information about the impact of systems of care using a standard approach and instrument package. Special studies have been conducted to examine unique issues and to explore the potential of less traditional approaches for evaluation. This paper will present the first findings from the Family-Driven Study of Family Involvement in Systems of Care. The study, designed and conducted by a team of diverse family members, examines the experiences and views of family members in three communities.

The second goal of Achieving the Promise (New Freedom Commission, 2003) is that mental health care will be consumer and family driven. Funded by SAMHSA, the Family-Driven Study of Family Involvement in Systems of Care puts this rhetoric into action. The study was conducted by the Federation of Families for Children's Mental Health in collaboration with the Georgia Parent Support Network and ORC Macro for three reasons. First was to conduct a study of a question of interest to families in a rigorous manner that was simultaneously consistent with the family values of systems of care. Second was to allow families to take the lead in all aspects of designing and conducting a study with highly qualified researchers playing a supportive role and providing technical assistance. Third was to document the experience, process and lessons learned from making the paradigm shift (Osher & Osher, 2002) to doing research in this manner. This paper focuses primarily on the first two reasons for the study.

Family members, practitioners, policy makers, administrators, and researchers all can benefit from the findings of the study itself and the lessons learned by actually doing the study. As this is arguably the first study of its kind to be so well documented, the authors believe the potential for impacting the field of children's mental health research is significant.

To help focus the broad goal of studying something of interest to families, the team conducted a modified Delphi process, a technique to build consensus using a series of written questionnaires with cycles of feedback rather than face-to-face discussions. The team identified 100 experts in family involvement in children's mental health to receive the questionnaires. The first wave generated a wide range of topics that could be studied. The team compiled and categorized these to generate more specific questions for the second round of responses from the same 100 individuals. These results were supplemented with information gathered from focus groups and interviews with key informants. The questions were:

1. How are families engaged in systems of care?
2. What supports or inhibits family engagement in systems of care?
3. Is there a relationship between family engagement and child and family outcomes?

In the course of developing the research questions, it became apparent that there were many different perspectives on what constitutes family involvement. The research team was interested in examining active and purposeful roles for families, beyond simply being present at a meeting or event. The team labeled this active role "engagement" and developed the following definition to insure a common understanding of the term.

Engagement is the act of doing something for your child, your self, or your family, that determines or derives from a care plan or supports the delivery of services and supports. Engagement is also participation of families and youth in governance, management or evaluation activities with the intention of improving or enhancing service planning and delivery of treatment, services, supports, or care for children in the community as a whole.

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Families may engage in different ways and intensity as their child's and family's needs change or as opportunities to become engaged in their child's care or in the system vary. Other terms used to refer to these acts have been involvement, participation, advocating, seeking, facilitating, and evaluating.

Method

The study used three methods to gather data: (1) a survey, (2) focus groups, and (3) extracting data from another evaluation in which the participants were involved. Site evaluators and family contacts assisted in recruiting family members whose children were enrolled in the longitudinal study of the national evaluation of the Comprehensive Community Mental Health for Children and Their Families Programs. Families from three communities who had received services in the past year were invited to participate in the study. Those indicating interest were sent a short questionnaire consisting of both closed and open-ended questions. Five focus groups of seven to nine individuals who had responded to the survey were held to supplement the survey data. With participant permission, child and family descriptive and outcome data were extracted from the national longitudinal data set and integrated with results from the survey for quantitative analysis.

The family driven study team reviewed existing instruments used for the national evaluation and looked for other instruments that assessed family engagement. Most items they found assessed a family's satisfaction with services or providers or their accessibility. These were not appropriate for this study.

The family driven study team was interested in the family's own perceptions about their engagement with the system of care. It was very important that the family be given the opportunity to describe how they engaged (specific activities or actions) how engaged they felt (level or intensity), and what impact they felt their engagement had on their child and family (outcomes). A new instrument was needed to answer these questions.

The team began by creating a question bank of their own. They then held three focus groups of family members to get reaction to their definition of engagement and some of the items in the question bank, as well as their preferences for different methods for collecting information and offering incentives for their participation.

The focus groups yielded support for some questions, provided clarity on others, and generated some novel ideas. Mixed opinions regarding methodology for collecting data led the team to a mixed-methods approach for the final study.

The team was committed to a minimalist approach to data collection, only asking for items that were really needed and could not be obtained elsewhere. Hence the effort to link survey responses to the national evaluation's longitudinal study. The result was a two page survey. There were field tests after each of three revisions of the instrument.

The team developed the moderator's guide and protocol for the focus groups after they had completed the survey and received training on focus group methodology. The moderator's guide was designed to explore the same themes as the survey but in more depth. The survey questionnaire and the moderator's guide and focus group protocol were approved by the Office of Management and Budget (OMB).

Qualitative analysis was conducted on the responses to open-ended items on the survey and transcripts from focus groups. Team members, working in pairs, conducted thematic coding of these data, looking for patterns, similarities, and differences. Each pair reviewed a printout of all the responses to one question at a time. Separately, each member of the pair identified themes for the same item. They did the same for a focus group transcript. The pairs compared their results and reached consensus to develop a common language about the themes in the data they had reviewed.

The full family driven study team reviewed and discussed all the themes for all the questions and transcripts to decide on a set of overarching categories so there would be consistency across the final analyses. The pairs then reassigned each item on their list of open-ended responses and their focus group transcript using the overarching categories.

The demographic profile of the 82 families that completed the survey was similar to that of the other 1,872 families receiving services from the systems of care communities in Jackson, Mississippi, Indianapolis, and rural Minnesota. However, since respondents were self-selecting and many were already engaged with the family organization that assisted in supporting their participation in the study, they may have been inclined to higher levels of engagement than families who chose not to respond.

Results

Thematic analysis of the responses to open-ended questions provided insight into how families describe their own engagement in systems of care, and what supports or inhibits engagement as defined by the study team. There were 82 respondents to the survey. For each of the open-ended questions, respondents were allowed to give up to two responses. Thus, the number of responses to each question varied.

The predominant themes regarding support for family engagement were support services and information, as well as opportunities for personal growth leading to empowerment and advocacy roles (104 responses). Representative responses included “being respected by professionals for their intelligence and involvement,” and “having a better understanding of where to access information.”

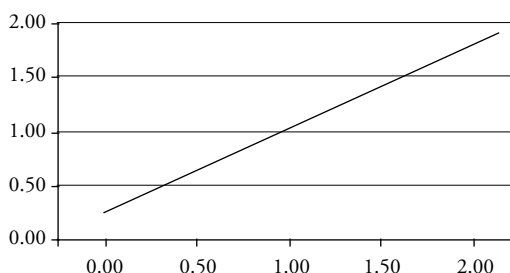
Over half of the responses (56% of the 64 responses) about what inhibits family involvement identified issues that impacted access to services. Specific issues mentioned were time constraints, lack of resources close to home, “revolving therapists,” and waiting lists.

Seventy-two responses were provided to open-ended questions about the positive changes respondents had seen in their child and family. Personal growth or self-awareness, including empowerment, were endorsed in about 40% of the responses, and changes in their child’s behavior or functioning in about one-third. “We are more apt and quicker to tell a treatment provider *thanks, but no thanks,*” was a typical response.

Families provided 107 responses addressing what they believe contributed to the positive changes they see. Empowerment and their own participation in services were the most common themes endorsed by families. Their comments specified having trust in the case manager or therapist, and the knowledge necessary to interact with school personnel. Of the 107 responses, about one-third endorsed services as contributing to change, 15% supports, and 13% information.

Analysis of the survey data revealed a statistically significant positive relationship between family perception of the level of their engagement and their perception of positive outcomes for their child and family, $\beta = 0.482$, $p = .000$ (see Figure 1).

Figure 1
Relationship Between Engagement and Perceived Improvement
in Outcomes Due to Engagement



To investigate the relationship between family engagement and child and family outcomes, respondents were divided into high and low engagement groups. Various analysis strategies (General Linear Modeling and Loglinear Modeling) were applied to discern relationships between the family's level of engagement and child's outcomes in the data from the national longitudinal outcome study. The dependent variables used included functional and clinical outcomes (from intake to 18-month follow-up), with family engagement serving as the predictor variable. Results indicated that there were no significant differences between high and low engagement groups in terms of change in outcomes. However, there was some indication that the children of more highly engaged families were less likely to experience detention in school or expulsion from school, $Z = 2.522$, $p = 0.012$.

Demographic analysis of the high and low engagement groups did not reveal any statistically significant differences between the two groups. However, raw data from the survey did show some differences in how families of different racial groups characterized their level of engagement. White families reported much higher levels of engagement (80% say *a lot*; 0% say *none*) than Black or African American families (22% say *a lot*; 11% say *none*). Further research is needed to determine the extent of these differences, and whether they are related to differences in opportunity to be engaged, cultural values, family perceptions of what is needed and helpful, or some other factors.

Discussion

The Family-Driven Study team concludes that families of children enrolled in systems of care believe that their own engagement in those systems of care does have an impact on outcomes. Support services and relationships with peers and professionals (rather than clinical services) and activities that enhance their knowledge and skills so they can be effective advocates for their child seem to be most valued by families. Functional (rather than clinical) outcomes also seem to be most valued by families. The kinds of engagement and the outcomes families report have implications for the field and merit further study. Tools used by the national evaluation may not capture all aspects of engagement or the outcomes considered relevant by families.

This study opens the door for much further research. This includes further study of the survey instrument itself to determine its usefulness as a means of assessing how families describe and feel about their involvement in their child's care. The themes from the qualitative analysis suggest topics for further investigations into what supports and what inhibits family involvement in their child's care. Finally, the differences in perception of engagement reported by families from different racial groups merits further investigation.

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Symposium

The Role, Impact and Effectiveness of Family Organizations in Developing Family Voice in Systems of Care

Symposium Introduction

Katherine J. Lazear

This symposium is built on the theoretical framework that there are certain system implementation factors which, when put into practice within communities, contribute to establishing well-functioning systems of care for children with serious emotional disorders and their families. This symposium examines how one of these factors—a strong family voice—contributes to the implementation of effective systems of care.

First, in Maricopa County, Arizona, a Managed Care Organization contracts with a family-run organization, the Family Involvement Center (FIC), to ensure the County's mental health system is family driven. The next summary addresses how the Florida Institute for Family Involvement/Florida Federation of Families for Children's Mental Health has championed strategic planning methods that guide policymakers to better understand the perceptions and real needs of families. The third overview addresses efforts to assess the current status of the literature on family organizations, in the interest of framing lessons learned in North Carolina. The family organization movement has grown significantly over the past 20 years, yet is a dearth of literature that details the journey of developing, running and sustaining family-led organizations. Together, these projects suggest an emerging methodology for bringing family voice to the center of service delivery reform.

Chair

Katherine J. Lazear

Discussant

Lisa Conlon

Authors

Susan Hickcox

Connie Wells

Laura Weber

Bringing the Family Voice to Practice Improvement by Pairing Professionals with Parents to Interview Families Receiving Services through the Child and Team Process

Susan Hickcox

Introduction

In 2001 a historic settlement to improve mental health and substance abuse services for children in Arizona's State Medicaid Program resolved a 10-year-old lawsuit. The settlement set forth a set of 12 principles that emphasized partnering with families and youth, interagency collaboration, and a child-and-family team approach for coordinating, designing and delivering individualized services. In Maricopa County, Value Options, the managed care organization (MCO), funded the development of a family-run organization, the Family Involvement Center (FIC) to hire family members to work on child and family teams. Other system building partnerships included the formation of a Maricopa County Collaborative, which brought together Maricopa County families and the following child-serving agencies including the Arizona Department of Health Services, the Department of Economic Security, the Arizona Health Care Cost Containment System (AHCCCS; State Medicaid), the Department of Education, and the juvenile probation and corrections systems. Under this Collaborative, the Assessments and Outcomes Sub-committee implemented a Child & Family Team (CFT) Interview process. These interviews were distributed in three formats: Family, Family Support Partner, and Facilitator. Interview questions were designed to represent issues associated with the 12 principles and the four Functional Outcomes: (1) engagement and relationship with child and family, (2) identify strengths culture, and needs of child and family, (3) create an Individualized Service Plan, and (4) implement, monitor and modify the plan toward a successful outcome for the child and family.

This initial interview process has taken on many different forms over the years, but the family voice has always been at the core of this practice improvement process. This summary describes how families have been actively involved in quality improvement processes, in evaluating system performance, in helping to recruit and select interviewers, and in training activities.

Methodology

Getting a full picture of how families were doing in the CFT process was important to the Assessment and Outcomes Committee. In June 2005 it was decided that pairing professionals and family members to work together, reviewing and interviewing, would provide the most complete picture of how to improve practice in Maricopa County. Value Options and the Family Involvement Center collaborated in managing the process as follows: Value Options requested a random “pull” of active CFTs (the CFTs had to be in place for 90 days or more). Once that process had been completed, information about the CFTs was “sifted” by demographics predetermined by the Assessments and Outcomes Committee. It was determined that each Comprehensive Service Planner (CSP) would have between 10 and 12 cases reviewed by the team. Professional reviewers were selected and put on a scheduling spreadsheet. Once the final CFTs for review were selected, the Family Interview Coordinator at the Family Involvement Center scheduled the interviews, placing the family interviewers with the professional interviewers.

Ten agencies were reviewed over four days, Monday through Thursday, with a debriefing on Friday for each of the agencies. Each interview team reviewed the files, interviewed the case manager (facilitator), the family and the child. Child Protective Services staff members were included in interviews when they were involved with the child and family. Each team completed a family interview each day, and scored the activities of the CFT across four domains:

1. Engagement and establishing a trusting relationship with the child and family
2. Clearly knows the family and has identified the strengths, culture and needs of the child and family
3. Has created an Individualized Service Plan that meets the needs of the child and family
4. Has implemented, monitored and modified the plan toward a successful outcome for the child and family

Scores were based on a one-to-four scale with the following measures: 1 = *a substantially unacceptable performance*; 2 = *a partially unacceptable performance*; 3 = *a minimally acceptable performance*; and 4 = *a substantially acceptable performance*.

The Practice Improvement Tool included questions addressing each of the four domains. Each question was answered with *yes*, *no*, or *n/a*, with additional space provided to record respondents' comments as they elaborated on their answers. Following the interview questions, sections were included to capture recommendations, needs, and a summary. Once the team finished each section of the interview they discussed their scoring and arrived at a score they both agreed upon. During the training we left the option open for team members to agree to disagree and to leave a particular item unmarked if they could not come to a consensus. There were no unmarked questions.

Results and Discussion

A two-day training on the Practice Improvement Tool and a hands-on demonstration of a family interview were created and implemented by Value Options and the Family Involvement Center. The unique element of implementing the review process was the pairing of the professional with a family member on review teams. As a result of this process, professionals who were involved in policy making (but never were on the “front lines” of service provision) partnered with a family member on review teams, interviewed families, and visited families' homes; thus, professionals and family members were able to share perspectives as peers, with the common goal of improving the system.

Family interviewers and families and children benefited from sharing the family perspective and interacting with policy makers, clinical supervisors and executive staff.

Family voice has been at the core of this recent practice improvement work in Maricopa County. The impact of the collaboration of system partners and the active involvement of families in quality improvement processes, evaluation of system performance, recruitment and selection of interviewers, and in training activities continues to be systematically monitored.

Using Family Perceptions to Guide System of Care Development

Conni Wells

Introduction

This summary describes how data collected on encounters with families over a period of several years have informed organizations, programs, and resource and policy development to ensure that efforts are built upon the voice and needs of families, as *they* perceive them. Through strategic planning that responds to the perceptions of families, the Florida Institute for Family Involvement/Federation of Families for Children's Mental Health has helped policymakers to better understand the real needs of families. The processes described here have also assisted in identifying and developing targeted information, resources, and training to enhance the capacity of families and providers to navigate the system of care.

Method

Methods used to collect data were aligned with the populations served and their level of communication comfort¹:

- **Encounter data.** This included information regarding the family, their needs, and the purpose of the encounter. These data also outline which system of care issues were interfering with families' ability to access necessary services.
- **Family View Points Survey.** This survey was designed by and for families of children and youth with special health care needs and mental health care needs. The survey is based upon questions used in the State and Local Area Integrated Telephone Survey (SLAITS, n.d.); a population-based survey developed by the Centers for Disease Control and Prevention to measure and monitor changes in health, health care, and well-being at state and local levels to enable a comparison between results, national geographic areas, and as a reliability check.
- **Family/Youth Forums and Focus Groups.** Forums and groups conducted structured but informal conversations with families and youth to identify and explore their perceptions of the system.
- **Family Story Bank.** This is a searchable database with family stories detailing their experiences interacting with the system of care.

Findings

We found that professionals are looking for simple to understand, accessible information at a level almost equal to families. We also discovered that system gaps have created major obstacles for families as they seek a medical home and culturally competent care for their child. From the data, it appears that financing issues are the major barrier to the access to appropriate mental health services. Yet families have answers for system failures, and we can learn much from them.

¹Surveys and tools are available upon request from the author.

Conclusion

Families are reputable historians of system encounters when approached in a family-centered, culturally competent manner. Their ability to identify what they need, along with the barriers that interfere with their navigation of the system, are dependent upon the approach, style, and their perception of how the information will be used. Information gathered from families can be used for the following operations in system of care:

- Program Development
- Program Evaluation
- Provider Selection
- Contract Management
- System Advocacy
- Reality Check

Of critical importance is the use of “authentic” family voice to drive the system transformation. An authentic voice is one that represents the perception of families of children served by the system and results in views that are not coerced or shaped by anyone other than the families themselves.

Gathering, sharing, and using the perception of families carries risks with associated consequences because not all stakeholders are in a position to justify their actions or inactions. Further, the reality of the family experience can be a threat to leadership, and not all systems representatives are committed to a family driven transformation.

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What the Literature Says about Family-Run Organizations and Lessons Learned from the Field: Family-Run Organizations within a System of Care in North Carolina

Laura Weber

Introduction

The system of care (SOC) philosophy is a framework for improving child mental health outcomes and is changing the relationships between families and the service system at every level. Family voice and partnership is the thread that links together successful programs, policies and practices. As professionals continue to recognize the importance of family voice, mandates and funding have followed. This trend is a major impetus for the increase in independent family led networks, organizations and groups. It is these groups, started around a kitchen table or in a spare bedroom, that are the nucleus of the movement. However, little is known about the development and evolution of these groups and even less is known about how best to sustain these groups. As family involvement is increasingly seen as best practice, it is essential to understand the variety of models and structures of family groups, the activities that increase parent voice and involvement in systems reform, and the conditions necessary for their sustainability. This literature review provides a backdrop of family involvement within a SOC, the efforts in North Carolina (NC), and what is known about the necessary conditions for sustaining family-run groups.

Findings and Discussion

Family involvement in SOC had its roots in the fertile grounds of the peer support, self-help and consumer rights movements of the 1970s as evidenced by the development of national non-profit groups such as the National Alliance for the Mentally Ill. This early work gained further momentum and

recognition through federal legislation such as the 1984 Child and Adolescent Service System Program that provided support for the development of statewide family organizations (Briggs, 1996). In 1988, programming that mandated family participation in children's mental health began (Stroul & Friedman, 1986) supported later by the Surgeon General's Report (US Department of Health and Human Services, 1999) and the President's New Freedom Commission on Mental Health (2003).

As a result of these influences, family involvement is a more common part of the professional lexicon. This is evident in the values and guiding principles of SOC (Stroul & Friedman, 1986), which have been adopted as key elements in the reform of NC mental services. For example, the 2001 State Mental Health Plan makes provisions for family and consumer advisory committees for advisement on all aspects of local system development. These developments were supported by NC's four SAMHSA/Children's Mental Health Services (CMHS) SOC grants. One way increased family involvement can be accomplished is through the development of family led support and advocacy groups. Currently in NC, there is a statewide family network and at least 18 family-run groups that were started in response to children's mental health concerns. Despite the commonality of their roots and influences, there is considerable diversity among these statewide and local groups in their structure, point of origin, staffing, funding, activities, and longevity.

When one examines the research base for what makes for successful development and sustainability of a family organization, there is a paucity of scholarly literature; however, slightly more information is available in the technical assistance documents produced by university-based research centers and national organizations, including foundations. Drawing on this literature and the related arenas of statewide family network development, community development, and organizational development, some insights can be drawn about the necessary conditions for the successful development and sustainability of family led groups.

Community development and neighborhood revitalization are fields with close ties to family run groups in the mental health field. The premise of all these groups is that fundamental change comes when those directly impacted are part of the change process. But how to ensure that they are part of the change process is less clear. The few studies that are available highlight a fairly consistent set of skills, such as leadership, and activism, advocacy, and organization (Joseph et al., 2001) that are needed in order for families to participate in full governance. Among the most frequently mentioned skills are leadership and leadership development (Koroloff & Briggs, 1996; Annie E. Casey, n.d.). Joseph and colleagues (2001), in a final project report for the Annie E. Casey Mental Health Initiative for Urban Children, adds that in addition to skills and experience with activism, advocacy and organization, individuals need skills and knowledge in areas of mental health policy and system reform, financing, management information systems and working in partnership with state and local governments. Furthermore, early and ongoing technical assistance supporting the further development of these skills is needed (Cornerstone Consulting Group, 2002).

Few sources speak directly to what is needed to sustain family led organizations. One organization, the Mary Reynolds Babcock Foundation (MRBF), began the Organizational Development Program in 1995 with community-based organizations. Through this work, the MRBF created a list of 13 areas of focus for sustainability. They, too, agree that much has been published about organizational theory and management, but this literature does not cross over to small grassroots community based organizations. What little information that is available comes from technical assistance providers. For example, the Federation of Families for Children's Mental Health Tip Sheet on Sustainability (2004) lists the following as areas of focus for sustainability: (a) developmental process, (b) building relationships, (c) cultural competence and diversity, (d) independence and autonomy, (e) communication networks, (f) running a business, and (g) funding and accountability.

Similarly, Weber (2004), after reviewing the literature and observing the development of family led organizations in NC, describes the following as necessary conditions for the sustainability of newly emerging family led organizations in a SOC: (a) strong family leadership, (b) sufficient paid staff, (c)

adequate and stable source of funding, (d) adequate infrastructure, (e) organizational commitment, (f) fiscal sponsors, and (g) early and ongoing technical assistance and training.

Conlan (2005), another technical assistance provider, presented consistent findings indicating that (a) planning and leadership, (b) organizational culture, (c) relationships and partnerships, (d) organizational relevance, (e) education and services, (f) fund/resource development and (g) volunteer capacity must be attended to for family led groups to be sustained.

Based upon the available limited research, the following areas are highlighted for continued exploration:

- **Family experience.** More information is needed from the families themselves, that is, from those who have tried to start groups and succeeded, and from those who have not succeeded. Researchers need to partner with families to describe and detail, from the family perspective, the necessary conditions for sustainability.
- **Original design.** How does the design, the target population, the issues and age ranges addressed affect the ability to sustain the work? What was the original purpose and funding for the group? From what source was the group initiated?
- **Funding.** Money often complicates the picture and efforts should be made to understand its impact. Important issues such as the source and recipient of the funds, how much money is enough, and what is the critical threshold of funds for a given group in a given area need exploring. Who controls the funds is also an important issue.
- **Leadership.** This topic was mentioned in a significant amount of the literature but rarely expounded upon. How are family leaders chosen and by whom? What are the qualities of leadership that support organization sustainability? What does leadership development look like for family led organizations? What needs to be included and how should it be implemented?
- **Technical assistance and training.** It becomes important to identify some of the specific competencies and skills needed by family leaders and to address which modalities are best for increasing competencies. For example, who should provide the technical assistance and training and what is the nature and duration important to sustainability?
- **Organizational model.** As family led organizations grow, there becomes an expectation either implicit or explicit that they will obtain a formal structure and incorporate as a nonprofit organization. Little work has been done to research other useful models for sustainability such as different methods of fiscal sponsorship or the development of a consortium model.

In 1996, Briggs suggested that the literature is lacking because national, state, and local family organizations have only started within the last 10 years, and that family support programs in children's mental health are also relatively new. However, 10 years later, the importance, role and benefit of family involvement in human service delivery systems is well documented. The on-the-ground experience of partnering with families is beginning to drive funders and researchers to develop strategies to gain a deeper understanding of the necessary conditions for sustainable family led organizations. Assessing the Role of Family Organizations in Developing Family Voice in Systems of Care, a current study by the Research and Training Center for Children's Mental Health at the University of South Florida, will research the factors that support or impede developing and sustaining family organizations within the context of SOC. This research will lay the foundation for new knowledge that will support the development and sustainability for family led groups, thereby ensuring the continuation of family voice and participation in SOC.

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Symposium Discussion

Lisa Conlon

The three papers presented in this symposium highlight a number of developmental characteristics of family organization, including promising approaches to growth and sustainability, as well as longstanding organizational challenges. The field must continue systematic examination of family organizations focused on their external and internal characteristics, and the influence on and from system of care partners. Research needs to identify measurable factors that facilitate the active and influential inclusion of family voices in systems of care activities so that necessary transformation of the system can occur.

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Chapter Four

System Navigation and Clinical Outcomes in a System of Care

Attrition from Children's Mental Health Treatment: A Review of Clinical Research and Practice

Diana J. Urajnik
Brian F. Shaw
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Gail L. McVey

Introduction

There is a large burden of suffering associated with mental health problems in children (Waddell, Offord, Shepherd, Hua, & McEwan, 2002). Studies have indicated that approximately 20% of children and youth may experience mental disorders at any given time (e.g. Breton, et al., 1999; Costello, et al., 1996; Offord, et al., 1987). Incorporating functional impairment—defined as an inability to function at a developmentally appropriate level—into the thresholds for defining mental health problems has led to somewhat lower overall prevalence rates (14% or > 300,000 in Ontario, Canada; Waddell, et al., 2002). The lower rates refer to clinically important disorders that cause both significant symptoms and impairment. Anxiety, attention, conduct, and depressive disorders are the most common types of referral problems (Roberts, Attkisson, & Rosenblatt, 1998; Waddell, & Shepherd, 2002). These conditions have a negative impact on children's development and functioning in the home, school, and community. Many childhood disorders also persist, and can affect eventual adult productivity and functioning (Costello, & Angold, 2000).

It is critical that children receive effective help in order to prevent, and mitigate the escalation of problems. However, it is estimated that 30-60% of children (and their families) end treatment prematurely (Armbruster & Kazdin, 1994; Wierzbicki & Pekarik, 1993). Considering that only 20% of children (4-18 years of age) with mental health disorders receive specialized services¹ (Waddell, et al., 2002), attrition² may exacerbate the problem of unmet need for mental health treatment. Conceptually, the loss of children from treatment raises questions about factors that put families at risk for attrition. What are the characteristics of children/families, service providers, and systems that lead to dropping out of care? That some children may not receive services by virtue of dropping out also raises questions in terms of treatment accessibility—how can we ensure that children who drop out get the treatment that they need? Dropping out of real-world clinical care may influence treatment effectiveness, and child and program outcomes. Does treatment attrition dilute the effectiveness of interventions? Importantly, what are the implications of attrition for children, services, and systems of care?

Objectives

The purpose of this paper was to examine the role of attrition from children's mental health treatment in outcome-based research and clinical practice. Specific objectives were to:

1. Identify and summarize factors that predict attrition from children's mental health services; and
2. Examine the implications of attrition for families and service providers from three key perspectives: (a) service accessibility; (b) evidence-based treatment and evaluation; and (c) service delivery within systems-of-care.

¹The term *specialized services* refers to psychiatric hospital, psychiatric ward in a general hospital, residential treatment centre, group home, partial hospitalization, therapeutic foster care, mental health centre, detoxification unit, outpatient drug/alcohol clinic, case management, private mental health professional, or children's mental health worker. **Sources:** Offord, D. R., Boyle, M. H., Szatmari, P., Rae-Grant, N. I., Links, P. S., Cadman, D. T., et al. (1987). Ontario child health study. Six-month prevalence of disorder and rates of service utilization. *Archives of General Psychiatry*, 44, 832-836; Farmer, E. M., Stangl, D. K., Burns, B. J., Costello, E. J., & Angold, A. (1999). Use, persistence, and intensity: Patterns of care for children's mental health across one year. *Community Mental Health Journal*, 35(1), 31-46.

²There is no universally accepted definition of attrition; as used here, attrition refers to a unilateral decision on the part of a child and/or parent to leave treatment/services against the advice of the provider or clinical team. The terms *attrition*, *dropout*, and *premature termination* will be used interchangeably.

Method / Major Research Literature

A review of the published and “grey” literature was undertaken using several methods: (a) A computer search using Scholars Portal at the University of Toronto, Ontario Canada; (b) Searches through the search engine Google and specific websites focused on children’s mental health (e.g. Children’s Mental Health Ontario), and associated government sites (e.g. Ministry of Children and Youth Services, United States Department of Health and Human Services, Center for Mental Health Services); (c) Reference sections of identified studies and reviews (articles, reports, books). Computerized searches of specified terms linked to child treatment / services attrition (e.g. dropout, attrition, continuance, adherence) and the children’s mental health literature along specified dimensions (e.g. access, outcome). Demographic descriptors, such as ethnicity, gender, and SES were also used.

Findings

Participation in Treatment

Recent evidence has documented a variety of child, family, and service factors that may affect participation in treatment (e.g. Armbruster, & Fallon, 1994; Baruch, Gerber, & Fearon, 1998; Kendall, & Sugarman, 1997). These include, but are not limited to, parental socio-economic status (SES), ethnicity, psychopathology, family dysfunction, and a lack of health insurance (payee status, or cost). The effects of context (e.g. type of agency) on participation has gained some attention given the strong impact systems have on children’s health care (Dierker, Nargiso, Wiseman, & Hoff, 2001). However, treatment dropout evidence is largely demographic and descriptive in nature. Findings have typically been based on retrospective analyses—analyses that have examined a common set of determinants (e.g. SES) with the assumption that they apply to all children who terminate treatment regardless of population and context. In this manner, method issues have complicated efforts to develop a composite profile of client, treatment, service, and provider characteristics that lead to attrition. Inconsistent results are likely due to wide variability in sample characteristics, setting, clinic and treatment procedures, and definitions of treatment attendance and adherence (Armbruster, & Kazdin, 1994; Kazdin, 1996).

While research has identified individual-level risk factors (e.g. SES) for treatment dropout, there is little clear discussion on what they may actually *mean* for children and service providers. There is a lack of in-depth, qualitative analyses of family and service provider perceptions of attrition. Studies of attrition need to emphasize the relations between treatment dropout and intervention processes from the perspectives of families and service providers in order to gain a deeper understanding of why children drop out. Experiential variables (e.g. attitudes, expectations, attributions, motivation to participate) may influence the relations between predictors and drop-out (Kazdin, Holland, & Crowley, 1997; Morrissey-Kane, & Prinz, 1999). Such variables would provide conceptual leads on familial treatment decision-making when it comes to dropping out of care. Demographic characteristics, although useful for identifying those at risk, do not address factors related to the experience of treatment that might lead to dropping out. Variables that emerge during treatment (e.g. therapeutic alliance, provider attitudes) may also influence termination decisions (Armbruster, & Kazdin, 1994; Fearing, 2003; Garcia, & Weisz, 2002). A unifying conceptual framework of children’s mental health attrition does not exist.

Implications of Attrition

The implications of attrition for families and service providers are apparent upon examination of critical treatment/service and systems issues. For example, the relations between attrition and service use are reflected in unmet need. Research shows clear evidence of unmet need for mental health services for children, including barriers to care, imperfect screening, and limited use of services (Fisher, Kramer, Grosser, et al., 1997; Jensen, & Royeen, 2002; McKay, McCadam, & Gonzales, 1996; Polgar, Stiffman, Horvath, Hadley-Ives, O’Neal, & Pescarino, 2001). These factors result in differential access to care—the situation may be worse for marginalized children and those living in certain regions of due to geographic, economic, and cultural factors that affect service accessibility (Boydell, & Pong, 2003). The problem of

unmet need for children and their families is exacerbated by premature attrition from services. In a study of premature termination from mental health services (Kazdin, et al., 1997), greater perceived barriers to participation in treatment (e.g. economic factors, distance to care, waiting for treatment) predicted early drop-out among children and their families. It is critical that children receive help when, and where they need it the most.

The dilemma faced by research and practice communities is how best to respond to the potentially compromising effects of treatment dropout on the quality of treatment/services. A major threat to the successful dissemination and adoption of evidence-based treatments within the service community is the dilution of treatment strength due to “no show” status, or attrition (Shirk, 2004). Children and their families are unlikely to attain the benefits seen in research settings if they fail to receive an adequate dose of treatment, or if they do not receive it at all (Weersing, & Weisz, 2002). Reviews of outcome research show that change (positive) is greater among children who receive treatment than among those who do not (e.g. Weisz, Weiss, Hann, Granger, & Morton, 1995). However, little evidence is available on the outcome status of children who terminate prematurely (Kazdin, Mazurick, & Siegel, 1994; Kazdin, & Wassell, 1998). Do some children improve in functioning despite their dropout status? Therapeutic change among dropouts is rarely evaluated because of the difficulty in obtaining post-treatment measures. Furthermore, many treatments still need to be evaluated, and long-term follow-up from controlled clinical trials is largely unavailable (Weisz, 2003). Real-world factors that researchers view as impediments (e.g. dropout) need to be included in the treatment evaluation process if interventions are to work well in practice (Shirk, 2004).

Due to the fact that system-level characteristics vary drastically among mental health treatment programs (Rivard, & Morrissey, 2003), their effects on attrition have not been well mapped. This is despite the fact of improved access to services indicated in evaluations of system-of-care initiatives (e.g. Hamner, Lambert, & Bickman, 1997; Schlenger, Etheridge, Hansen, Fairbank, & Onken, 1992). Inconsistent attendance and high attrition rates may hinder efforts to systematically evaluate the effectiveness of services and programs for children with mental health problems. Clinicians and researchers have argued that treatment attrition affects the delivery of services through increased costs and unfulfilled appointment hours (e.g. Kazdin, 1996). This has a negative impact on the effectiveness and efficiency of children's mental health services across all sectors (e.g. health, education; Dierker, et al., 2001). However, very few studies have addressed attrition and retention within a system-of-care. This raises questions surrounding the whereabouts and experiences of families upon attrition from service. Rather than a single path of service use, families likely negotiate multiple pathways and take a circuitous route. Importantly, families may or may not receive subsequent treatment upon termination—treatment that is needed.

Conclusions

There is no clear, composite profile of those children and families who drop out of mental health treatment. The diverse client, treatment, service, and provider factors that affect attrition need to be understood in the *context* of why children and families drop out. However, very little research has been driven by conceptual models that may help explain why families leave services prematurely (Armbruster, & Kazdin, 1994), or by what processes they interface with treatment. Understanding attrition from the perspectives of families and service providers will have critical implications for the adoption of evidence-based interventions by indirectly linking knowledge on experience, with method of treatment and service delivery. An integration of individual-level risk factors and experiential constructs into a coherent, unifying framework is necessary in order to fully understand attrition. Integrative research and practice-based models of attrition will complement current strategies (see Staudt, 2003) aimed at promoting treatment attendance.

The reality is that no treatment can be effective if those children who need it do not access it due to dropping out of care. Despite the documented influence of many factors on treatment attendance, evaluations of care need to account for attrition if treatments are to work well in practice. More research should be focused on the development and testing of treatment methods in naturalistic settings (Weisz, Chu, & Polo, 2004). Lastly, the role of attrition within systems-of-care requires further evaluation. Children with mental health difficulties may be referred to many types of organizations and services after initial contact with the system. Children with complex problems may use multiple services. Integrated systems of multiple service use and longitudinal data are required in order to more fully assess the impact that attrition has on program/service and child outcomes.

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The Effects of Parent Participation on Child Psychotherapy Outcomes: A Meta-Analytic Review

Kathy A. Dowell

Introduction

Parents seeking psychological services for their child have the daunting task of choosing the most appropriate and effective type of intervention. As one estimate suggests, there are more than 500 independent psychotherapy techniques in use for children. Consequently, recent child psychotherapy research has sought to identify those “evidence-based” treatments that have demonstrable effects across rigorously controlled randomized clinical trials. Of these, individual therapies, such as interpersonal psychotherapy, have demonstrated robust effects along with parent-only and combined treatments, such as parent management training and cognitive-behavioral therapy (Kazdin, 2003).

In order to bring some organizational structure to the numerous child therapies, meta-analyses have examined treatment effectiveness according to several classification systems including theoretical orientation, length of therapy, and structure of therapy (Kazdin, Bass, Ayers, & Rodgers, 1990; Weisz, Weiss, Alicke, & Klotz, 1987; Weisz, Weiss, Han, Granger, & Morton, 1995). However, there remains a lack of attention among researchers to the comparative efficacy of individual child treatments, parent-only interventions, and combined parent-child treatments.

Despite the limited empirical evidence supporting one method over the other, research findings indicate increased utilization of parent participation in children’s treatment by practitioners. Survey results show that almost 80% of respondents indicated that they routinely include children as well as parents as treatment participants (Kazdin, Siegel, & Bass, 1990). Empirical support is needed to provide clinical guidance regarding when parent-only, individual, or combined treatment is most appropriate, as well as to further explore potential moderating variables that influence treatment efficacy.

Method

This study intended to evaluate the effects of parent participation on child psychotherapy outcomes through a meta-analytic review. Studies were included that offered a direct comparison of an individual child treatment group to either a combined parent-child or family therapy treatment, or a parent-only treatment group. Computer searches of the databases PsychInfo, Medline, and ERIC were conducted using a combination of search terms from several previous meta-analyses for publications from 1984 through March 2003. In addition, the *Journal of Consulting and Clinical Psychology* was reviewed by hand from years 1994 to March 2003. Also, references cited by Weisz et al. (1995) were reviewed and included if they met the selection criteria. Finally, a message was posted requesting unpublished studies on the list-serves hosted by the Society for Psychotherapy Research and Division 53: the Association of Clinical Child Psychology of the American Psychological Association.

Cohen’s *d* (Cohen, 1977) was calculated for each study as an index of the size and direction of the treatment effect. Effect sizes were combined across studies using weights calculated in part by the sample size of each study (Shadish & Haddock, 1994; Hedges & Olkin, 1994). A test of homogeneity of variance of effect sizes was conducted, which determined whether the variability of a group of effects was consistent with or greater than what would be expected based on the sampling variation (Hedges & Olkin, 1994).

Results

From the computer database search method, a total of 4,565 journal articles, book chapters, conference presentations, and dissertations were initially identified. The issue-by-issue search of the *Journal of Consulting and Clinical Psychology* resulted in a total of nine additional studies. No studies came from either the references cited by Weisz et al. (1995) or postings on the listserves.

After review of abstract and methodology of each of these studies, forty-two original psychotherapy outcome studies were identified, with a total of 4,189 subjects. Of these, one study was based on a comparison of an individual child therapy group to a parent-only treatment group, thirty-four studies compared an individual child therapy group to a combined child and parent treatment group (this could be either family therapy or a treatment group that included simultaneous participation in individual child treatment and parent-only intervention), while seven studies compared all three types of treatment groups. See Table 1 for a summary of descriptive characteristics of the sample of studies.

Results indicate that combined treatments were more effective than individual child treatments, with an average weighted effect size within the moderate range ($d = .25$, $SD = .042$). No differences were found between individual child and parent-only interventions ($d = .13$, $SD = .18$). Tests of homogeneity of variance were significant for both the comparison of child-only to parent only treatments $Q(7) = 15.175$, $p < .05$, and child-only to combined treatments $Q(40) = 139.201$, $p < .05$. Therefore, moderator analyses were conducted among the studies that compared child-only to combined treatments to

Table 1
Descriptive Variables Across Studies

Subjects	4,189
Mean age	11.66
Percentage male subjects	64.14
Age range (percentage)	
Preschool	9.5
Elementary School	26.2
Adolescent	38.1
Combined Elementary School and Adolescent	26.2
Child only vs. parent-only treatment	1
Child only vs. combined treatment	34
Child only vs. parent only vs. combined treatment	7
Child therapy orientation (percentage)	
Cognitive-behavioral	69.0
Eclectic	16.7
Client-centered/dynamic	11.9
Systemic	2.4
Combined therapy orientation	
Cognitive-behavioral	63.4
Eclectic	4.9
Client-centered/dynamic	2.4
Systemic	29.3
Parent-only therapy orientation	
Cognitive-behavioral	100
Mean treatment duration (number of sessions/weeks)	
Child-only	17/14.7
Combined	21.9/13.8
Parent-only	11.5/14.7
Mean percentage race	
Caucasian subjects	65.3
African American subjects	21.0
Other subjects	26.0
Type of presenting problem (percentage)	
Externalizing	57.1
Internalizing	23.8
Abuse	4.8
Other	7.1
Both internalizing and externalizing	7.1

identify predictors of treatment outcome. When entered individually, of all potential moderator variables examined in previous child psychotherapy meta-analyses, (presenting problem, treatment orientation, methodological quality, difference in number of therapy sessions, outcome measure, and child age), child treatment orientation was marginally significant as a unique predictor, $R = .286$, $F(1, 39) = 3.49$, $p = .69$. When mean effect sizes of cognitive-behavioral and non-cognitive behavioral child-only treatments were examined, cognitive-behavioral treatments had a lower average effect size ($d = .186$) compared to non-cognitive behavioral treatments ($d = .522$), suggesting that cognitive-behavioral child-only treatments are closer to the effectiveness of combined treatments (which are overall more effective) than non-cognitive-behavioral child-only treatments. When all other potential moderators were entered into a stepwise regression analysis, no significant predictors were identified.

Study findings suggest that including parents in the psychotherapeutic treatment of children is beneficial. More research is needed that offers these specific treatment comparisons to offer more specific treatment recommendations.

Conclusions

Results suggest that, with an effect size of .25, the average family receiving psychotherapy that included both parent and child participation was better off than 56% of children receiving individual interventions. This finding is consistent with the median probability calculated by Grissom's (1996) meta-meta-analysis when comparing two active treatment groups. Conversely there was no difference in treatment effectiveness when child-only and parent-only interventions were compared. Generalizability of results, however, is tempered by the lack of homogeneity among effect sizes for both comparisons as well as the limited number of studies comparing parent to child only interventions, which precluded moderator analysis.

These findings seem to support in part the treatment strategies of family systems theorists, that treatment involving participation of all members of a family system are more effective than treatments that target either unit (children or parents) individually. The results suggest that parent participation in child psychotherapy treatments is most effective when children are also active in treatment, regardless of age or type of presenting problem. However, there remain unknown moderator variables adding unexplained variance that would also contribute to these findings once identified. It is intended that these results will ultimately assist clinicians in making decisions when incorporating parents in the treatment of children.

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Measuring Predicted Individual Improvement among Children Receiving Community-Based System of Care Services

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Introduction

The system of care (SOC) approach is the most widely employed method of mental health service delivery to children and adolescents with severe behavioral and emotional disturbances in the United States (Stroul & Friedman, 1986; Stroul & Friedman, 1994). The SOC program is designed to optimally serve children and adolescents' needs; and policy makers that adopt SOC principles clearly have the best interests of children in mind. However, without outcome research on SOC programs it is impossible to determine if the SOC framework is effective in terms of individual improvement, implementation, and dissemination in real world settings.

Prior research indicates that the recipient of care and his or her presenting characteristics and demographics play a role in community-based treatment outcome (Greenbaum et al., 1998). Therefore, any approach to outcomes management in a SOC should include modeling of outcomes at the individual level. In addition, because the SOC model was designed to be a broad philosophy based on a set of values and principles, SOC's are not intended to fit one specific population, and the concept does not utilize strict therapeutic guidelines and does not advocate a particular model of prevention or intervention (e.g. empirically supported treatments) or organizational practices. It is reasonable to assume that within the context of the multilayered SOC system, service providers operating under the SOC banner approach the implementation of SOC principles and the utilization of empirically supported treatments with significant variability. Therefore, outcomes should also be modeled at the provider/agency level.

The aim of the present study is to assess the real world effectiveness for individuals enrolled in a statewide program that purports to adhere to SOC principles. The two units of analysis are (a) youth receiving a variety of therapeutic interventions and (b) their service providers operating within the context of SOC. A model containing these two units of analysis has two primary applications: (1) to model variability in youth outcomes (slopes) as a means of providing individualized expectations for improvement for every unique youth in the system and; (2) to model variability in outcomes across providers of care as a point of departure for quality improvement efforts. In addition, variability in outcome measures at the point of initial contact (intercepts) is obtained in order to assess any baseline differences that may exist between individuals. A model for the prediction of individualized outcome data for adolescents involved in SOC would benefit policy makers, clinicians, and families by providing expectations for change tailored to the individual. Furthermore, interpretation of the results could be used to modify services provided by SOC agencies.

Method

The overall sample consisted of 3,950 children and adolescents who were in state custody; they were referred to services within a SOC through the Illinois Department of Children and Family Services (DCFS) between September 1999 and December 2004. DCFS takes youth who are Illinois citizens into state custody when caregiver abuse (physical or sexual) and/or neglect have been indicated by a caseworker. After a comprehensive healthcare screen, DCFS becomes legally responsible for all of the youths' needs, including the provision of safe and stable placements as well as medical and mental health treatment.

The total sample was 55% male. The average age of the clients at the point of initial contact was 11.3 years old. Race/ethnicity was not reported in the vast majority of cases (90%); the demographics of the cases in which race was reported were; African American 71%, European American 21%, Latino/a 4%, Asian American 3%. The most common diagnoses made after the point of initial contact were Adjustment Disorder, Oppositional Defiant Disorder, and Attention Deficit/Hyperactivity Disorder.

Child outcomes were assessed using the Child and Adolescent Needs and Strengths (CANS; Lyons, 1999). The CANS was developed to assess clinical and environmental factors related to adolescent development. The CANS instrument evaluates the needs and strengths of a child or adolescent across multiple domains and is used as an assessment, decision-support and outcome measure instrument (State of Illinois DCFS, 2003). The CANS consists of 25 dimensions across five factors: symptoms, risk factors, functioning, comorbid factors, and placement/system factors. The average score of the dimensions in each factor was used in the present study in order to obtain average factor scores across each of the five factors. Severity ratings are based on a 0 to 3 scale. Detailed descriptions for what constitutes each numerical rating for each dimension are provided in the CANS manual.

Results

During the period of the study (2001 to 2004), 598 of the children in the total sample met the requirements for inclusion in the study. Eligible clients were those had data for the outcome measurement at three or more points in time within a single agency. If they received services from multiple agencies, they must have been administered the outcome measure three or more times at one of the agencies. When there were multiple treatment episodes within the same agency, at least one episode must capture the minimum three data points. These clients received treatment from 26 different providers. In cases where there were three or more data points at multiple agencies or multiple treatment episodes, random selection determined which set of data was analyzed for the present study.

The outcome measurement was administered by trained professionals at the agency in which the client was receiving treatment at intake, during the course of treatment, and at the conclusion of treatment. The collection of data at multiple time points allowed for the use of hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992).

A three level HLM was conducted in order to analyze the differences in maladaptive behaviors over time. The problem behaviors factor of the CANS was utilized as the outcome measure. A model was first tested examining a level one null model; this model consists of treatment days (β_0) plus random variability around this average (representing within-person variability) plus error. There was significant variability in slopes (i.e. random effects, or slopes as outcomes) between individuals ($\chi^2 = 1027.38$, $p < .001$). The children and adolescents receiving services varied on their amount of improvement over time. There was also significant variability in the intercepts (i.e. random effect, or intercepts as outcomes) at level one ($\chi^2 = 1954.05$, $p < .001$). The level of problem behaviors differed significantly between individuals in the present sample. There was a significant drop in problem behavior scores over time ($\gamma = -.003$, $t = -6.09$, $p < .001$). The average equation for the sample of 595 clients, without any predictors (i.e., unconditional model), was equal to $Y = 6.92 - .003$ (Days of treatment)

The second level model included stable characteristics, such as CANS factor scores at time one, age and gender. The results of the trimmed HLM with only the significant level two factors included are presented in Table 1. In the results the fixed effects are estimated with robust standard errors because the sample size is large (i.e. level two units greater than 50; Liang & Zieger, 1986).

The level three model assessed the differences in problem behavior that could not be explained by level one or level two factors. Therefore, these differences could be attributed to variability in agencies. At level three, the third level of the HLM analysis (random effect) was significant ($\chi^2 = 3003.78$, $p < .001$, see Table 1). There is evidence of leftover variance not explained by the individual, clinical, or demographic variables. After accounting for first and second level factors, the individual child remained significantly associated with problem behavior slopes. In addition, there was significant variability around the average problems intercept as a function of agency ($\chi^2 = 363.43$, $p < .001$). Agencies differed on the amount of average client improvement.

Table 1
Three-Level Analysis Using a Linear Model of Treatment Days, Trimmed Model

<i>Fixed Effect</i>	<i>Coefficient</i>	<i>se</i>	<i>t Ratio</i>	<i>p value</i>
Level 1				
Average problem behavior	-.003	.001	-6.09	.001
Level 2				
Problem behavior intercept	.950	.028	33.35	.001
Problem behavior slope	-.002	.001	-7.95	.001
Risk behavior slope	.001	.001	3.96	.001
Age slope	.001	.001	2.99	.003
Gender slope	.001	.001	3.34	.001
<i>Random Effect</i>	<i>Var. Comp.</i>	<i>df</i>	χ^2	<i>p value</i>
Time as a function of child	.001	563	3003.78	.001
Average problems as a function of agency	1.906	22	363.425	.001
Time one problem behaviors as a function of agency	.006	22	44.718	.003
Time as a function of agency	.001	22	38.405	.016

Conclusion

The results of the level one HLM analysis suggest that children and adolescents receiving community based SOC services improve over time, although the gains are modest. According to the coefficients obtained from the study, on it takes the average child about a year (333 days) to go down one point in the problem behaviors dimension of the CANS (the outcome measurement). The level two results assessed differences that could be attributed to baseline clinical severity and demographic factors. The results indicated that higher initial problem behavior scores were associated with increased rate of improvement. The most likely explanation for this finding is the regression to the mean effect. Risk behaviors, including danger to self, danger to others, and elopement, were associated with slower average rate of improvement. In addition, older adolescents improved more slowly on average than younger children. The level three results indicate that agencies differ on the both the level of problem behaviors at time 1 and the decrease in problem behaviors. Therefore, although certain providers may have clients with higher initial problem behaviors, there is a difference in the reduction of problem behaviors between agencies, even after controlling for initial problem behaviors. The present study does not assess specific agency/provider factors that are associated with clients performing better or worse than expected based on their level two results (i.e. use of empirically supported treatments, adherence to SOC principals, etc.). In order to aid providers in quality improvement efforts, future research should evaluate the agency variables that are associated with variation in client outcomes.

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Predicting the Treatment Prognosis of the Systems of Care Clients Based on their Baseline Ohio Scale Scores

Jothi S. Themozhi

Introduction

Exploring the relationship between clients' problem severity and functioning strength levels with clients' clinical outcome is an ongoing research agenda intent on identifying better service structure. Many investigators have utilized different clinical assessment tools to predict clients' clinical outcomes (Burnam, 1996; Green et al., 2001; Stewart & Ogles 2003; Fields & Ogles, 2004). The analysis described in this summary also attempts to describe this relationship through examining Ohio Scale Clinical scores of children receiving services through systems of care (SOC) in Oklahoma.

The Oklahoma Systems of Care Program for Children was initiated in 2000 by the joint effort of state child-serving agencies to promote the development of community-based systems of care for children with serious emotional disorders and their families. Oklahoma SOC is also one of the Center for Mental Health Services' Comprehensive Community Mental Health Services Program for Children and Their Families grant funded communities. This study specifically focused on a group of nine Oklahoma SOC sites that started using the Ohio Scale as the clinical instrument from FY 2005 onwards to assess their clients' problem severity and functioning strength.

Methodology

A decision was made by the Oklahoma SOC evaluation committee to replace previously used clinical assessment tools with the Ohio Scales developed by Ogles and colleagues. The Ohio Scales (Ogles, Melendez, Davis, & Lunnen, 1998, 2000, 2001) is a practical, brief, easy to administer, psychometrically sound instrument that can be given at regular intervals throughout the treatment of children and adolescents. It has parallel rating forms for youth (12-17 years), primary caregivers, and agency workers. Each of the 20 items on Problem Severity and Functioning Strength are rated for frequency during the past 30 days. Generally, a high score on the Problem Severity scale is considered to be more problematic (i.e., having more frequent problems), while a low score on the Functioning Strength scale is considered to reflect more impairment in the functioning level of the child. On the Total Problem Severity Scale, a score of 30 and above means the child has clinically meaningful problem behaviors. Similarly, a Total Functioning Strength Score of 40 and below means clinically meaningful impairment in functioning of the client.

From FY 2005 onwards, all SOC clients were assessed by all three versions of the Ohio Scales. This research specifically examines the baseline assessment results of the agency worker version Ohio Scale (designed for youth ages 5-18). The number of clients included in this analysis is 357 who were enrolled in the program from FY 2005 onwards until the last day of July 2005. Based on their baseline Problem Severity and Functioning Strength scores, the clients were grouped into four different groups: (1) Clinically Severe, 42%; (2) Functioning Strength, 11%; (3) Less Problems, 10%, and; (4) Less Severe 37% (see Table 1).

Table 1
Client Group Categories

<i>Problem Severity Scale at:</i>	<i>Functioning Strength Scale at:</i>	<i>Group</i>	<i>Description</i>
1. Clinical Level	Clinical Level	P-Clinical & F-Clinical	Clinically Severe
2. Clinical Level	Non-clinical Level	P-Clinical & F-Non-Clinical	Functioning Strength
3. Non-clinical Level	Clinical Level	P-Non-Clinical & F-Clinical	Less Problems
4. Non-clinical Level	Non-clinical Level	P-Non-Clinical & F-Non-Clinical	Less Severe

Notes: P = Problem Severity Scale F = Functioning Strength Scale Clinical = Scores at Clinical Level
Non-Clinical = Scores at Non-Clinical Level

The demographic features of clients in these four groups were analyzed in order to understand the differences among them. These clients were tracked in order to determine their length of stay in the program, or their reason for discharge if they separated from the program.

Findings

There were no significant differences among the distribution of characteristics, such as: median age, gender, ethnicity, diagnosis, psychosocial environmental needs, referral sources, average days living in community 90 days prior to baseline assessment, family income level, and custody status among the four different groups. However, the grouping showed a difference in graduation outcomes. Graduation is the successful separation of the client from the program after reaching the treatment goals that were devised for the wraparound and treatment plans.

The children with problem scores that were at the non-clinical level tended to graduate at a higher rate than children with problem scale scores at the clinical level. Also, children with problem severity scores at clinical level tended to drop-out of the program at a higher rate when compared with the children with problem scale scores at the non-clinical level. These dropouts were either due to family preference or official withdrawal from the SOC services, or due to non-compliance and unofficially leaving the program by avoiding contact with the program personnel (see Table 2).

Table 2
Rate of Discharge by Reason by Group

<i>Discharge Reasons</i>	<i>Group 1: P-Clinical & F-Clinical</i>	<i>Group 2: P-Clinical & F-Non-Clinical</i>	<i>Group 3: P-Non-Clinical & F-Clinical</i>	<i>Group 4: P-Non-Clinical & F-Non-Clinical</i>
Graduated	17%	14%	33%	30%
Family Withdrew	20%	29%	10%	14%
Grew too Old	1%	0%	0%	0%
Moved out of community	11%	21%	10%	7%
Non-compliant	29%	29%	14%	33%
Other/unknown	11%	0%	29%	12%
Referred to Other program	10%	7%	5%	3%
	100%	100%	100%	100%

Discussion

These findings suggest that if the client's problem scale is at a clinical level (i.e. a Problem Severity score of 30 and above), then more effort is needed to retain that child (and the family) in the program. Conversely, it is important to recognize the service delivery implications if graduation rates are higher for those clients who have their problem severity score at the non-clinical level (i.e. Problem Severity score 29 and below)

The prior section explored the use of unweighted combination of scale scores to discriminate between children who were having different levels of functioning strength and problem severity. It is possible that weighted combinations of scores might produce better discrimination. However this exploratory research finding is still valuable for making better decisions about how to help each child with particular problem severity and functional strength levels. Other variables, such as observational data, family constellation, developmental measures, and biomedical conditions, might also be found to predict intervention outcomes. These variables could be used in conjunction with the Ohio Scale scores to identify children expected to have poor outcomes and then to develop better ways of helping them.

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Differential Effectiveness: A Closer Look at Home-Based Treatment Responders

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Introduction

Home and community-based treatments for children and adolescents with serious emotional disturbance have received attention as possible alternatives to more restrictive, out-of-home placements (Burns, Farmer, Angold, Costello & Behar, 1996; Evans, Huz, McNulty, & Banks 1996). While program structure may vary from site to site, the conceptual underpinning for home based interventions, influenced by the Child and Adolescent Services System Program (CASSP) principles, appears consistent for a variety of programs reporting positive youth outcomes. This conceptual foundation includes: (a) recognition of the primary role of the family in the care of the child, (b) importance of access to clinically intensive services, integrated within the child and family team, and (c) individualized, strength-based work with the child which allows care to be delivered in the least restrictive setting (Demidovich & Woolston, 2004; Grimes, 2004; Sheidow & Woodford, 2003). As further research is undertaken to augment the evidence base for the effectiveness of home and community treatment, it is timely to evaluate the range of responses to this treatment, with the particular question of what differentiates the youth who benefit most from this type of treatment from those who do not.

Method

The Mental Health Services Program for Youth (MHSPY) is a demonstration project for a specific clinical intervention that integrates home and community-based treatment for Medicaid youth ages three through eighteen years who have severe, documented, mental health impairment and are either currently in, or at risk for, out-of-home placement (Grimes & Mullin, 2006). Data analysis occurs via a longitudinal, multi-wave study design, with results stratified by child age, race/ethnicity, sex, intervention site and source of referral. Secondary analysis for this responder vs. non-responder comparison study was conducted on results for participants from the five urban areas around Boston, where the MHSPY program currently operates. Two communities have had access to the intervention for over seven years, with MHSPY available to the other three communities for the past three years.

MHSPY members who were no longer enrolled as of July 1, 2005 were divided into a group of graduates and a group of those who disenrolled for other reasons. Those who *unambiguously* benefited from participation in the program, from the perspective of their child and family Care Planning Teams, were designated as “graduates” because they have *completed the mission* identified for them by their families upon enrollment; in this study, these youth are referred to as “responders” ($n = 75$). Other youth, who have also disenrolled from the program but whose Care Planning Teams did not feel had graduated, for a variety of reasons (e.g., the family moved, youth entered a residential program, youth lost Medicaid coverage), are identified in this study as “non-responders” ($n = 54$). The combined tally of those no longer enrolled in the program yields a total of 129 children or adolescents.

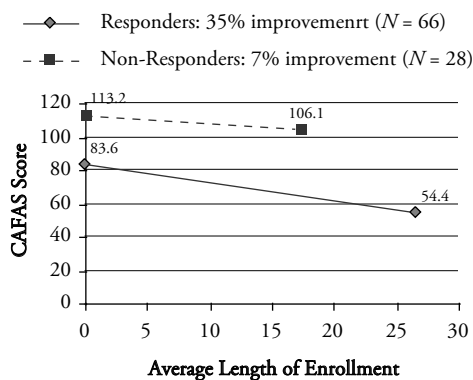
Programmatic data, including demographic information and referral source, were collected from all study participants at program entry. Self-report was used for race/ethnicity data. At baseline and every six-months, Child and Adolescent Functional Assessment Scale (CAFAS; Hodges 1998) scores were collected throughout enrollment to evaluate clinical progress. Length of stay—or exposure to the intervention—as well as location of the child (level of care) at the time of termination were also measured.

Demographic characteristics, percentage of improvement measured on repeated functional measures over time, and summary counts of youth location at the time of disenrollment from the program are reported for the responders. The same analysis was performed for non-responders.

Results

A review of the baseline CAFAS scores grouped by responders and non-responders indicates that responders average lower beginning total scores (83.6) than non-responders (113.4). Low scores equal higher levels of functioning. Responders averaged 26 months in the program, whereas the average enrollment for non-responders was 17 months. The percentage of improvement for responders on the CAFAS from baseline to graduation was 35%; the percentage of improvement for non-graduates was 7% (see Figure 1). A look at location after disenrollment shows that 89% of graduates were living at home, versus 57% of non-graduates. Diagnostic breakouts of the two groups reveal higher percentages of ADHD as the primary diagnosis for the responders than for the non-responders (16% vs. 6%), while the reverse was true for PTSD as a primary diagnosis (31% vs. 53%) for responders versus non-responders.

Figure 1
Average Change in CAFAS Score
by Responders vs. Non-Responders
March 1998 – June 2005



Family risk factor analysis revealed equivalent rates of parental mental illness for both responders, (81%), and non-responders (80%). However, a larger percentage of non-responders reported parental substance abuse (74%) than did responders (69%), and more non-responders than responders (20% vs. 0%) reported having siblings who had been imprisoned (see Table 1).

Age comparisons for each group show that the youngest study participants (three to five year olds) were the least likely to graduate (33%), while teenagers were the most likely to graduate. Responders were more likely to be female than male: 62 % of female participants graduated vs. 56% of males. Race/ethnicity break-outs indicate wide variation: African-American and bi-racial youth responded to the MHSPY intervention at the highest rate, which is 2:1 graduates vs. non-graduates, in contrast to White children and adolescents who graduated 52% of the time. Latino youth were more likely not to graduate (55%) than to graduate (45%; see Table 1).

Referring agencies differed between the groups: youth referred to the program by the schools graduated at the highest rate (65%), followed by those referred by the state's Child Welfare system (60%), then those referred by the state Mental Health system (55%). The Juvenile Justice referrals were least likely to graduate (38%; see Table 1).

Table 1
Demographics

	<i>Responders</i> <i>N = 75</i>	<i>Non-Responders</i> <i>N = 54</i>	<i>N = 129</i>
Gender			
Female	62%	38%	42
Male	56%	44%	87
TOTAL	58%	42%	129
Age			
0-5 year olds	33%	67%	3
6-12 year olds	53%	47%	43
13-15 year olds	64%	36%	42
16-19 year olds	59%	41%	41
TOTAL	58%	42%	129
Race/Ethnicity			
African American/ Bi-			
Racial/African	66%	34%	32
Asian/ South Asian	100%	0%	3
Caucasian	52%	48%	60
Latino	45%	55%	22
Other	83%	17%	12
TOTAL	58%	42%	129
Referring Agency			
DMH	55%	45%	20
DSS	59%	41%	74
DYS	38%	63%	8
School	63%	37%	27
TOTAL	58%	42%	129
Diagnoses			
PTSD	32%	57%	37
Mood Disorders	24%	11%	19
ADHD	17%	4%	12
Conduct & Oppositional			
Disorders	12%	14%	12
Psychosis	6%	11%	7
Developmental Disorders	6%	0%	4
Anxiety Disorders	2%	4%	2
Selective Mutism	2%	0%	1
TOTAL	100%	100%	94
Location At Disenrollment			
Home	89%	57%	98
Foster Care	9%	6%	10
AWOL	0%	2%	1
Group Home	0%	6%	3
Incarcerated	0%	2%	1
Residential	1%	28%	16
TOTAL	100%	100%	129

Conclusion

Preliminary investigation suggests that while the overall population of MHSPY enrollees appears to display clinical improvement from baseline to termination, there are differences in the slope of improvement for MHSPY graduates (who may be those youth most likely to respond to home and community based intervention) versus those who do not graduate (all of whom are, to a greater or lesser extent non-responders). The so-called non-responders are actually a somewhat heterogeneous group clustered only by the fact that their Care Planning Teams did not feel that the full mission for the child had been achieved. This group includes a very small number of drop-outs (11%), while the other 89% participated to the best of their capacity, and many actually improved. Another level of investigation into the non-graduates might prove valuable in differentiating “less responsive” youth and families versus non-

responders. In other words, the degree of responsiveness to home-based intervention may represent more of a continuous variable than the binary “responder/non-responder” labels imply.

The fact that those with the greatest gains during treatment have a twenty-point lower baseline CAFAS score than the non-responders may be a finding of potential interest to the field, since statistically those who are the furthest from the mean would be expected to demonstrate the greatest improvement. It is possible that we are running up against true limitations for applicability of home and community based treatment of youth with mental illnesses. While most MHSPY youth are able to remain in the community, despite serious diagnoses and on-going risks, there may be a level of need that cannot be optimally treated at home. This need appears to be expressed in a variety of ways, but early indications are that location of school and community are highly correlated with difficulty graduating from MHSPY. Conversely, responders benefit from a combination of youth, family and community/school factors, which appear powerful enough to offset even some of the usual predictive forces (such as racial disparities) on outcomes.

Future investigation of the non-responders, including additional analyses of duration of intervention, which can be both an engagement as well as a severity indicator, may elicit deeper knowledge of what youth, family and community characteristics contribute to treatment response and the likelihood of program graduation. Ever increasing specificity and shared understanding about those for whom home and community treatment is likely to be successful, and those for whom it is not, is desirable in order to support ongoing improvement of clinical treatment protocols and community resource allocation.

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Clinical and Non-Clinical Characteristics Associated with Medication Use among Children with Serious Emotional Disturbance

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Acknowledgements: This research was funded by the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration (280-99-8023, 280-00-8040).

The children and families who participated in the ongoing collection of data made this research possible.

Introduction

Currently, more children and adolescents are receiving psychotropic medications than ever before (Gadow, 1997; Jensen, Bhatara, & Vitiello, 1999; Kelleher, Hohmann, & Larson, 1989). Since the 1980s, the amount of psychotropic drugs prescribed to children has increased dramatically (Rawal, Lyons, MacIntyre, & Hunter, 2004). According to Lyons (2000), 80% to 90% of children in hospitals and residential treatment settings are currently on at least one psychotropic medication, and nearly half of these children are on two or more medications. These treatment methods are also becoming an important factor in community programs, such as system of care and wrap around services (Hallfors, 1998; Pumariega, et al., 2000). In order to explore the characteristics associated with medication use among children with serious emotional disturbance, factors such as service utilization, family and child exposures and experience, and insurance status are explored.

The Comprehensive Community Mental Health Services for Children and Their Families Program has funded 121 communities across the United States and its territories to develop community-based, family-driven, culturally appropriate systems of care for children with serious emotional disturbance and develop individualized service plans to meet the unique needs of those children, which may or may not include the use of medication. Data gathered as part of the mandated national evaluation of this federal initiative include, among other things, the collection of information on child and family functioning and experiences, service utilization, and insurance status. These factors were used to investigate the characteristics of children entering systems of care with and without histories of medication use. The availability of these data on a large sample of children with serious mental health challenges provides an excellent opportunity to further investigate the relationship between medication use and non-symptomotologic child and family factors.

Methods

Participants

The current study uses a subset of baseline data collected as part of Descriptive Study of the national evaluation between 1997 and 2004 from up to 45 communities across the United States. Children enrolled in the Descriptive Study with valid data on demographic and family characteristics, Medicaid eligibility, prior service utilization, referral source, and medication history were included in the current study sample ($N = 7,009$). Children in the current study sample were approximately 12 years of age on average, nearly three-quarters of the study sample was male, and nearly 70% of the children were Medicaid eligible. Over one-half (58%) of the sample were non-Hispanic White, 27% non-Hispanic African-American, 5% Hispanic, and 10% Native American. Nearly one-third (32%) of the children were referred into their respective systems of care from mental health, 22% from the school system, 15% from juvenile justice, 13% by caregiver or self referral, 9% from child welfare, and the remaining 9% from other sources. Nearly 53% of the study sample had reported use of medication for behavioral or emotional symptoms in the six-months prior to system-of-care entry.

Indicators

The majority of data used in the current study were collected via caregiver interview at the child's intake into system-of-care services. Specifically, caregiver report of child and family demographic information; child medication and service history; child Medicaid eligibility; child history of suicide attempt and psychiatric hospitalization; and family mental illness and family income were provided via structured interview. Referral source information was obtained from record review. History of medication use was based on a caregiver question that asked whether their child had taken medication for behavioral or emotional symptoms in the prior six months.

Design and Analysis

First, the bivariate relationship (i.e., *t*-test and chi-square analyses) were explored between medication use in the past six months and child and family demographic and psychosocial characteristics, service history, and Medicaid eligibility. Second, a logistic regression analysis was performed to assess the association between medication use in the six-months prior to system of care entry and child and family characteristics.

Results

While the preliminary first step analyses resulted in some interesting bivariate relationships between medication usage and child and family characteristics, the logistic regression analysis which allowed for the simultaneous entry of all indicators to assess their unique relationship with prior medication usage identified important and significant relationships between non-symptomotologic child and family factors and medication usage for behavioral and emotional symptoms.

Specifically, females with serious emotional disturbance entering systems of care were significantly less likely to have received medication in the six-months prior to their entry ($OR = .71, p < .001$), as were children of African-American ($OR = .81, p < .01$) and Native American ($OR = .26, p < .001$) heritage when compared to children of non-Hispanic White heritage. Children referred to systems of care from the mental health ($OR = 2.2, p < .001$), child welfare ($OR = 1.3, p < .05$) and by self-referral ($OR = 1.3, p < .05$) were all significantly more likely to have medication usage histories when compared to children referred from juvenile justice. Specifically, children referred from mental health were more than 2 times as likely as those referred from juvenile justice to have received medication for emotional or behavioral problems in the six-months prior to system of care entry. There was no difference in the medication usage history between children referred from juvenile justice and the school system ($OR = 1.1, p = .44$).

Children with histories of participating in prior outpatient ($OR = 2.8, p < .001$), day treatment ($OR = 1.8, p < .001$), and school services ($OR = 2.2, p < .001$) were between 2 and 3 times as likely to have received medication in the last six months, while children with histories with alcohol or substance use services ($OR = .67, p < .001$) were less likely to have received such medications. While children who had previously attempted suicide were nearly twice as likely to have received medication in the past six months ($OR = 1.8, p < .001$), those with previous psychiatric hospitalizations were over 4 times as likely ($OR = 4.2, p < .001$).

Children with histories of family illness were more likely to have received medications ($OR = 1.5, p < .001$), as were children from families with higher incomes ($OR = 1.1, p < .001$) and children who were eligible for Medicaid ($OR = 1.2, p < .05$). Older children were slightly (albeit significantly) less likely to have medication histories ($OR = .95, p < .01$). Finally, the education of the caregiver was not associated with the child's prior medication usage ($OR = 1.0, p = .10$).

Discussion

Based on this large sample investigation of children with serious mental health challenges entering system-of-care services, significant and important unique relationships were identified between the usage of medication for behavioral and emotional symptoms over the prior six months and non-symptomologic child and family characteristics. While it may be argued that some of the characteristics investigated may indeed have third-variable relationships with child presenting problems and symptoms (e.g., prior psychiatric hospitalizations, service history, etc.) there are other characteristics (e.g., Medicaid eligibility, family income, etc.) for which that argument is much more difficult.

Both clinical and non-clinical (family and child) characteristics appear associated with prior medication use, hence clinical characteristics alone are not dictating the prescription and use of medication for the behavioral and emotional problems of children. Given that we know little about the effects of psychotropic medications have upon development, the higher likelihood of medication use among younger children in this sample is cause for concern. The introduction of medications with younger children may additionally pose a greater likelihood of long-term stigmatization and labeling. A detailed examination of the characteristics of younger children using medications versus older children is warranted.

Furthermore, these findings suggest that access to medication may be related to race/ethnic heritage by suggesting that Whites are more likely than African or Native Americans to use medications. Perceptions about using medication to treat mental health issues may differ across ethnic groups and must be further investigated. The role of caregiver education and family income must also be considered in this context.

Finally, service history and referral source appear to play an important role in predicting medication use. History of day treatment, school-based service use and outpatient therapy are all related to medication use, suggesting that medication use may be service sector and duration dependent. Collectively these findings demonstrate interesting, albeit in some instances alarming correlates of medication use among children entering systems of care, and suggest important areas for future research.

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Who's Minding the Meds: Prescribing Practices for Youth with Serious Emotional Disturbance (SED) by Insurance Type

Katherine E. Grimes
Lauren Gold
Brian Mullin

Introduction

Even prior to the recent controversy spurred by the Food and Drug Administration warning over the safety and efficacy of antidepressant medication use for children and adolescents, there was growing public and scientific concern over the changing picture of psychiatric medication use in general for youth under eighteen. National studies show the overall rate of psychotropic medication use by children increased from 1.4 per 100 children in 1987 to 3.9 in 1996 (Olfson, Marcus, Weissman & Jensen, 2002), and that the use of antidepressants increased 3-5 fold from 1988-1994 (Zito & Safer, 2001).

Reports of the increasing prevalence of polypharmacy in children are equally disturbing. A national study of data from the 1987 National Medical Expenditure Survey and the 1997 Medical Expenditure panel study found that the rate of co-prescription in the general youth population was almost eight times higher in 1996 than 1987 (Olfson, et al., 2002). In a national study during 1997–1998 of office visits for children in which a stimulant prescription was written, 24.7% of children also received other psychotropic medications (Bhatara, Feil, Hoagwood, Vitiello & Zima, 2002). Such dramatic changes in prescribing practices bring concerns about appropriateness. In particular, previous investigators have noted variation in psychotropic medication prescription by insurance type of the child, as well as by variation based on other demographic factors such as race and ethnicity (Zito, Safer, Zuckerman, Gardner, & Soeken, 2005; dosReis, et al., 2005).

Youth with serious emotional disturbance (SED) are particularly at risk for disparities in medication access and appropriateness (New Freedom Commission on Mental Health, 2003). As prescribing patterns change and access to child psychiatrists becomes more limited, it is of great importance to understand not only whether current treatment practice meets the evidence base, but also how the specialty and training of the clinician affects treatment decisions for the population of children and adolescents with higher need. As a first step, prescribing patterns for Medicaid vs. privately insured children in a non-profit Managed Care Organization (MCO) in New England were examined for variation in the numbers of prescribed medications and medication expense across both groups.

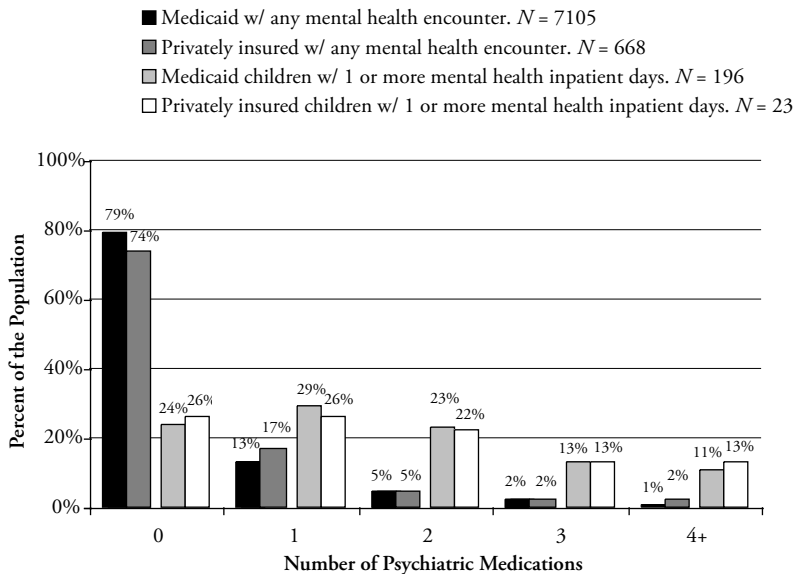
Method

For this study, Medicaid and commercial MCO insurance claims from July, 2004 through June, 2005 were reviewed for all children and adolescents three to nineteen years old with a mental health encounter. In order to capture differences based on morbidity, the resulting sample was divided into two groups: those with any type of mental health encounter and those who had a psychiatric hospital admission. De-identified data for approximately 70,000 Medicaid recipients and 10,000 privately insured children and youth under age 19 included insurance status, claims, prescriptions, service codes and demographic factors such as age and gender. Psychiatric medication use for Medicaid vs. privately insured children with a mental health encounter were compared, as were prescribing patterns for children and adolescents with a psychiatric hospitalization from both insurance groups. Data from both the lower and higher morbidity youth were examined for the presence of zero, one, two, three or four or more simultaneous psychotropic medication prescriptions. Medicaid vs. private insurance status was included in the analysis. A similar comparison was conducted to explore trends in pharmacy expense for each group.

Results

For the population with any type of mental health encounter (representing outpatient only, outpatient and inpatient or inpatient only), children and adolescents insured by Medicaid were slightly more likely (7%) than the privately insured children to be getting no psychotropic medications (see Figure 1).

Figure 1
Distribution of MCO Children by Number of Psychiatric Medications
July 2004–June 2005



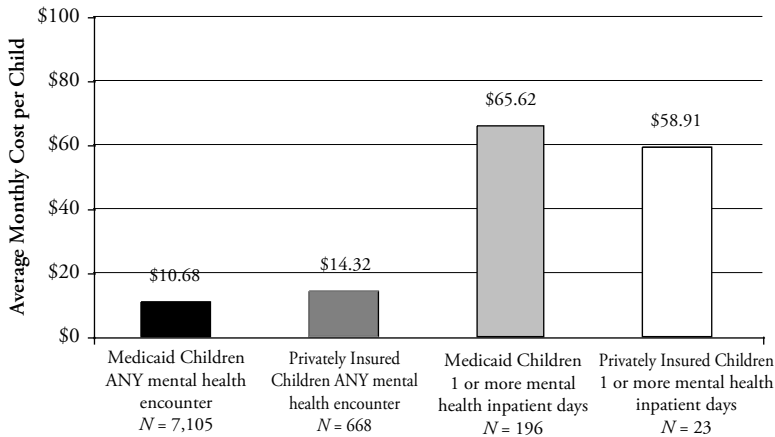
Note: Population is MCO children 3-18 who have at least one mental health encounter, or one inpatient mental health day between 7/1/2004 and 6/30/2005.
 $N = 7,793$

The difference increases when the two groups are examined regarding one psychiatric medication. The privately insured population of youth with a mental health claim is *32% more likely* to receive one medication than the Medicaid insured children. For children on two medications, there is virtually no difference between the two groups. However, for three prescriptions, there is a 25% difference, with, again, more youth with private insurance than those insured by Medicaid getting medications (2.4% vs. 1.9%). Finally, there is a 50% difference between the groups on four or more medications: privately insured children are half again as likely as those on Medicaid to receive four or more medications (1.6% vs. 1.1%). Overall, privately insured children with any kind of mental health encounter ($N = 668$), are more likely to be medicated, than their Medicaid counterparts ($N = 7105$) with $p < .0001$.

Among children who have had at least one psychiatric admission, the differences between children who are privately insured ($N = 23$) or insured via Medicaid ($N = 196$) are in the reverse direction for comparison of 1, 2 or 3 medications (see Figure 1). Privately insured youth who have had inpatient psychiatric treatment are 8.7% less likely to be receiving one medication, 5.3% less likely to receive two medications, and 1.6% less likely to receive three medications. However, privately insured children with histories of hospitalization are *16.2% more likely* to receive four or more psychotropic medications. Overall, privately insured children with at least one psychiatric admission are 8.8% more likely to be on psychiatric medication than are their Medicaid counterparts.

Corresponding expense data for these utilization figures is displayed in Figure 2. The previously described trend toward greater frequency of medication use by children with private insurance is generally consistent with greater expense. Privately insured children with any mental health encounter have an average monthly cost that is 34% higher than that for Medicaid children with comparable claims histories. However, it is of interest that, despite the fact that prescriptions occur more frequently overall for privately insured youth than for Medicaid children with an inpatient psychiatric admission, prescription costs are 10.2% higher per Medicaid child on average than for the privately insured youth.

Figure 2
Cost of Psychiatric Medication for Medicaid and Privately Insured Children
Average Monthly Cost Per Child



Note: Population is MCO children 3-18 who have at least one mental health encounter, or one inpatient mental health day between 7/1/2004 and 6/30/2005.
N = 7,793

Conclusion

All of this raises significant questions about the appropriateness of the care being provided and what is the “right” level of access to medication. It is possible that formulary restrictions are contributing to different patterns for Medicaid versus privately insured youth. It is also possible that barriers to care and/or differences in provider types contribute to the profiles described above, where privately insured children and adolescents appear to have greater access to medications. Given the high stakes for children caught between the medical risks of treatment and the possibility for help for disabling conditions, there is critical need for research into prescribing patterns for psychotropic medications. Variations in the presence or absence of medication use, as well as in patterns of prescription for major classes of psychotropic medications, both of which are associated with demographic and provider specialty differences, represent important areas for further study.

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Symptom Onset and Patterns of Service Use among Youth with Conduct Disorder: Findings from the Great Smoky Mountains Study (GSMS) of Youth

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Gordon Keeler

Introduction

Conduct disorder (CD) is characterized by delinquency that exacts a heavy burden on both the individual and the community. Early access to services has been related to improved long-term delinquency outcomes (Feehan, McGee, & Stanton, 1993). Because of the observable nature of CD symptoms, boys and girls with CD are likely to be identified for services, but by whom (i.e., mental health, education, child welfare, and/or juvenile justice)? Further, the services they receive within these sectors are relatively unknown.

The major purpose of this paper is to document knowledge about service use for children with CD up to age 13. Specific goals were to examine: (a) the rate of CD among youth in the community, (b) rates of service use among children qualifying for a CD diagnosis, (c) the overall pattern of service use across sectors, and (d) demographic variations in the findings.

Method

The sample was drawn from the Great Smoky Mountains Study (GSMS), a longitudinal, population-based study in western North Carolina. The methods for the GSMS have been detailed by Costello and colleagues (1996). Briefly, boys and girls aged 9, 11, and 13 were randomly selected from school lists and screened for mental health symptomatology. All of the high-risk and 10% of the low-risk boys and girls were selected for follow-up. An additional American Indian sample was not screened; instead, all American Indian boys and girls in the three age cohorts were selected to maximize sample size. The final sample consisted of 1,398 youths. Interviews were conducted over annual waves and quarterly for service use.

Approximately half (50.7%) of the sample was male. The racial distribution of the sample was as follows: 69.3% White; 24.5% American Indian; and 6.2% African American. Approximately 20% of boys and girls in the sample were living in poverty at the time of the study. The current paper uses data collected over the first four annual waves of the study.

Measures

The Child and Adolescent Psychiatric Assessment (CAPA; Angold, Prendergast, Cox, Harrington, Simonoff, & Rutter, 1995) was used to measure symptomatology. Diagnostic criteria for the CAPA are based on the DSM-IV (American Psychiatric Association, 1994). Respondents reported symptoms across two time frames: ever, and in the last three months. For the current study, symptoms were counted as present if reported by either the parent or the child, or both.

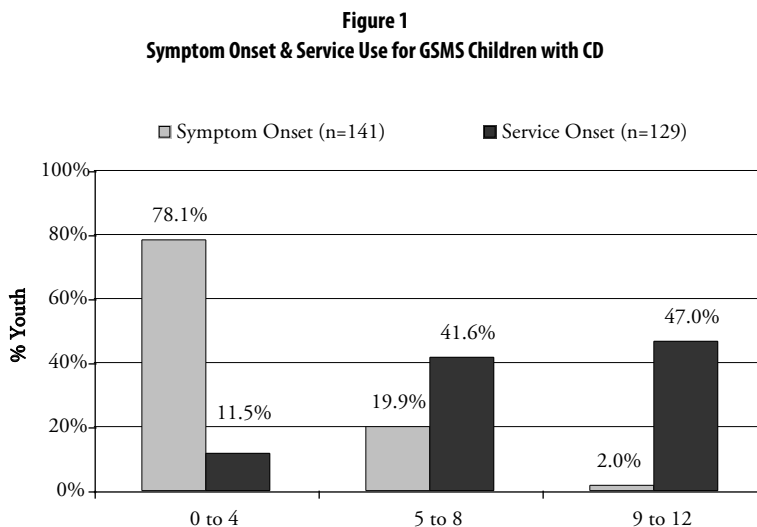
Service use data were collected using the Child and Adolescent Services Assessment (CASA; Ascher, Farmer, Burns & Angold, 1996). The CASA is a structured interview administered to both child and parent that elicits information on use of more than 30 types of services for emotional and behavioral problems. Respondents indicated whether they had ever used services and, if so, whether service use occurred during the past three months immediately prior to the interview. Respondents were also asked for the date of first service use. Services were categorized into four sectors: specialty mental health, child welfare, juvenile justice, and education.

Results

Approximately 10% of the sample qualified for a CD diagnosis at some point over the four annual interviews. The most common comorbid diagnosis in the CD sample was oppositional defiant disorder (38.9%), followed by substance use (38.6%), attention deficit-hyperactivity disorder (15.1%), depression (14.8%), and anxiety (14%).

Males constituted a larger portion of the CD sample (80.3%) than the non-CD sample (51%), consistent with findings from previous research (Romano, Tremblay, Vitaro, Zoccolillo, & Pagani, 2001). Children in the CD group were also more likely to be poor (43% versus 18% of those without CD). The racial distribution was essentially comparable across the two groups (CD and non-CD). There were no demographic differences in comorbidity.

Age at onset of service use has not previously been reported for children in the community with a CD diagnosis. Figure 1 presents symptom onset and service onset for the sample. A lag between the onset of symptoms and the onset of service use is apparent.



Early onset of CD symptoms was reported, consistent with prior epidemiological data and studies of clinic-referred boys. The majority displayed their first CD symptom by age four (78.1%), but only 11.5% of this very young group received services for emotional/behavioral problems. Both trends then reversed between the ages of five and eight, when 41.6% of the boys and girls began to use services while the onset of symptoms occurred in 19.9%. By the time the sample reached 9-12 years of age, the remaining 2% experienced symptom onset, and there was a continued substantial increase in first service use. Thus, although only a small fraction of the boys and girls experienced onset of CD symptoms between ages 9-12, half of them demonstrated initial service use in this age period.

More than 91% of youth with a CD diagnosis had contact with a service provider from one of the four sectors prior to age 13. Of these youth, 61% reported a service contact in more than one sector. Contacts across sectors were as follows: education (81.3%), specialty mental health (61.8%), child welfare (30.6%), and juvenile justice (10.4%). Males and females in the CD sample were almost equally represented (91.4% and 92.4%, respectively) in their service contacts from any sector. However, child welfare was contacted by a higher percentage of females (41.9% vs. 27.9%).

Conclusion

Early onset of CD symptoms has been found in other studies (Loeber & Farrington, 1998; Tremblay et al., 1998) and underscores the need for early access to services. The high rates of comorbidity displayed by the sample are also consistent with prior findings (Angold, Costello, & Erkanli, 1999), emphasizing the need for attention to compound symptomatology in children with CD.

Rates of service use were relatively high in the sample. This is likely due to the high rates of service use in the education sector, as well as our definition of service use as any contact between the child and a service provider. Despite this finding, there was evidence of a delay between symptom onset and access to services, again underscoring the need for earlier screening and service provision. Most children in the CD sample accessed services from multiple sectors. This supports findings on the multiple problems often faced by these children and the heavy burden they can incur on the system. A key implication of this finding is the need for communication and coordination among service sectors.

Education was the most commonly accessed service sector. Future work should address the dissemination of evidence-based practice into the schools, as they may be a key source of services for children with CD. Rates of contact with juvenile justice were lower than expected. This is surprising given prior findings (Silverthorn, Frick, & Reynolds, 2001) that youth with CD are heavily represented in this sector. The lack of contact in the current sample may be related to the young age range of the sample. Finally, the finding that girls were more likely than boys to use child welfare services may be related to higher levels of abuse in girls (see Walker, Carey, Mohr, Stein, & Seedat, 2004, for review).

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Modeling Aftercare Decision-Making for Hospitalized Adolescents

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Acknowledgements: This research was supported by a grant from the National Institute for Mental Health (T32-MH16242-25) and the Center for Health Care Strategies, Inc., under the Annie E. Casey Foundation's Children in Managed Care Initiative (CIMC).

Introduction

Discharge planning and linkage to appropriate aftercare services are crucial to successful outcomes following inpatient care. As length of hospital stays have markedly decreased, treatment teams are forced to quickly assess children's needs and almost immediately at admission decide what types of aftercare services and community supports are necessary to ensure continued stabilization after hospitalization. These decisions are difficult and time-consuming, yet there are virtually no assessment tools or level-of-care criteria to guide decisions about aftercare placements (Burns, Hoagwood, & Maultsby, 1998). Ideally, decisions should be based on clinical need and youths should be placed in the least restrictive environment. However, anecdotal evidence suggests that decisions are often driven by non-clinical factors such as availability of services, financial arrangements and organizational level variables. Surprisingly, few studies have examined factors that influence decisions about aftercare placement (Daniel, Goldston, Harris, Kelly, & Palmes, 2004; Foster, Saunders, & Summerfelt, 1996; Goldston et al., 2003). Using a reliable, well-established decision-support tool and merged data from medical records and the Area Resource File (Bureaus of Health Professions, 1998), this study explores the relative influence of non-clinical factors on aftercare decision-making.

Method

Data for this study were collected as part of a larger retrospective investigation on factors associated with psychiatric re-hospitalization of adolescents (Fontanella, 2003). The sample consisted of 522 adolescents consecutively admitted to three major private psychiatric hospitals in Maryland between July 1, 1997 and June 30, 1998. Eligibility for inclusion in the sample was based on three criteria: (a) aged 11-17.99; (b) covered by or eligible for Medicaid; and (c) resident of Maryland. Adolescents were excluded if they were discharged against medical advice, eloped from the hospital, or were missing records ($n = 23$). Complete details about the methods of the Baltimore Inpatient Study and data collection procedures are described elsewhere (Fontanella, 2003).

Sample

The sample for the current study included 508 adolescents. The mean age was 14.3 years; 54% were female; 45% were Caucasian; 51% were African American and 4% comprised other racial/ethnic groups. More than one-third (38%) were in state custody at the time of the index admission.

Data Sources and Procedures

The study merged data from hospital records (demographics, clinical variables, and recommended aftercare) and from the Area Resource File, a national dataset that included information on availability of mental health providers. Medical record data were abstracted by two graduate social work students who were blind to study hypotheses. Inter-rater reliability ranged from .85 to .96 using the intraclass correlation coefficient.

Measures

Aftercare Services. The dependent variable was type of recommended aftercare services coded into 0, *outpatient only*; 1, *intermediate non-residential* (day treatment); 2, *intermediate residential* (therapeutic foster-care, group home, crisis residential); and 3, *residential treatment* (residential treatment center). The measure includes the full range of service types, from least to most restrictive treatment setting.

Clinical Need. Items from symptom, risk behavior, and functioning dimensions of the Childhood Severity Psychiatric Illness (CSPI) scale (Lyons, 1998) were used to measure mental health need. The CSPI is a standardized decision-support tool with good reliability and validity that measures 25 clinically relevant items on a 4-point scale ranging from 0, *no evidence of disturbance* to 3, *severe disturbance* (Lyons, Kisiel, Dulcan, Chesler & Cohen, 1997).

Availability of Providers. An index of community providers was created that consisted of the number of providers (child psychiatrists, pediatricians, psychologists, and social workers) per 1,000 adolescents in each county.

Service Use. Service history was measured by hospital provider, length of stay, prior hospitalizations, multiple out-of-home placements, and mental health services received 30 days prior to the index admission (see Table 1 for service categories).

Sociodemographic Characteristics. Variables included adolescent's age at admission, gender, race/ethnicity, and custody status (see Table 1 for reference categories).

Table 1
Multinomial Logistic Regression Predicting Level of Aftercare (N = 508)

Variable	Outpatient vs. Intermediate Non-Residential		Outpatient vs. Intermediate Residential		Outpatient vs. Residential Treatment Center	
	β eta	Odds Ratio	β eta	Odds Ratio	β eta	Odds Ratio
Demographics						
Age at admission (Yrs)	.04	1.03	.15	1.17	.10	1.11
Race (African American)	-.41	.66	1.22	3.41**	.67	1.94
State Custody (Yes)	.18	1.20	2.93	18.77**	1.34	3.81*
Clinical Need						
Neuropsychiatric Disturbance	.32	1.38*	.55	1.74**	.46	1.59*
Emotional Disturbance	.59	1.80*	.82	2.28*	.34	1.41
Behavioral Disturbance ^a	.06	1.06	.08	1.08	.49	1.64**
Danger to others	-.14	.87	.09	1.09	-.48	.62
Elopement risk	-.23	.79	-.28	.75	-.08	.92
Family impairment	.18	1.19	.84	2.32**	.30	1.35
Availability of Providers						
Community mental health provider index	.03	1.03	-.04	.96*	-.02	.98
Service Use						
Hospital provider (Ref: Hospital A)						
Hospital B	-2.17	.11**	-.33	.72	-.53	.59
Hospital C	-1.16	.31*	-1.33	.26*	-2.30	.10**
Length of stay (Logged)	.69	2.01**	.71	2.03*	1.95	7.04**
Prior services (Ref: No Services)						
Non-residential ^b	.48	1.61	.89	2.44	.24	1.27
Residential ^c	.68	1.96	3.03	20.61**	2.39	11.02**
Prior hospitalizations (Yes)	.75	2.12*	.56	1.76	1.21	3.36**
Multiple out-of-home placements (Yes)	.64	1.90	1.45	4.25**	1.74	5.71**
Constant	-4.76		-10.29		-11.59	

Note: Overall Model Chi-square = 643.41; $df(51)$. Base referent category for the dependent variable is Outpatient Care

^aThe high correlation between the three symptom variables of the CSPI (conduct, oppositional, and impulsivity) necessitated that the variables be collapsed into one variable that measured severity of behavioral problems. Scores for this variable ranged from 0, no behavioral problems to 9, severe behavioral problems.

^bIncludes outpatient and day treatment. ^cIncludes foster-care, group homes, residential treatment center

* $p < .05$, ** $p < .01$

Analyses

Multinomial logistic regression was used to examine predictors of the four levels of aftercare—outpatient, intermediate non-residential, intermediate residential, and residential treatment. Outpatient care was the reference category. Variables were entered into the equation in four steps. Model 1 included demographic variables; Model 2 added clinical variables; Model 3 added community resources; and Model 4 added service history variables. The final model included all variables that were significant at the $p < .20$ level in bivariate analyses.

Results

Of the 508 adolescents in the study, close to one-third ($n = 155$) were recommended for outpatient care at discharge from hospital. Slightly more than a fifth were recommended for intermediate non-residential care, 26% ($n = 130$) for intermediate residential care, and 23% ($n = 119$) for residential treatment. Eighty-five percent ($n = 430$) actually received the services that were recommended. The remaining 15% ($n = 78$) did not participate in recommended services either because of (a) lack of availability ($n = 64$); (b) parental refusal ($n = 8$); or (c) funding constraints ($n = 6$).

Predictors of Aftercare Services

Table 1 shows the predictors of aftercare for each of the recommended discharge plans in relation to outpatient care.

Intermediate Non-Residential. Youths were more likely to be recommended for intermediate non-residential care instead of outpatient care if they had higher neuropsychiatric and emotional disturbances ($OR = 1.38, p < .05$; $OR = 1.80, p < .05$ respectively), longer length of stays ($OR = 2.01, p < .01$), and prior hospitalizations ($OR = 2.12, p < .05$). Adolescents were less likely to be referred to intermediate non-residential care if they were admitted to both Hospital B ($OR = .11, p < .01$) and Hospital C ($OR = .31, p < .01$).

Intermediate Residential. Prior residential services ($OR = 20.61, p < .0005$), multiple out-of-home placements ($OR = 4.25, p < .01$), longer lengths of stay ($OR = 2.03, p < .05$), and greater neuropsychiatric and emotional disturbances ($OR = 1.74, p < .01$; $OR = 2.27, p < .05$) as well as family dysfunction ($OR = 2.32, p < .01$) increased the likelihood of being recommended for intermediate residential care versus outpatient care. African American youths were three times ($OR = 3.41, p < .01$) more likely to be referred for intermediate residential care compared to outpatient care and youths in state custody were over eighteen times more likely to be referred to intermediate residential care. Youths who lived in areas with greater numbers of providers ($OR = .96, p < .05$) or were admitted to Hospital C ($OR = .26, p < .05$) were less likely to be referred to intermediate residential care.

Residential Treatment. Youths were more likely to be referred to a residential treatment facility versus outpatient care if they received some type of residential treatment prior to hospitalization ($OR = 11.01, p < .01$), had longer lengths of stay ($OR = 7.04, p < .01$), multiple-out-home placements ($OR = 5.71, p < .01$), prior hospitalizations ($OR = 3.36, p < .01$), and more neuropsychiatric and behavioral problems ($OR = 1.59, p < .05$; $OR = 1.63, p < .01$). Adolescents who were in state custody were more than three times ($OR = 3.81, p < .05$) more likely to be referred to a residential treatment center compared to outpatient care. Admission to Hospital C decreased the likelihood of being referred to a residential treatment center by 90% ($OR = .10, p < .01$).

Discussion

Findings for this study indicate that non-clinical factors influence decision-making even after controlling for level of clinical need. The clinical factors associated with more restrictive care included more severe symptomatology and longer lengths of stay. Prior service use was also a strong predictor of aftercare decisions. Non-clinical factors had a substantial effect on aftercare decisions. The finding that

youths who were in state custody were more likely to be referred to residential care instead of outpatient care suggests that wards of the state may be subject to different decision-making standards. Moreover, the findings that youths who were African American also were more likely to be referred to residential care raises questions about whether minority youth have access to appropriate, less restrictive treatment alternatives. Also important were findings about the role of community level variables and organizational factors in influencing aftercare decision-making. Youths residing in areas with greater numbers of mental health providers were less likely to be placed in higher levels of care, confirming the commonly held belief that decisions are driven in part by availability of services. Placement decisions also appear to be influenced by provider behavior. Even after controlling for demographic and clinical variables, hospital provider strongly influenced aftercare decision-making. Overall, the study underscores the need for standardized decision-support tools and access to a continuum of mental health services to ensure improved quality of care.

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The Relationship of Social Supports toward Adolescent Girls' Resiliency in Families Receiving Welfare

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Introduction

The purpose of this research was to investigate how to help adolescent girls living in poverty succeed in today's society. Specifically, the study examined the changes over time in social supports, rates of depression levels, pregnancy, and high school drop out rates in a cohort of adolescent girls whose mothers were receiving Temporary Assistance for Needy Families (TANF).

Over the past ten years, poverty has decreased by 6% (Kids Count, 2000). Nevertheless, there are still 12.4 million children living in poverty (Annie E. Casey Foundation, 2000). Moreover, one in every three children living in poverty resides in single-parent families headed by women (Annie E. Casey Foundation, 2000).

Research has documented the numerous harmful effects that poverty has on adolescent girl's well-being. Children residing in impoverished families were more likely to endure isolation from others, unhealthy living conditions, and lower educational opportunities (DiLeonardi, 1993). Significant relationships are also reported between socioeconomic status and physical and health and school involvement (Child Trends, 2002). Children living in poverty are significantly more likely to be in poorer health and to experience more emotional and behavioral problems than their non-impoverished peers. Similarly, girls living in poverty are more likely to experience depression (Puotiniemi, & Kyngas, 2004). Adolescent girls living in poverty are more likely to be sexually active (Boothroyd, et al., 2005) and to become pregnant compared to girls living in more affluent situations. Dropping out of school is more likely in to occur in moderate and high poverty neighborhoods (Child Trends, 2002; Harding, 2003) than in affluent ones.

Social supports have been shown to be a helpful mediator in dealing with these adverse outcomes associated with poverty. There are various types of social supports, but the two distinct supports are emotional and instrumental. Both have been found to affect an adolescent's well-being. However, research has also shown that source of support contributes to different effects for the recipient (Colarassi & Eccles 2003). For example, a cross-sectional study comparing middle school and high school groups showed that both groups' primary source for emotional support came from their parents (Richman, Rosenfeld, & Bowen, 1998). Another study showing the effects of instrumental support for low-income women documented that more "professional" support predicted higher levels of depression (Bassuk, Perloff, Mickelson, & Bissell, 2002).

Method

Research Questions

The three research questions addressed in this summary were:

1. What are the levels of social supports, teenage pregnancy, high school drop out, and depression that this cohort of adolescent girls living in poverty experience?
2. Do the levels of social supports, teen pregnancy, high school drop out, and depression change over time?
3. To what extent are social supports correlated with teenage pregnancy, high school drop out, and depression?

Participants

The participants were 125 mothers who were receiving TANF at the start of the study and their adolescent daughters ranging from the ages 13 to 17 residing in a five-county region in Florida. From this

population, 20 adolescents were randomly selected to participate in a comprehensive qualitative interview. This summary focuses on the daughters' status on measures of interest, and responses on interviews.

Study Design

The study used a mixed-method design, including both qualitative and quantitative approaches. The quantitative portion of the study involved data collection through face-to-face interviews with both the mothers and the daughters ($n = 125$) using a standardized interview protocol. The qualitative aspect of the study included comprehensive open-ended interviews with the random sample of 20 daughters. The protocols were created to focus on the girl participants, and each year, modifications were made to the protocols based on the following year's results as well as to ensure that the measures were age appropriate. In this longitudinal study, the attrition level was very low. In 2003, 93% of the daughters were re-interviewed. Follow-up interview rates were 89% in 2004 and 92% in 2005. Although many domains were examined in the original study, only data pertaining to social supports, depression, high school dropout, and pregnancy are examined here.

Measures

Social Support. Two measures were used in this study to assess adolescents' level of social supports. The Social Support Scale for Children (Harter, 1985) was used in the first three years of the study. This 24-item self-report measure assesses the adolescents' perceptions on the extent of positive and negative social support from four sources: parents, classmates, teachers and close friends. In 2005, the social support measure was replaced with the Inventory of Socially Supportive Behaviors (ISSB; Barrera, Sandler, & Ramsey, 1981). The ISSB is a 40-item self-report measure that uses a five-point Likert-type scale and has been shown to have acceptable reliability and validity (Barrera & Ainlay, 1983).

Depression. The Center of Epidemiologic Studies Depression (CES-D; Radloff, 1977), a 20-item self-report measure, was used to assess the daughters' level of depression. For each question, the daughters were asked to report the frequency of depressive symptoms they experienced during the past week. Studies have documented the CES-D to be a valid and reliable measure (Hann, Winter, & Jacobsen, 1999; Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977) and useful for the initial screening of depression (Roberts & Vernon, 1983).

Other Outcomes. Both the teenage pregnancy and high school drop out measures consisted of a single self-report item. The questions were dichotomized as either *yes* or *no*, to: (a) having been previously pregnant and (b) having dropped out of school.

Analysis

Initial analyses involved the use of descriptive statistics to assess the daughters' levels of social support, depression, pregnancy, and high school drop out rates in each of the four study years. In addition, repeated measures analyses of variance were conducted in order to assess any changes in these measures over the four-year study. Correlational analyses were then conducted to examine the relationship between social support and depression, high school drop out and teenage pregnancy.

Results

Characteristics of the Adolescents

Table 1 provides a summary of the characteristics of daughters interviewed at the start of the study in 2002. Daughters' ages ranged from 13 to 17, averaging 15.5 years old ($SD = .99$). In terms of the daughters' racial/ethnic distribution 33.6% were White; 40.8% Black/African American; and 25.6% Hispanic. At the start of the study, 28.0% of the daughters reported they had dropped out of school. All of the daughters were living at home with their mothers, and none of them were married.

Changes in Adolescents' Depression, Pregnancy Rates, High School Dropout, and Social Supports

Table 2 provides a summary of the changes in rates of depression, pregnancy, school dropout, and social supports among the 125 adolescent girls over the four-year study. Although not statistically significant, the percentage of daughters reporting depressive symptoms exceeding the criterion score on the CES-D increased over time from 30.6% in 2002, to 45% in 2005. Somewhat less surprising, given the age of these girls, is the percentage of daughters who reported having been pregnant at some point in time; a significant change over time was observed starting at 15% in 2002 and increasing to nearly 45% in 2005 $F(1,124) = 51.30; p < .001$. The percentage of daughters dropping out of school also significantly increased between 2002 and 2005 $F(1,124) = 11.13; p < .001$ from 28% in 2002 to 43% in 2005. In terms of the daughters' social supports, examination of changes during the first three years of the study when the Social Support Scale for Children was used revealed no significant change. The mean scores for these adolescent girls generally consistent with the average scores reported by Harter (1985), with the exception of the teacher support subscores which tended to be somewhat higher in the sample of girls.

Table 1
Characteristics of the Daughters

<i>Characteristics</i>	<i>Daughters 2002 (n = 125)</i>
<i>Age</i>	
Mean	15.5
SD	.99
Range	13 - 17
<i>Race/Ethnicity</i>	
White	33.6%
Black/African American	40.8%
Hispanic	25.6%
<i>Marital status</i>	
Married or living as married	0%
Divorced, Separated, or Widowed	0%
Never married	100%
<i>Education</i>	
Dropped out of school	28.0%
Completed high school/GED	NA

Table 2
Changes in Depression, Pregnancy Rates, High School Dropout, and Social Supports

<i>Measure</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>p <</i>
Depression	30.6%	40.9%	45.0%	38.3%	NS
Pregnancy Rates	15.2%	21.6%	36.8%	44.8%	.001
HS Dropout Rates	28.0%	24.0%	34.3%	43.2%	.001
Social Supports					
Classmates	3.03(.84)	3.23(.63)	3.23(.63)	NA ¹	NS
Teachers	3.26(.76)	3.27(.60)	3.25(.66)	NA ¹	NS
Parents	3.32(.85)	3.45(.63)	3.43(.70)	NA ¹	NS
Friends	3.35(.83)	3.49(.69)	3.39(.72)	NA ¹	NS
Total	77.46(17.26)	80.96(12.25)	80.48(11.70)	NA ¹	NS

¹The Children's Social Support Scale was not used in 2005.

Relationship of Social Supports to Depression, Pregnancy Rates, and High School Dropout

All 12 resulting correlations were negative, indicating that higher levels of social supports in one year were associated with lower levels of depression in the following year. The two types of social support that were most highly correlated with adolescents' depression scores were social supports provided by parents and classmates. All of the six correlations between parents and classmates and depression were significant; four at the .01 level and two at the .05 level. Although less highly correlated compared to parents and classmates, teacher social supports were significant related to CES-D scores in two of the three years. Social supports from friends were not significantly related to depression. The magnitude of all the correlations ranged between $-.031$ and $-.334$, indicating that upwards to 11% of the variability in adolescents' depression scores was accounted for by these forms of social supports.

Additional correlations were computed in order to assess the levels of teenage pregnancy and high school drop out rates for the adolescents in this study. The analysis of these two groups indicated mixed correlations. In general, higher levels of social support were associated with less teenage pregnancy and high school drop out. In all three years of the teenage pregnancy analyses, social supports from close friends were associated with a decreased likelihood of becoming pregnant. In 2003, classmates' and teachers' social supports were also associated with lower levels of pregnancy than in other years.

When the lagged correlations were assessed for social support and high school drop out, 11 of the 12 of the correlations were negative, indicating that adolescents who were not in school had lower levels of social supports from any source compared to adolescents who were still in school or had graduated. The only source of social support that was negatively associated with being in school was support from classmates in the last year of the analysis. In general, being pregnant and not in school were associated with having fewer social supports from classmates, close friends, teachers, and family members.

Qualitative Interviews

Follow up qualitative interviews were conducted with four daughters who participated in this study to specifically obtain their perspectives on these new analyses. The interview questions asked and the adolescents about their present status with regard to their education, pregnancy, well-being and social supports. The results indicated that three out of the four daughters graduated from high school. Even though all four daughters desired to further their education, only one daughter had pursued a post-secondary education. Only one of the daughters had been pregnant. All four reported depressive symptoms during adolescence; nevertheless, all reported that social support from parental figures (mothers and grandmothers, in particular) helped them to overcome challenging situations.

Discussion/Implications

The mean social support scores for these adolescent girls are generally consistent with the average score reported by Harter (1985), with the exception of the teacher support subscores which tended to be somewhat higher in the sample of girls. This is a positive finding, in that despite living in poverty, these daughters report having better than average social support systems. Although the increased pregnancy rate is somewhat expected given that the daughters were becoming older, in 2005, 45% of this cohort of 125 daughters who reported they had been pregnant seems high, given that the Center for Disease Control (CDC) noted in their 2003 National Youth Risk Behavior Survey (CDC; Grunbaum, et al., 2003), that 51% of students are sexually active by grade 12. It must be noted, however, that a number of the daughters had already graduated from high school by 2005. The dramatic increase in the number of daughters reporting depressive symptoms is a cause for concern, particularly in light of the fact that during any given year, no more than 5% of adolescents perceived a need for mental health services. The high school dropout rates mean a growing number of these girls are entering the workforce in primarily low paying positions with few if any benefits.

These analyses suggest most of the daughters in this study face an increasing number of barriers that can prevent them from moving out of poverty and becoming economically self-sufficient. We question

how these daughters will respond to the accumulating number of challenges and their changing roles in light of the fact that few structural supports are available to assist them. What impact will these challenges and changes have on their ability to be productive and happy adults, attain their personal goals, and become economically self-sufficient? What role and responsibility do/should we have to provide supports to maximize the potential for adolescents' success? This emerging body of research documenting the poor outcomes of adolescents growing up in poverty raises cause for concern. At the very least we need to focus energy on developing strategies to assist these adolescent girls while their hopes and aspirations remain high—and before they come to face accumulating life challenges that may drown their spirits and impede their ability to succeed as adults.

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Chapter Five

Interventions in Early Childhood

Baby Steps—Continued Innovations in Early Identification and Service Access

Russell Lyman

Introduction

This Blue Cross and Blue Shield of Massachusetts Foundation (BCBSMA) Baby Steps Building Bridges in Children's Mental Health initiative, conducted by the Guidance Center, Inc. in Cambridge, Massachusetts, investigates ways to best conduct universal screening and service access. Our research questions included: What are barriers to screening and service for very young children? When is the best time to screen, with what tools, and what does screening reveal?

Timely identification and intervention can dramatically change developmental trajectories in key components of early childhood mental health. The brains of infants and toddlers grow faster than at any other time of life, with 85% of core brain development occurring by age 3. Empirical studies have shown that brain structure and function can be permanently altered by early experiences (Shonkoff & Phillips, 2000), with potentially lasting effects on learning and behavior.

National studies support our findings that parents have concerns about their young children. For children ages 4-35 months, between 38% and 48% of parents have concerns about behavior; communication; emotional well-being; getting along with others; and learning preschool skills (National Center for Health Statistics, 2000). The President's New Freedom Commission on Children's Mental Health (2003) calls for periodic universal screening in health care for young children, yet this is not happening.

Method

In baseline assessment, parent focus groups and provider surveys were conducted, targeting the use of screening tools as well as strengths and barriers in the early childhood service system. The Parents' Evaluation of Developmental Status (PEDS; Glascoe, 1997) was administered in three settings - WIC, the Windsor Street Health Center, and city child care settings ($N = 262$) with parents of children under age six. Settings were specifically selected to reflect urban, low-income, cross-cultural populations—those commonly facing the most significant risks to developmental and social-emotional wellness, and least likely to have access to services. The PEDS is a brief, validated 10-item parent questionnaire targeting various areas of development, including two areas we identified a priori as pertaining to mental health (Behavior and Social-Emotional).

Retrospective analysis was also conducted on Denver II (Denver Developmental Materials, 1992) screens collected across five years of universal screening with children ages 0-3 ($N = 350$) in primarily low income Cambridge and Somerville city child care settings. The Denver II is a validated instrument that is completed in direct interaction with the child, and was done in this study by Early Intervention (EI) developmental specialists. Our hypotheses were that developmental concerns would be more common in boys than in girls, that there would be a relationship between social-emotional concerns and concerns about language, and that the incidence of both types of concern, as well as their co-occurrence, would be more common in boys than in girls.

Results

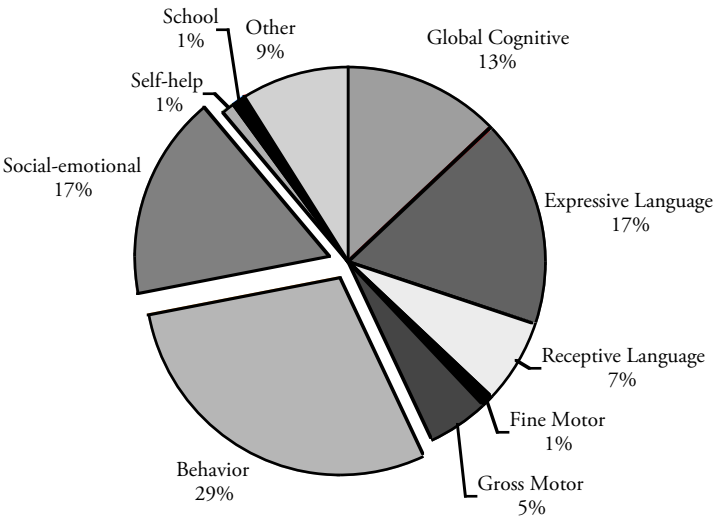
Parent reports. Baseline focus group study with parents of children ages 0-5 in child care, WIC mental health EI and primary care services included groups in Portuguese, Haitian Creole and Spanish. Cross-cultural parents articulated significant language and reimbursement barriers to service access. Haitian parents in particular voiced a strong need for services, resource information and advocacy in their native language. They pointed to particular difficulty during brief pediatric check-ups in describing

problems their child might be having. Both language and cultural differences in understanding child behavior were reported barriers. Consumers of developmental, pediatric and mental health services clearly articulated difficulties in dealing with health insurance systems. Most parents appeared to be receptive to being asked, especially by pediatricians, about how their children were doing developmentally and psychologically, though some wariness was also evident amongst Haitian speakers. Many parents reported being told to “wait and see” when they raised concerns with their child’s doctor.

Surveys of providers. Baseline surveys of Cambridge education, child care and pediatric providers are consistent with national data. The use of formal screening tools is inconsistent, especially in screening for mental health (69% of respondents do not use them). Only 31% of providers screen parents informally for mental health issues, and no providers reported using a parent mental health screening tool. The use of formal developmental screening tools was reported by 75% of providers; however none of these were pediatricians. Less than 25% of those children screened are referred. Major barriers to successful referral were identified as: language or culture match, lack of agency follow-up (more than half of those referring receive follow-up calls never or rarely), and family hesitation.

PEDS results. Our studies indicate that 31% to 39% of parents of children age 0-5 ($N = 262$) reported at least one significant concern on the PEDS, with relatively consistent patterns across settings. In Windsor Street Health Center, 31% of parents reported at least one significant concern; and 46% of reported concerns were mental health concerns (see Figure 1). In WIC, where 32% of parents reported significant concerns, 31% of all concerns were about mental health. In preschool, 39% of parents reported significant concerns, and 39% of all reported concerns were about mental health. In other words, about 1 in 3 parents reported a significant concern about their child, regardless of setting, and a third to nearly half of all concerns reported were about mental health issues, depending on the setting.

Figure 1
Windsor Street Pediatrics Pilot I & Pilot II Areas of Concern in Children with PEDS Concerns



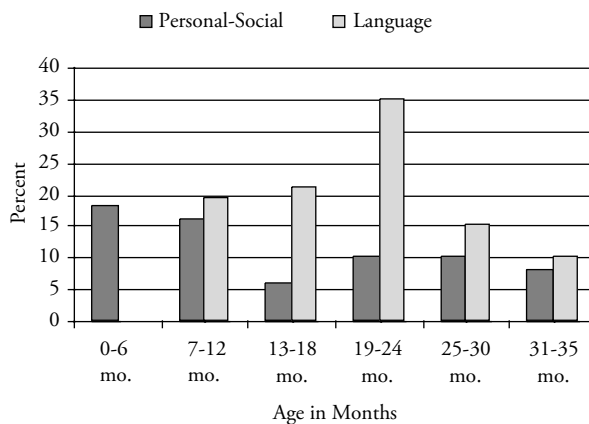
In tracking referral patterns, comparison to retrospective baseline of referral patterns during a similar time period revealed that referrals were dramatically increased, but still remained surprisingly low. Referrals in pediatrics were reported to have increased, and referrals during 2 months of screening in WIC increased from 0 to 10.

Denver II results. In our Denver II work, ($N = 350$), screenings indicated a need for referral for 39% of the children. It should be noted that this incidence is higher than in the general population, both because of the low-income status of the settings, and because child care providers and practitioners tended to select the children they were most worried about for screening first. The Denver II has 4 domains, Personal-Social, Fine Motor, Gross Motor and Language, which are assessed as advanced, normal, of concern, or delayed. In the Personal-Social domain, 18% of children showed a concern or delay. In the area of Language, 31% showed concerns or delays; in Fine Motor, 18%; and Gross Motor, 20%. What is most troubling, however, is that of the 135 children for whom referral was indicated (either by test scores or by clinical judgment), only 48% completed the process of referral to our Early Intervention (EI) program. More than three quarters of the children evaluated by EI met developmental risk or delay criteria (25% delay) for EI service.

Pearson Chi-Square analysis did find a significant relationship between being a boy and having delays ($\chi^2 = 9.265, p = .002$). No significant relationship was found between delays in Language and delays in Personal-Social areas, but a significant relationship between being male and having Language Delays/Cautions was found ($\chi^2 = 4.12, p < .05$). Girls in fact showed more co-occurring delays in Language and Personal-Social (26% of those with any delay) than boys (16%), but this relationship was not significant.

The question of when in child development social-emotional problems appear and can be identified is a critical one for screening efforts. The answer in our data is: *It is never too early to screen.* In 11 children ages 0-6 months found with delays, 34% of these delays were in the Personal-Social realm. Personal-Social delays were found in every 6-month age span across the first 3 years of life (see Figure 2).

Figure 2
Percentage of Personal-Social and Language Delays by Age
($N = 350$)



Conclusion

Data from two independent projects using different screening tools consistently indicate that, in high-risk urban settings, at least one in three children show indications of need for developmental or mental health services. Results also demonstrate that parent reports can be a useful way to screen, and that they yield patterns of incidence that are similar to those shown when trained developmental specialists screen children directly. For identified children, access to services often meets with significant barriers when recommendations for referral are made to parents.

Our work confirms results from early childhood screening initiatives that are springing up in selected states around the country. All of these initiatives underscore the need for broad systems change, in

which early identification is mandated and also supported through appropriate cross-system training, collaboration and funding streams. There is a need to make an investment similar to what many states have done in systems of intensive wraparound care for older children. Starting early is a critical element in reducing the need for more intensive service later in development. The time to start using validated tools to identify developmental and mental health problems starts in the first months of life. And the time is now to develop a national system that provides this opportunity for every child, on a regular and periodic basis.

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Multi-Level Determinants of Effective Mental Health Consultation in Early Childhood Settings: Results from a National Survey

Beth L. Green
Maria Everhart

This research was funded by grant #H133B990025 from the National Institute for Disabilities and Rehabilitation Research (NIDRR) to Portland State University's Research and Training Center for Family Support and Children's Mental Health.

Introduction

In response to the increasing need to better support children with emotional and behavioral challenges in childcare settings, mental health consultation in early childhood programs is a rapidly proliferating intervention strategy (Brennan, Bradley, Allen, Perry, & Tsega, 2005; Gillam & Shahar, 2006). As defined by Cohen & Kaufman (2000) early childhood mental health consultation is a “problem-solving and capacity-building intervention (p. 4)” involving a collaborative relationship between a mental health consultant and teachers in a preschool or childcare setting. Consultation can be *child or family (individual) level*, providing direct work with particular children (e.g., screening, assessment, therapeutic intervention). Alternatively, consultants may provide *program level* consulting, which supports programs through training, coaching, and organizational support (Cohen & Kaufman, 2000).

Despite the growing popularity of the consultant model, the empirical evidence for its effectiveness is limited. In their review of 31 (mostly unpublished) studies of mental health consultation, Brennan et al. (2005) conclude that there is mixed evidence for its effectiveness. They suggest that the lack of consistently positive findings may be related to a lack of consensus and information about what consultants do, how they work with staff, and which strategies are most closely linked to outcomes. The current study begins to address this gap, and seeks to answer the following research questions:

- What characteristics of mental health consultants (MHCs) are most strongly associated with the reported effectiveness of consultation?
- What activities are associated with the reported effectiveness of consultation?
- Is the quality of the staff-MHC relationships associated with effectiveness?
- What is the relative importance of MHC characteristics, activities, and quality of relationships to effectiveness?

Methodology

Sample

Head Start programs. A stratified random sample of Head Start programs was selected¹; 79 programs agreed to participate. 1,273 surveys were sent to a random sample of 12-18 staff at each program plus the program director, the mental health services coordinator, and the mental health consultant. 816 surveys were returned (64%). 74 programs had sufficient information (e.g., returned surveys from the program director and mental health counselor) to be included in the analyses.

Respondents. 528 direct service, 130 administrative staff, and 68 consultants were included in the analysis. There were 327 teachers (47% of respondents), 114 assistant teachers (16%), 112 family advocates (16%), 74 program directors (11%), 60 (8%) program coordinator/managers, and 62 (8%) consultants. Head Start staff and managers were almost entirely female (96%). Twenty-seven percent were African American (27%); 51% were white/Caucasian; 11% were Hispanic/Latino; and 8% were of other ethnic backgrounds.

¹Migrant, tribal, and Early Head Start programs were excluded.

The 62 mental health consultants (MHCs) were primarily White (61%); 4 (5%) were African American, and 6 were Hispanic/Latino. The majority were female (59%). Thirty-seven percent had a PhD (23); 36 (58%) had a master's degree and 3 (5%) had a bachelor's degree.

Survey Instrument

1. **MHC Characteristics.** MHCs reported on their education, race/ethnicity, their workplace, and the length of time they worked with the program. Program directors reported the number of hours of consultation time for the overall program and the percentage of budget spent on mental health consultation.
2. **MHC Activities.** Respondents reported the frequency of different activities, from 1, *rarely or never*, to 5, *weekly or more*. Two subscales were created, *individual level activities* (e.g., conducting screenings of individual children, etc.) and *program level activities* (e.g., providing staff training, etc.). Reliability was high (alphas = .89, .91, respectively) and the scales were positively correlated ($r = .71$).
3. **Quality of Relationships.** We developed six items to measure the quality of MHC-staff relationships (e.g., "The MHC works as a partner with staff to meet children's MH needs"). Items were rated on a 4-point scale, 4 = *strongly agree*, 1 = *strongly disagree*, and had good reliability (alpha = .84).

Outcome Measures

1. **Effectiveness in Helping Child Outcomes.** Respondents rated the extent to which the program's mental health consultant was helpful in reducing three internalizing behaviors and four externalizing behaviors, and increasing four positive social behaviors. Each behavior was rated from 4, *helped a lot*, to 1, *hasn't helped*, and combined to create three subscales (alphas > .85).
2. **Staff Wellness.** Staff were asked four questions about the extent to which they felt professionally supported (e.g., "Our program provides me with the emotional and personal support I need to do my job most effectively"). Items were rated on a 4-point scale (4 = *strongly agree*; 1 = *strongly disagree*, and the scale was reliable (alpha = .86).

Results

General Analytic Strategy

Because individual staff responses are nested within programs served by specific consultants, a statistical method that can take into account these non-independent effects and appropriately model program-level variables was needed. Hierarchical Linear Modeling (HLM, Raudenbush, Bryk, Cheong, & Congdon, 2000) is one such technique. In the models tested, outcomes (level 1 variables) reported by Head Start staff and managers were nested within 74 programs with their associated organizational (e.g., size, urban/rural status, etc.) and MHC characteristics (level 2 variables). Information about staff perceptions of the consultant (frequency of activities, quality of relationships) were aggregated at the program level and included as level 2 variables.

Covariates were identified by modeling each of the program organizational characteristics (target population demographics, urban/rural setting, program size, number IEPs, number of mental health referrals made, and staff turnover) on the four primary outcomes (internalizing, externalizing, positive behaviors, and staff wellness). Significant predictors were included in the models (see Table 1).

Effects of MHC Characteristics, Activities, and Quality of Relationships on Perceived Effectiveness

Separate hierarchical models were analyzed modeling the effect of each of the level-2 MHC characteristics; the frequency of program and individual consulting activities; and the quality of relationships on each of the four outcome variables. These results are shown in Table 1. The *only* measured MHC characteristic that was significantly associated with outcomes was whether the MHC was in private practice. Staff within programs that worked with consultants in private practice reported generally more positive outcomes for each of the four areas. Further, the more frequently the MHC

Table 1
Results of Individual Predictor HLM Models
for MHC Characteristics, Activities, and Quality of Relationships

<i>Dependent Variable</i>	<i>Independent Variable (n=74)</i>	<i>Individual Predictors (Standardized B)</i>
Reducing Externalizing Behavior	Private practice vs. other	.174*
	Freq. Program Consulting	.222**
	Freq. Individual Consulting	.250**
	Quality of Relationship	.688***
Reducing Internalizing Behavior	Private practice vs. other	.202**
	Freq. Program Consulting	.113*
	Freq. Individual Consulting	.139*
	Quality of Relationship	.461***
Increasing Positive Behavior	Private practice vs. other	.165*
	Freq. Program Consulting	.206**
	Freq. Individual Consulting	.192**
	Quality of Relationship	.574***
Staff Wellness	Private practice vs. other	.127
	Freq. Program Consulting	.175**
	Freq. Individual Consulting	.180**
	Quality of Relationship	.55***

Note: All models control for the total number of children in the program, number of centers, number of mental health referrals made, and number of children on IEPs (level 2) and for respondent race/ethnicity (African American vs. any other ethnicity) and position (management vs. staff) (level 1).

* $p < .05$; ** $p < .01$; *** $p < .001$

engaged in both types of activities, the more helpful the mental health services were perceived to be by program staff. More frequent consulting was also associated with increased reports of staff wellness. Finally, results showed that the more positive the relationships between staff and MHCs, the more likely those staff were to report that mental health services were effective, and that the program helped them to feel supported in their work.

What is the Relative Importance of MHC Characteristics, Activities, and Relationships to Perceived Effectiveness?

Next, we tested several models to assess the relative importance of MHC characteristics, activities, and relationships to outcomes. HLM models were analyzed for each outcome and included each of the predictors in Table 1 entered simultaneously (including covariates). Because of the high correlation between program and individual-level consultation, these two variables were combined into a single index of frequency of MHC activities. These results are shown in Table 2. Only the quality of relationships remained a significant predictor of outcomes. Finally, because the frequency of activities was reduced to non-significance when the quality of relationships was included in the model, we tested a mediational model, and found that the influence of the frequency of activities on outcomes was due to its influence on quality of relationships (Baron & Kenny, 1986).

Table 2
Results of Full (all predictors) HLM Models

<i>Dependent Variable</i>	<i>Independent Variable (n=67)</i>	<i>Full Model (includes all predictors) Standardized B</i>
Reducing Externalizing Behavior	Private practice vs. other	.003
	Frequency of Consulting	-.045
	Quality of Relationship	.501***
Reducing Internalizing Behavior	Private practice vs. other	.002
	Frequency of Consulting	-.045
	Quality of Relationship	.502***
Increasing Positive Behavior	Private practice vs. other	.004
	Frequency of Consulting	.017
	Quality of Relationship	.558***
Staff Wellness	Private practice vs. other	.004
	Frequency of Consulting	-.053
	Quality of Relationship	.600***

Note: All models control for the total number of children in the program, number of centers, number of mental health referrals made, and number of children on IEPs (level 2) and for respondent race/ethnicity (African American vs. any other ethnicity) and position (management vs. staff) (level 1).

* $p < .05$; ** $p < .01$; *** $p < .001$

Discussion

These results suggest that in planning mental health consultation interventions, significant attention should be paid to building positive, collaborative relationships between staff and consultants. The characteristics of consultants and amount of consultation were less important to outcomes. The effect of the frequency of activities was mediated by the quality of relationships, suggesting that consultants who are engaged in more frequent on-site activities may be better able to build these positive relationships.

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Early Childhood Mental Health Consultation: A Logic Model Based on Theories of Change

Mary Dallas Allen

Introduction

This presentation depicted a logic model of early childhood mental health consultation that was developed through examination of theories of change and the results of a synthesis and review of research on mental health consultation. Mental health consultation, as a problem solving and capacity building intervention in early childhood settings, has the potential to improve the mental health outcomes of young children (Cohen & Kaufmann, 2000). Although mental health consultation has been identified as an important component of many early childhood programs, program implementers and evaluators have not reached consensus on the necessary components of consultation or the outcomes to be evaluated. This logic model is intended to provide researchers and early childhood programs with a systematic, visual representation of the relationship between the program resources, inputs, and activities of mental health consultation so that program implementation and outcomes can be effectively evaluated (W.K. Kellogg Foundation, 2004).

From such a logic model, early childhood mental health consultation program implementers, evaluators, and researchers can gain an analytic perspective about the necessary resources, inputs, and activities for developing and implementing an effective mental health consultation program. They can examine how inputs, activities, and outcomes can be tied to a theory of change for mental health consultation. Finally, they can tie short-term and long-term outcomes to consultation program activities.

This logic model can contribute to the evidence base for mental health consultation. During a national conference on early childhood mental health consultation (Establishing the Evidence Base for Early Childhood Mental Health Consultation, 2005), prominent researchers in early childhood mental health consultation identified developing a logic model as an important step in building the evidence base of mental health consultation. In a review of the recent research on early childhood mental health consultation, Brennan, Bradley, Allen, Perry, and Tsega (2005) found that although mental health consultation is associated with positive staff and program outcomes, a logic model and a theory of change based on empirically sound constructs can ensure that program evaluators are measuring the components of mental health consultation that produce the desired staff and program outcomes.

Method

The logic model was developed as part of an academic program in social problem analysis. The first or three development phases consisted of reviewing the current research literature on mental health consultation, including 24 empirical studies (Brennan et al. 2005), which provided valuable information on the inputs, activities, and short- and long-term outcomes of mental health consultation. In the second phase, the author identified the theories of change for early childhood mental health consultation. The theories of change make explicit the beliefs and assumptions of mental health consultation that guide program implementation and produce the desired change (Hernandez & Hodges, 2003). Finally, the author developed the logic model, which incorporated program resources, inputs, activities, outputs, short- and long-term outcomes, and impact to provide an illustration of mental health consultation.

Resulting Model

The proposed logic model for mental health consultation was derived from two theories of change which describe the beliefs and assumptions of the service delivery system that guide mental health consultation program implementation and produce the desired change (Hernandez & Hodges, 2003). These two theories of change are based on two underlying explanatory theories: social learning theory and general strain theory. The first theory of change, which is based on social learning theory, identifies

the child and family as the focus of the intervention and proposes that mental health consultants implement activities that directly support the positive mental health of young children. Such child- and family-focused activities include modeling and supporting positive classroom interactions with children and early childhood staff, providing education about early childhood mental health to parents and to staff, and identifying and referring children and families needing additional mental health services (Cohen & Kaufmann, 2000). These child and family focused activities lead directly to child outputs and outcomes, such as decreased child challenging behaviors. The second theory of change, based on general strain theory, identifies the early childhood program as the focus of the intervention and proposes that mental health consultants should implement activities that assist staff and programs to support staff who work with children who experience challenging behaviors and to integrate mental health best practices through staff training and support (Cohen & Kaufmann). These staff and program level activities will lead to staff and program outputs and outcomes, such as decreased staff stress and increased staff retention.

Conclusion

Crafting a logic model of early childhood mental health consultation is an important step in establishing the framework upon which to build an evidence base to support and evaluate real-world practice; such a comprehensive logic model can serve as a guide to mental health consultation programs and evaluators. This current logic model clarifies how child- and family-focused and staff- and program-focused activities both contribute to positive early childhood mental health consultation outcomes. In order to determine if this model improves mental health consultation outcomes, it will be necessary for program evaluators to utilize the model to test the degree to which the identified activities contribute to the desired outputs and short- and long-term outcomes. Continued refinement of the model should include feedback from researchers in early childhood mental health and application in practice settings.

Table 1
Logic Model for Mental Health Consultation in Early Childhood Programs

RESOURCES	ACTIVITIES	OUTPUTS	OUTCOMES	IMPACT
<i>In order to accomplish the set of activities, we will need the following:</i>	<i>In order to address the problem, mental health consultation will accomplish these activities:</i>	<i>We expect that once accomplished these activities will produce the following evidence of service delivery:</i>	<i>Short Term: We expect that these activities will lead to the following changes in 1-3 years:</i>	<i>We expect that if accomplished these activities will lead to the following changes in 7-10 years:</i>
<ul style="list-style-type: none"> • Funding: To hire, train, support, and supervise qualified mental health consultants; to provide childcare, transportation, and food for parent trainings • Support from local schools (special education services), school districts, mental health programs, and family support programs • Community Partnerships: With early childhood programs who are willing and eager to work with mental health consultants, and with higher education system that educates professionals in early childhood mental health 	<ul style="list-style-type: none"> • Hire, train, and provide ongoing supervision to early childhood mental health consultants who will: • Identify and implement a mental health screening tool for children birth to 5 in early childhood settings • Screen, evaluate, and refer children who may experience challenging behaviors • Provide parenting support and education for parents of children with challenging behaviors • Support early childhood program staff who work with children who experience challenging behaviors • Assist parents and early childhood staff to promote positive behaviors and transform negative behaviors in young children through education and modeling. • Support early childhood programs integrating mental health best practices into their program activities 	<ul style="list-style-type: none"> • 100% of mental health consultants receive weekly supervision and regular training in early childhood mental health consultation • 100% of children in early childhood programs receive mental health screening • 100% of children and families identified as needing additional mental health services are referred by parents or teachers to mental health consultant • 100% of children and families identified as needing additional services are referred to appropriate community mental health services • Quarterly parent trainings provided by mental health consultant • Quarterly staff trainings per year provided by mental health consultant on early childhood mental health 	<ul style="list-style-type: none"> • Decrease in children's internalizing and externalizing behaviors in early childhood setting and at home • Decrease in parent and staff stress • Increase in early childhood staff knowledge of early childhood best practices • Increase in staff ratings of competence in working with children with challenging behaviors • Decrease in expulsion rate in early childhood settings • Increase in child attendance rate in early childhood settings <div> <p><i>Long Term: We expect that these activities will lead to the following changes in 4-6 years:</i></p> <ul style="list-style-type: none"> • Increase access to and availability of community resources for children with challenging behaviors • Increase in family and early childhood staff understanding of mental health services provided in early childhood settings • Increase in early childhood staff retention </div>	<ul style="list-style-type: none"> • Young children will exit early childhood programs with the social, emotional, and educational skills necessary to be ready to enter kindergarten • Improved community mental health services for young children and their families • Reduction in incidence and severity of mental health challenges for school age children

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Chapter Six

School-Based Mental Health Services

Comprehensive and Multi-Method Assessment of School-Based Mental Health Services

**Gloria J. O. Carpenter
Natasha Buchanan
Mary DePaola**

Introduction

Over the past decade, school-based mental health programs have received increased attention based on the growing need for more effective, collaborative systems, which promote the well-being and school success of all children and youth (Weist, Paternite, & Adelsheim, 2005). Ensuring that school-based mental health practices are effective, ongoing evaluations of empirically supported or evidence-based practices that are culturally competent and reflective of a strong commitment to family and community engagement should be a priority (Wandersman, 2003). Given limitations related to external validity and implementation challenges, program evaluators argue for combining different methods of evaluation (Chen, 2005). The use of comprehensive research designs allows for sufficient monitoring of internal and external factors to ensure program success.

This paper will discuss: (1) the strengths and weaknesses of using quasi-experimental designs, (2) the usefulness of this design in providing outcome data to schools and agencies regarding services and student performance, and (3) implications for informing public policy and strengthening community programs. Data from a collaborative program (Project PASS and Cincinnati Public Schools) will be featured to demonstrate the use of comprehensive program evaluation.

Strengths of Using Comprehensive Evaluation Methods

- A well-defined evaluation plan is critical to assessing the needs of students for appropriate identification and referral.
- A multi-method approach strengthens the validity of the data being collected.
- Perspectives from multiple informants enrich the data and the understanding of programs' strengths and limitations.
- Results and outcomes provide more information regarding the process of program delivery and how to improve programs, thus aiming for high scientific and stakeholder credibility.

Limitations of Using Comprehensive Evaluation Methods

- Programs will need a plan for resolving divergence in data sources (in the event of non-convergence among respondents about the impact of the program)
- Efficiency may be compromised to conduct a valid and robust assessment of the program.
- More resources may be needed to collect, manage and analyze data, including an administrative core to develop and manage evaluation protocols.

Example: A Collaborative Evaluation Approach Comprehensive Outcomes for Project PASS, a Talbert House School-Based Program

Background

Project PASS is a collaborative partnership with schools by which comprehensive and integrated social/emotional and behavioral health services are provided. The mission of the program is to provide flexible, strength-based, culturally competent, individualized and family-focused services to students and their families in the communities and school in which they live, to promote healthy behaviors, the development of life skills, and promote collaboration among the child-serving system. The program was developed based on: the School-Based Behavioral Health Project, the Public Health Prevention Model, and the Protective Factors/ Social Competence/ Strength-Based Model.

Project PASS is implemented in six Cincinnati Public Schools where academic, behavioral, and mental health challenges are prevalent. The evaluation plan is designed around seven targeted intervention/

prevention strategies: (a) Increasing Anger Management Skills; (b) Decreasing Aggression Rates; (c) Increasing Self-Esteem; (d) Increasing Social Skills; (e) Decreasing Behavioral Problems; (f) Improving School Performance; and (g) Increasing School Attendance Rates.

Data Management Plan and Database Design

Data are obtained using several measures, including the Anger Scale from the Parent, Facilitator, Teacher Behavior Checklist, the Ohio Scales (Ogles, Melendez, Davis, & Lunnen, 1999), survey questionnaires, school grades, etc. Data are collected by site coordinators and are submitted to *INNOVATIONS* of Cincinnati Children's Hospital, an independent evaluation team, for data entry, analysis, and summary. Currently, data have been collected on over 1,800 students for the 2004-2005 academic year, including 1,131 students receiving prevention or intervention services. Pre- and post-data were available on 794 of these students, numbers sufficient to ensure validity and statistical power in pre-post comparisons.

Results

Students in the program showed positive trends on attendance, proficiency test performance, and discipline. Over the four years that Project PASS has been in operations, attendance rates have increased, from 90.8% to 94.6%, and suspension and expulsion frequencies have decreased dramatically. Suspensions decreased from 221 during the 2001-2002 school year to 8 in 2004-2005. During this time period, expulsions decreased from 18 to 2. Across the six program sites (and related to the seven program goals), outcome data appear in Table 1.

Qualitative data were also collected to assess principal, parent, and student perspectives on the mental health services provided through Project PASS. Parents acknowledged a change in their child's academic and behavioral functioning, and credited Project PASS with being essential in this progress. Principals responded to several questions indicating that the program helps reduce discipline referrals, promotes social consciousness, and higher achievement. In addition, the Ohio Scales were completed on students in the highest risk categories. Data highlight the clinical challenges and needs of these high risk students. The scores on the Ohio Scales (through May, 2005), across participants and time points are shown in Table 2.

Table 1
Aggregate Student Outcomes for Six Program Sites (2001-2005)

<i>Program Target</i>	<i>Outcome</i>
Students showing an increase in Anger Management skills and Conflict Resolution.	89.9%
Students improving on Problem Behaviors (as rated by teacher, parent, and group facilitator).	74.4%
Students showing an increase in Caring and/or a decrease in Bullying	72.7%
Students successfully resolving peer conflicts through Peer mediation	90.1%
Students improving in grades from the first quarter to the fourth academic quarter.	93.3%

Table 2
Ohio Scale Scores for Youth in High Risk Category

<i>Rater</i>	<i>Scale</i>	<i>Project PASS Mean (SD)**</i>	<i>Community Sample* Mean (SD)</i>
Youth	Problem Severity	24.7 (14.7)	18.18 (15)
	Functioning	57 (11.5)	61.07 (13)
	Hopefulness	10 (4.6)	9.6 (3.8)
	Satisfaction	9.2 (4.6)	N/A
Parent	Problem Severity	27.5 (14.5)	10.3 (9.9)
	Functioning	46.1 (13.6)	64 (12.7)
	Hopefulness	11.6 (4.3)	8.3 (3.5)
	Satisfaction	8.6 (5.1)	N/A
Worker	Problem Severity	23.2 (16.3)	17.6 (9.6)
	Functioning	45.9 (13.5)	67 (9)

* Community Sample data taken from Ohio Scales User's Manual (Ogles, Melendez, Davis & Lunnen, 1999)

Conclusions and Implications for Public Policy

This summary highlights an example (Project PASS) of how collaboration and evaluation is critical to assessing the impact of a school-based mental health program and the needs of its participants. The steps utilized in this comprehensive evaluation include (1) Collecting data in order to conduct a “needs assessment” on students referred to the program, (2) Administering quantitative pre-post tests, standardized measures, and school data from the District, (3) Collecting qualitative survey data to assess student, parent, and principal satisfaction and additional data on students identified as “high risk,” and (4) Implementing an evaluation design to assess over 1,800 students (in 2004-05) across six schools. The evaluation plan has been refined over the past four years to ensure feasibility and data integrity. In summary, data reveal that the program is achieving its end goal which is to successfully serve the mental health needs of “at risk” and “high-risk” youth. Results are highlighted by positive trends in student attendance, discipline, and social skills have been observed. In addition, the agencies and the schools have been able to use their data to increase funding of school-based mental health programs as the number of schools that offer mental health services has increased dramatically over the past four years.

Project PASS’ experience highlights the significance of a comprehensive evaluation model to provide outcome data for stakeholders, agency workers, parents, and students. Qualitative analyses inform individual treatment services, while quantitative analyses provide outcomes for interventions and programmatic services targeting at-risk factors and behavioral and mental challenges. These schools and agencies may be able to utilize a similar model to demonstrate the effectiveness of school-based mental health services and to leverage data for public policy and advocacy efforts.

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Measuring the Effectiveness of School-Based Interventions for Children with Serious Behavior Problems

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Acknowledgements: The National Behavior Research Coordination Center has been funded with Federal funds from the U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, under contract number ED04CO0040. This content does not necessarily reflect the views or policies of the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.

Introduction

The roots of the assessment process that underlie many behavioral interventions can be found in applied behavior analysis (Gresham, Quinn, & Restori, 1999; Sugai, Horner, & Sprague, 1999). In the past, treatments of students with emotional and behavioral disabilities have focused primarily on the topography of the deviant behavior, and interventions centered mainly on the manipulation of contingency variables (Gable, 1996). Token economies, behavioral contracts, social reinforcement, and point-and-level systems are some of the resulting strategies frequently used with children with behavior problems, but they have not been shown to be widely effective, and the outcomes for these children have not been good (Cullinan, Epstein, & Sabornie, 1992; Greenbaum et al., 1996; Lipsey & Wilson, 1993).

However, there is literature available on effective strategies for children with emotional and behavioral disabilities (e.g., Forness, Kavale, Blum, & Lloyd, 1997) that gives increasing importance to a three-tiered approach to prevent and remediate behavior problems: (1) strategies to reduce the likelihood of behavior problems in the general population (e.g., communicating clearly about expected behaviors and the consequences of violating them, effective classroom management); (2) strategies to screen for behavior problems and provide behavioral and academic support (Coie, 1994; Dishion & Andrews, 1995; Walker, Colvin, & Ramsey, 1995; Walker et al., 1996); and (3) interventions to keep the inappropriate behavior of students with chronic behavior problems from escalating through intensive and individually tailored support services and systems of care (Walker et al., 1996). Several studies suggest that this multitiered approach in schools is effective in reducing behavior problems—e.g., a longitudinal study of the Regional Intervention Program (Strain & Timm, 2001) and studies of the Effective Behavior Supports program (Sugai & Horner, 1994) and First Step to Success (Walker et al., 1998). This research has begun to compile a “tool kit” of strategies or program components that can be used to build more effective interventions for students with emotional disturbances and behavior problems.

Although research conducted in the last several years suggests some potentially promising approaches to behavior interventions, much of it lacks the rigorous, experimental base that is the “ideal method” (National Research Council 2002, p. 109) for determining the true efficacy and effectiveness of interventions. A commitment to increasing the scientific rigor of education research and, thus, its potential for improving practice and student outcomes has been codified in the Education Sciences Reform Act of 2002. This law has sparked the reorganization of federally sponsored education research and the formation of the Institute of Education Sciences (IES) and its *What Works Clearinghouse*—an entity charged with screening education research to identify studies that meet standards of scientific rigor, including an experimental design, and, therefore, whose results can be trusted to identify “what works” in improving student outcomes.

In 2004, the Office of Special Education Programs (OSEP) funded four Behavior Research Centers (BRCs) and the National Behavior Research Coordination Center (NBRCC) to investigate the effectiveness of interventions for children with serious behavior problems (grades 1-3 when interventions begin). Since then, the funding has transferred to the National Center for Special Education Research in the Institute of Education Sciences (IES). The BRCs, in collaboration with NBRCC, are conducting randomized clinical trials of behavioral interventions that were found to be efficacious in previous research. The four BRCs are located at the University of South Florida (in collaboration with the

University of Colorado at Denver), Vanderbilt University (in collaboration with the University of Minnesota and Virginia Commonwealth University), the University of Washington, and the University of Oregon. The purpose of this presentation summary is to describe the interventions and research of the four BRCs; discuss how the NBRCC will coordinate, synthesize, and conduct analyses across the BRCs; and propose a research agenda for the next several years.

Methods

This section will provide a brief description of the interventions being tested and researched in each of the four BRCs and the purpose of the NBRCC.

University of Oregon BRC

The University of Oregon BRC is evaluating the First Step to Success intervention, a three-month process that incorporates three components in an effort to improve the behavior and academic performance of students with severe behavior problems. Components include universal screening using the Systematic Screening for Behavior Disorders (SSBD; Walker & Severson, 1990) tool, a school component, and a family-based intervention. Many children served are from at-risk environments, and the intervention is designed to help students learn behaviors and approaches to learning that will lead to school success. Simultaneously, parents are taught how to teach their children skills for school success. Behavior coaches serve as liaisons between the home and the school. The intervention is based on the theory that a preventive approach (rather than a reactive one) to early signs of poor social adjustment using secondary prevention goals and involving both teachers and families to support students' behavior change will more effectively transform emerging severe behavior problems.

First Step was first developed via a four-year Office of Special Education Programs (OSEP) research grant that ran from 1992 to 1996 and has been broadly recognized as a promising early intervention by both researchers and practitioners. Over the past decade, the program has been extensively researched by its developers and other researchers in the field. To date, nine studies of the program's efficacy and effectiveness have been conducted. These studies have involved differing methodologies (single-subject research, randomized control) and have been conducted by the program's developers (Golly, Stiller, & Walker, 1998; Walker et al., 1998), as well as by other investigators (Beard-Jordan & Sugai, in press; Overton, McKenzie, King, & Osborne, 2002). Collectively, these studies provide evidence that First Step (a) consistently produces effect sizes above .80, (b) shows acceptable persistence of behavioral gains in a majority of cases, and (c) has been shown to work effectively with diverse learners in rural, suburban, and urban school-community settings.

University of South Florida BRC

The University of South Florida BRC, in collaboration with the University of Colorado at Denver is evaluating the Prevent-Teach-Reinforce (PTR) intervention. PTR is modeled after a positive behavior supports approach and is a team process through which an individualized intervention is developed and implemented. PTR is based on the theory that well-conducted functional behavioral assessments and sound positive behavior support plans for children with severe behavior problems will: (a) decrease the occurrence of maladaptive target behaviors, (b) increase the occurrence of appropriate prosocial behaviors, and (c) consequently produce positive outcomes in the areas of behavior, academics, and lifestyle changes for the child and family.

Research on functional behavioral assessment clearly illustrates the efficacy of this strategy and other functionally based interventions. Recent reviews of the literature have demonstrated a broad effect of functional behavioral assessment, including an increase in reinforcement-based interventions such as teaching replacement behaviors that result in the same consequence (e.g., access to attention) as problem behavior and a decrease in the reported use of punishment procedures (Carr et al., 1999; Kahng et al., 2002; Pelios, Morren, Tesch, & Axelrod, 1999). Research suggests that effective multicomponent

interventions include ecological changes to prevent problem behavior from occurring, educative strategies to teach new skills to replace problem behavior, and contingency management to reinforce the occurrence of adaptive behavior (e.g., Bambara & Kern, 2005; Knoster, 2000; Lucyshyn, Horner, et al., 2002). The PTR intervention is a method of assessment that draws directly on the large research base on functional assessment, is applicable to the majority of students exhibiting problem behavior, and can be conducted by individuals faced with constraints on time, assistance, setting, and expertise.

University of Washington BRC

The University of Washington BRC is evaluating the Check, Connect, and Expect (CC&E) program. CC&E is based on the theory that relationships with school staff, reinforcement of clear expectations and social behavior, and engagement in school activities contribute to improved academic and social outcomes of students. Therefore, the intervention focuses on improving students' positive relationships and prosocial behavior via increased school staff reinforcement and feedback. Students not completely successful with CC&E will receive an additional intensive, functionally based intervention developed by a district behavior specialist, a behavior coach, and the classroom teacher. The intervention planning will be driven by the needs of the individual, but it also will have a standardized procedure, described below.

The Check, Connect, and Expect (CC&E) intervention being evaluated by the Washington BRC combines two interventions that have been found to be efficacious: the Check & Connect program (Sinclair, Christenson, Evelo, & Hurley, 1998) and the Behavior Education Program (Crone, Horner, & Hawken, 2004). Both programs rely on the use of important practices that have theoretical and empirical support for students with or at risk of emotional disturbance. These include: (a) daily supervision and monitoring, (b) frequent feedback on academic and social performance, (c) point systems that monitor social goals, (d) reinforcement for meeting criteria, (e) the use of a positive adult role model to support the student, and (f) social skills instruction when necessary.

Vanderbilt University BRC

The Vanderbilt BRC's secondary-level, classroom-based intervention is directed toward students receiving special education services in self-contained classrooms and toward students in general education classrooms who are at risk. Components include: (1) academic tutoring in reading; (2) teacher self-monitoring of classroom management; (3) the Good Behavior Game for improving students' classroom behavior; and (4) behavior consultants in classrooms 3-5 hours per week. These interventions are based on the theory that student behavior is directly affected by classroom environment and practices. Training and motivating teachers to engage in practices known to improve the classroom environment will result in improved student behavior and learning. Academic success hinges on reading skills and will be enhanced by direct reading instruction and indirectly by improved student behavior.

Evidence from several meta-analyses of school-based interventions (Stage & Quiroz, 1997; Wilson, Gottfredson, & Najaka, 2001; Wilson, Lipsey, & Derzon, 2003) demonstrates that under controlled research conditions, school- and classroom-based interventions for children with severe behavior disorders can be efficacious. It appears that structured school-based interventions that include the use of behavioral or cognitive-behavioral treatment methods, treatment manuals, and monitoring of treatment integrity are likely to produce the most successful results. The Vanderbilt BRC will research the effectiveness of combining several efficacious interventions: the Classroom Organization and Management Program (COMP; Evertson & Harris, 2003); teacher self-monitoring of use of praise statements and opportunities for students to respond (Sutherland & Wehby, 2001a); Horizons Fast Track A-B (Engelmann et al., 1997); an accelerated Direct Instruction reading program; and a peer group contingency intervention, the Good Behavior Game (Barrish, Saunders, & Wold, 1969; Kellam, Ling, Merisca, Brown, & Ialongo, 1998).

National Behavior Research and Coordination Center

The NBRCC is funded to work closely and effectively with the four BRCs to:

- Develop and implement a data coordination plan—determine uniform measures of context, implementation, participation, outcomes, and satisfaction appropriate to the interventions being tested.
- Develop and implement a data synthesis plan—develop and support BRC staff in the use of a Web-based data system that will collect core data from each site which will be used in the cross site analyses.
- Develop and implement a data analysis plan—determine research questions regarding the context, implementation, participation, outcomes, and satisfaction of each intervention; how these factors compare across interventions; and how these factors vary for students, settings, and schools with different characteristics.
- Develop and implement a dissemination plan—develop a multifaceted dissemination plan to bridge the research-to-practice gap by reaching diverse practitioner, policy, consumer, advocacy, and research communities.

Results

The four BRCs are in the midst of collecting baseline data. Participants will be assessed at baseline, post-test, and one-year followup through the 2007-08 school year.

Discussion

Under the Individuals with Disabilities Education Act (IDEA) and the No Child Left Behind Act (NCLB), schools have an obligation to support students with disabilities to ensure they achieve positive academic and behavioral outcomes. IDEA recognizes that learning may be severely impeded for children with challenging behaviors and provides for students with disabilities to receive appropriate services that will foster their educational achievement.

This presentation summary describes IES-funded research using randomized control group designs to investigate the effectiveness of four school-based interventions for children who exhibit serious behavior problems. The BRCs will analyze data on their evidence-based interventions to assess their impact on child behavior and academic achievement. The National Behavior Research Coordination Center will coordinate, synthesize, and analyze comparable data across BRCs to foster the dissemination of knowledge on effective practices to consumers, practitioners, and policy-makers. At the conclusion of the BRC studies and the cross-site analyses conducted by the NBRCC, additional information about the effectiveness of behavioral interventions for children will add to the extant knowledge base in the field, which subsequently should help inform decision-makers and consumers and improve outcomes for children behavior who exhibit serious behavior problems.

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School-Based Wraparound: Child and Family Outcomes

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This paper was produced in part with funds from CMHS grant SM52273-06-2.

Introduction

Upon receipt of a Center for Mental Health Services (CMHS) grant in 1998, a school mental health initiative was implemented in 21 schools in the Appalachian Mountains of Kentucky. Termed the Bridges Project, this collaborative model focused on promoting partnerships among families, educators, and service providers to better meet the needs of youth with emotional and behavioral challenges and their families. The purpose of the project was to build upon and enhance Kentucky's existing system of care in three rural Appalachian mental health regions in eastern Kentucky. This area of the state possesses characteristics that differ dramatically from the rest of the state, including high rates of poverty, unemployment, and illiteracy. Due to the rural nature of the region, lack of transportation, limited community services and resources, and a shortage of human services professionals serve as barriers to effective service delivery. Despite these barriers, the Bridges Project sought to provide services in a way that acknowledged and built upon the strengths of the Appalachian culture.

Acknowledging schools as a critical partner in system of care efforts, the primary feature of the initiative centered upon developing and evaluating a school mental health service delivery model in which school-based student service teams (SSTs), consisting of a service coordinator, family liaison, and intervention specialist employed by a community mental health centers were located within schools. In collaboration with school staff, the SST facilitated the implementation of a continuum of positive behavior intervention and supports (PBIS; Sugai & Horner, 1999), a systems approach focused on building the capacity of schools to teach and support positive behavior of all students. PBIS includes procedures and processes intended for (a) all students, staff, and school settings; (b) non-classroom settings within the school environment; (c) individual classrooms and teachers, and (d) individual student support for the students who present the most challenging behaviors. For youth with the most challenging behaviors, a school-based wraparound approach was used. Wraparound is characterized as a strengths-based process through which intensive, individualized supports are designed, implemented, and monitored. Facilitated by school-based staff, the process begins by identifying the perspectives and goals of the family and the school, then blending these perspectives to prioritize action planning across life domains. Action plan strategies build on youth, family, school, and community strengths, in combination with function-based positive behavioral interventions.

This paper describes the characteristics, outcomes, and services received by youth with emotional and behavioral challenges and their families participating in a school-based wraparound process. Given the school-based nature of the program, particular consideration is given to the examination of educational functioning over time. Policy, program, and practice implications are discussed.

Methodology

Descriptive, outcome, and service experience information was gathered from youth and their families who participated in the school-based wraparound process. Upon referral and acceptance to the Bridges Project, the caregiver completed an intake process through which demographic information, risk factors, presenting problems, and previous service use were gathered. Following the intake process, caregivers and youth were invited to participate in the CMHS national longitudinal outcome study. If consent was obtained, SSTs conducted an intensive structured interview with the caregiver and/or youth (11 and older) at entry into the program and every six months thereafter for up to 36 months. The structured interview was comprised of self-developed instruments as well as commonly used standardized instruments. Descriptive, service experience, and education data were captured using instruments

developed specifically for the CMHS national longitudinal outcome study. Youth outcome measures included the Child Behavior Checklist (CBCL; Achenbach, 1991), which assesses youth problem behavior; the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990), used to measure youth functioning across life domains; and the Behavioral and Emotional Rating Scale (BERS; Epstein & Sharma, 1997), an assessment of youth emotional and behavioral strengths. The Family Assessment Device (FAD; Epstein, Baldwin, & Bishop, 1983) was used to capture family functioning from the perspective of both the caregiver and youth, while the Caregiver Strain Questionnaire (CGSQ; Brannan, Heflinger, & Bickman, 1998) assessed caregiver perception of their level of strain.

Results

Descriptive Information for Youth and Families

For those families and youth for whom descriptive information captured at intake was available ($N = 496 - 631$), the majority were males (67%) with an average age of 11.3 years at program entry. Mirroring the demographics of the Appalachian region, most youth were White, non-Hispanic (97%). Ninety-three percent had annual family incomes below \$18,850, and 87% were covered by Medicaid. These youth also experienced numerous child and family risk factors. About one in five had been physically abused, and 15% had run away at least once in their lifetime. One in two youth had a parent with a history of mental illness and/or substance abuse, while 40% had witnessed family violence and 30% had a parent who had been convicted of a crime.

Due to the nature of the project, most youth were referred by either school or mental health agency personnel. Most youth were referred for multiple presenting problems ($X = 4$), with the most common being noncompliance (51%), hyperactive-impulsivity (43%), attention difficulties (40%), academic problems (39%), poor peer interactions (38%), and physical aggression (36%). Given their presenting problems, most were diagnosed with externalizing psychiatric disorders, such as Attention Deficit Hyperactivity Disorder (33%), Oppositional Defiant Disorder (30%), and Disruptive Behavior Disorder (12%). One in five presented with a Mood Disorder, and 15% presented with an Adjustment Disorder. In addition to having a diagnosable mental health disorder, 37% also experienced chronic physical illness, mostly asthma, allergies, and frequent or severe headaches.

Services Received by Youth and Families

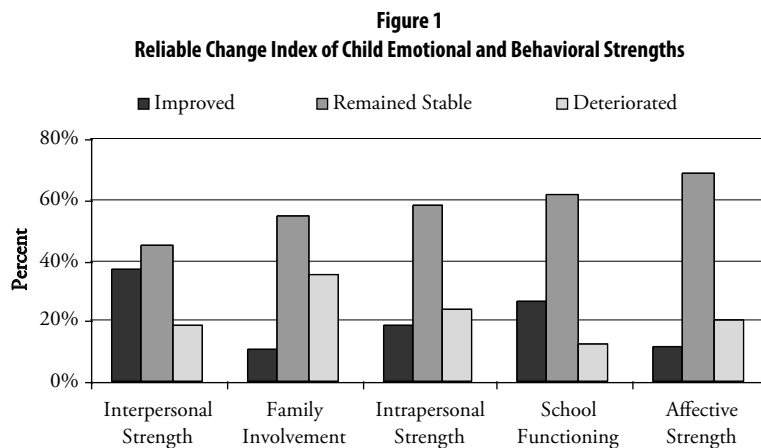
Service use data were captured at six months post entry into the program and every six months thereafter for up to 36 months for those consenting to participate in the CMHS national longitudinal outcome study. Youth and their families received a decreasing number of services over time, with an average of five services delivered during the first six months in the program and four services at 30-month follow-up. There appeared to be a balance in the number of traditional outpatient services and support services delivered, with an average of two services in each category. Individual therapy (81%), medication monitoring (54%), and group therapy (33%) were the most commonly received traditional outpatient services. Case management (65%) and caregiver/family support (35%) were the most commonly received support services. Residential services were used infrequently.

Youth and Family Outcomes at 30-Month Follow-Up

Outcomes were assessed across life domains at program entry and every six months thereafter for youth and families consenting to participate in the longitudinal outcome study. For those with complete education data ($n = 50$), less than half (46%) had an individualized education program (IEP) in the six months prior to intake, with the majority identified as having an emotional or behavioral disability and/or learning disability. The percentage of youth identified and served in special education increased by 10% between baseline and 30-month follow-up. About one in three improved their grade point average between intake and 30-month follow up ($n = 40$). Youth ($n = 25$) receiving school-based wraparound experienced fewer detentions and expulsions following entry into the program. Between baseline and 30-

month follow-up, the percentage of youth who received detention decreased from 36% to 24%, and the percentage of youth expelled decreased from 12% to 4%. The percentage of youth receiving a suspension increased slightly from 29% to 33%.

At 30-month follow-up ($n = 60$), a reliable change index (Jacobson & Truax, 1991) of total problem behaviors indicated that the majority of youth (70%) experienced decreased symptomology over time. Symptomology remained stable for 22% and worsened over time for 8%. While the average internalizing score ($X = 58$) was in the subclinical range at 30-month follow up, the average externalizing score ($X = 67$) remained in the clinical range, attesting to the chronic and severe nature of the problems these youth experience. Youth ($n = 34$) functioning improved over time as well. At intake, the average CAFAS Total Score was 107, while at 30-month follow-up the average decreased to 70. Increased emotional and behavioral strengths were most apparent in the interpersonal and school functioning domains (see Figure 1).



Family outcomes included measures of family functioning and caregiver strain. A reliable change index (Jacobson & Truax, 1991) for 57 families revealed that 37% experienced less global strain at 30-month follow-up, and 44% reported that their level of strain remained stable. The remaining (18%) experienced greater strain. While 50% of caregivers ($n = 30$) reported a deterioration in general family functioning between program entry and 30-month follow-up, only 14% of youth ($n = 14$) reported decreased functioning. Likewise, only 23% of caregivers reported improved family functioning compared to 43% of youth.

Discussion

In recent years, schools have begun to serve as a host environment for the delivery of integrated and coordinated services, including the provision of school-based wraparound. The results presented here support the contribution of school mental health services to improved clinical *and* school functioning of youth with emotional and behavioral problems; however, a less positive impact was realized for family outcomes, such as caregiver strain and family functioning. It is vital that mental health services research include the examination of academic as well as clinical outcomes when assessing service impact. Additionally, these findings indicate that greater attention must be given to the design of services that result in positive outcomes for the family, such as evidence-based family therapy to improve family functioning and effective caregiver supports to diminish caregiver strain. While the delivery of school-based wraparound shows promise as a strategy to address psychosocial barriers to learning, greater attention must be given to determine which services and supports contribute to improved family outcomes.

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Relationships among Model Fidelity, Dosage, and Student Outcomes in High Risk Elementary Schools

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Acknowledgements: This project was funded and supported by a community partnership that included United Way of the Capital Area, Hartford Public Schools, Hartford Federation of Teachers, The Village for Families and Children, Inc., and Girls and Boys Town.

Introduction

When effective interventions are implemented with a high degree of fidelity, positive outcomes occur (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). When assessing program fidelity, one is examining whether curricula are being provided as designed; that is, are teachers and administrators doing what they were trained to do. Unfortunately, many schools fail to assess whether academic and behavioral initiatives are delivered as intended; however, those that do, tend to find that lower adherence to the intervention protocol results in poorer outcomes for students (Dane & Schneider, 1998).

This study examined the effects of low and high levels of fidelity with the Girls and Boys Town Well-Managed Classroom (GBT WMC), a school-wide classroom management program, on Hartford (CT) Public Schools elementary students' classroom behavior and suspension rates.

Method

Participants

Fifty-six teachers from eight elementary schools participated in the study. Participating schools had an average enrollment of 535 students. Almost all students were African American or of Hispanic descent and qualified for the free/reduced price meal program. Close to half of students lived in homes where English was not the primary language. Less than 22% of 4th and 6th graders in participating schools met state goals on all three state standardized tests.

Intervention

All teaching, support, and administrative staff at participating schools were trained in the Girls and Boys Town Well-Managed Classroom intervention (GBT WMC). On-site technical assistance, coaching, and evaluation followed training. Staff training included information and practice with (a) establishing clear classroom expectations for student behavior, (b) preventing student disruptive behavior, (c) blending social and academic instruction, (d) reinforcing (verbally) student prosocial behavior and academic performance, (e) correcting student misbehavior effectively, and (f) providing daily social skills instruction. Additional training for administrators included ways to implement a school-wide social skills curriculum, intervene with disruptive students, and use data to support building-wide change.

On-site technical assistance and coaching efforts were focused on increasing implementation and adapting the GBT WMC to meet needs of staff and students. On five occasions during the school year GBT consultants conducted structured and unstructured observations in classrooms and common areas of the building. Observation data were shared with teachers and administrators; strengths and areas in need of improvement were discussed; and strategies were developed that targeted classroom and student issues.

Design and Measures

Design. A posttest-only comparison group design was used. Dependent measures included student off-task rates during class instruction and student out-of-school suspension rates.

Fidelity measures. GBT WMC level of fidelity was determined based on data collected during 16 minutes of direct observation in each participating classroom. During observations, the observer sat in the back of the room and had no interaction with the teacher or students. Twelve minutes of each

observation involved tracking the occurrence of key GBT WMC components, i.e., teacher use of behavior and academic verbal prompts, teacher use of verbal praise for student academic responses and prosocial behavior, the ratio of teacher praise to correction of student misbehavior, and the percent of student compliance with teacher correction (a proxy measure for use of effective correction strategies taught during the WMC training).

Dosage and assignment to low and high fidelity groups. Teachers were assigned to either a low or high program fidelity group based on rates of observed use of GBT WMC components (i.e., the dosage of GBT WMC). The bottom and top third of teachers (i.e., those providing the lowest and highest combined dosage of praise, prompts, effective correction, and praise-to-correction ratios) were assigned to the low implementation group ($n = 20$) and high implementation group ($n = 18$), respectively.

Student off-task behavior. Off-task rates were determined via direct observation in the classroom. At every one-minute interval during the observation, the observer scanned the room and recorded the number of students who were off-task. Student off-task behavior was operationally defined as *not* visually, verbally, or kinesthetically engaged in the academic lesson.

Inter-rater agreement. A second observer was present in 16 of the 56 classrooms (29%) to assess inter-rater agreement. Inter-rater agreement was 100% for assigning teachers to low ($< 10\%$ of students off-task) and high ($\geq 20\%$ of students off-task) levels of disruptive student behavior and 81% (13/16) for assignment to low or high program fidelity group.

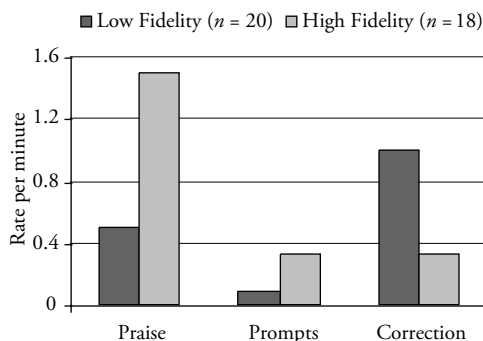
Suspension rates. Out-of-school suspensions (OSS) reported to the district and state were summarized for each participating classroom.

Results

Fidelity and dosage

High fidelity teachers provided a greater dosage of the intervention than low fidelity teachers. On average, high fidelity teachers praised students three times more often (3 per 2 min vs. 1 per 2 min), prompted students four times more often (1 per 3 min vs. 1 per 12 min), and corrected students three times less often (1 per 3 min vs. 1 per 1 min) than low fidelity teachers (Figure 1). High fidelity teachers had, on average, a praise to correction ratio of 4:1 while low fidelity teachers had a 1:2 ratio; that is, teachers in the low fidelity group corrected students twice as often as they praised them. On average, students in high fidelity classrooms complied with teacher correction 94% of the time while students in low fidelity classrooms complied on 51% of the occasions.

Figure 1
A Comparison of Key GBT WMC Concepts



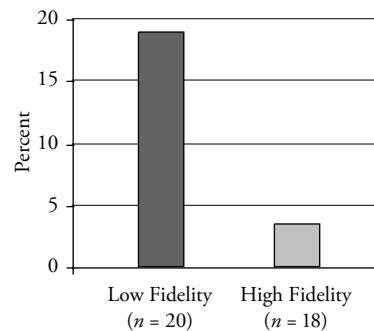
Student off-task behavior. Results indicated an inverse relationship between program fidelity level and student behavior problems. On average, low fidelity teachers had 5.5 times more students who were off-task in their classrooms than high fidelity teachers (Figure 2).

Suspension rates. Low fidelity teachers had, on average, eight suspension events while high fidelity teachers had four suspensions during the school year. Students in low and high fidelity classrooms were suspended an average of three and two days per suspension, respectively.

Conclusions

Initial results from this study provide support for a relationship among program fidelity, dosage, and improved outcomes. Those teachers who provided a high dosage of the GBT WMC had more students on task and fewer students suspended than teachers providing a low dosage of the intervention. These findings are preliminary. Alternative explanations for differences among fidelity, dosage, and outcomes, such as teacher quality before their GBT WMC training or assignment bias that resulted in well-behaved students in high fidelity teachers' classrooms, have not been ruled out. Nevertheless, results are encouraging and provide support for studies that have found relationships between intervention fidelity and school based outcomes. Future studies should focus on examining other differences between low- and high-fidelity teachers; strategies administrators, district staff, and outside consultants can use to help low-fidelity teachers provide effective classroom management; and the effect of implementation of the Girls and Boys Town Well-Managed Classroom on academic performance.

Figure 2
Mean Percent of Off-Task Students



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Risk Status and the Differential Effectiveness of Urban School-Based Mental Health Services

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Acknowledgements: The author wishes to express thanks to the Ohio Department of Mental Health for funding this research, and to Shenyang Guo, PhD, Associate Professor, School of Social Work, University of North Carolina, for conducting the HLM analyses.

Introduction

We are entering an era of unsurpassed interest in supporting schools through school-based mental health services. Nationally, increased accountability mandates (i.e., No Child Left Behind) responsive to children with emotional and behavioral disabilities have encouraged educators and mental health professionals to develop school-based models to deliver mental health services. In Ohio, for instance, the Ohio Department of Mental Health (ODMH) and the Center for Learning Excellence have joined together to develop a statewide network of support for the improvement and expansion of mental health services in Ohio schools. Such service models afford opportunities to achieve high penetration and retention rates with at-risk youth earlier in their developmental course. Unfortunately, much of the research from school-based initiatives lack explanatory power because the data elements, while consistent, are not linked to each other, and not linked to individual children, specifically measuring changes in the mental health status of those with serious emotional disturbances.

In 2002 the Ohio Department of Mental Health funded a study (ODMH #04-1201) to learn more about the utility of urban school-based mental health service delivery models that are funded through routine public sector sources such as Medicaid. Eight years (1995-2003; $N = 2,449$) of behavioral rating data were analyzed on youth, consecutively referred to as the Beech Brook School Based Mental Health Program. Beech Brook is a large child-serving agency that has been providing school based mental health services since 1975. The study sample encompasses school-referred children from over 30 Cleveland schools who were enrolled in the Beech Brook school based program at any point in time during the period from 1995-2003. The program mental health staff provided individualized treatment plans to meet the needs of each child in the program, including individual, group, and family assessment and treatment interventions. The interventions were designed to improve social competence and reduce symptoms of emotional/behavioral disturbance that interfere with daily living, personal development, and school performance. Individual interventions included assistance in crisis situations, assessment, linkage, coordination/referral of children and families to other community based services, and training and consultation to teachers and other school personnel. Children discussed issues regarding their home life and progress toward treatment goals, and received assistance in crisis situations when they are unable to function due to conflicts with others. Group interventions were designed to promote the development of interpersonal and community coping skills, improve symptom monitoring, and assist in the self-management of mental health symptoms. The children were divided into small groups consisting of children with similar goals and issues. The effects of feelings and behaviors that interfere with daily living and personal development were recognized, the child's awareness of how these issues affect others was discussed, and alternative coping strategies were identified.

Beech Brook is one of six agencies now providing urban school based mental health services in over 100 schools through a Cleveland consortium in a developing system of care initiative. Collectively, this urban school based mental health service delivery consortium provides a formidable platform for successfully achieving high service penetration rates to at-risk youth. In 2004, the Beech Brook program alone served approximately 800 youth, or 6.7% of the 11,851 children in Cuyahoga County's public mental health system.

Method

Cross-sectional and longitudinal statistical analyses were used to describe and compare changes in the psychiatric status of youth. Child psychiatric symptomatology and behavioral functioning is measured using the Devereux Scales of Mental Disorders (DSMD; Naglieri, LeBuffe, & Pfeiffer, 1994). The DSMD is the primary research instrument administered at intake and every 90 days thereafter while youth were enrolled in services. The DSMD is a 111-item standardized behavior rating scale designed to evaluate behaviors related to psychopathology in children and adolescents. The DSMD was specifically chosen because of its connection to DSM-IV criteria. The instrument has three composite scores: (a) Externalizing (conduct disorder and attention deficit hyperactivity disorder); (b) Internalizing (depression and anxiety); and (c) Critical Pathology (acute and autistic behaviors), each made up of two subscales. The DSMD total and composite scores have excellent internal reliability (e.g., Cronbach's alpha of .97 for the Total Scale) and test-retest reliability (.96 for the Total Scale). The DSMD uses both teacher and parent raters. A total score of 60 has been empirically determined to be the best cut-score for differentiating clinical from non-clinical samples. Generally DSMD *t*-scores can be interpreted as follows: 40-55 = *Average*; 56-59 = *Borderline*; 60-69 = *Elevated*; and 70+ = *Very Elevated*.

A subset of the 2,449 school-based mental health program children ($n = 626$) received only assessment and consultation services. These children were not seen for continued treatment which included ongoing DSMD ratings at 90 day intervals. DSMD ratings are available for 1,823 unique children enrolled from November 5, 1995 to December 19, 2003. There are over 8,000 DSMD ratings in the data base. Of the children who have two or more parent ratings, there are 4,626 ratings for 1,197 children. Each child has an average of 4.68 ratings made by parents and/or teachers.

Results

The sample contains descriptive data on 2,449 children assessed by mental health staff. Of these children, 1,992 (81.5%) are African American; 358 (14.67%) are Caucasian; 15 (.6%) are Hispanic; 7 (.3%) are Native American; 3 (.1%) are Asian; 11 (4%) are classified as Other; and approximately 1.4% are unknown. The sample includes more males (72.2%) than females. The mean age at the first rating for this sample is 9.74 years old ($SD = 2.69$).

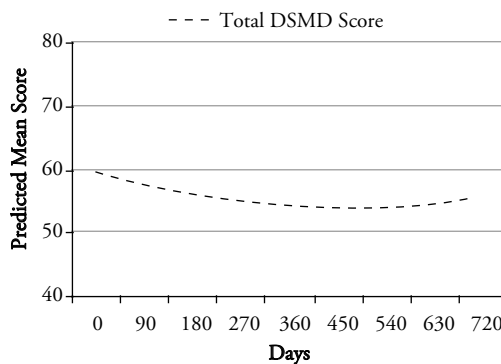
Results showed that upon referral, 70.6% of children rated by parents and 76.6% of children rated by teachers, scored in the Borderline or above range (> 55) on the conduct subscale of the DSMD, with more than 35.5% of parent rated children and 30.9% of teacher rating children scoring a 70 or above, or in the Very Elevated range of clinical impairment. Results further showed that upon referral, 62.8% of children rated by parents and 71.1% of children rated by teachers, scored in the Borderline or above range (> 55) on the depression subscale of the DSMD, with more than 27.9% of parent rated children and 29.4% of teacher rating children scoring a 70 or above, or in the Very Elevated range of clinical impairment.

Initially, two series of paired *t*-tests were conducted, selecting subjects who have at least two ratings either from their parents (i.e., caretakers) or teachers, or both. Findings indicate statistically significant improvements for youth served in the program by both parent ($M = 60.65$ (13.34) vs. 56.10 (13.50); $t = 12.49$, $df = 1196$; $p = .000$) and teacher raters ($M = 59.94$ (10.66) vs. 57.98 (10.88); $t = 12.39$, $df = 924$; $p = .000$). The mean change difference in parent score was 4.55 points, the mean difference in teacher score was 1.96 points.

While paired *t*-tests are often used as a first step to assess pre/post change in agency settings, they are limited in providing a thorough and consistent picture of change. This study will utilize more sophisticated analyses to examine change scores, including analyses of key client and service characteristics that may predict differential change outcomes. Preliminary analyses using hierarchical linear modeling (HLM) included children who had at least two rating scores. The mean number of ratings was 3.9, and the median was 3. Based on the rating dates, investigators calculated statistics about

children's length of stay in the program. The median length of stay was 262 days. The distribution of length of stay in the program is as follows: 61.1% stayed in the program for one year, 27.8% stayed for two years, and 11% stayed for more than two years. Since the majority of children (88.9%) stayed in the program less than two years, a two-year time period was selected as the study observation window to show the change of behavioral measures over time in graphic presentations. All HLM models showed a quadratic change. Figure 1 depicts the overall change for the total DSMD score, encompassing the internalizing, externalizing, and critical pathology dimensions. The observed mean total score of the study sample at baseline was 61.06 ($SD = 13.51$), and the same mean score at the last rating was 56.52 ($SD = 13.81$). Clearly, children's mean total score decreased over time. As Figure 1 shows, the change trajectory was curvilinear. In general, the model-predicted mean trajectory of the study children constantly declined in the first year, and reached to a lowest point of 54.14 on the 450th day; after that, the predicted mean trajectory started to increase.

Figure 1
Model-based Prediction of DSMD Total Score Over Time



Conclusion

Successful school-based models, with the ability to achieve high service penetration rates using routine and publicly supported funding mechanisms, are in critical demand. Further investigation needs to continue to understand how program effects may be related to differences in client and service characteristics. Clearly, control groups need to be utilized in such studies in order to truly evaluate program effects. Deeper understanding of such promising treatment models that can inform the field regarding practice-based evidence, and are a high priority for more rigorous study and investigation.

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School-Wide and Student-Specific Interventions: Behavioral and Academic Effects with Urban Middle School Students

Acknowledgements: This project was funded and supported by a community partnership that included United Way of the Capital Area, Hartford Public Schools, Hartford Federation of Teachers, The Village for Families and Children, Inc., and Girls and Boys Town.

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Introduction

The recent report Locating the Dropout Crisis (Belfanz & Legters, 2004) indicated that high schools with low student promotion rates (i.e., < 50% of freshman become seniors) are concentrated in high poverty, high minority, urban districts. While poor academic achievement is the strongest predictor for dropping out of high school, middle school students living in poverty who engage in deviant behavior and have antisocial peers are at greater risk for dropping out regardless of whether they have a history of academic failure (Battin-Pearson, Abbott, Hill, Catalano, Hawkins, et al., 2000). This study examines effects of a student and family assistance center and school-wide classroom management program in a middle school that serves students from a high crime, high poverty urban community.

The current project focused on increasing time spent on-task during academic lessons, reducing suspension rates, and improving student academic outcomes. This summary describes results at one of the middle schools involved in the project.

Method

Participants

The participating middle school has an urban campus serving 1,140, primarily Black (33%) and Hispanic (63%) students with high-risk profiles: 100% are in compensatory education programs; 95% qualify for free/reduced priced meals, 63% are from families where English is not the home language; 21% qualify for Special Education services; 14% are in English as a Second Language (ESL) classrooms; and 13% of 8th grade students met the state goal on standardized tests of reading, writing, and mathematics during the year prior to the project.

Interventions

Two interventions were introduced to the middle school during the two successive years of the project. The first intervention involved establishing a Student and Family Assistance Center (SFAC) in the building. SFAC is based on the Substance Abuse and Mental Health Service Administration's "Science-Based Prevention Programs and Principles" Residential Student Assistance Program and has been modified for an urban population. Services vary by needs of the student and situation but most services fit under the headings of counseling, peer mediation, or conflict resolution. The SFAC is staffed by three full-time licensed social workers and 25 to 30 part-time bachelor and masters-level interns from local universities. Students can self-refer or be referred to SFAC by school administrators and staff. Referrals are typically the result of student disruptive behavior in the classroom or verbally or physically aggressive behavior between students in common areas of the building. SFAC services are available to students throughout the school day. When students depart the SFAC, they typically return to their class, return to the administrator's office, or are referred for other school- or community-based services.

The second intervention, The Girls and Boys Town Well-Managed Classroom (GBT WMC) involves training for school staff and administrators followed by on-site technical assistance, coaching, and evaluation. Staff training includes information and practice with (a) classroom management plans that establish clear classroom expectations for student behavior, (b) the prevention of student disruptive behavior, (c) the blending of social and academic instruction, (d) verbal reinforcement for student

prosocial behavior and academic performance, (e) methods for correcting student misbehavior, and (f) a daily lesson on social skill instruction and generalization of skill use. Training for administrators includes ways to implement a school-wide social skills curriculum, intervene with disruptive students, and use data to support building-wide change.

Dependent measures

Student classroom behavior. The percentage of students who were off-task during classroom instruction was used to assess the effectiveness of classroom management strategies. Off-task rates were determined via direct observation in the classroom. At every one-minute interval during the observation, a trained observer scanned the room and recorded the number of students who were off-task. Prior studies that have used this process of recording off-task rates have reported inter-rater agreement between 88% and 90% (Burke, Hensley, Duppong-Hurley, & Oats, 2002). Student off-task behavior was operationally defined as not being visually, verbally, or kinesthetically engaged in the academic lesson. For the purposes of this study, the building administrator identified classrooms that were challenging for the staff and/or had high rates of student office referrals. Seven classrooms on this list had student off-task rates above the 10% threshold for a well-managed classroom during at least one of five technical assistance visits during the school year (Time 1, Figure 1). These seven teachers and their students were observed during the end of the school year evaluation to assess improvement in the most challenging classrooms.

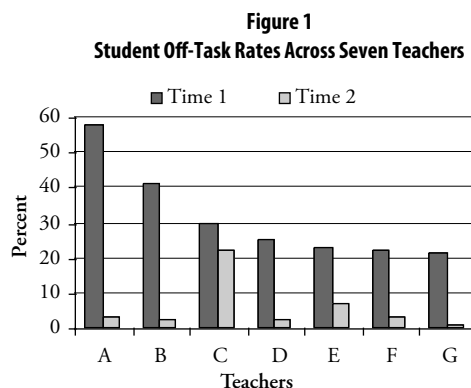
Suspension rates. The total number of in-school (ISS) and out-of-school suspensions (OSS) that were reported by the school to the district were summarized for each year of the project.

Academic performance. Results from the annual state-wide administration of the Connecticut Mastery Test (CMT; Connecticut State Department of Education, 2002) were used to assess improvement in academic performance. For this study, we summarized and compared the annual percentage of students who met state goals on the reading, writing, and math portions of the test.

Results

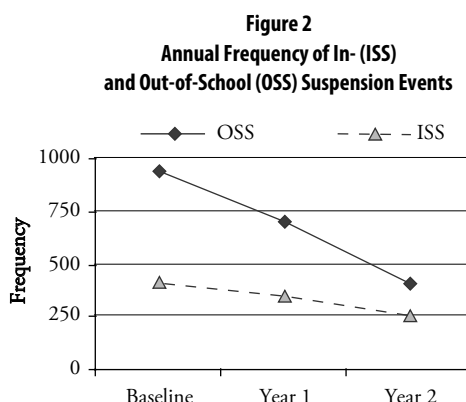
Student classroom behavior

During the end-of-the-school year evaluation, classroom observations indicated that all teachers had improved off-task rates and that 95% or more of the students were on-task at each one-minute interval in six of the seven challenging classrooms (Figure 1).



Suspension rates

The frequency of ISS and OSS events decreased steadily from baseline through year two of the project (Figure 2). From the baseline school year to Year 1 of the project, ISS and OSS decreased by 25% and 15%, respectively, when the SFAC program was implemented. When SFAC and GBT WMC programs were combined, ISS and OSS rates decreased an additional 42% and 28%, respectively.



Academic performance

The percentage of students who participated in CMT testing and met the state goal on CMT reading and writing tests steadily increased in each project year. The percentage of students meeting the state goal improved from 25% at baseline to 30% in year two of the project on reading tests and from 31% to 37%, respectively, on writing tests. Results on the math test fluctuated each year.

Discussion

Urban schools face unprecedented challenges in an era of accountability and results-based testing. This study provides preliminary support for the combined use of school based support services for students and staff. Results suggest that use of student and family assistance centers and the Girls and Boys Town Well-Managed Classroom helps increase on-task behavior during academic lessons, reduce in-school and out-of-school suspensions, and improve scores on standardized tests of reading and writing with high risk students.

Middle school students in high poverty, high crime communities are exposed to environmental toxins in the school and community that place them at increased risk for dropping out. Interventions that provide students with support in solving immediate problems (SFAC) and the opportunity to learn and use social skills in a safe environment (GBT WMC) have the potential to reduce the affects of poor academic achievement in earlier grades. Additional studies, including use of random assignment of student, staff, or schools to treatment and comparison groups will be necessary.

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Child and Family Predictors of Absenteeism among At-Risk Students

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Acknowledgements: This research is part of a larger grant awarded to the Columbia County School District, Project Columbia Acting Together for Students (CATCh), which is funded by the Safe Schools Healthy Students Consortium (award #S184L020327).

Introduction

School absenteeism has been identified as a precursor or symptom for many negative outcomes for children and adolescents, including school dropout, social and occupational problems, and mental health disorders (American Psychiatric Association, 2000; Kearney & Silverman, 1996). Historically, researchers have focused more attention on the issue of student dropouts than on issues related to problematic absenteeism. School dropout is often preceded by a series of events, such as grade decline and absences, that become increasingly characterized as academic disengagement and avoidance behaviors (Epstein & Sheldon, 2002). Researchers have argued that shifting the focus away from the single event of dropout and toward rates of daily attendance may aide in the early identification of at-risk students (Epstein & Sheldon, 2002). Despite this need for early identification, prevention research in the area of school absenteeism is lacking, and further examination of the potential factors related to absenteeism is necessary to guide intervention studies.

Current researchers have highlighted that chronic non-attenders are a heterogeneous population and that steps should be taken to piece apart subgroups who share common risk factors that may be amenable to targeted treatment (King et al., 1998). Two such subgroups are unexcused and excused absences. Excused absences denote instances of absenteeism defined as any formal school absence agreed on by parents and school officials as legitimate in nature (e.g., approved parent and doctor notes). On the other hand, unexcused absences are instances of formal school absence judged by school officials to be unjustified. Oftentimes, unexcused absences denote “skipping school.”

Comparatively less research has examined family-related factors associated with school absenteeism. Most studies of school absenteeism or dropout that have examined family factors have used purely demographic variables in analyses (Rumberger, Ghatak, Poulos, Ritter, & Dornbusch, 1990). More precise explanations of the specific mechanisms underlying the family characteristics contributing to absenteeism are needed to aid in the development of strategies that will be effective for preventing absenteeism.

The aim of the current study was to examine factors related to school absenteeism for two types of absences: unexcused absences versus excused absences. The current study examined data from a sample of students referred by school guidance counselors to a school-linked mental health program. This study hypothesized that both child- and family-related factors would contribute to absenteeism. Additionally, this study hypothesized that differences would emerge between factors associated with unexcused and excused absences, such that older age, more externalizing problems, and families characterized by conflict and disorganization would emerge as predictors of unexcused absences, whereas younger age, more internalizing problems, and families characterized by less cohesion would emerge as predictors of excused absences.

Method

Participants were 90 youth (34 females and 56 males) and their families living in a primarily rural region of the Southeastern United States. Children ranged in age from 4 to 17 ($M = 10.82$, $SD = 3.19$). Eighty-nine percent of the children were Caucasian, 7% were African American, 1% were Hispanic, and 3% were classified as other ethnicity. Fifty-two percent of primary caregivers were married or living together and 48% were single. Approximately 40% of families had an income less than \$20,000; 40% of families had an income between \$20,000 and \$40,000; and 20% of families had an income greater than \$40,000.

This study was conducted with children and their families who were referred to Project CATCH (Columbia Acting Together for Children), a federally funded prevention and intervention project, for school-linked mental health services due to concerns about behavioral, academic, or emotional problems. School guidance counselors identified at-risk students and then referred the child to Project CATCH. After this referral, clinicians conducted a formal assessment of emotional and behavioral functioning via standardized measures. Academic functioning was assessed via school records.

Instruments and Data Collection

Parents completed the Behavior Assessment System for Children – Parent Rating Scale (BASC-PRS; Reynolds & Kamphaus, 1998). This study used the Internalizing Problems and Externalizing Problems composite scales as indicators of symptom severity and the Social Skills composite as an indicator of a child's social competence. The Family Environment Scale (FES; Moos & Moos, 2002) was used to measure the parent's perceived family climate. This study examined three of these subscales: Cohesion, Conflict, and Organization.

School absences were assessed over a 12-month time period prior to the initial CATCH assessment and were obtained from school records. Excused absences constituted instances of absenteeism defined as any formal school absence agreed on by parents and school officials as legitimate in nature. Unexcused absences were instances of formal school absence judged by school officials to be unjustified.

Results

The number of unexcused absences ranged from 0 to 28 ($M = 5.41$, $SD = 6.90$), and the number of excused absences ranged from 0 to 26 ($M = 7.02$, $SD = 6.87$). The number of total absences ranged from 0 to 48 ($M = 12.43$, $SD = 11.58$).

We conducted two separate multiple regressions in which the predictor variables for each regression were child age, child internalizing symptoms, child externalizing symptoms, child social skills, family income, parental marital status, family cohesion, family conflict, and family organization. The dichotomous variable, parental marriage status, was dummy coded, such that (0) represented married/living together and (1) represented single.

In the first analysis, unexcused absences was the criterion variable. In this analysis we found that the aforementioned predictor variables accounted for 33% of the variance in unexcused absences ($R^2 = .33$; $F[9,80] = 4.37$, $p < .001$). Table 1 presents standardized regression coefficients and t -statistics for each predictor variable. In the second analysis, excused absences was the criterion variable. In this analysis we found that the predictor variables accounted for 29% of the variance in excused absences ($R^2 = .29$; $F[9,80] = 3.62$, $p = .001$). Table 2 presents standardized regression coefficients and t -statistics for each predictor variable.

Table 1
Standardized Regression Coefficients and t -Statistics
for each Predictor of Unexcused Absences

Predictor	Beta	t
Age	.36	3.73**
Marriage status	.04	.40
Income	-.26	-2.58*
Internalizing symptoms	.02	.19
Externalizing symptoms	.14	1.19
Social skills	-.13	-1.25
Family cohesion	.28	1.96
Family conflict	.08	.64
Family organization	-.25	-2.03*

Note: * $p < .05$; ** $p < .01$

Table 2
Standardized Regression Coefficients and t -Statistics
for each Predictor of Excused Absences

Predictor	Beta	t
Age	.08	.75
Marriage status	.05	.42
Income	-.28	-2.71**
Internalizing symptoms	.46	4.09**
Externalizing symptoms	-.17	-1.41
Social skills	-.10	-1.00
Family cohesion	.02	.16
Family conflict	-.18	-1.32
Family organization	-.12	-.94

Note: * $p < .05$; ** $p < .01$

Results provided some support for the hypothesis that different factors would emerge as predictors of unexcused versus excused absences. In particular, findings indicated that (1) older child age, lower family income, and lower family organization were significantly related to unexcused absences and (2) greater internalizing symptoms and lower family income were significantly related to excused absences.

Discussion

Results from this study indicate that family income is implicated in both excused and unexcused instances of school absenteeism. This finding suggests that children and adolescents from poorer families may be at a disadvantage when it comes to attending school. Factors that may reduce motivation or opportunities to attend school, and that are also associated with low income, include a lack of educationally stimulating material in the home, more health-related problems, and transportation difficulties. Results from this study suggest that interventions aimed at reducing overall school absenteeism should include some aspect that addresses family resources.

Since family disorganization was predictive of unexcused absences, interventions targeting youth with these absences may benefit from assessing and addressing issues of family organization. Disorganized families are characterized by chaotic interactions, ineffective communications, and instability in supervising responsibilities, and these qualities are likely contributors to a student's absenteeism. Research has suggested some preliminary support for interventions that involve connecting parents with school contact persons and assigning students and families with attendance problems to a truancy officer (Epstein & Sheldon, 2002). Such contact with families may help them to enhance communication, increase monitoring, and assume greater responsibility for their children's educational involvement. Interestingly, child externalizing symptoms and family conflict were not significantly related to unexcused absences. In the past, a child's oppositional or delinquent nature was implicated as a factor in "skipping school" (Lauchlan, 2003). However, results from this study suggest that risk factors for unexcused absences may be more related to the structure and organization of the family environment than to externalizing problems within the child.

In contrast, youth internalizing symptoms were found to be predictive of excused absences. Thus, interventions targeting youth with these absences may benefit from inclusion of components that address internalizing symptoms, including anxiety, depression, and somatic complaints. Indeed, there is preliminary evidence that referring chronically absent students for counseling is associated with reduced absenteeism (Epstein & Sheldon, 2002). Research on the effectiveness of cognitive-behavioral intervention programs for chronic non-attenders has reported mixed results (Lauchlan, 2003). Future research studies in this area should investigate whether use of targeted cognitive-behavioral techniques (e.g., relaxation training, cognitive restructuring, and exposure) with only those children evidencing internalizing symptoms would provide clearer empirical support for cognitive-behavioral treatment for school non-attenders.

In conclusion, researchers have indicated that attendance at school serves as a protective factor for at-risk youth (Henry, Caspi, Moffitt, Harrington, & Silva, 1999). This study examined possible contributors to non-attendance so as to identify areas in which intervention may be helpful in improving attendance rates among at-risk youth. Findings suggest that different factors are related to excused versus unexcused absences, thus illustrating the importance of considering tailored interventions based on the type of absenteeism and other symptoms exhibited by the student. Future research should continue to evaluate predictors of absenteeism among subgroups of non-attenders. Furthermore, future research should focus on systematic empirical investigations of whether targeted interventions are effective in reducing absenteeism.

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Chapter Seven

Youth Voice and Transition Services

Youth Involvement in Infrastructure of Systems of Care: Policy Implications

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Acknowledgements: This work was supported by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, United States Department of Health and Human Services (Contract numbers: 280-00-8040 & 280-2003-00016). We truly appreciate the help of national evaluation team members and Marlene Matarese with participant recruitment and the knowledge she brought to the project.

Introduction

Involving youths in the services they receive is an emerging phenomenon that still faces resistance but is becoming increasingly accepted. Youth report significant benefits associated with their involvement, such as developing positive relationships with adults, learning responsibility and new skills, and feeling positive about themselves and contributing to their community (Linetzky, 2000; Quinn, 1995). When youth participate in an organizations' activities and decision-making, adults who work with the youth develop improved perceptions of youth and become increasingly engaged in their organizations and communities, and organizations are better able to target programs to youth needs and use youth as effective spokespeople for fundraising (Zeldin, McDaniel, Topitzes & Calver, 2000).

Recognizing the value of youth involvement, the Substance Abuse and Mental Health Services Administration (SAMHSA) mandated youth involvement in all SAMHSA-funded system-of-care communities that have been awarded grants since FY2002. While the mandate specified that all of these systems of care were required to hire a youth coordinator, the details of the youth coordinators' role and the nature of youth involvement were left vague (Department of Health and Human Services, 2002). Consequently, each system of care is working to determine what youth involvement will mean in its community and how this involvement will be implemented, or continue to involve youth if they already did so pre-funding.

The national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program (CMHS) has included a longitudinal assessment of the status of youth involvement in systems of care. The first stage of this assessment involved focus groups with youth coordinators and youths from across the nation. The findings from these focus groups shed light on how youth (a) are currently engaged in their communities, (b) have areas of absent or minimal involvement, (c) see challenges to youth involvement and strategies, and (d) benefit from being involved in their systems of care. The role of youth coordinators in developing youth involvement is a significant factor that is examined. The focus group findings were used to increase awareness, and inform the youth interview that will be piloted with selected communities with the final version administered longitudinally to youths in all Federally-funded systems of care as part of the CMHS national evaluation.

Methodology

Between May and October 2004, focus groups were conducted with youth coordinators and youths from system-of-care communities funded between 1999 and 2003. As part of the three-stage process for a youth-centered methodology, there were two types of focus groups (Ginsburg, Alexander, Hunt, Sullivan, & Cnaan, 2002; Moore, 1987; Robinson, 1999). First, in the planning stage, there was an exploratory focus group teleconference with a few youth and youth coordinators who shaped topic areas for the more exploratory focus groups. This focus group helped guide and provide ideas around how youth were involved in their systems of care.

In the second phase, themed focus groups were held with youth and youth coordinators. The two youth coordinator discussions were held at a national system-of-care meeting and a national youth coordinators training conference. A total of 11 youth coordinators representing systems in varying stages of development and diverse geographical areas participated in the discussions. The topics discussed

in these focus groups were (1) the role of youth coordinators and youth in their systems of care, (2) the challenges that youth coordinators confront in conducting their work and in trying to get youth involved, and (3) strategies for addressing the challenges, and all were held to approved institutional review board standards. This included obtaining consent, having different themes in each focus group, and a standard introduction. One youth focus group was conducted at a national system-of-care conference, and the remaining two youth focus groups were held in system-of-care communities. A total of 22 youths (ages 14-22; 6 White, 16 African American/Black) participated in these focus groups. Topics covered in the youth discussions were youth groups, and youth involvement in the infrastructure (e.g., governance, conducting of trainings, quality monitoring) and service components of systems of care. Each focus group lasted 1.5 hours and participants were compensated \$50 for their participation (youth coordinators received gift cards and youths received cash). Thematic analyses were conducted using Atlas.ti (Muhr & Fries, 2004). The result of these analyses guided the development of a mixed-methods instrument that would be used in the third phase—the pilot study—to test validity and reliability (Delbecq, Van de Ven, & Gustafson, 1975).

Findings

Consistent patterns about youth involvement emerged from the youth and youth coordinator focus groups. Both types of respondents identified youth groups as the key mechanism for youth involvement, and it was heavily stressed that these groups need to have a strong social emphasis. Primarily because of issues related to stigma, youth resist joining groups that are about emotional and behavioral problems. However, the youth do appreciate the opportunity to discuss their problems and get emotional support from other youths and staff within a context of coming together to form friendships and participate in fun activities.

Youths who are involved in youth groups derive significant benefits from the experience. They value the support they receive from their peers and the staff and the relationships they form in the group. The group also provides a safe place to go and this helps keep the youths out of trouble. As well, youths credit participation in the youth group with helping them develop strategies for coping with their problems.

Other than in youth groups, youth involvement in systems of care is limited. There was little evidence of youths being involved in participating in the decision-making process for their system of care (such as through membership on committees and boards), or providing trainings or other services, and only in some cases were they involved in planning their services or providing feedback on the services they receive. It appeared that youths were often unaware that they *could* be involved in these activities, although the youth coordinators were aware of the different domains in which youth could participate. In fact, some youth coordinators felt that system-of-care administrators were actively trying to prevent youth coordinators from informing youths about their rights and involvement options because of a general resistance to involve youth. Other barriers to youth involvement included an absence of a true commitment to creating environments in which youths are able, or feel welcome, to participate (e.g., when board meetings are held during school hours or food and transportation are not provided). Youth coordinators are actively working to engage youths in these domains from which they are currently excluded. Youth interest does raise questions as to the feasibility and benefit of implementing infrastructural involvement, and to the discernment needed between adolescent youth and transition-age youth, and perhaps that is where the discussion needs to begin (Chalmers, 2000).

Youth coordinators identified several key challenges to youth involvement. Most significant was a lack of support from the system-of-care community and a pervasive “tokenism” mentality. This lack of buy-in for real youth engagement impacts programmatic decisions such as budget allocations for youth involvement, which was often insufficient or unstable. In cases where youth were moderately involved in advisory boards, they seemed to do so with no real effect to shaping change at the infrastructural level in their systems of care. Moreover, it speaks to the underdevelopment of policy at the service level.

The Role of Policy for Youth and Infrastructure

The picture that is emerging from these focus groups regarding youth involvement in infrastructure points out the struggle of principle implementation. Youths are mostly confirming interest in having a voice in governance and management, but are largely uninformed as to how influential they actually are in shaping service infrastructure (Matarese, McGinnis & Mora, 2005). System of care administrators and staff struggle to find a balance in effective service delivery and youth involvement. At the same time, the policies and mandate governing system level change can be interpreted in many ways, and this may have encouraged varied implementation (Drake, Ling, Fitch, et al, 2000). However, as youths—especially transition-age youth—continue to use alternate means such as their youth groups, youth coordinators, and as they gradually become more involved in advisory committees, both the youths and policy at the service level will have to grow.

Conclusions

Both the youths and the youth coordinators conveyed similar experiences of youth involvement in systems of care, such as a lack of awareness by youths about the ways in which they *could* be involved in their communities, the importance of including social activities in youth groups, and an absence of a youth voice in decision-making arenas within systems of care. This consistency is important because two of the three youth focus groups were conducted in system-of-care communities and thus cannot be assumed to be representative of youths from other systems of care. Though it is unlikely that all of the experiences are shared by all of the communities, the findings identify areas that system of care administrators and youth coordinators can review to determine whether the identified shortcomings of youth involvement are present in their communities and then steps can be taken to address problem areas. Given the benefits of youth involvement, to both youth and the systems/organizations with which they are involved, finding ways to increasingly and effectively involve youth in their systems may be an important way to improve outcomes for youth in systems of care and to enhance the services, infrastructure, and sustainability of these systems.

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Community Integration of Transition-Age Youth: Voices of Youth and Young Adults

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Acknowledgements: This research was funded by the Child, Adolescent and Family Branch, Center for Mental Health Services, Substance Abuse Mental Health Services Administration, U.S. Department of Health and Human Services, and from The National Institute on Disability and Rehabilitation Research, U.S. Department of Education (Grant #H133B040038). The content does not necessarily represent the views or policies of the funding agencies. We thank Jan Lacy, Cynthia Brothers, and Cathy Callahan-Clem for their assistance with the project.

Introduction/Purpose

While there is a growing literature on the challenges facing youth with mental health difficulties (e.g., Blackorby & Wagner, 1996; Davis & VanderStoep, 1997; Delman & Jones, 2002; Federation of Families for Children's Mental Health, 2001), far less attention has been paid to understanding how youth themselves view the meaning of a successful life in the community, and what helps or hinders achievement of such self-defined success. For this exploratory, qualitative study, our aim was development of understanding of community integration across life domains for this population of young adults. The study reported here was part of a larger study that also explored the perspectives of family members on the community integration of their children with mental health disorders.

Method

A research team of collaborators in Portland, Oregon and Seattle, Washington was formed in the fall of 2004. Local advisory groups of young adults and family members were created at each research site. Youth and family member research assistants were hired and trained in focus group methods and qualitative analysis in the spring of 2005. In consultation with local advisory groups, the team developed focus group questions and planned recruitment strategies. The project was approved by Portland State University's Human Subjects Research Review Committee.

Young adults and family members were recruited through contacts with schools, colleges, family support organizations and mental health agencies in the Portland and Seattle areas. Research staff at both locations distributed brochures and literature inviting youth who had experience with mental health services and were between the ages of 17-24 to contact project staff. Parallel materials were developed to recruit family members of such youth as well. A total of twenty 90-minute separate focus groups for youth, young adults, and family members were held in a variety of community settings, including public libraries, family support organizations' meeting rooms, and service agencies. In moderating the focus groups, the youth and family member research assistants took the lead roles, while principal investigators and the project manager took secondary roles.

This presentation focused on the experiences and of youth and young adults, as related in 12 focus groups in the Seattle, Washington and Portland, Oregon metropolitan areas. Participants completed a short demographic survey and they received \$30 as compensation for their time. Sampling was designed to seek diversity in ethnicity, age, sexual orientation, rural/urban locations, and socioeconomic status.

Focus group questions focused on the meaning of community integration and a successful life in the community; barriers and supports to community integration; young people's hopes, goals, and dreams; and advice to others in similar situations. Groups were audio-taped and transcribed, and transcripts were analyzed with the assistance of N6 (QSR International, 2002), a qualitative analysis software program. After reading and becoming familiar with the content of the transcripts, the team members developed a coding framework that identified and categorized examples of young people's definitions of community integration across seven domains: personal, family and friends, living situation, school/college, employment, service system and service providers, and community. The analysis also incorporated

barriers and challenges facing young people in each of these domains, and strategies and supports they used to achieve a successful life in the community. Finally, codes were assigned to content that spoke to young people's hopes, dreams, and goals, as well as their advice to other young people with mental health difficulties. After all team members had independently coded one transcript and reached an acceptable level of agreement in coding, pairs of team members coded transcripts independently and reconciled their codes. Finally, when team members achieved a high level of consistency in coding, the remaining transcripts were coded independently.

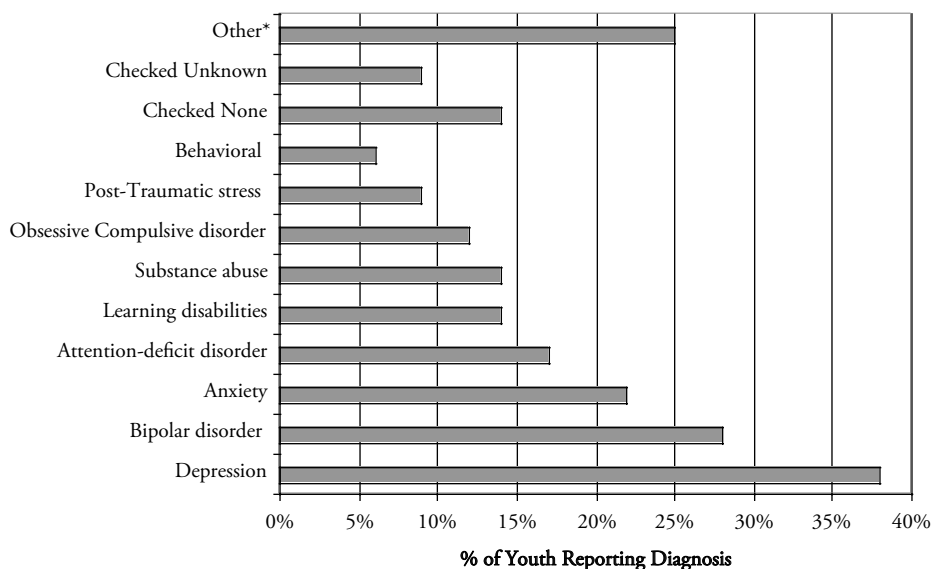
Results

This summary will report on findings related to selected youth characteristics and domains that were shared at the conference presentation itself¹.

Participants

Fifty-nine young adults (36 young men, 23 young women) participated in focus groups and completed survey forms. Ages ranged from 15-28, with a median age of 19.5 years ($SD = 2.4$). Sixty-six percent of the youth were European American; 15% African American; 10% Multi-racial; 7% Asian Pacific Islander; and 2% Native American. Figure 1 depicts self-reported mental health diagnoses, while Figure 2 illustrates youths' current use of, and access to, mental health services. The largest percentage of youth were living with their parents (42%), with 21% living with roommates, 16% alone, 10% with other extended family, 7% with a partner or spouse and 9% in a homeless shelter.

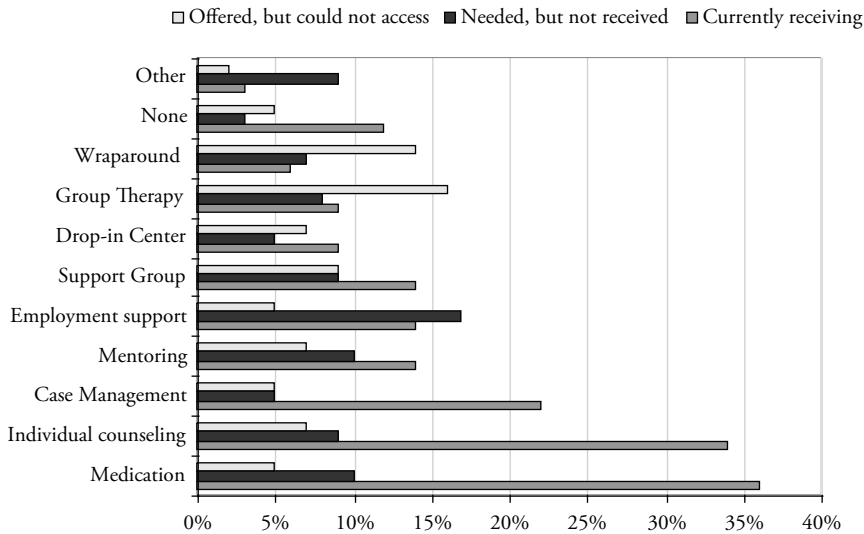
Figure 1
Youth Self-Reported Diagnoses
($N = 59$; percentages add to more than 100% because of multiple diagnoses)



* "Other" includes Aspergers, attachment, behavioral, oppositional-defiant, schizophrenia, and other disorders

¹Please contact the lead author, Jean Kruzich, for information about complete findings.

Figure 2
Youth Self-Report of Service Use and Access
(N = 59)



Youth perspectives on the meaning of community integration

Three central themes that emerged around this area of questioning were: (a) having opportunities to meet goals, (b) the value of relationships, and (c) having access to resources. As one young adult responded,

"I think whenever I have things in common with other people, those are the times that I feel more part of that community."

Hopes, dreams and goals of these youth

These young people wanted to feel a sense of success, to feel connected to community activities and causes, and to give back to others. The goal of connecting, while overcoming stigma, was described thusly by one young woman:

"I would want to be a part of something...I would like to be comfortable enough with my disability to not feel like I have to hide anything from anybody. That would allow me to really be around other people."

Youth views on barriers and supports to community integration in domains of school/college, employment, and formal services

Themes that arose out of groups' discussion of barriers included stigma; high school culture and educational system shortcomings; lack of accessible, developmentally appropriate resources and services; uncaring, clueless and "by the book and by the clock" professionals; the effects of the disorder itself on personal motivation and behavior; and a pervasive lack of understanding of mental health difficulties. This final point is brought home by a young woman's thoughtful comments:

"You are going back and forth, you are bipolar, you are suicidal...but nobody else understands you, because you can't explain what you are going through... So they push you away, so you have absolutely no support to integrate back into society, to be able to figure out who you are, what you are doing, how you can function with this disorder that you have."

Supports for community integration were characterized by youth as involving supportive relationships with friends and family, including siblings, grandparents and foster parents; caring, skilled professionals and mentors; opportunities to give back and to be productive; programs focused on transition-age youth offering practical and emotional support; opportunities for rejuvenation, spiritual guidance, and self-expression; solid information about mental illness and mental health that gave encouragement and fostered hope; and awareness of others living successfully with mental health difficulties. In one young person's words,

"The best support I've gotten is from people who have the same problem as me, because you can relate to it. My therapist was only a couple of years [older]—she is 26...she had gone through the same things, and she basically showed me some new treatments."

Advice to others struggling with mental health difficulties

Two strong themes emerged in response to this question: Youth advised other young people to seek support from people who've had similar experiences, and urged them to "take charge of your life." An example of this sense of empowerment was a youth's assertion that

"If you feel like your therapist isn't really listening to you or if something is not right with a particular doctor or therapist, go ahead and see someone else."

Conclusion

Although this study has limitations such as being a geographically limited, modestly diverse sample that cannot be said to represent all youth, the implications drawn from these findings are useful for families, service providers, policymakers, youth advocates and youth themselves. They include:

- We need to focus on recovery, success and strengths—youths' competencies and desire to give back to the community should be recognized.
- Schools and colleges are seen by youth with mental health difficulties as especially important in their lives, yet a pervasive lack of understanding of mental health issues persists in educational settings, and this needs to be addressed.
- Stigma cuts across all domains of living, and broad educational efforts are needed for family members, professionals, employers and communities.
- Successful role models—close in age and experience to youth themselves—can normalize disclosure and provide hope.

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Symposium

Partnerships for Youth Transition (PYT): Evaluating Process and Progress Outcomes of Community Initiatives

Symposium Introduction

Hewitt B. "Rusty" Clark

In 2002, five Partnerships for Youth Transition (PYT) community sites were funded for the purpose of planning, developing, implementing, and documenting models of comprehensive community-based programs to assist in improving the outcomes for youth and young adults with serious emotional disturbances or serious mental illnesses (SED/SMI) as they prepare for and enter adulthood. This symposium summary provides data on the: (a) cross-site analyses of process activities undertaken by sites, (b) system of care decision making focused on hope contrasted with trauma and known risk factors, and (c) testing fidelity to the Transition to Independence Process (TIP) model. The implementation experiences and findings from across the sites will contribute to the field's instrumentation and knowledge base related to program design, as well as to youth and family progress, community partnerships, and system/policy reform.

Chair

Hewitt B. "Rusty" Clark

Authors

Hewitt B. "Rusty" Clark et al.

Gwendolyn White et al.

Nancy Koroloff et al.

An Analysis of Partnerships for Youth Transition (PYT) Cross-Site Findings

Hewitt B. "Rusty" Clark, Nicole Deschênes, Arun Karpur, & Peter Gamache

Introduction

This paper describes cross-site findings of process activities undertaken by the five Partnerships for Youth Transition (PYT) community sites in serving youth and young adults with serious emotional disturbances or serious mental illnesses (SED/SMI) and their families.

Process information on the services and supports provided at the sites will further inform our efforts in the refinement of a fidelity assessment instrument and in a forthcoming analysis of youth process/outcome findings. The site stakeholders have also found these data to be valuable as they revise their transition program manuals. By comparing process activity to progress/outcome findings by domain in our future analysis work, a pattern of "efforts to outcomes" will provide communities serving these young people with strategies on how to achieve similar gains.

Methods

The PYT Process Survey: Efforts to Outcomes (Deschênes, Clark, Gamache, & Karpur, 2005) instrument examined process activities specifically targeted to improve transition progress/outcomes for the approximately 526 youth and young adults enrolled across the five sites over the course of a nearly 2.5 year period. The PYT Process Survey examines the services and supports that sites provided across the 4 transition domains, with the last one separated into the 8 subdomains of Community life and functioning (Clark, Deschênes, & Jones, 2000). The transition domains are:

- Employment
- Education
- Living situation
- Community life and functioning
 - daily living and leisure time activities
 - interpersonal relationships: family, friends, and mentors
 - community involvement and social responsibilities
 - emotional and behavioral well-being

- physical health
- parenting
- self-determination
- communication skills

The PYT Process Survey provided activity selections to check, as well as open-ended questions for description of other activities not given as selections. Additional open-ended questions asking for descriptions of the barriers/difficulties experienced and how these were overcome were given for each domain.

The five PYT sites were sent the PYT Process Survey during the fourth year of the initiative. Surveys were completed by a group consisting of the Project Director, two transition facilitators, and one young person at a minimum. The inclusion of the Project Evaluator, parents, parent advocates, or others who could inform survey responses was encouraged.

Results

Selection data indicating activities undertaken by the sites were examined by frequency counts. A summary of the primary service and support activities are presented below for the 11 domains. Qualitative descriptions for barriers/difficulties and how these were overcome were summarized and presented by theme frequency. Qualitative descriptions representing explanatory depth and clarity from the sites are given when present.

Employment

Primary service and support activities reported to improve employment outcomes (e.g., drop-out prevention, returning to school) included helping young people with job searches (e.g., via Internet, newspaper); job shadowing; improving interview skills (e.g., sample questions, role-play) and networking skills (e.g., introducing one's self, follow-up with contacts); completing paperwork (e.g., application, understanding tax forms); establishing employment goals; accompanying them on job searches (e.g., provide transportation); providing directive feedback and encouragement, and; making referrals to vocational rehabilitation and career/employment resource centers.

Two of the recurrent themes cited across the sites on employment barriers included transportation difficulties and finding employment for youth with criminal backgrounds. One site discussed the youth self-determination and motivation issue in the following manner: "Why a young person is seeking employment in the first place [is a major factor]...once a youth is motivated to seek employment for his/her own reasons, the outcome is successful."

Education

Primary activities to improve education outcomes included all sites helping young people with improving school attendance, encouraging school work (e.g., homework) completion, searching for postsecondary programs (e.g., writing/applying to colleges, looking for programs in catalogs or on the Internet), referring to guidance counselors, making use of state resources, and gaining an educational representative for their respective site's oversight structure.

The one overriding difficulty for educational achievement was the young person's disinterest and the associated lack of motivation. One site stated that, "a lot of youth have had negative experiences with education, especially special education, which hinders their willingness to explore other educational opportunities."

Living Situation

Primary activities to improve living situation outcomes included all sites helping young people in a homeless state find housing, completing applications for housing, evaluating housing options, and making use of state resources for housing.

Many different themes emerged from the sites with respect to living situation barriers and difficulties, including a lack of social skills pertaining to living with others, poor budgeting skills, the availability of low-income and safe housing, and the inability to rent their own place because current homeless or at-risk youth “are under 18...[have] poor credit or no credit,” are unable to have someone co-sign a lease, and cannot afford move-in costs that are “often three times the amount of rent.”

Daily Living and Leisure Time Activities

Primary activities reported across the sites to improve daily living and leisure time outcomes included helping young people with identifying and accessing activities, budgeting (e.g., balancing checkbook, managing credit), utilizing public transportation (e.g., understanding bus schedules), and developing an organized schedule of activities.

Recurrent barriers and difficulties included transportation, limited financial resources, and limited availability of evening and weekend activities.

Interpersonal Relationships: Family, Friends, and Mentors

Primary services and support activities to improve interpersonal relationships included providing cultural competency training to staff, developing a youth group (e.g., peer support groups, Youth Council), and helping young people access integrated community activities (e.g., YMCA classes, summer camp).

Efforts to improve interpersonal relationships ranged from peer-to-peer mentoring, group activities, and providing links to outside youth groups, to a large-scale leadership conference.

Community Involvement and Social Responsibilities

Primary activities to improve community involvement and social responsibility outcomes included all sites assisting young people with their driver's license requirements, helping young people with learning about relationships (e.g., controlling anger, getting along with family), getting along with friends and peers, finding or doing fun and enjoyable positive activities, becoming involved with community activities (e.g., volunteering, mentoring), helping with legal problems (e.g., meeting with parole officer, going to court), understanding public assistance paperwork, and obtaining referrals to community resources (e.g., anger management or martial arts classes). Additionally, the use of state resources for community development and the attainment of a community representative for the site's oversight structure were each indicated by every site.

Barriers and difficulties included stigma, limited volunteer opportunities for teens with criminal histories, symptoms and effects of mental illness, and comfort level from the perspective of the youth. Efforts to address these issues included utilizing the youth's social network (e.g., staff, families), psychoeducation, cognitive behavioral therapy, exposure training, and networking with community organizations.

Emotional and Behavioral Well-Being

Primary activities by all sites to improve emotional and behavioral well-being outcomes included: helping young people understand their condition or diagnosis and the effects on his/her behaviors; maintaining prescription regimens; understanding side-effects of medications; helping young people with their grieving process; teaching young people how to express concern and caring for others, reciprocation, managing one's anger, frustration, and impulse control; and providing young people with strategies to avoid alcohol abuse and street drugs or illegal substances. All sites also reported that they referred young people to resources (e.g., psychologists) to discuss plans, making use of expert consultants/technical assistance and state resources, and gaining an adult mental health representative to serve as a liaison to that system.

Resistance to mental health services, lack of mental health insurance coverage, dual-diagnosis complexities, and transportation problems (e.g., to appointments) were cited as barriers to accessing mental health services. Additionally, mental illness stigma and its effects, youth difficulties with appointment time management, resistance to therapy, and low motivation confound these difficulties.

Physical Health

Primary activities to improve physical health outcomes included all sites helping young people with dietary skills (e.g., nutrition, cooking), helping with exercise and physical activities, and developing a healthy lifestyle (e.g., sufficient sleep schedule).

Barriers and difficulties included limited resources for the uninsured, lack of community exercise facilities, limited financial resources, and transportation problems.

Parenting

Primary activities to improve parenting outcomes included all sites helping young people with understanding the responsibilities associated with parenting and child rearing, assisting young people with searching for resources (e.g., parenting classes, financial support), and making use of expert consultants/technical assistance and state resources.

While many barriers overlap with those found in other domains, particularly transportation and limited finances, these issues were described as being compounded by parental responsibilities. Difficulties unique to this domain included the maturity level of the young parent, a desire to conceal pregnancy due to embarrassment and fear of negative reactions, and an inability (perhaps due to their own childhood trauma) to emotionally bond with their children.

Self-Determination

Primary activities to improve self-determination outcomes included all sites assisting young people with advocacy skills, choice-making, problem solving, goal setting and attainment, self-knowledge and understanding, self-observation, evaluation, and reinforcement, risk taking and safety, knowledge of self (e.g., knowing interests, preferences, strengths, needs), and leadership skills.

In addition to youth directive considerations, such as a lack of motivation, effects of mental illness, shyness and inhibition, and the unfamiliarity of “having power in a situation when they are so used to having people tell them what to do,” ecological factors such as neighborhood crime, poverty, and transportation problems were cited as confounding stressors.

Communication Skills

Primary activities to improve communication outcomes included all sites assuring that young people were involved in developing their site's program brochures/logo, assisted with negotiation skills, and provided cultural competency training to their staff.

The minimization of face-to-face communication via technological changes (e.g., instant messaging, email, chat rooms) was cited as presenting communication difficulties. Other communication difficulties included a lack of confidence and experience, anxiety, negative past experiences, and the effects of mental illness. The perception by youth that “they won't be heard or people don't want to hear what they have to say” was also cited.

Discussion

This paper provided an overview of the services and supports that were available at the PYT sites across the transition domains of employment, education, living situation, and community life functioning – with this domain being composed of eight sub-domains. The results also summarized some of the barriers that existed across these domains. Clearly sites had made progress in creation of developmentally-appropriate, individualized services and supports for these youth and young adults with SED/SMI. However, site personnel still faced many obstacles in the provision of a complete service system tailored to meet the needs of these young people and those of their families.

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Transitioning Young Adults: A Hopeful Life View ... Traumatic Life Experiences

Gwendolyn White & Robin A. Orlando

Acknowledgement: This research was funded in part by the Substance Abuse and Mental Health Services Administration (SM54474-02).

Introduction

As a Partnership for Youth Transition (PYT) grantee community, Allegheny County, Office of Behavioral Health System of Care Initiatives (SOCI) has worked with transition aged young adults to inform the overall planning and implementation of a transition system. In 2002, SOCI was awarded a Substance Abuse and Mental Health Services Administration (SAMSHA) Partnerships for Youth Transition (PYT) grant agreement to expand the service population in the system of care to ages 14 through 25. The evaluation component is a critical element of this agreement.

The goal of the SOCI evaluation is to collect, analyze, and disseminate vital information regarding system of care performance and effectiveness in ways that will ensure that the information is used to improve the quality of supports to young adults. The data collected are also used as an educational tool for staff working with the young adult population. As part of the two-year outcomes study that is currently being conducted with transition aged youth, the notion of hope and resiliency has been reflected in the data collected. The focus of this paper is to discuss the presence of hope as identified by the young adults despite the significant evidence of trauma and known risk factors.

Method and Early Findings

Program data collection began with the first referral in March 2004. As of June 2006, 153 young adults were referred to the program and 79 are enrolled. The majority of referrals are self-referrals from either the caregiver or the young adult (68%). The average age of PYT enrollees is 17. More than half of the consumers served by PYT are female (62%). The majority of enrollees are African American (56%), followed by Caucasian (26%). Many of those served (67%) have more than one mental health diagnosis. Currently, the most common diagnoses of PYT enrollees are Major Mood Disorders (64%), Attention Deficit Disorder (37%), and Adjustment Disorders (20%).

Program Data Collection

In addition to the Transition to Adulthood Assessment Protocol (TAAP; Davis, Deschênes, Gamache, & Clark 2004), SOCI uses additional measures as part of the service planning process to assess consumer needs, strengths, hopes, and dreams. The Young Adult Needs and Strengths Assessment (Lyons, 2003) collects information on the young adult's needs, strengths, and culture and is used for service planning. This assessment is administered at enrollment and every six months until disenrollment. The Consumer Strengths Discovery is a qualitative tool that questions young adults about their hopes and dreams for the future as well as their general goals for their lives. It is used for service planning and is collected at intake and prior to each consumer support team meeting.

Consistent with the findings of national studies, Allegheny County young adults ($N = 79$) with serious emotional disturbances (SED) are subject to a number of risk factors in their homes and communities.

These include, but are not limited to: having children (16%); living in temporary situations (29%); having experienced homelessness (18%); having dropped out of high school (25%); not having a source of income (23%); being addicted to drugs and/or alcohol (27%); having a parent with a mental illness (63%); having a parent convicted of a crime (48%); and not having adequate transportation to work/school (24%). Risk factors were specifically investigated to illustrate the confounding factors that significantly impact the sustainability and achievement of outcomes for these youth.

Outcomes Data Collection

SOCI is committed to collecting outcomes on young adults and families. Although not required under the PYT grant agreement, SOCI decided to conduct a two-year outcomes study with the young adults who consented to participate. Data are collected within 30 days of enrollment into PYT and every six months through the end of the grant. As of June 2006, 59 young adults have participated in the longitudinal study. The study was designed to gather information similar to that collected under the SAMHSA system of care grant to provide comparisons between the younger and older populations. Data in the PYT outcomes study are collected in the following areas: perceptions of opportunities, substance use/abuse, exposure to violence, delinquency, functioning, sexuality, service history, and cultural competency.

While risk factors confound and in some cases even magnify the probability of achievement difficulties, exposure to violence and trauma represent experiential differences among Allegheny County's PYT enrollees and illustrate how (in addition to why) outcomes are disparate among this population. Using the My Exposure to Violence (Selner-O'Hagan, Kindlon, Buka, Raudenbush, & Earls, 1998) instrument, these data reflect a high level of victimization in physical, emotional, and sexual abuse and violence. Disparity is reflected in the level of suicide ideation (42%) and suicide attempts (24%). More than half report knowing someone who has thought about suicide and 37% know someone who has attempted suicide. Table 1 illustrates the young adults' self-reported history as a victim or witness to violent and/or traumatic incidents at baseline.

In contrast to these traumatic life events, young adults report a strong sense of hope and opportunity. They have identified career goals, family and living plans, and positive familial relationships as part of their recovery and future. Several instruments are used to collect this information including: Perceptions of Opportunity, Young Adult Needs and Strengths Assessment (YANSA; Lyons, 2003), and the Consumer Strengths Discovery. Based on the YANSA and the Consumer Strengths Discovery data, the four goals most often identified by the young adults ($N = 72$) are: career, steady income, housing, and relationship/starting a family. Several young adults identified their hopes for a career in social work, culinary arts, graphic arts, computer design, nursing, and medical assistance. On the Perceptions of Opportunity instrument (adapted from the Pathways to Desistance Study [Griffin, 2006]), the young adults ($N = 59$) rated their life aspirations and expectations. Table 2 illustrates the young adults' hopefulness regarding career, education, and family.

Table 1
Exposure to Violence
 $N = 59$

<i>Violent/Traumatic Events</i>	<i>Victim</i>	<i>Witness</i>
Beaten up or seriously threatened	44%	83%
Emotional or verbal abuse	53%	73%
Physical abuse	29%	51%
Attacked with a weapon	21%	42%
Shot at	7%	32%

Table 2
Perceptions of Opportunity
 $N = 59$

	<i>Very Important for this to occur</i>	<i>Good Chance this will happen</i>
Graduate from college	76%	57%
Have a good job/career	93%	72%
Earn a good living	91%	76%
Have a good relationship with parents	85%	58%
Have a good relationship with children	97%	88%
Stay out of trouble with the law	95%	86%

Conclusion

There are many issues to explore when looking at the contrasting data. Further research questions to consider are:

- What factors lead to hope in the face of trauma and violence?
- What are the source(s) of hope?
- How can the service process build off of hope to produce better outcomes?
- How can hope be maintained as an individual moves into adulthood?

Beyond the remaining questions, there are numerous lessons learned. Hope can be translated into best practice. Since it is developmentally appropriate to be hopeful as a young adult, hope needs to be nurtured. Some of the ways to build on hope in the practice arena include:

1. ***Use a planning process centered on hopes and dreams.*** A standardized instrument such as the YANSA provides for a discussion of hope, validates that hope and provides the basis for evidence-based practice.
2. ***Build on those self-identified strengths.*** Reflect these strengths in written plans and documents, and build on the small successes identified in the service plan. Identify short-term goals that lead to long-term success.
3. ***Value social connections and natural supports.*** This includes: (a) inclusion in the service plan; (b) building on existing positive relationships; and encouraging support groups and educational activities
4. ***Recognize that staff relationships with young adults are critical.*** Young adults report low trust with the system as a whole, therefore staff should be coached in the principles and values of system of care, and to encouraged to work from a “position of hope” when interacting with young adults.

Data tell us that young adults have a hopeful world view despite traumatic life events. These data challenge us to build on hopes and dreams. All young adult service plans should include “hopefulness” as a best practice. This builds confidence and enables the individual not just to survive but to thrive in their world.

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From the Ideal to the Real: Testing Fidelity to the Transitions to Independence Process (TIP) Model

Nancy Koroloff & Lyn Gordon

Introduction

The Clark County, Washington, Department of Community Services and Corrections has established a Partnerships for Youth Transition (PYT) site project, subsequently named Options. The goal of the Options project is to build an enhanced system of treatment to address the particular difficulties that youth with serious emotional disturbances or serious mental illnesses (SED/SMI) face in making a successful transition to adulthood. This comprehensive continuum of services builds upon existing programs and works to bridge gaps between the children's mental health and adult mental health systems.

The program, based upon the TIP model (Clark, 2004) and augmented by the use of a "Core Gifts" approach (Anderson, 2005), focuses on the life domains of youth that are most critical during the transition years—education, employment, housing, and community life functioning. Program staff include four transition specialists and a job developer who consult with an on-site supervisor. They work with youth in flexible, innovative, non-clinical ways. Youth are referred to Options from Connections (a specialized mental health program based in juvenile justice) and Catholic Community Services (a provider of crisis and intensive mental health services). Youth qualify if they are age 14-25, meet criteria for a mental health diagnosis, and are at imminent risk of out-of-home placement or homelessness.

As part of Options, researchers from Portland State University's Regional Research Institute for Human Services have conducted process and outcome evaluations; preliminary findings have previously been reported on at this conference. This presentation reports on the methods and findings from our latest process evaluation effort: an examination of the Options program's fidelity to key TIP principles.

Methods

This phase of the evaluation was undertaken to answer the following questions:

1. Are services being provided according to the TIP System guidelines and other principles adopted by the program?
2. What are the perceived levels of effectiveness of services offered to youth?
3. How satisfied are youth with the services they have received?

The process evaluation and fidelity assessment was accomplished by collecting case study data on a stratified random sample of eight Options program youth (1-2 per transition specialist). For each youth selected, we reviewed his/her case record and service activity data; interviewed the youth directly about the services s/he has received; and interviewed the youth's transition specialist about the services provided to the youth.

Once a youth agreed to participate, a research interviewer visited the Options offices and reviewed the case record for that youth. This involved reading through the contents of the case records (including assessment, plans, progress notes and correspondence with other service providers) and completing a checklist. The case record review looked for evidence that services were being delivered according to the theory base and philosophy established for the program. After the case record was reviewed, the researcher first interviewed the youth and then the transition specialist. Both interviews were conducted using parallel structured interview schedules, adapted from the TIP Case Study for Continuous System Improvement Protocol (Deschênes, Gomez, & Clark, 1999). Youth who were eligible for selection all had given consent to being involved in the project's evaluation, which included extracting data from the youth's case record. Specific informed consent was obtained from both youth and transition specialists for the individual interviews. Youth received a \$20 gift certificate for participating in the interview.

All interviews were taped and reviewed manually to confirm direct quotes; audiotapes were not transcribed. A detailed 'case by data source' matrix was constructed, and evidence for each TIP practice

guideline was entered for each case. Evaluators independently assigned ratings of *high* (3), *medium* (2), or *low* (1) for each case within a given guideline, then discussed ratings until agreement was reached. Average scores, rating frequencies, and summaries of the evidence were reported for each practice guideline; program staff were provided with a four-page principle and practice guideline matrix that included all of this information, along with a one-page ranking of scores across practice guidelines (see Table 1) that allowed for comparison of strengths and areas for improvement at a glance.

Table 1
Clark County Options Program 2005 Fidelity Study, Practice Guidelines by Rank

<i>Item Number</i>	<i>Practice Guideline</i>	<i>Fidelity Indicator</i>	<i>Frequencies</i>
16*	Transition facilitator and other Options staff are committed to the youth.	3	8-H
8*	The youth has access to a range of services and supports in all transition domains identified in the Success Plan.	2.9	7-H, 1-M
14*	There is one person assigned, over time and across agencies who is responsible for coordination of the youth's services.	2.9	7-H, 1-M
22*	The youth is able to voice his/her concerns.	2.9	7-H, 1-M
23*	The youth and his/her family are able to make informed choices during the transition process.	2.9	7-H, 1-M
4*	The youth participated in the transition planning process.	2.75	6-H, 2-M
11*	Supports and services are provided in a community-based setting.	2.75	6-H, 2-M
17*	The youth feels that staff allow him/her to explore and take risks.	2.7	6-H, 2-M
18*	Services and supports are offered in a flexible manner to meet the changing needs of the youth.	2.7	6-H, 2-M
1*	The strengths of the youth have been identified.	2.6	5-H, 3-M
12*	The youth has access to coordinated services in all domains.	2.6	5-H, 3-M
15*	The transition facilitator maintains a good collaborative relationship with youth and all services and supports.	2.5	4-H, 4-M
19*	The youth feels hopeful and encouraged through the actions of the transition team.	2.5	4-H, 4-M
20*	Relevant and meaningful skills for community settings are being taught.	2.5	4-H, 4-M
25*	An assessment of progress toward goal achievement is conducted.	2.5	5-H, 2-M, 1-L
29	Transition specialists incorporate Core Gifts strategies and techniques as appropriate in their work with this youth.	2.5	3-H, 3-M, 2-deferred
9*	Services and supports are implemented in a timely fashion.	2.4	3-H, 5-M
6*	The culture of the youth and family are valued in the planning process.	2.3	2-H, 4-M, 2-NA
5*	The goals of the plan reflect strengths, resources and priorities of the youth.	2.25	3-H, 4-M, 1-L
13*	Difficulties regarding access to supports and resources are quickly eliminated.	2.25	4-H, 2-M, 2-L
7*	The cultural and linguistic diversity of this youth and family is reflected in services and supports received.	2.2	1-H, 5-M, 2-NA
2*	A thorough assessment of needs in all domains has been conducted.	2.1	1-H, 7-M
10*	Natural resources (including family members, per youth's choice) are included in supports and service delivery.	2	2-H, 4-M, 2-L
21*	The youth experiences successes during the transition process.	2	2-H, 4-M, 2-L
3*	The youth, in partnership with transition team, has identified natural supports who can help with transition plan.	1.9	2-H, 3-M, 3-L
26*	The transition services and support help the youth meet his/her transitional needs and improve his/her situation.	1.9	1-H, 5-M, 2-L
27	The youth, in partnership with the transition facilitator, has identified his or her Core Gift.	1.7	3-H, 1-M, 4-L
30*	Transition specialists incorporate TIP strategies and techniques as appropriate in their work with this youth.	1.6	1-H, 3-M, 4-L
24*	The transition plan has measurable goals and objectives in all relevant transition domains.	1.5	4-M, 4-L
28	The Core Gift has been integrated into the Success Plan and is recognized when being used.	1.5	4-M, 4-L
31	Transition specialists coordinate with youth's wraparound or ITC teams.	Not scored	2-H, 6- N/A

Note. * = TIP-specific guidelines. Fidelity indicators are rated 3 = *high, well met*; 1 = *low, poorly met*; dark shading indicates a strength, while lighter shading indicates areas for improvement

Findings

Qualitative analysis was completed in late December 2005, discussed with Options program staff in early January 2006, and reported to the program's community steering committee in early 2006. Key findings suggested that the Transition Specialists are working with youth in a way that is highly consistent with key TIP principles, and that adherence to practice guidelines related to encouraging youth voice and youth decision-making were particularly strong. In fact, 15 of the 26 TIP practice guidelines received a mean rating of 2.5 or better, meaning that almost everyone was scored as either *medium* or *high* on these principles. Only three of the 26 TIP practice guidelines received a mean rating of 1.9 or lower (on a scale of 1 = *low* to 3 = *high*). Overall, scores for the following three TIP principles pointed to particularly high fidelity: Providing Coordinated Services and Supports, Providing a Safety Net, and Providing Services that are Competency Based.

Areas Needing Improvement

There were few instances of natural supports being involved in either the development or the implementation of the Success Plan. Family members were the most frequent examples of natural supports. Although a lot of work was being done with each of these youth and concrete examples of success were found, most youth were not in "improved situations." Further, goals in the Success Plan were usually stated in general terms and were not measured systematically, nor was progress toward goals easily tracked. Also, the use of the Core Gift process was inconsistent. In three cases, the approach was integrated into the Success Plan and the youth responded well, but in four cases the Core Gift process had not been completed for a variety of reasons. Finally, in most cases, wraparound teams appeared to have dissolved as soon as, or within a few months after, youth were accepted into Options. There were only a few examples of integration between the wraparound team process and the Options program.

Discussion

This time- and labor-intensive case study process provided the Options program staff and stakeholders detailed documentation of the consonance of their daily practice with the program model they had been implementing. While the study confirmed relatively high fidelity to key TIP principles and related practice guidelines, it also identified areas that could be improved, including the need for new staff to have more training and supervision around the TIP and Core Gifts approaches, and for greater efforts around coordination with natural supports and formal services when wraparound teams dissolve.

Undertaking this process also underscores the need for a fidelity evaluation approach that is tailored to the community and program being studied, and for the evaluators themselves to have a thorough understanding of the elements of the model being tested. Furthermore, the value of going beyond simply reviewing case file information was affirmed by the depth and quality of information provided by interviewing youth and program staff. Although in some instances youth did not have much to say (which suggested that the pilot Options-specific interview instrument could be streamlined, and raises the question of whether trained youth evaluators might have elicited more response), their heartfelt and honest comments provided strong evidence of the youth-driven nature of the program.

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Transition to Adulthood Program Information System (TAPIS)

**Arun Karpur
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Jordan T. Knab**

Introduction

The transition from adolescence to adulthood presents bewildering challenges for young people with emotional/behavioral disturbances (EBD). In the National Longitudinal Transition Study (NLTS), researchers observed a substantially lower rate of employment and enrollment into postsecondary education, and higher rates of incarceration for youth and young adults with EBD compared to their peers with no disability classifications (Blackorby & Wagner, 1996; Vander Stoep et al., 2000). Strikingly, a decade later, in the National Longitudinal Transition Study – 2 (NLTS2), the postsecondary outcomes for youth and young adults with EBD did not show any substantial improvements (Wagner, Newman, Cameto, Garza, & Levine, 2005). The Transition to Independence Process (TIP) system was developed at the Louis de la Parte Florida Mental Health Institute, University of South Florida to address these challenges and to help improve the outcomes for young people with EBD.

The TIP system was conceptualized to engage youth and young adults in their own futures planning process and to provide them with developmentally-appropriate services and supports. Further, the TIP system involves youth and their families and other informal key players in a process that prepares and facilitates youth in their movement toward greater self-sufficiency and successful achievement of their goals related to each of the transition domains. The TIP system is currently being implemented at various sites across the state of Florida and nationally. The TIP system has developed a multi-pronged approach in evaluation based on various qualitative and quantitative methodologies.

The Transition to Adulthood Program Information System (TAPIS) is one of the evaluation strategies within the TIP system. The TAPIS is an internet-based four part information system that consists of various instruments. These instruments were designed to inform transition programs on the progress indicators for young people transitioning into adulthood roles and provide program evaluation data. The summary provides an overview of the conceptual layout of the TAPIS system, brief description of the instruments, and sample reports. Some of the components of TAPIS are in the production phase and one is currently being pilot-tested.

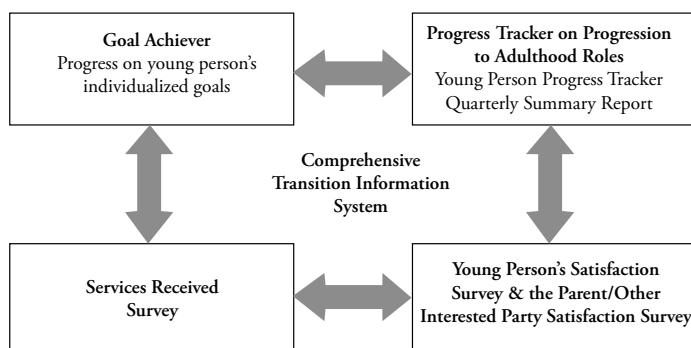
Methodology

The TAPIS data elements were developed based upon various other transition assessment systems that have been researched (Ansell-Casey, 2003; Bullis & Fredericks, 2002; Clark & Patton, 1997; Clark, Knapp, & Corbett, 1996; Davis, Deschênes, Gamache, & Clark, 2004a, 2004b, 2004c). Literature was also searched to identify variables or indicators of progress that impact future functioning of young people with EBD, and these were also considered as potential elements in the instruments (Clark & Davis, 2000; Karpur, Clark, Caproni, & Sterner, 2005; Luecking & Fabian, 2000; Neel, Meadows, Levine, & Edgar, 1988; Newman, 2005). Additionally, focus groups were conducted with various stakeholders (e.g., transition facilitators, administrators, teachers, parents, and case managers) across the state of Florida and nationally to get their input on the TAPIS concept and variables within the TAPIS instruments.

Description of the TAPIS components

Figure 1 depicts the conceptual layout of the TAPIS system. TAPIS is a four-part system consisting of: (1) TAPIS Goal Achiever, (2) TAPIS Progress Tracker, (3) TAPIS Services Received Survey, and (4) TAPIS Young Person's Satisfaction Survey and the Parent/Other Interested Party Satisfaction Survey. Following is a brief description of each of these components.

Figure 1
Conceptual Layout of the TAPIS



The *TAPIS Goal Achiever* is used with youth and young adults to assist them in setting their own individualized goals and tracking their progress across such goals and the related tasks involved in achieving them. The Goal Achiever is currently being pilot-tested with a limited number of sites.

The *TAPIS Progress Tracker* secures data on the indicators of progress and difficulty, across the various transition domains, on youth and young adults transitioning into adulthood roles. Information within each transition domain consists of: (a) objective information on the indicators of young person's progress and/or difficulty, and (b) assessment of overall levels of functioning within each of the 11 transition domains mentioned in the TIP system (Clark, 2004). The Progress Tracker is completed by the *transition facilitator* (or other personnel most knowledgeable of the young person's recent experiences or personnel working with the young person on transition-based issues), drawing on all of the sources of information available to him/her, including, but not limited to: the youth, parents, foster parents, various agency records, school reports, and other informal and formal key players in the life of the young person. Data on all of the young people will also be stored in a spread sheet for program evaluation purposes.

The *TAPIS Services Received Survey* collects information on the services received by the youth over the past 90-day period and allows for the rating of the helpfulness of those services. It also requests information on any additional services that appear to be needed by the young person. This survey is completed by the young person within the transition program.

The *TAPIS Young Person's Satisfaction Survey* can be completed through mailings, person-to-person interviews, or telephone interviews with the young persons every six months and addresses issues such as the following:

- How satisfied are you with your progress in each of the transition domain that you are working on?
- How confident are you that you can make progress in each of the domains?
- How satisfied are you that you are getting the help you need to achieve in this domain?
- Do you have additional needs for which you require help?

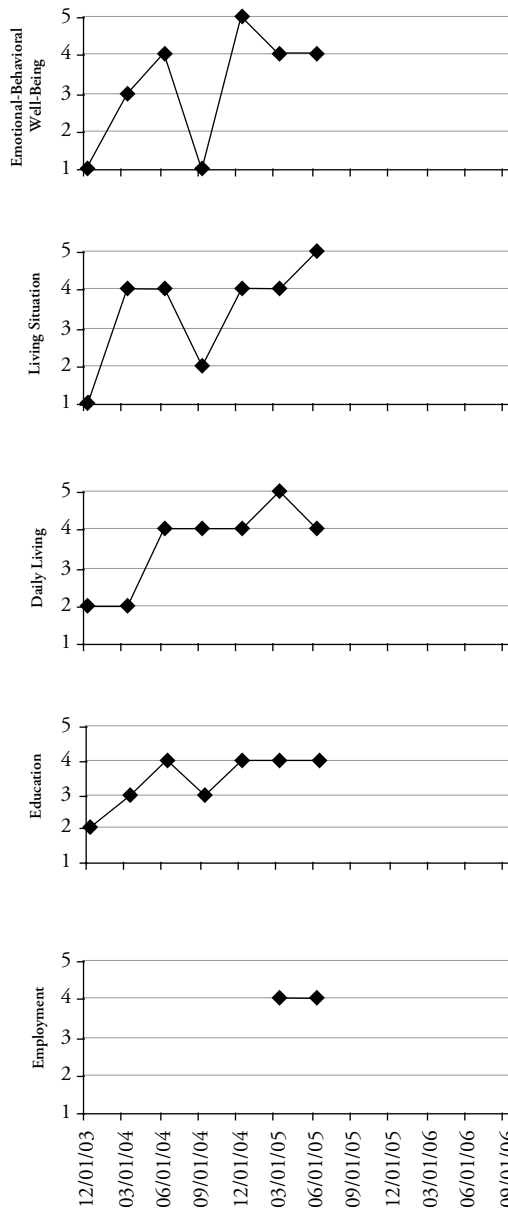
Another version of this satisfaction survey will be developed for parents and other key players associated with the young people.

TAPIS reporting format

The TAPIS Goal Achiever reporting format includes young person's individualized goals, associated tasks/strategies, and their corresponding progress rating. The TAPIS Progress Tracker report consists of: (a) Graphic Display Output and (b) Text-based Summary. The Graphic Display Output is a graphic layout of the levels of functioning of the young person for each of the 11 transition domains (e.g.,

Figure 2). It is intended to provide: (a) a global picture of the progress of the young person, and (b) an opportunity for celebrating the young person's success with the young person and his/her transition team (may consist of formal and/or informal key players). Customization for printing the most current month's responses to items or cumulative months will be built into the system. The database can be utilized to conduct an aggregated analysis for effectiveness studies for program and/or intervention impact assessment.

Figure 2
Sample Graphic Output from the Progress Tracker Report
Young Person PT Profile: Keisha W.



System description

As previously mentioned, the *TAPIS Goal Achiever* is currently being pilot-tested, with the remaining components of TAPIS in the production phase. The TAPIS is a web-enabled software system with a user-friendly graphical interface¹. Currently the database is being designed in a SQL Server database system and the front end is provided by ASP.net. The data entered in the TAPIS system will be streamed through the internet into a database stored behind a firewall secured server at the program site. The system is designed to have an encrypted password protected access feature for maintaining data security. Administrative level access will be provided to data administrators for editing the data. The transition personnel will have the capability to view and edit records of young persons with whom they are working. The TAPIS system can be modified for transition programs serving youth and young adults with other disability classifications (e.g., physical disabilities, sensory-motor disabilities).

The TAPIS Goal Achiever and TAPIS Progress Tracker are designed to be interconnected for reporting purposes on an individual as well as aggregate basis. The TAPIS Services Received Survey and TAPIS Young Person's Satisfaction Survey and the Parent/Other Interested Party Satisfaction Survey are optional components and they are stand alone sub-systems within the TAPIS and the reports will be generated on an aggregate basis only. By design, TAPIS can function as an internet-based version as well as a stand alone system on one's laptop computer. The advantage of completing TAPIS electronically is to provide summarized instant graphical reports (as shown in Figure 2) for the transition facilitator to discuss with the young person, parents, and other informal and formal key players to encourage participatory planning.

Conclusion

TAPIS is an integrated data collecting system that is designed to inform the transition programs on: (a) the progress of young each person on their individualized goals, (b) status of each young person on the indicator progress and/or difficulty, (c) services received, and (d) the young person's/parent's/ other key player's perceptions of services received and progress across all the transition domains. An integrated approach is a unique feature of the TAPIS system, which will also provide data for conducting program evaluation.

¹ For more information on TAPIS please visit the TIP website at <http://tip.fmhi.usf.edu> and follow the link for TAPIS. Also, you can email Hewitt B. "Rusty" Clark or Arun Karpur (addresses below). Beta version of TAPIS Goal Achiever is now available online at <http://tapisproto.fmhi.usf.edu>

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Survey Outcome for Youth with Mental Health Illnesses Transitioning from State Care

**Angelo Melendez
Nathalie Dozois**

Introduction

In the U.S., an estimated 20,000 youth leave the child welfare system every year (Propp, Ortega, & NewHeart, 2003). While in the child welfare system, these children experience an average of 4.6 out-of-home placements in various settings including foster homes, group homes, and residential programs (Courtney, Piliavin, Grogan-Kaylor & Nesmith, 2001). As young adults, they are discharged from the child welfare system at age eighteen and are often sent into the community with the expectation that they will not only survive, but also contribute to society. Due to the lack of stability in their formative years, children in state care experience many difficulties in transitioning to adulthood and are to likely develop unhealthy living patterns as well as mental health issues. According to Reilly, 2003, this group of transitioning young adults is likely to experience homelessness, incarceration, poverty, early pregnancy, unstable employment, and financial government dependency. A review of the literature indicates that about 38% of youth exiting foster care were diagnosed as having an emotional disturbance (Stoner, 1999). There appears to be very little data collected on children with a DSM-V-R Axis I diagnosis in state care. The lack of literature yielding guidance on how to best provide services and aid to this smaller segment of the transitioning young adults is problematic. This study was designed to better inform the community of the needs of these individuals.

Method

This study analyzed data on clients, ages eighteen to twenty-two, receiving outpatient services with Northside Mental Health Center's Clinical Case Management (CCM), who were admitted to Florida's state inpatient psychiatric program, admitted to the child welfare system, or both.

The targeted population in this study included all CCM clients in the past three years who were eighteen to twenty-two and receiving outpatient services. The population constitutes 30 individuals, including 10 females and 20 males, all of whom have been diagnosed with a mental health illness on Axis I. Northside CCM provided services to clients for an average of four years before the cases were closed, and thirteen of the thirty cases were open with CCM at the time of the study. The majority of CCM clients have at one time been admitted to Florida's State In-Patient Psychiatric Program (SIPP). Two-thirds of the population was also involved with the child welfare system and were transitioning from foster care into adulthood at the time services were provided.

The data were gathered by reviewing clients' charts and interviews with clients' case managers and other clinicians who worked with the clients. Data were analyzed using correlations.

Areas researched include length of stay in Northside CCM care, reason for case closing (when applicable), highest level of education achieved, employment history, type of community support system, residential placements, psychiatric emergencies, and duration of volunteer services such as therapy and respite services. Residential placements included living with relatives or friends, adult assisted living facilities, structured apartments, group homes, and shelters. Types of psychiatric emergency situations that occurred with these clients were also studied, and generally these emergencies consisted of admissions to the Crisis Center, 911 calls that did not result in any further action being pursued, arrests, and admissions to the hospital.

Information was also gathered on the types of independent living skills that these clients lacked, related to less successful transitional periods. These main categories include: maintaining proper hygiene, maintaining psychiatric stability, stress management and coping skills, ability to use the public transportation system, money management and budgeting skills, job readiness skills, and domestic skills such as cooking and cleaning.

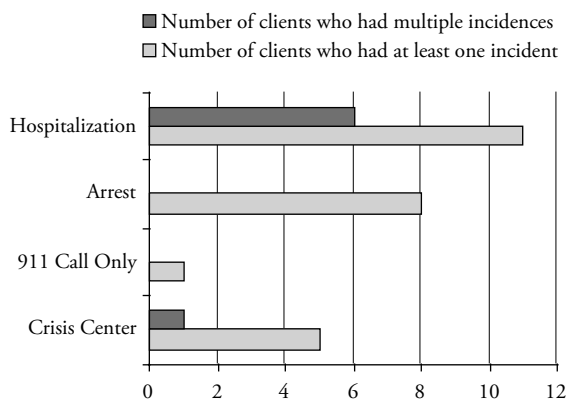
Findings

The most significant finding was the lack of stable housing for these clients. There was a significant correlation between former foster care and multiple residential placements throughout the treatment period at $r = .80$, as compared to an $r = .70$ correlation for the entire population. Over half of the population had at one time resided at adult assisted living facilities. The nine clients who terminated their care at Northside prematurely had multiple residential placements. Cases closed prematurely and psychiatric emergencies compared with a correlation of $r = .78$.

A correlation between all clients in treatment and occurrence of psychiatric emergencies was found to be $r = .57$. Clients with only one residential placement had a significantly lower correlation to occurrence of psychiatric emergencies at $r = .22$. The most significant positive correlation in this comparison set was for clients with multiple residences and occurrence of psychiatric emergencies at $r = .71$. The variance between findings for one residence as compared to multiple residences as correlated with psychiatric emergencies is statistically significant.

Clients who lived in adult assisted living facilities were more likely to experience one of these emergencies than clients who had not. The break down of types of emergencies and their frequency of occurrence are depicted in Figure 1.

Figure 1
Types of Psychiatric Emergencies



The majority of clients needed assistance in all the areas of independent living skills. The respite services are provided on a voluntary basis and are conducted in the community on an outpatient basis. There is a significant relationship between length of exposure to respite services and the amount of independent living skills addressed. For the clients who received these services for less than one month only 24% of the areas addressed included independent living skills, as compared to 57% for clients who receive these services for more than one month.

Sustaining long-term employment for this population was not common. In comparing the population's employment history, only 26% held employment for over one week. A correlation of $r = .62$ was found for clients who had multiple residential placements and were never employed. For clients who resided at adult assisted living facilities and were never employed, a more significant correlation of $r = .85$ was found. There was a correlation of $r = .62$ for clients who were never employed and had an arrest. Clients who were arrested and were former foster care youth had a correlation of $r = .75$.

The level of education these clients achieved by their early twenties was also investigated. None of these clients had high school diplomas by the age of eighteen. While receiving services at Northside,

only eight of the thirty clients completed some type of secondary education, such as a GED, a special education diploma, or a regular high school diploma. There was no direct correlation between the level of education and having multiple residences.

Conclusion

Finding a stable and motivating place of residence was shown to be paramount. The results suggest that having multiple residences relates to being more likely to be unemployed, to have psychiatric emergencies, and to terminate services prematurely. It is clearly difficult to attend school or work on a regular basis while changing residences often. It is also difficult to be contacted by potential employers when the individual does not have a stable residence. In adult assisted living facilities, these youths often live with a high proportion of adults with chronic illnesses, most of whom are no longer active in the community. Transitional youths placed in adult assisted living facilities decompensate more frequently and significantly than transitional youths in different placements. The environment found in such residences is shown to have impacts on the clients' goals and motivations.

A secondary concern was acquisition of independent living skills. These clients struggle with simple independent living tasks such as making and keeping appointments, shopping, maintaining personal hygiene, managing their money, cooking for themselves, and eating nutritious meals. Many clients are reluctant to utilize public transportation for fear of getting lost or of leaving a familiar area alone.

The respite service program is on an outpatient basis and is susceptible to compliance issues. It is concerning that only a small percentage of clients participated in these voluntary services. Possible reasons for termination of respite services may include anything from a compatibility issue to trouble contacting the client. With the instability facing the client, respite services may not be a high priority. Respite services provide a long-term benefit for the clients, and basic unmet physical needs not being met, such as food, shelter, etc., may render these services overwhelming to clients. In this manner, clients cannot see their immediate need for these services.

It appears that the current system of care does not meet the immediate needs of these clients very efficiently. Having a transitional residence including onsite independent living skills training would provide a possible solution to meeting these needs as a potential pilot program for further research. By having these clients in one residential placement for their transitioning years, clients may benefit from group socialization, consistent staff, personal mentors, on-site and hands-on life-skill training, and easier access to public services such as transportation.

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Chapter Eight

Collaboration and Services within the Juvenile Justice Population

Expediting Access: A Collaboration of Juvenile Justice, Mental Health and Child Welfare

**Richard Hlavacek
Marlyse Benson**

Introduction

Union County, New Jersey, has developed a comprehensive system of care incorporating a service approach based on wraparound principles. Components include a Care Management Organization, a Family Support Organization, a Mobile Crisis Team and Youth Case Management services. All services are linked through a statewide database. Two years ago these agencies joined with groups from the juvenile justice system to reduce the number of children in county detention centers and to move children with behavioral problems out of the juvenile justice system into appropriate mental health programs.

The detention center in Union County, New Jersey has been plagued with overcrowding for years. Total admissions reached 782 in 2002, the sixth highest in the state. Recently, the suicide of a teenager and other violence at the site led to extremely negative press coverage and the re-organization of administrative staff at the center. At the same time, New Jersey was facing a Federal takeover of its troubled child welfare system. An independent Child Advocate was appointed who promptly charged that the state was abusing the rights of adjudicated children with mental health problems by keeping them in detention while awaiting placement. In response, Union County created a workgroup called the Union County Juvenile Expediting Team (UJET), which was charged with moving youth out of the detention center to community based probation, residential treatment settings, if indicated, or to commitment in state juvenile justice facilities.

This paper illustrates the outcomes that were achieved by the creation of the UJET to reduce enrollment in the detention center, shorten the length of stay in the detention center, eliminate conditions that led to violence among the youth, and increase access to the mental health system for children with behavioral health needs. Additional outcomes achieved by UJET included improved inter-agency understanding of the various child-serving systems, identification of better treatment alternatives for children and recommended referrals that were more appropriate to the needs of the child in the detention center.

Method

At the time of this writing, UJET has been operational for approximately 24 months. The first year involved the development of a reporting tool to capture the needed information, organizational changes including the hiring of a social worker to manage the system and training of the system partners in a better understanding of the function and mission of each group. During this two year period approximately 1,500 children were admitted to the detention center. The process became fully functional in the second year.

Union County began the project by hiring a consultant who was a senior administrator with extensive state government experience in residential treatment, child welfare and juvenile justice. Her task was to spearhead a work group which had been assembled by the county. She created a model that encourages the participation of various stakeholders in the county, tracks the progress of the decisions that were being made regarding disposition of cases and holds the group accountable for children that fall into their legal and professional area of responsibility. The group also provides feedback to the family court judges who ultimately make the final determination on the cases coming before them. In addition to local interest in improving a troubled juvenile justice system, the reform of the child welfare system and the increased scrutiny of the Child Advocate's office, which had legal standing to sue the state or counties, made the deliberations and the outcomes very public.

Work group participants included members of the newly developed behavioral health care system which was heavily biased toward community based alternatives using a wraparound model and

strength based family orientation. Members included the Executive Director of the Care Management Organization, the Director of the hospital based Mobile Crisis Team and Youth Case Management system, and representatives of the newly formed behavioral health office of the state. Other participants included a court based representative of the child welfare system, the manager and social workers from the detention center, state juvenile justice representatives, probation offices and liaisons from the offices of the family court judges. On occasion, visitors included staff from the state juvenile justice commission, the county judges, mental health providers, prosecutors, defense attorneys and others. The UJET also became a forum for education and advocacy for a wide range of high-level state officials. Other visitors included the Commissioner of the Department of Human Services, staff from the Child Advocate's Office and senior planners from the state Juvenile Justice Commission.

Data were collected for each child in detention on a two-sided form. At each meeting the facilitator distributed a packet of these forms which contained profiles of the youth with an emphasis on his or her psychosocial and criminal justice history. The group reviewed each form and discussed issues that determine sentencing, including previous crimes, special education history, mental health history and family issues.

The UJET process includes a rapid review of the children in the detention center where population varied from an average daily census of 54 in 2003 to 39 as of September 2005. Poorer families in the county and minorities were consistently overrepresented in the population in detention. Union County is about 20% African American and 20% Hispanic. The population in the detention center was 68% African American, 10% Caucasian and 21% Hispanic. In detention, boys outnumbered girls six to one (New Jersey Dept. of Law and Public Safety, 2004).

Cases are reviewed at a weekly meeting and the group then recommends interventions that include a wide range of options. These include, but are not limited to, the following:

- Residential treatment for conduct or behavioral disorders
- Specialized treatment within the juvenile justice system such as residential programs that include drug counseling
- Court ordered county-based day program with a strong counseling component
- Electronic bracelet with a range of collateral requirements including probation and counseling
- Intensive case management through the Care Management Organization including extensive wraparound services such as in home counseling and family team meetings
- Less intensive Youth Case Management which also included service delivery based on wraparound principles

Recommendations of UJET then go to the family court judge through the newly hired court liaison specialist who also plays a role in monitoring requests for service such as psychological testing and tracking additional charges or legal problems in the case. The weekly meeting, which lasts about two hours, also includes sharing information about system development and has served as a forum to discuss gaps in service and realignment of existing services.

Findings

For this analysis, the Daily Population Report for UJET form was collected and reviewed, individual client summaries were assessed and state reports from the Juvenile Justice Commission were used to give comparative data. All of the children in the sample were detained in the Union County detention center from 2003 to 2005, during which period the UJET became fully functional. Outcomes indicate the changes in the number of children in detention, changes in the average length of stay in detention and the current disposition or placement of the cases. The current population of the detention center ($N = 36$) includes 13 special education students (36%) and 9 (25%) who self-reported a history of mental health treatment.

The outcome of this effort has been the creation of a process that moves children out of detention in an effective and expeditious manner, a reduction in the number of youth in the detention center, closer collaboration with the judges and detention staff when planning for discharge, and more appropriate care for children with behavioral health issues. Challenges include differing views regarding safety and risk among system partners, families that resist engagement in the mental health system and mental health providers that are apprehensive about this population.

The outcomes after two years of UJET includes the following:

- The average daily census in the detention center was 52 in 2003 and is 40.5 for the first nine months of 2005, a reduction of 23% from 2003, when the project began.
- Family Court judges routinely use the UJET recommendations in their deliberations.
- A significant number of children are being referred to alternatives to detention including case management program where extensive wraparound services are being employed for high-risk families. One of the current detainees is enrolled in the Care Management Organization and five are enrolled in the less intensive Youth Case Management service.
- Juvenile justice staff in various facilities have additional options for treatment and are more likely to partner with mental health professionals. Juvenile justice professionals still tend to favor their own residential facilities (many also provide counseling) as an alternative to incarceration even for youth with special education or a history of mental health problems.
- Support from state officials for continuation of the process. Several counties have adopted this model and expanded it with foundation funding.
- Increased access to less restrictive juvenile justice facilities where political pressure has succeeded in relaxing admission standards for children with mental health histories or those on medication.

Conclusion

The development of a system of care with a strong wraparound component can have an impact on other child oriented systems including juvenile justice. By providing a wider range of options for children and input on an administrative level in the decision making process, a mature system of care can reduce transfers of children with mental health and conduct issues into the juvenile justice system. In addition the collaboration of professionals on a local level can improve understanding of the needs of children in the juvenile justice system, potentially reduce recidivism and create a forum to advocate for programs to fill in gaps in service.

The census of the detention center has been reduced through these efforts; those youth who remain tend to have more extensive criminal justice profiles, including some youth whose behavior is viewed as an extreme safety risk to the community (e.g., homicide, manslaughter).

A review of the experience of the UJET for the past two years also reveals that some issues remain that are significant impediments to accessing treatment. These are often based on differing governmental mandates and philosophies of care and treatment.

Community safety is a key factor when a judge decides to release a child into an unlocked facility or return them to their home. These decisions are often influenced by media attention or other events that create a conservative backlash. Recent situations regarding severe abuse or even death to children in the child welfare system have caused caseworkers and others to propose more restrictive environments if the family appears to be unstable or has a history of non-compliance. Families and youth sometimes prefer the less stigmatizing experience of the justice system to that of mental health.

Families may also resist engagement in the mental health system for a variety of reasons. Clinical services are generally based on the voluntary commitment of clients of families to a process of counseling. Some caretakers, due to their own mental illness, addiction problems or resistance to treatment, may be

unwilling to commit to treatment. Sometimes there is an interest and even motivation to participate, but a long history of failed efforts, missed appointments or unrealistic expectations cause professionals to be skeptical about plans that rely too heavily upon voluntary participation in programs.

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Symposium

A Multi-State Study of Mental Health Prevalence and Services for Justice Involved Youth: Findings and Implications

Symposium Introduction

Joseph J. Cocozza

Over the past five years, there have been significant steps forward in mental health prevalence research among youth in the juvenile justice system. Despite this, significant questions remain about the generalizability of these results. To answer these questions, a multi-state prevalence study was undertaken by the National Center for Mental Health and Juvenile Justice, through support from the Office of Juvenile Justice and Delinquency Prevention and the Center for Mental Health Services. This study also sought to determine the services provided to these youth and the views of family members regarding their children's needs and treatment. This symposium presented the results of this study and discussed the implications of these results.

Chair and Discussant

Joseph J. Cocozza

Authors

Kathleen Skowyra et al.

Joseph Cocozza et al.

Jennie Shufelt et al.

Trina Osher

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) Multi-State Study: Background, Research Design, and Sample Characteristics

Kathleen Skowyra, Joseph J. Cocozza, & Jennie L. Shufelt

Introduction

National, state, and local policy makers and practitioners are increasingly recognizing the importance of identifying and responding to the needs of youth with mental health disorders in contact with the juvenile justice system (Cocozza & Skowyra, 2000). The increased awareness is the result of a number of factors. First, there has been growing recognition of the mental health needs of youth in general. The Surgeon General's report, *National Action Agenda for Children's Mental Health* (Office of the Surgeon General, 2001), notes that many children with mental health problems end up in the juvenile justice system due to the lack of identification of disorders, prevention, and treatment in the community. Second, recent studies have documented the higher rates of mental disorders among youth in the juvenile justice system. Studies estimate that anywhere from 65% to 100% of youth in the juvenile justice system have diagnosable mental disorders (Otto, Greenstein, Johnson, & Friedman 1992; Teplin, Abraham, McClelland, Dulcan & Mericle, 2002; Virginia Policy Design Team, 1994; Wierson, Forehand and Frame, 1992).

In addition, a recent series of US Department of Justice (2005) investigations into the conditions of confinement in juvenile detention and correctional facilities repeatedly found inadequate access to treatment, inappropriate use of medications, and neglect of suicide attempts in juvenile justice facilities across the country. There is also growing concern on the part of both the juvenile justice and mental health systems over the "criminalization of mental illness." Despite the documented lack of mental health treatment available in many juvenile justice facilities, placement of youth in the juvenile justice system with the hope of obtaining treatment that is unavailable in the community continues. In a recent survey of parents, 36% reported intentionally involving their child in the juvenile justice system in order to access mental health services otherwise inaccessible to them in the community (National Alliance for the Mentally Ill, 2001).

Recently, there have been significant advances in the knowledge base with respect to the mental health needs of youth in contact with the juvenile justice system. Despite this, research on the prevalence and types of mental health disorders among these youth has been scarce, and methodological issues have limited those that have been conducted. Specifically, many of the existing studies focus on populations in large urban centers, leaving many regions of the country understudied. Additionally, many of the existing studies have focused exclusively on youth either within one facility or at one discrete point within the juvenile justice continuum.

In response to the gaps in the knowledge base, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) and the Center for Mental Health Services provided support to the National Center for Mental Health and Juvenile Justice, within Policy Research Associates in Delmar, New York, to undertake a comprehensive study of the prevalence of mental health problems among youth involved with the juvenile justice system. This study attempted to overcome many of the limitations of prior studies by collecting data on a large number of youth from several understudied regions of the country and, within each region, across multiple levels of care.

Methods

Data on 1,437 currently housed or newly admitted male and female youth, ages 11-18 years, from 29 juvenile justice facilities distributed across three states (Louisiana, Texas and Washington) and three different types of residential placements (community-based programs, juvenile detention centers, and secure juvenile correctional facilities) were collected. All participating youth were administered the Youth Interview. The Youth Interview consisted of: (a) a General Questionnaire for Youth, which included questions about the youth's stay in the facility and living arrangements before coming to the facility; (b) The Massachusetts Youth Screening Instrument – Second Version (MAYSI-2; Grisso & Barnum, 2000); and (c) a Services Questionnaire for Youth (SQY), a newly developed self report services questionnaire.

A 50% subsample of youth whose MAYSI-2 score met the study threshold severity (defined as either two or more cautions on any scale, or one or more warnings on any scale) were identified to take the Diagnostic Interview Schedule for Children – Voice Version IV (Voice DISC-IV; Shaffer, et al, 1996; Shaffer, Fisher, Lucas, Dulcan & Schwab-Stone, 2000). The Voice DISC-IV is a highly structured contingency-based interview designed to assess over 30 psychiatric diagnoses commonly seen in children and adolescents.

Data collection was initiated in May 2003 and ended in April 2004. Efforts were made to oversample for girls and certain ethnic minorities including Hispanic and Native American youth. A total of 1,437 MAYSI-2 interviews and 640 Voice DISC-IV interviews were completed. Data were weighted back to the facility populations at the state level. Estimated rates of disorders were calculated for the full sample based on their MAYSI-2 threshold level.

Finally, in order to supplement and enhance the information collected through the prevalence component of this study, focus groups of parents of justice-involved youth with mental health needs were conducted in each of the three states that participated in the prevalence study. The goal of these focus groups was to obtain the family's views of their children's mental health needs, the adequacy of the services they received, and recommendations for how the juvenile justice system can improve services to these youth.

Conclusion

This research endeavor represents the first ever attempt to collect information on the mental health issues of youth from several regions of the country and, simultaneously, across multiple levels of care. The results of this study fills critical gaps in the knowledge base and will help the juvenile justice system get a better handle on the extent of the problem and better allocate resources. Findings are presented in Cocozza, this symposium summary.

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Prevalence of Mental Disorders among Youth in the Office of Juvenile Justice and Delinquency Prevention (OJJDP) Multi-State Study

Joseph J. Cocozza, Jennie L. Shufelt, & Kathleen Skowyrá

Introduction

Past research that has attempted to determine the exact prevalence of mental health disorders among youth in the juvenile justice system has produced wide variations in prevalence rates. A 1992 comprehensive review of the literature attributed this variation to inconsistent definitions, use of unstandardized and inconsistent measures, and problematic study designs (Otto, Greenstein, Johnson, & Fredman, 1992). Recent research has utilized newly developed standardized screening and assessment instruments, thereby overcoming some of these limitations. However, several issues remain. These studies often draw their sample from one region of the country or from one level of care within the juvenile justice system. Several regions of the country have remained unstudied. The primary goals of this study were to overcome these limitations and comprehensively examine the prevalence of mental health and substance use disorders among youth involved with the juvenile justice system.

Method

Psychiatric diagnoses were identified among a sample of 1,437 male and female justice-involved youth, 11-18 years, from 29 juvenile justice facilities in three states (Louisiana, Texas, and Washington). Within each state, youth were sampled from three types of facilities (secure-correctional, detention, community-based). Females, Hispanics, and Native Americans were oversampled to ensure adequate representation of these subpopulations.

All participating youth were administered the Massachusetts Youth Screening Instrument – Version 2 (MAYSI-2; Grisso & Barnum, 2000) as part of an initial youth interview. Upon completion, the research interviewer examined the participant's MAYSI-2 scores to determine whether the youth met criteria for the second, more-detailed diagnostic interview, the Diagnostic Interview Schedule for Children-Voice Version IV (Voice DISC-IV; Shaffer, et al, 1996; Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000). A random sample of 50% of all youth eligible for the Voice DISC-IV were selected for participation ($n = 721$). Completed Voice DISC-IV results were obtained for 640 youth. Data were weighted back to the facility populations at the state level. Rates of psychiatric disorders for the 640 youth with a completed Voice DISC-IV were used to estimate prevalence rates for the entire sample.

Findings

Estimated prevalence rates for individual mental health disorders are presented in Table 1, both overall and by gender. A total of 70.4% of the sample met criteria for at least one mental health diagnosis. Some variation was found in terms of type of placement. Mental health disorders were most common among youth in secure correctional facilities (76.4%), followed by detention centers (66.4%) and community-based placements (60.0%). While some state differences were also found, this variation was largely due to differences in the characteristics of the youth in the state samples. Consistent with previous research, disruptive disorders were most prevalent (46.5%), followed by substance use disorders (46.2%), anxiety disorders (34.4%), and mood disorders (18.3%). The prevalence of mental disorder was higher for girls (81.0%) than for boys (66.8%). Girls exhibited especially high rates of internalizing disorders such as anxiety and mood disorders.

Many youth in the sample met criteria for multiple disorders. More than half (55.6%) of youth met criteria for two or more mental health diagnoses, and approximately 33% of males and 49% of females had co-occurring mental health and substance use disorders. Furthermore, a significant proportion of youth in the sample (27%) had a mental illness serious enough to require immediate and significant treatment.

Table 1
Prevalence of Mental Health Disorder, Overall and Stratified by Gender

	<i>Overall</i> %	<i>Males</i> %	<i>Females</i> %
Any Disorder	70.4	66.8	81.0***
Any Anxiety Disorder	34.4	26.4	56.0***
Agoraphobia	13.5	10.2	22.6***
Generalized Anxiety	6.8	5.3	10.8***
Obsessive-Compulsive	11.1	8.5	18.4***
Panic	6.4	4.9	10.4***
Posttraumatic Stress	8.7	5.5	17.4***
Social Phobia	9.7	7.4	16.0***
Specific Phobia	12.8	9.0	23.1***
Any Mood Disorder	18.3	14.3	29.2***
Manic Episode	3.6	2.6	6.1**
Hypomanic Episode	2.2	1.9	2.8
Major Depression	15.5	11.8	25.4***
Dysthymic	.5	.5	.5
Any Disruptive Disorder	46.5	44.9	51.3*
ADHD	6.6	6.7	6.6
Conduct Disorder	42.4	40.7	47.6*
Oppositional Defiant Disorder	17.4	15.7	22.1**
Any Substance Use Disorder	46.2	43.2	55.1***
Alcohol Abuse	14.4	12.2	20.7***
Alcohol Dependence	16.0	15.5	17.4
Marijuana Abuse	10.5	9.9	12.2
Marijuana Dependence	26.6	24.5	32.5**
Other Substance Abuse	7.3	6.9	8.5
Other Substance Dependence	18.9	15.9	27.8***

* $p < .05$ ** $p < .01$ *** $p < .001$

Conclusion

This study was able to overcome the limitations of prior research by sampling a large number of youth from three levels of care and multiple regions of the country. What is clear from the results of this study is that large numbers of youth in the juvenile justice system have mental disorders. Approximately 70% of youth in this study met criteria for at least one mental disorder. This is consistent with previous studies utilizing the Diagnostic Interview Schedule for Children (DISC), which have found rates of disorder between 65% and 70% among youth in residential juvenile justice placement (Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002).

Furthermore, it is clear that many of these youth have significant and complex treatment needs. Approximately 27% of the sample met criteria for a severe disorder. In addition, more than half of the sample had multiple disorders. The presence of multiple disorders makes proper identification and treatment more difficult, particularly for the juvenile justice system, which is not equipped for addressing their complex needs.

The results of this study also confirm the finding of previous studies that mental illnesses are more prevalent among justice-involved girls than boys. Approximately 80% of girls in this study met criteria for at least one mental health diagnosis, compared to 67% of boys. In particular, girls were more susceptible to internalizing disorders.

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Past and Current Service Utilization among Youth in the Office of Juvenile Justice and Delinquency Prevention (OJJDP) Multi-State Study

Jennie L. Shufelt, & Joseph J. Cocozza

Introduction

The recognition that there are large numbers of youth with mental health disorders involved in the juvenile justice system has resulted in heightened awareness of the need to identify those youth requiring immediate attention and to provide appropriate services (Cocozza & Skowyrá, 2000). Evidence suggests that, for the most part, the juvenile justice system does not adequately respond to the mental health needs of these youth. A recent series of US Department of Justice investigations into the conditions of confinement in juvenile detention and correctional facilities documented inadequate access to treatment, inappropriate use of medications, and neglect of suicide attempts in juvenile justice facilities across the country (US Department of Justice, 2005).

This presentation discussed the findings from the service utilization component of the OJJDP Multi-State Study. Data were obtained on the extent to which youth with mental health issues report receiving a variety of services during their current placement. In addition, logistic regression was used to identify factors related to the provision of mental health services within the juvenile justice system.

Method

Through support from the OJJDP and the Center for Mental Health Services, the National Center for Mental Health and Juvenile Justice, within Policy Research Associates in Delmar, New York, undertook a comprehensive study of the prevalence of mental health problems among youth involved with the juvenile justice system. As part of the study, information on mental health services provided to youth in the study was collected. Services information was collected from three sources: a survey of the facilities that participated in the prevalence study, a self-report services questionnaire, and a record review.

Findings

The majority of facilities reported providing an array of mental health services to youth in their care. The most common services that the facilities reported providing were medications (94.7%) and screening (89.5%). Significantly fewer facilities reported providing more intensive services such as residential care (36.8%) and hospitalization (47.4%).

In contrast, the results of the record review suggest that while most facilities report providing services, a significant proportion of youth in need do not receive mental health services. For example, while almost 80% of facilities surveyed indicated that they provide emergency mental health services, only 10% of youth with a severe mental disorder had received those services. Similarly, while almost 95% of facilities said that they provide medications to youth in their care, only 44% of youth with a severe mental illness had received medications.

Logistic regression analysis was used to identify predictors of receiving mental health services, using the self-report services data obtained during the Youth Interview (see Skowrya, this symposium). This analysis was limited to those youth who took the Voice DISC-IV and those youth who did not score a caution or warning on the Massachusetts Youth Screening Instrument – Second Version (MAYSI-2; Grisso & Barnum, 2000) (i.e., assumed to have no diagnosis). The results of the logistic regression analysis are shown in Table 1. As expected, youth with severe mental illness were over two times more likely than youth with no disorder to receive mental health services. However, other factors unrelated to a youth's mental health status also predicted service provision. Specifically, Non-Hispanic Caucasian youth were more likely ($OR = 2.01, p < .001$) than their Hispanic counterparts to receive services (no differences were found between Hispanic and Non-Hispanic African American youth), and youth in Louisiana were 3.6 times more likely ($p < .001$) to receive services than youth in Washington (no differences were found between youth in Washington and Texas).

Conclusion

The results of this study raise significant concerns about the extent to which the juvenile justice system is providing these youth with the treatment they need. A significant proportion of youth with a severe disorder were not receiving services. Furthermore, although there is some indication that the presence of severe mental illness plays a role in determining service allocation, other factors unrelated to a youth's mental health status, including race, geographic region, and type of facility emerged as predictors of service provision.

Table 1
Results of Logistic Regression—
Predictors of Current Mental Health Services (SR)

<i>Mental Health Status (ref: None)</i>	<i>OR</i>
Mild Mental Health Disorder	1.68*
Severe Mental Health Disorder	2.38**
Substance Use Disorder	1.02
Race/Ethnicity (ref: Hispanic)	
Non-Hispanic Caucasian	2.01**
Non-Hispanic African American	0.994
Female Gender	0.915
Age (ref: 11-13 years)	
14-15 years	0.929
16-18 years	0.689
State (ref: Washington)	
Louisiana	3.55***
Texas	1.18
Facility Type (ref: Detention)	
Secure	5.29***
Community-Based	2.26**
Most Serious Charge is Violent	1.56
Length of Stay (days)	1.002**

* $p < .05$ ** $p < .01$ *** $p < .001$

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The Family Perspective: Results of the Office of Juvenile Justice and Delinquency Prevention (OJJDP) Multi-State Study Family Focus Groups

Trina Osher

Introduction

Increasingly, the importance of developing interventions for youth with mental health needs involved in the juvenile justice system that address the social context of youth development, including the family, is being recognized (MacKinnon-Lewis, C., Kaufman, M., & Frabutt, J., 2002). Families represent a valuable resource for the juvenile justice system. They can contribute background information and insight into their child's condition, provide support and assurance to their child, and play a vital role in carrying out transition plans (Osher & Hunt, 2002). Unfortunately, parents often find themselves isolated and confused by the complexities of the juvenile justice process and, as a result, this vital resource is often overlooked and underutilized.

Given the importance of the family perspective to the juvenile justice system's ability to appropriately respond to the needs of this population, an additional component of the OJJDP Multi-State Study involved conducting family focus groups. The goal of these focus groups, convened by the Federation of Families for Children's Mental Health, was to obtain the family's views of their children's mental health needs, the adequacy of the services they received, and to solicit recommendations for how the juvenile justice system can improve services to youth with mental health needs. The results enhance the information obtained through the OJJDP Multi-State Study.

Method

Focus groups of parents of justice-involved youth with mental health needs were conducted in each of the three study sites (Louisiana, Texas, and Washington). The target population for the focus groups consisted of family members of children with mental health disorders currently or previously involved with the juvenile justice system in the three sites. A total of 31 parents or caregivers of justice-involved youth participated. Consistency between the focus groups was maintained through the use of a discussion guide, predetermined focus group questions, and facilitation of the group by two or three members of the research staff. Each focus group lasted approximately three hours.

Findings

Beneficial Services

Parents repeatedly said that the availability of a support system was extremely helpful. They spoke frequently about the complexity of the juvenile justice system and the difficulties this imposed on parents. Many participants felt confused and frustrated as they tried to understand what was happening to their child. As several members pointed out, there is no time when the juvenile justice system explains the juvenile justice process or parental rights and options. The failure of the system to offer this support made navigation and understanding of the process almost impossible for the focus group participants. Some parents also reported satisfaction with wraparound services provided to their child.

Barriers

A resounding theme of the focus groups was disappointment over the failure of the juvenile justice system to involve families. Many parents reported feeling blamed or looked down upon by the juvenile justice system, as if they were responsible for their child's behavior. Most parents reported that they had tirelessly tried to get their child help prior to juvenile justice system involvement. The failure of their efforts was typically attributed to inadequate community mental health resources, and not to a lack of effort on their part. As a result, the negative reception of parents by the juvenile justice system, often the system of last resort, was extremely frustrating.

Many parents also indicated that the incredible burden placed on families is magnified by the lack of collaboration and communication between the mental health, juvenile justice, and school systems. Parents revealed that treatment and medications were often interrupted during transitions between systems. They attributed this disconnect to the failure of any one agency to take responsibility for the treatment of youth with mental health needs. This forces parents to take responsibility for their child's care. In an environment that views parents as part of the problem and that isolates and ignores parents, such a task can be overwhelming and discouraging.

When asked about the quality of mental health services, most parents in the focus groups felt that the quality was poor. This was primarily attributed to inadequately trained providers and high turnover in the facilities. Parents also expressed their frustration with the "one-size-fits-all" approach to treatment typical in the juvenile justice system. Such an approach was not only viewed by parents as ineffective, but as time consuming and costly.

The majority of parents in the focus groups felt that their children did not receive adequate treatment for mental health issues while involved with the juvenile justice system. A number of parents actually reported involving their child in the juvenile justice system with the hope that they would finally be able to access services that were unavailable to them in the community. Therefore, the failure of such services to materialize was very troublesome.

Parents consistently brought up the inadequacy of screening for mental health and substance abuse issues at entry into the juvenile justice system. According to these parents, youth are not screened until they are already immersed in the system. Furthermore, once a mental health issue was identified, most parents thought that the juvenile justice system focused on addressing the behavioral manifestation of the mental illness in a punitive way instead of addressing the underlying mental illness in a therapeutic way.

According to some of the focus group participants, the juvenile justice system did not create or implement any transition plan for their children. Other parents reported that although their child was given a transition plan, the plan was unrealistic. This was attributed to the failure of the system to involve parents in transition planning. However, despite the lack of parental involvement in transition planning, the system expected parents to carry out the plan once the youth had been released. This typically involved coordinating and arranging services, providing transportation, supervision of their child, and other expectations nearly impossible for a parent to carry out.

Conclusion

The participants in the three focus groups had several recommendations for improving the delivery and effectiveness of mental health and substance abuse services within the juvenile justice system. Many of their recommendations focused on increasing family involvement. In particular, participants felt that providers and administrators should be encouraged to look at families as a potential resource. Most of them felt that families are perceived as part of the problem, resulting in reluctance by providers to involve them in the care of their child.

Parents in these focus groups also advocated strongly for the implementation of family support mechanisms. These sources of support were sometimes formal (support groups, advocacy organizations), but often consisted of informal conversations with parents in similar situations. Specific support mechanisms mentioned by parents include the provision of information on parental rights, the juvenile justice process, and available options; formal support groups; and facilitation of good relationships between parents and probation officers.

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Symposium Conclusion

Joseph J. Cocozza

This research endeavor represents the first ever attempt to collect information on the mental health issues of juvenile justice-involved youth from several regions of the country and, simultaneously, across multiple levels of care. The availability of this information represents a significant step forward for the field. Equipped with a better understanding of the prevalence and types of disorders and service needs, the ability of the juvenile justice system to plan effectively and utilize resources more efficiently is significantly enhanced. This, in turn, can improve the response of the juvenile justice system to the mental health needs of the youth in its care.

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Juvenile Justice and Mental Health in Rural and Urban Tennessee

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Introduction

Youth living in rural areas have comparable rates of mental health problems to youth in suburban and urban areas, but the availability and quality of behavioral health care in rural areas may be more limited (Fox, Merwin, & Blank, 1995). Estimates of the rates of youth with mental health problems in the juvenile justice system are high. The rate of youth in the juvenile justice system who qualify as having a *serious* mental health disorder is estimated at 20% (Cocozza & Skowrya, 2000; Goldstrom, Jaiquan, Henderson, Male, & Mandersheid, 2000), which is double the estimated rate in the general youth population (Friedman, Katz-Leavy, Mandersheid, & Sondheimer, 1996).

Advocates are apprehensive as to whether the system is prepared to address the needs of the young people being served. A recent study of juvenile offenders referred to any of the 98 courts in Tennessee (Breda, 2001) found that about 7% are referred either to mental health or substance abuse services by the court. This rate of treatment referral is substantially lower than even conservative estimates of service need (Otto, Greenstein, Johnson, & Friedman, 1992). This suggests the juvenile court system is missing an opportunity to respond to the service needs of youth. This may be even more of a problem for rural youth, given the lack of available services. However, there is a lack of research available on the juvenile justice system in rural areas. The purpose of this study is to compare rural and urban counties in Tennessee on their need for mental health service through juvenile justice facilities and juvenile courts.

Method

Data Sources

This is a secondary analysis of two datasets. The first was from a survey of juvenile justice facilities in Tennessee between October and December of 2003 (Tennessee, 2004). Sixteen questions were asked about identifying and providing services to youth with mental health and substance use problems. Additionally, a “one-day census” asked facilities to report on all of the youth in their facility during a high-census day of their choosing. Forty (91%) of the forty-four juvenile justice facilities in Tennessee responded to this survey. A report from this survey is currently available (Tennessee, 2004). The second dataset was created from survey results addressing Tennessee juvenile court judges’ beliefs about mental health services (Breda, 2001). Seventy-three of the ninety-eight juvenile courts in Tennessee responded to this survey.

There are four research questions for the current study. First, what are the differences between juvenile holding facilities located in rural or urban counties in screening, referral, and provision of services? Second, do the youth served in juvenile holding facilities located in rural or urban counties differ in respect to demographics, mental health need, and substance use need? Third, what are the differences between rural and urban juvenile court judges’ reports on the adequacy and quality of mental health services in their county, and on their beliefs related to mental health? Finally, how do the findings from the juvenile court judges differ when using different definitions of rural?

Definition of Rural

Compounding the lack of rural mental health research is the lack of consensus on an operational definition of rural. This study used five different definitions in order to compare the findings (all definitions are available at <http://www.ers.usda.gov/Briefing/Rurality/>). First, a categorical measure from the Office of Management and Budget defines *nonmetropolitan* (rural) as all counties that were not metropolitan (urban). Metropolitan is defined as an area that has at least one central county with either a place with a minimum population of 50,000, or a census bureau defined urbanized area and a

total metropolitan area population of at least 100,000. Second, the Economic Research Service (ERS) *Rural-Urban Continuum Code* classifies counties into nine increasingly rural categories by urbanization and nearness to a metropolitan area. Third, the ERS *Urban Influence Code* classifies counties into ten increasingly rural areas by adjacency to metropolitan counties and the size of the largest urban settlement within the county. Fourth, counties are classified as “percent rural” by the US Census Bureau, which included areas that had a population density of less than 500 people per square mile as rural. The fifth and last definition was a simple continuous measure of persons per square mile in the county.

Juvenile Justice Facilities

The analysis of juvenile facilities focuses on Juvenile Detention Centers (JDCs) and Temporary Holding Resources (THRs), two of several different types of facilities in Tennessee used to hold pre-adjudicated delinquent youth. All eighteen of the JDCs and eight of the nine THRs responded to the statewide survey; these represent 26 of the 40 juvenile facilities that responded. The number of youth detained in JDCs and THRs was 396, with 82% being male and 54% African-American. Four percent of the youth were identified as Hispanic or Asian-American. The average age was 15.6 years.

Results

The first research question sought to uncover the differences between rural and urban holding facilities in screening, referral, and provision of services, and the second research question examined differences between rural and urban youth served in those facilities. Table 1 answers the first two questions using the survey of JDCs and THRs, with findings based on the first definition of rural (OMB, nonmetropolitan). There were significant differences in the race of the detained youth. In rural areas, the youth were approximately one fourth African-American, while in urban areas this increased to 77%. This difference generally reflects the differences in population in these regions, however, it demonstrates a disproportionately high rate of minority youth confinement in both settings. Youth in rural settings were significantly more likely to be reported as having mental health problems ($\chi^2(1) = 7.6, p = .006$), more likely to have a mental health diagnosis ($\chi^2(1) = 10.8, p < .001$), and more likely to be on a suicide watch ($\chi^2(1) = 12.9, p < .001$). There were no differences between youth in the rates of receiving mental health services in the facility, or receiving mental health medications while in facility. Facility resources for identifying and treating behavioral health issues were also examined. The JDC facilities’ activities in screening and referral for mental health and substance abuse were not related to rurality.

The third research question explored the differences between rural and urban juvenile court judges’ reports on the adequacy and quality of mental health services in their county, and in the judge’s beliefs related to mental health. The fourth research question examined how the findings from the juvenile court judges differ when using different definitions of rural. Table 2 presents the findings for questions three and four from the survey of juvenile court judges. In all tests that were significant (see Table 2), judges in urban counties rated the item higher (i.e. they rated with more agreement, as more important, of higher quality, or of higher adequacy) than judges in rural counties. Rural judges tended to report significantly less contact with mental health providers, significantly less adequate mental health services, and significantly lower quality mental health services. This was especially true for the adequacy and quality of outpatient mental health services. There were few differences in reports on inpatient residential treatment centers or community mental health centers.

Rural judges were no more or less likely to think delinquency was related to youths’ emotional disturbance, to believe that the court should take mental health factors into account in making dispositions, or to think that a psychiatric evaluation was important prior to making a disposition. In three of the five definitions of rurality, urban judges were significantly more likely to think that mental health services can rehabilitate offenders with mental health needs, and this approached significance in the other two definitions.

The variables *persons per square mile* and *percent rural* were each significantly related to eight of the variables completed by the judges. The *Rural-Urban Continuum Code* was significantly related to three of the variables completed by the judges.

Table 1
Descriptive Information on Juvenile Demographics,
Mental Health Services, and Mental Health Training in Juvenile Facilities

	<i>JDC-Urban</i> (<i>n</i> = 5)	<i>JDC-Rural</i> (<i>n</i> = 13)	<i>THR-Rural</i> * (<i>n</i> = 8)
Demographics			
Number of youth	209	163	24
Youth is male (%)	83	80	71
Youth race (%)			
African American	77	26	13
Hispanic	2	2	0
White	20	70	88
Youth average age	15.5	15.7	16.3
Youth MH problems			
Youth has MH probs—staff ID (%)	8	19	-
MH medication (%)	4	10	-
MH diagnosis (%)	2	7	-
MH service received in facility (%)	18	17	-
Youth on suicide watch (%)	0	4	-
Any of the above (%)	24	29	-
Services and training in facilities			
Information collected at intake (%)			
MH problems	60	69	38
Past MH services	100	100	100
Current MH services	60	69	38
Services offered in facilities (%)			
Crisis intervention	20	31	13
MH counseling	20	8	0
Staff training in the facilities (%)			
Mental health	80	77	75
Psychiatric medication	60	69	50

* The THRs did not identify any of their youths with having any mental health problems.

Table 2
Relationships Between Juvenile Court Judges' Survey Responses
and County Rural/Urban Classifications

	<i>Definition of urban or rural</i>				
	<i>Metro/ non-metro</i>	<i>Rural-urban continuum code</i>	<i>Urban influence code</i>	<i>Persons per square mile</i>	<i>Percent rural</i>
Think delinquency is the result of emotional disturbance	NS	-.008	.015	.137	-.058
Think court dispositions should be made with regard to the mental health status of the youth	NS	-.057	-.072	.142	-.042
Think mental health services can rehabilitate offenders with mental health needs	U>R*	-.213	-.229*	.239*	-.210
How often is a clinical MH evaluation available before a disposition is made	NS	.144	.150	.132	.031
How important is clinical/psychiatric evaluation before a disposition is made	NS	-.013	-.007	.088	-.102
How often are the court's work group members in contact with others regarding mental health	U>R*	.364**	.283*	-.416**	.439**
How is the quality of the work group's relations with others outside the group who handle mental health	NS	-.115	-.101	.168	-.151
What is the overall <i>adequacy</i> of mental health services in your community (sum score of 12 different services)	U>R*	.237*	.303*	-.379**	.342**
What is the overall <i>quality</i> of mental health services in your community (sum score of 12 different services)	NS	.156	.158	-.287*	.306**
Adequacy of outpatient MH services	U>R*	.185	.246*	-.289*	.377**
Quality of outpatient MH services	U>R*	.265*	.304*	-.315**	.323**
Adequacy of inpatient residential treatment centers	NS	.015	-.029	-.243*	.134
Quality of inpatient residential treatment centers	NS	.220	.114	-.305*	.321*
Adequacy of community mental health centers	NS	.103	.168	-.196	.295*
Quality of community mental health centers	NS	.124	.211	-.180	.270*

Note: In all significant cells, judges in urban counties rated the item higher than judges in rural counties

* $p < .05$; ** $p < .01$

Discussion

There has recently been a push by U.S. federal agencies to pay more attention to rural areas. Rural residents have been designated as special populations for increasing focus on health, mental health, drug and alcohol abuse (NIH, 2004) issues and service delivery for those concerns. The President's New Freedom Commission on Mental Health (2003) specifically addressed the need to improve access to quality care in rural areas (Recommendations 3.2 and 6.1).

While there was only one statistically significant difference found in the urban v. rural facilities' screening, training, services, and referral, the rate of behavioral health resources varies widely and few of the facilities provided a full range of behavioral health screening, referral, or treatment services. Juvenile court judges in rural counties reported that the quality and adequacy of mental health facilities were lower than judges in urban counties reported and that mental health services were less effective for juveniles with mental health needs; however, they did not report any differences in beliefs about the interaction between mental health and juvenile delinquency or the importance of incorporating mental health needs into dispositional hearings.

A last note is needed on the varying definitions of rurality. The "correct" definition of rural is dynamically related to the research question; this study revealed some differences in findings depending on the definition that was used. In this study, *persons per square mile* and *percent rural* were predictive of the most variability in judges' responses, the *Rural-Urban Continuum Code* was predictive of the least, and the last two definitions fell in the middle. It is important to remember that regardless of definition of rurality, rural areas are unique, each with its own special populations, resources, health problems, and patterns of caring for its members (Bushy, 1997) and large variations in the demographic, cultural, economic, and environmental characteristics (Hart, Larson, & Lishner, 2005). This study is a first step in examining the needs of youth in rural areas.

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Factors Related to Mental Health Referral among Juvenile Detention Staff

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Introduction

It has been estimated that as many as 60% of youth who enter the juvenile justice system suffer from an emotional or behavioral disability (Cocozza, 1991). Despite this high level of identified need, most juvenile detention facilities do not have adequate screening procedures to detect psychopathology in youthful offender populations. The burden of identifying youth in need of mental health treatment and referring these youth for treatment is often placed on juvenile corrections staff members who have little training in mental health or developmental issues.

Unfortunately, knowledge about factors that motivate these gatekeepers' judgment is minimal. Currently, the decision to refer a youth for treatment once in the justice system is highly variable and dependent upon a complex interaction of youth factors (age, race, crime committed, past criminal record, etc.), decision maker characteristics (attitudes about incarcerated youth, experience in the system, feeling about mental health treatment, mental health training, etc.), and organizational context characteristics (barriers to referral, lack of available services, etc.).

Knowledge about mental illness may be associated with mental health care. However, there are few identified studies examining factors associated with referral in individuals with no clinical background or training. Furthermore, many of these individuals have been trained in disciplines with models that appear more punitive and less rehabilitative in nature.

The goal of this study is to (1) describe the sociodemographic characteristics of juvenile corrections staff, (2) explore the attitude of corrections staff toward mental illness and mental health treatment, and (3) explore reasons for referral or lack of referral of youth for mental health treatment by juvenile corrections staff.

Methods

Focus groups were convened with four groups of staff members at a long term juvenile corrections facility housing adjudicated youth including: front line officers, supervising officers, facility administrators, and mental health and nursing staff. The data from the focus groups were used to develop two questionnaires: The Staff Attitude Survey and the Youth Referral Survey. The Staff Attitude Survey is a 22 item questionnaire focusing on four domains: (1) the role of mental health in detained youth, (2) benefits of mental health treatment, (2) barriers to mental health referral, and (4) indicators of referral for mental health treatment (see Table 1). The Staff Referral Survey is a 40 item instrument which assesses the reasons for mental health referral and has five domains: (1) youth likeability, (2) likelihood that the youth would have a positive future, (3) aggression toward staff, (4) aggression toward others, and (5) indicators of mental illness.

All staff members were recruited to complete the Staff Attitude Survey including direct care staff, supervising staff working on each unit, facility administrators, and mental health and nursing staff. Additionally, primary assigned staff members for 120 youth referred for mental health services and a control group of 120 youth not referred for services were asked to complete the Staff Referral Survey.

Clinical and demographic data was obtained for a randomly selected group of 100 youth referred for mental health care and a group of 100 matched youth. The matched factors include age, type and severity of charges, gender, and length of time in the detention prior to referral. Sources of information included the Child Behavior Checklist (CBCL; Achenbach, 1991a), Youth Self Report (YSR; Achenbach, 1991b), and a clinician reported diagnosis.

Table 1
Component Questions of the Staff Attitude Survey

Domain: Discipline	$\alpha = 0.73$
Q1. Discipline for the youths in juvenile hall is too strong.	
Q2. All that juveniles here need is a good spanking.	
Q3. Encouraging and supporting troubled youths is more important than strict discipline.	
Q4. Detention in juvenile hall is not enough punishment for most of the crimes youth commit.	
Q5. The main purpose of juvenile hall is to punish offenders.	
Q6. Most youth who seek mental health treatment are trying to avoid punishment.	
Domain: Role of Mental Health	$\alpha = 0.74$
Q1. Adequate evaluation for mental health problems should be a high priority in juvenile hall.	
Q2. I would seek mental health treatment myself if I thought that I needed help.	
Q3. I feel I can help youths under my care just as much as a mental professional can.	
Q4. Having a mental health professional to talk to is very helpful for youths in juvenile hall.	
Q5. Youth with emotional problems are reluctant to be evaluated by mental health professionals.	
Q6. Youth who are referred to mental health by staff members are usually troubled youth.	
Domain: Barriers to Mental Health	$\alpha = 0.62$
Q1. Most staff in SFV juvenile hall are aware of the mental health services offered here.	
Q2. The last thing that staff members need is another training session.	
Q3. It is easy to make a mental health referral at SFV juvenile hall.	
Q4. I am concerned about what youths might say about me or my co-workers to the mental health staff.	
Q5. I feel SFVJH should receive more training in how to deal with youths with possible mental problems.	
Q6. I feel that my co-workers will think negatively of me for making a mental health referral.	
Domain: Indicators for Mental Health	$\alpha = 0.76$
Q1. Juveniles who attack other juveniles should be referred to mental health.	
Q2. Kids who are fearful or anxious should be referred to mental health.	
Q3. Juveniles who attack staff members should be referred to mental health.	
Q4. Juveniles who try to hurt themselves should be referred to mental health.	
Q5. Youth who are sad and cry a lot should be referred to mental health.	
Q6. Kids who hear voices when no one is speaking should be referred to mental health.	
Q7. Kids who ask to be referred to mental health should be sent.	

Results

The study included 301 participants which represented 80% (301/375) of individuals working at the facility. The most common reasons for refusal were (1) negative information getting back to administration ($n = 50$) and (2) working on an intermittent basis and thus not available during the study period ($n = 24$). These individuals did not differ demographically from subjects agreeing to participate.

The mean age of subjects was 35 years with line staff being younger than nursing staff (mean age = 42) and administration ($n = 51$). Most staff members had a post high school education with associates degree (25%), bachelor's degree (37%), master's degree (12%), and doctoral degree (1%). Twenty-five percent only had a high school diploma, but many had taken college classes. The most common areas of study were criminal justice, sociology, and psychology. Most direct care staff had been at the facility for a long period (6 years). Mental health professionals and nurses had the longest average tenure (7 years).

Most staff members endorsed positive feelings about mental health treatment, but felt that mental health practitioners did not focus enough on consequences for behavior problems. Survey results showed that staff members were able to identify symptoms of psychosis and suicide risk factors, but were less likely to identify symptoms of depression or anxiety as reasons to refer youth for mental health treatment. Most staff members reported that they did not feel that there were system barriers preventing mental health referral; however, many felt that fellow staff members may view the decision to refer the youth for mental health treatment negatively.

Juvenile justice staff members were able to identify appropriate youth for referral. Youth referred for mental health care were more likely to have clinically significant scores on both the CBCL (Mean = 65) and YSR (Mean = 71) than youth in the comparison sample ($p = .005$ for CBCL; $p = .002$ for YSR).

Results indicated that youth were more likely to receive a mental health referral if they were seen as likeable, $\chi^2 = 5.67$, $p = .017$. This included joyfulness, positive self statements, and ability to engage. Youth were most likely to be referred for services if they asked to be referred for services, $\chi^2 = 7.65$, $p = .006$. Youth who were more verbally aggressive were more likely to be referred for mental health services, but youth with physical aggression toward staff or peers were less likely to receive a referral, $\chi^2 = 15.52$, $p \leq .001$. Youth who were seen as possibly having a bright future were more likely to receive a referral, $\chi^2 = 65.59$, $p = .01$.

Sociodemographic factors also influenced referral status. Youth who were of a different race from the primary staff member were less likely to receive a mental health referral. This was more prominent for Latino youth than for African-American or Caucasian youth. Gender differences between primary staff member and youth did not impact referral status. Direct care staff members were less likely to make a mental health referral than supervisors. Nursing staff were more likely than corrections staff to recognize symptoms of mental illness and refer the youth for treatment.

Conclusions

This study does not support the common assumption that juvenile corrections officers do not recognize psychopathology and are unwilling to refer for mental health services. The findings do suggest that more subtle symptoms of anxiety and depression are more difficult for individuals with little mental health training to identify. As corrections personnel gain more experience in dealing with youth, the ability to identify and refer youth appears to improve. The findings also suggest that cultural differences may impact the ability of staff members to recognize mental health problems. This is especially true when language barriers may also be present with a Latino youth and a non-Latino staff member. These problems do not appear as pronounced with African-American and Caucasian youth.

This study has several limitations that prevent its generalizability. First, the study was completed in a single juvenile facility in a metropolitan area. Secondly, the staff members in this juvenile facility may have been more educated than staff in most juvenile correction facilities. Thirdly, mental health service are more prominent and available in this facility than in most. Despite its limitations, this study is an initial step into understanding the referral patterns of juvenile corrections staff.

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Topical Discussion

The New “Unclaimed Children”— Linking Systems of Care and Best Practices for Intervention with Youth Who have Caused Sexual Harm

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Introduction

During the last fifteen years clinicians and researchers have been grappling to make sense of the complex dynamics involved in the development of sexually abusive behavior (Hermann, 1992; Ryan & Lane, 1997), ways to prevent recidivism (Knight & Prentky, 1993; Prentky, Harris, Frizzell & Righthand 2000; Minor & Crimins, 1995) and curb the tide of sexual abuse. Literature now includes comprehensive, multidisciplinary models addressing a full continuum of care (Bengis, 1986; Henggeler, Schoenwald, Broduin, Rowland & Cunningham, 1998; Trepper & Barrett, 1989). Agencies intent on providing a therapeutic response to juvenile sexual offending based upon best practice strategies can now integrate core effective components into a broad range of settings.

A therapeutic framework embracing evidence based research on juvenile sexual offending, trauma, affect regulation, resiliency and family therapy can inform interventions with sexually aggressive youth and their families. This important research can easily be integrated into systems of care in order to enhance service provision and impact successful treatment outcomes.

Research indicates that multisystemic family therapy (MST) is an empirically tested approach that influences successful treatment outcomes with delinquent youth and is cost effective. A study using MST with sexually aggressive youth shows promise with this population (Borduin, Henggeler, Blaske & Stein, 1990). Concepts derived from family systems theory, which provide the foundation for multisystemic treatment, can be integrated into all service provision. Family focused interventions need not be limited to the intensive home-based approach created by Henggeler and his colleagues (Borduin et al., 1990; Henggeler et al. 1998). Programs do not have to struggle with the dilemma of either providing MST, or limiting interventions to traditional responses based primarily on outdated conventional wisdom.

Challenges in Systems of Care

Comprehensive therapeutic protocols for youth who exhibit sexually harmful behaviors do not exist in many systems of care, and identification and early intervention are not widespread. Families are often scared and have no idea where to obtain help, and systems of care staff do not always know where a family might get help. There is also inadequate specialized training for service providers. Further, referrals are made without adequate specialized assessment which puts other children at risk of sexual harm.

Goals for Best Practice

In keeping with the President’s New Freedom Commission on Mental Health (2003), we are proposing a family driven response to youthful sexual harm that encompasses essentials for living, working, learning, and participating fully in the community. Best practices for responding to youthful sexual harm include the following goals for integration into mental health settings:

- Freedom from sexual harm is essential to overall health.
- Family driven services are critical to successful treatment outcomes that stop youthful sexual harm.
- Disparities in mental health services are eliminated through a seamless continuum of care.
- Mental health screening, assessment and referral to services specifically designed to address sexual harm are needed.
- Data and research drive best practice for mental health care delivery that is empirically based.
- Technology enhances access for mental health care and information.

While experts in the field of youthful sexual aggression acknowledge that a collaborative, multi-system approach is required for successful treatment outcomes, it is the system of care approach that can

operationalize the Child and Adolescent Service System Program (CASSP) principles, making them the driving force in policy formulation, program planning, service delivery, training and evaluation. The enhanced core values of system of care work (based upon the New York Statewide Workgroup on Child and Adolescent Sexual Abusers) provide the foundation essential for integrating specialized services for youngsters who are sexually aggressive. See Table 1 for a list of identified best practices for this population.

Providing comprehensive services for youth who have caused sexual harm and their families requires that a range of service options, at varying levels of intensity, be made available to them, (Stroul & Friedman, 1986). Such services should meet their multiple needs across all relevant domains, including physical, emotional, social, educational and justice domains. Specifically, youth identified as experiencing learning, conduct, and psychiatric problems need individually tailored treatment plans to remediate these difficulties (Becker, 1990), as well as treatment programs which conform to their developmental abilities (Stroul & Friedman, 1986).

Table 1
Best Service Practices for Youth with a History of Sexual Aggression

-
1. The system of care must address community safety. While we believe in advocacy for the rights of the client, these must be balanced against concerns for community safety, with safety taking priority if a choice is forced.
 2. Individualized treatment of sexually abusing children and adolescents, which uses a strength-based approach, can be effective in curtailing the offending behaviors and increasing community safety.
 3. There should be cooperative inter-agency planning and integrated service delivery at the state and local level. Coordinated services maximize community resources, reduce duplication, and address the complex needs of clients.
 4. The system must have measurable and accountable outcomes routinely monitored and reported to a centralized oversight group. The system of oversight and standards, whether at the local, state or peer level, must exist independent of program administration and be charged with the responsibility for formative evaluation and continual quality improvement.
 5. Sustainable funding needs to follow the client.
 6. The system should include case coordination: a person or entity that ties together services and insures continued oversight.
 7. The system must include a comprehensive continuum of care including early intervention and continuing care, to prevent recidivism and to maintain community safety.
 8. All services must be culturally sensitive, respecting ethnic and cultural backgrounds of youth and families.
 9. Individualized services should be provided to abusers, their families, victim, and victim's families.
 10. Services should be available close to the child and family's home community. Agencies should provide equal access to services with an individualized monitoring plan consistent with the risk of reoffending.
 11. Adjudicated youth need to complete specialized sex offender treatment. Length of treatment should not be dictated by sentence length. Treatment should continue regardless of sentence completion.
 12. Inclusion of families, surrogate families, and significant others identified by the child or family for full participation (as appropriate) in all levels of service planning and delivery.
 13. A sex abuse-specific, culturally competent needs and risk assessment is an essential component of care.
 14. Perpetrators accept responsibility and accountability for their behavior(s).
 15. All staff working with this population must complete a core training that establishes a minimum level of competence, and receive regular, on-going training thereafter.
 16. The system should insure a smooth transition to the adult system of care/support as clients reach maturity.
-

A service use model such as the system of care provides a context for organizing and delivering a broad array of community-based services necessary to successfully treat and maintain youth in their communities (Holden et al., 2001). Essential elements of the system of care model, applied to the treatment and management of sexually aggressive youth include service providers offering a comprehensive array of individualized, integrated services in the least restrictive environment, making families full participants in all aspects of treatment planning, as well as providing case management services, early intervention, and culturally sensitive care (Rosenblatt, 1998; Stroul & Friedman, 1986).

Youth arrested for sexual crimes may be viewed by community-based social service agencies as being under the aegis of the juvenile justice system, and therefore seen as not appropriate for inclusion in certain service networks. However, no single agency or service domain should be expected to assume responsibility for the treatment of youth receiving services across service domains (Stroul & Friedman, 1986). Rather, a multi-modal, cross-systems treatment approach that involves multiple agencies and multiple modalities is required to provide services that increase the chance of youths improving over time (Stroul & Friedman, 1986). Integrated, multi-agency networks of services are needed to blend services across multiple domains including mental health, education, juvenile justice, social services, and substance use. Active involvement of community and social service agencies (Borduin et al., 1990; Henggeler et al., 1998), school-based support services (Borduin et al., 1990), and family treatment resources (Ryan & Lane, 1997) are key to the success of treating sexually aggressive youth. Optimal multi-system service delivery requires communication and collaboration among agencies.

The Discussion

Because this presentation followed a research-based presentation, the audience consisted primarily of researchers who had little first hand knowledge about working with families with a child who has serious emotional disturbance and sexual aggression issues. Although audience members had other backgrounds, they were very receptive and asked questions about the statistics that were presented as well as the number of children that were thought to have these problems. The comments and suggestions that were made during the discussion and presentation suggested that the Substance Abuse and Mental Health Service Administration (SAMHSA) might consider adding the following types of questions to all systems of care (SOC) research projects related to youth with serious emotional disturbances (SED) who are sexually aggressive:

- How many children/adolescents within the SOC have sexually aggressive issues?
- Are these youth treated within the community or routinely sent into residential care?
- If they are sent into residential care does that residential care facility offer treatment for their sexually aggressive behaviors?
- When these children/youth return from care, are there treatment providers within the SOC who can address (with some sense of expertise) their sexually aggressive behavior issues?
- Does the SOC community have protocols or standards to address the needs of youth with SED who are also sexually aggressive?
- Does the SOC have professionals who are trained specifically in the area of youth who are sexually aggressive?
- If so, what does that training consist of, and how often is it updated?
- If there is not an expert on staff, do SOC professionals receive consultation from an expert?
- Are there programs that work seamlessly with families and youth where sexual aggression is an issue?
- Does the SOC believe they are doing an adequate job of addressing the needs of families with youth who have SED and are also sexually aggressive?

The discussion was short and decidedly had more questions than answers. However, we are of the opinion that researchers in the field of children's mental health who investigate the problems of sexually

aggressive youth need more time to adequately explore the current research and to move forward with designing new research tools to help address the needs of youth and their families faced with these troubling issues. In past presentations when we have spoken with audiences that were mixed in terms of therapists, line staff, Social Services, teachers etc., they brought issues relevant to working with these youth to the table. Yet they too had experienced frustration when trying to find experts in their communities who could help them address the needs of the youth and family.

Conclusion

We believe providing a therapeutic response to youthful sexual harm is trauma work. Empirical evidence increasingly reveals that trauma influences dysregulation that includes sexually harmful behavior. Resiliency or protective factors have the power to mitigate such influence. Integrating important empirical findings from these areas of research can enhance successful treatment outcomes and create safer communities.

The importance of service coordination among service systems dealing with sexually offending youth is especially pertinent because of the seriousness of their sexual and nonsexual behavior problems, as well as because of the large number of youths who receive services across multiple systems of care, and pervasive problems with service fragmentation across service systems (Cocozza & Skowrya, 2000; President's New Freedom Commission, 2003).

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Chapter Nine

Wraparound Implementation

Symposium

Wraparound Fidelity: Different Aspects

Symposium Introduction

Eleanor Castillo

The symposium addressed three aspects of wraparound fidelity. The first paper examined the relationship between wraparound fidelity and youth behavior and functioning. In particular, there was a strong focus on community-based services, as it was the most consistent relationship to clinical outcomes. The second paper examined the relationship between wraparound fidelity and other constructs related to wraparound (i.e., family-centeredness and satisfaction). The third paper presented findings from a pilot of the Wraparound Supervisor Adherence Measure (W-SAM), an instrument completed by the facilitator to rate the clinical supervisor's fidelity to wraparound services via supervision. Use of the W-SAM as a quality improvement tool was discussed. In summary, the implications of the various aspects of fidelity were described.

Chair & Discussant

Eleanor Castillo

Authors

Enrica F. Bertoldo et al.

Joshua E. Berry et al.

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The Relationship Between Fidelity to Wraparound and Outcomes

Enrica F. Bertoldo, Kathleen Cox, & Eleanor Castillo

Acknowledgements: We would like to thank Rosemary Pacini, PhD, for her statistical analysis.

Introduction

Treatment fidelity, the degree to which a program is implemented as intended (Moncher & Prinz, 1991; Rast & Bruns, 2003), has emerged as a major issue in the delivery of mental health services. Adherence is critical to the provision of wraparound services, a team-based individualized service planning process that is described as a promising practice for seriously emotionally disturbed youth (Burns, Hoagwood, & Maultsby, 1998). Despite no nationally recognized manual to guide the delivery of wraparound, the field has advanced the development of implementation measures for assessing fidelity to the model. With the increased interest in the effectiveness of services, research is also beginning to demonstrate the relationship between adherence to the wraparound principles and outcomes for youth (Bruns, Burchard, Suter, & Force, 2005). However, limited studies have focused on the specific elements of wraparound that are linked to success.

The following study examined the relationship between fidelity to wraparound's core elements and emotional and behavioral functioning (as defined by the CAFAS and CBCL), as well as successful graduation (as defined by living in the community at the time of discharge). In particular, as community-based services and supports are an essential distinguishing element of wraparound, this study investigated the impact of fidelity to community-based services on treatment outcomes for high-risk youth.

Method

Participants

Participants in this study included youth ($N = 146$), caregivers ($N = 124$), and resource facilitators ($N = 183$) for families receiving wraparound services by a large family service agency in the Sacramento region. The average age of these youth at the time of admission was 14 years ($SD = 2.55$). Sixty-three percent of the youth were male. Ethnicity was 62% Caucasian; 26% African-American; 8% Latino; 2% Asian/Pacific Islander; 1% Native-American; and 1% Other. The average length of participation in wraparound services was 15 months ($SD = 11$).

Measures

The WFI-3.0 (Suter, Force, Bruns, Leverentz-Brady, & Burchard, 2002) is a structured interview tool that assesses adherence to the 11 core elements of wraparound. Interviews are conducted with the wraparound resource facilitator, caregiver, and youth. The responses from each interview result in a total fidelity score, ranging from 0 to 8, with 0 indicating *low adherence* to the wraparound philosophy and 8 indicating *high fidelity* to the wraparound philosophy. An overall fidelity score is also calculated by combining the reports of the three respondents.

The Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001) measures a youth's competence and problem behaviors and is administered to caregivers. Scoring produces a Total Problems score that includes Internalizing and Externalizing Problem scores which are displayed in relation to percentiles and T scores based on a nationally representative sample of children of the participant's gender and age.

The Child and Adolescent Functioning Assessment Scales (CAFAS; Hodges, 2003) measure a youth's emotional and behavioral functioning across eight domains. Subscale scores on these dimensions are summed to produce a Total CAFAS score, with a higher value indicating more severe impairment.

Information about the youth's living arrangement at discharge was derived from the agency's electronic health record. Community living arrangement was defined as living with biological/adoptive parents, kinship care, foster family, or a youth living in an independent living program.

Procedures

The WFI was collected six months after admission and every six months thereafter for each youth until discharge. Youth 11 years of age and older, caregivers, and resource facilitators participated in a structured interview. The CAFAS and CBCL were completed by the resource facilitator and caregiver, respectively, at the youth's admission to wraparound services, semi-annually, and at discharge. The CAFAS and CBCL scores at discharge were used in this study.

Analysis

Non-parametric correlations (Spearman's rho) were conducted to demonstrate relationships between WFI Total fidelity and element scores and outcome measures at discharge. The average score of each element across the respondents was calculated for the analysis. The analysis also factored in the pre-test scores on the outcome measures to account for the differences in the pre- and post- scores on youth functioning.

Results

Results found that the mean WFI Total fidelity score was 73% ($SD = .82$) and individual respondents' mean total fidelity scores were 79% ($SD = .78$) for Resource Facilitators, 67% ($SD = 1.21$) for Caregivers, and 67% ($SD = 1.22$) for Youth. Elements of wraparound rated as 80% or above included Voice and Choice, Cultural Competence, Individualized Services, and Outcome-Based Services. Relative weaknesses below 65% included Community-Based Services, Child and Family Team, and Natural Supports. Table 1 shows the mean scores for the fidelity measure, the WFI, and the outcome measures, CAFAS and CBCL.

Table 2 displays the correlations between fidelity scores and outcome measures. As shown, statistically significant relationships were consistently found between fidelity to Community-Based Services and Supports and various outcome measures at discharge: CBCL Total Problem Score ($r = -.19, p < .05$); CBCL Externalizing Problem Score, ($r = -.25, p < .01$); CBCL Internalizing Problem Score ($r = -.21, p < .05$); CAFAS Total Score ($r = -.40, p < .01$); and Living in the Community ($r = .21, p < .01$). Other significant relationships were found with certain elements; however, these correlations were consistently weak or the direction of the relationship was unexpected. For example, positive significant relationships were found between the CAFAS Total Score and the elements of Voice/Choice ($r = .15, p < .05$) and

Outcome-Based Services ($r = .14, p < .05$) on the WFI. These results indicate that greater fidelity to these elements is related to higher impairment on the CAFAS. Additionally, total fidelity, as measured by the WFI, did not have a significant relationship to outcomes, including pre-post change scores on the CAFAS and the CBCL.

Table 1
Outcome and Fidelity Variables

<i>Variable</i>	<i>Mean</i>	<i>SD</i>
Outcome Measures		
CBCL Total T-Score	88.13	19.29
CBCL Externalizing T-Score	87.16	19.71
CBCL Internalizing T-Score	79.88	25.20
CAFAS Total Score	94.78	43.78
Fidelity Measure		
WFI Total Fidelity	5.81	.82
Resource Facilitator WFI Total Fidelity	6.30	.78
Caregiver WFI Total Fidelity	5.39	1.21
Youth WFI Total Fidelity	5.38	1.22
Voice/Choice	6.66	1.16
Youth and Family Team	4.5	1.26
Community-Based	5.00	1.72
Cultural Competence	6.64	1.04
Individualized	6.85	1.28
Strengths-Based	6.43	1.14
Natural Supports	3.78	1.52
Continuation	6.04	1.30
Collaboration	6.10	1.34
Flexible Resources/Funds	5.2	1.32
Outcomes-Based	6.83	1.37

Table 2
Correlations among WFI Scores and Outcome Measures at Discharge

	<i>CBCL Total</i>	<i>CBCL Externalizing</i>	<i>CBCL Internalizing</i>	<i>CAFAS Total</i>	<i>Living in Community</i>
1. Voice and Choice	.12	.07	.12	.15*	.47
2. Youth and Family Team	-.04	-.04	.01	.07	.10
3. Community-Based Services	-.19*	-.25**	-.21*	-.40**	.21**
4. Cultural Competence	.06	.01	.02	.10	.15
5. Individualized Services	.09	.06	.01	.11	.05
6. Strengths-Based	-.10	-.09	-.14	.08	.05
7. Natural Supports	-.19*	-.12	-.13	-.07	-.11
8. Continuation of Services	-.06	-.02	-.12	.12	-.02
9. Collaboration	-.04	-.03	-.17*	.13	.10
10. Flexible Resources/Funds	-.06	.04	-.14	.05	.20**
11. Outcome-Based Services	-.16	-.04	-.18*	.14*	.21**
12. RF Total Fidelity	-.09	-.20	-.08	-.15	.16
13. Caregiver Total Fidelity	-.04	-.02	-.12	.04	-.15
14. Youth Total Fidelity	-.03	-.01	-.05	.02	-.05
15. WFI Total Fidelity	-.10	-.09	-.15	.05	.04

Note: * $p < .05$; ** $p < .01$

Discussion

This study suggests that greater fidelity to the provision of community services and supports for youth receiving wraparound is related to the achievement of positive outcomes. No other elements of the wraparound process consistently had as significant relationships to outcomes as did the adherence to community services and supports. Unlike previous research that has found a strong relationship between overall wraparound fidelity and positive youth and family outcomes, this study did not find a significant association between total fidelity, as measured by the WFI, and improvements in child and family functioning. Nevertheless, the results suggest that fidelity to certain elements of wraparound, particularly community services and supports, may be more critical in the determination of outcomes than overall fidelity to the service delivery. Although correlations were significant, overall the relationships were not strong across all elements, indicating a weak association between fidelity and outcomes.

These findings reinforce the importance of exploring the central mechanisms that contribute to change in multi-component interventions, such as wraparound. The value in such an examination of key elements through which children and families experience behavioral change has, in fact, been underscored by other researchers of complex therapies for troubled youth (Huey, Henggeler, Brondino, & Pickrel, 2000). The results of the present study reveal that the wraparound provider's focus on developing community supports and services may be a key mechanism in the achievement of positive outcomes. This essential element prescribes the team's support for youth school attendance and involvement in work, training, and other community activities. It also incorporates an emphasis on supporting the youth's success in community-based living situations, as an alternative to the use of residential and institutional care. The fact that this aspect of wraparound service emerged as a central component may not be surprising given that previous research has highlighted wraparound's role in enhancing the community adjustment of high-risk youth (Hyde, Burchard, & Woodworth, 1996).

It should be recognized that the current study was limited in important ways. Caution should be exercised in the interpretation of its findings given that a correlational analysis was conducted; thus one cannot assume that increased community services and supports caused positive results. The field would benefit from experimental studies that offer a more rigorous examination of the impact of fidelity to various wraparound elements on outcomes for youth. A further limitation of this investigation pertains to the relatively low fidelity scores that were obtained on certain elements (e.g., Community-Based Services, Child and Family Team, and Natural Supports) and respondent total scores (Caregiver and Youth). If these scores had been higher, the current analysis may have detected significance and increased strength in the relationship between a wider range of fidelity scores and outcomes. However, low scores on natural supports and composition of the child and family team have also been common to other wraparound providers. Additional research is needed to investigate the relationship of high fidelity scores and outcomes and to assess the nature and types of community supports (e.g., community-based living situations, community activities, vocational training) that are most beneficial to the youth and families who are receiving wraparound.

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The Wraparound Fidelity Index (WFI) as a Framework for Service Delivery

Joshua Berry, Brian Oliveira, & Eleanor Castillo

Introduction

Wraparound is a way of providing services to children and families that adheres to particular principles identified as important to service delivery. These principles hold that services should be community-based, strength-based, culturally-competent, and family-centered. In short, “Wraparound is not a service and not a program, but a *process for providing care* for children and families” (Kendziora, Bruns, Osher, Pacchiano, & Mejia, 2001, p. 1). As interest in the wraparound process has increased, the necessity to effectively assess fidelity has also increased. Measuring fidelity allows a better understanding of the effectiveness of service delivery in meeting the principles of wraparound and a more complete interpretation of research outcomes. Furthermore, linking fidelity to outcomes ensures that service providers are serving the best interests of the children and families. (Moncher & Prinz, 1991).

While fidelity assessment increasingly has become a part of evaluating the wraparound process, studies of the relationship between fidelity and outcomes have produced tenuous results. The findings generally indicate that the two are related, with satisfaction being more related to fidelity than clinical outcomes, but the nature of the relationship is not clearly understood (Bruns, Burchard, Suter, Force, & Dakan, 2003). In seeking to further understand the dynamics between wraparound fidelity and outcomes, this study looked at the relationship between the wraparound Fidelity Index- Version 3.0 (WFI-3.0; Suter et al., 2002) and various satisfaction and clinical outcome measures. Based on the literature and the construct of the WFI, it was hypothesized that wraparound fidelity would be related to satisfaction more than clinical outcomes.

Method

Participants

The participants in this analysis included youth who received wraparound services at any time during July 2004 to June 2005. The studied youth averaged approximately 15 years of age and the sample included predominantly Caucasians (58.7%) and males (58.0%). Oppositional Defiance Disorder (ODD; 22.0%) and Post Traumatic Stress Disorder (PTSD; 22%) were the two most prevalent primary diagnoses.

Measures

This analysis examined the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2003), Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001), and the WFI. The CAFAS Total score ranges from 0 (*highest level of functioning*) to 240 (*lowest level of functioning*). Lower Total

CAFAS scores indicate higher levels of functioning. Similarly, lower Total CBCL *t*-scores indicate higher levels of functioning. The WFI measures adherence to wraparound principles with scores ranging from 0 (*lowest fidelity*) to 8 (*highest fidelity*).

The Family-Centered Behavior Scale (FCBS; Allen, Petr, & Cay-Brown, 1995), Youth Services Survey for Families (YSS-F; Brunk, 1999a), and Youth Services Survey (YSS; Brunk, 1999b) were also examined. The FCBS Total score ranges from 1 (*low level of family centeredness*) to 5 (*very high level of family centeredness*). Both the YSS-F and YSS have total scores that range from 1 (*low level of satisfaction*) to 5 (*very high level of satisfaction*). All measures included in this study were analyzed with the statistical program, Statistical Package for Social Sciences (SPSS; Statistical Package for Social Sciences, 2004).

Analysis

An inspection of WFI scores during five 6-month periods from January 2003 until June 2005 revealed a pattern where WFI scores were lower during July to December 2004 when compared to the other four 6-month periods (see Figure 1). This “dip” in WFI scores provided the impetus to further explore potential relationships between WFI scores and measures of youth’s problems and functioning.

Pearson correlations were run from two perspectives (resource facilitator and caregiver) and at two time periods (Time 1: July-December 2004 and Time 2: January-June 2005). The first set of correlations examined the resource facilitator’s perspective by comparing the resource facilitator’s WFI Total to the CAFAS Total during the period of July to December 2004 and then by comparing the WFI Total from the same time period to the CAFAS total during January to June 2005. The same type of analysis was done from the caregiver’s perspective by comparing the caregiver’s WFI Total to the CBCL Total. Last, a cross perspective analysis was conducted by examining the correlations between the resource facilitator’s WFI Total and the CBCL Total and the caregivers WFI Total and the CAFAS Total. This cross perspective analysis was also conducted for both time periods. It was hypothesized that there would be negative correlations between treatment fidelity and measures of youth behavior and functioning.

Results

Resource Facilitator’s Perspective (WFI and CAFAS)

These relationships were in the expected direction, suggesting that lower treatment fidelity levels were associated with higher functional impairment levels. The patterns of the correlations were similar across time points and the smaller sample sizes are likely related to fewer of the correlations being statistically significant (see Table 1).

Caregiver Perspective (WFI and CBCL)

Although not statistically significant, analyses of WFI and CBCL data from Time 1 indicated a moderate negative correlation between the WFI (CG-WFI-Total) and the CBCL Total Problems score (CBCL-Total), $r(15) = -.43$, $p = .10$. The lack of statistical significance may be attributed to the relatively small sample size. Analyses of WFI data from Time 1 and CBCL data from Time 2 indicated no significant relationships.

Figure 1
Mean Resource Facilitator WFI Total
January 2003–June 2005

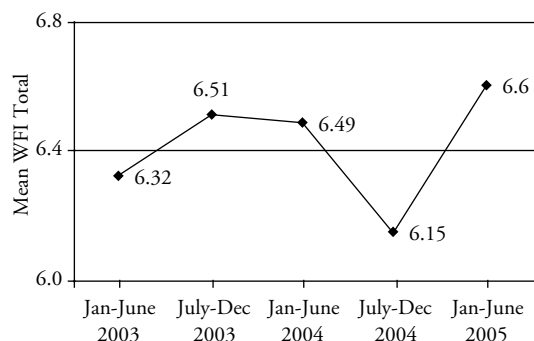


Table 1
Resource Facilitator CAFAS Correlations

WFI	CAFAS	CAFAS
	June-Dec 2004 (<i>n</i> = 49)	Jan-June 2005 (<i>n</i> = 22)
WFI-Total	-.34*	-.29
WFI-Community	-.46**	-.55**
WFI-Strength	-.29*	-.38

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

Cross Informant Perspective #1 – RF-WFI and CG-CBCL

Analyses of WFI and CBCL data from Time 1 indicated a statistically significant negative correlation between the WFI (RF-WFI-Strength) and the CBCL (CBCL-Total), $r(31) = -.39, p = .03$; the WFI (RF-WFI-Community) and the CBCL (CBCL-Internalizing), $r(31) = -.40, p = .03$. These relationships were in the expected direction, suggesting that lower treatment fidelity levels were associated with higher behavior problem levels across informants' perspectives. Analyses of WFI data from Time 1 and CBCL data from Time 2 indicated no statistically significant correlations.

Cross Informant Perspective #2 – CG-WFI and RF-CAFAS

Analyses of WFI and CAFAS data from Time 1 indicated a statistically significant negative correlation between the WFI (CG-WFI-Community) and the CAFAS Thinking score (CAFAS-Thinking), $r(19) = -.59, p = .008$. Also, although not statistically significant, there was a trend toward a moderate negative correlation between the WFI Total (CG-WFI-Total) and the CAFAS (CAFAS-Thinking), $r(19) = -.40, p = .09$. These relationships were in the expected direction, suggesting that lower treatment fidelity levels were associated with higher functional impairment levels, across informants' perspectives.

Although not statistically significant, analyses of WFI data from Time 1 and CAFAS data from Time 2 indicated a moderate negative correlation between the CAFAS (CAFAS-Total) and (a) WFI-Total, $r(9) = -.40, p = .30$; (b) WFI-Community, $r(9) = -.49, p = .19$; and (c) WFI-Strength, $r(9) = -.58, p = .10$. Again, the lack of statistical significance may be attributed to the relatively small sample size.

Caregiver and Youth Family Centered/Satisfaction Perspective (WFI and FCBS, YSS-F, & YSS)

Due to similarity in construct, correlations were run between scores on the WFI and satisfaction measures. It was hypothesized that there would be a positive correlation between treatment fidelity and levels of satisfaction. An analysis of the WFI with satisfaction measures across all five 6-month periods from January 2003 until June 2005 indicated a statistically significant moderate to strong correlation between the CG-WFI and both the FCBS, $r(79) = .56, p = .000$, and the YSS-F, $r(34) = .72, p = .000$. Analyses also indicated a statistically significant strong correlation between the youth WFI (Y-WFI) and YSS $r(42) = .62, p = .000$. These relationships were in the expected direction, suggesting that higher treatment fidelity levels were associated with higher levels of satisfaction.

Discussion

The findings in this study are similar to previous studies, which have found moderate relationships between wraparound fidelity and youth functioning and behavior (e.g., Bruns, Burchard, Suter, Force, & Dakan, 2003). Although there were correlations with the WFI total score, there was a more consistent relationship between the community-based and strength-based domains with functioning and behavior. It was also demonstrated that fidelity moderately influenced functioning and behaviors at a later time. In addition, this study indicated that WFI principles were more highly correlated with other measures of similar constructs (e.g., family-centeredness and satisfaction) than to measures of clinical functioning.

The moderate results of this study, moreover, are conceptually consistent with the definition of wraparound stated in the introduction. If wraparound is indeed a process and not a program, hypothetically, a robust relationship would not be expected between WFI principles and youth functioning and behavior, because there are more aspects to treatment than just the process. To be sure, service processes are fundamental to treatment, but they are only one aspect and may not be the most important in terms of improving clinical outcomes. Thus, while it appears WFI principles provide a framework for service delivery processes, there are likely other factors that are related to improvements in youth functioning and behavior. In order to better understand these factors, future studies should examine other aspects of treatment, such as evidence-based practices.

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Wraparound Supervisor Adherence Measure: A Pilot

Eleanor Castillo & Veronica Padilla

Introduction

Currently, the term “wraparound” has been used very loosely to define a wide range of services. As a result, the research on “wraparound” has yielded inconsistent results. There are a number of reasons to further define wraparound. First, there are political and legislative reasons to do so, as there is a trend to have wraparound services legislated (e.g., California Mental Health Services Act, 2004; Katie A. et al., v. Diana Bonta et al., 2006). Second, there is a trend toward the use of evidence-based practices. In order to establish wraparound as an evidence-based service, it is critical to differentiate wraparound practices that adhere to the 11 core elements from those that do not, to better define the service, and to tie outcomes to the service. Third, treatment fidelity has been associated with more positive outcomes. Treatment fidelity refers to the degree to which an intervention is implemented as intended (Moncher & Prinz, 1991; Rast & Bruns, 2003). Wraparound involves a family-driven, individualized plan of care developed by a team of people who have a stake in seeing the family succeed (Walker & Burns, 2003). Adherence is critical in the provision of quality wraparound services. As Rast & Bruns (2003, p. 21) note, “wraparound requires

intensive and ongoing training, supervision, and administrative support.” As wraparound is better defined, fidelity to the model can be more accurately measured and relationships to outcomes can be better understood.

As with a number of evidence-based services (e.g., Multisystemic Treatment, Multi-treatment Foster Care, etc.), in order to assure appropriate services and fidelity to a model, supervision has been identified as a critical component in service provision. Although supervision has been identified as a critical aspect of wraparound, there are limited measures, if any, that directly assesses wraparound fidelity in individual supervision. The wraparound Fidelity Index version 3.0 (WFI; Suter, Burchard, Bruns, Force, & Mehrtens, 2002) measures 11 elements of the wraparound process from the youth, caregiver, and facilitator perspective in an interview format. Our experiences indicate that an average length of time to administer the WFI 3.0 is 2 - 3 hours per child. The Wraparound Observation Form version 2.0 (WOF 2.0; Nordess & Epstein, 2003) elicits information of the wraparound process via the child and family team meetings. However, there are even fewer, if any, tools that directly assess fidelity to wraparound via individual supervision.

Developed on the same premise as the Multisystemic Treatment Supervisor Adherence Measure (SAM; Henggeler, Schoenwald, Liao, Letourneau, & Edwards, 2002), in that the supervisor plays a critical role in maintaining fidelity, the wraparound Supervisor Adherence Measure (W-SAM) is a 40 item questionnaire that rates the supervisor's fidelity to the wraparound principles and practices from the facilitator's perspective on a 5-point likert-type scale, 1, *Never*, to 5, *Almost Always*. The items were based on (a) the guidelines and principles of wraparound; (b) a review of various satisfaction tool such as the Family Centered Behavior Scale (Allen, Petr, & Cay-Brown, 1995) and Youth Satisfaction Survey (Brunk, 1999); and (c) derived by a team of experienced wraparound supervisors and trainers (see Table 1). The measure is intended to be administered every six months. In addition to being a tool to better understand the relationship between fidelity and clinical outcomes, the W-SAM can serve as a quality assurance tool, as well as a quality improvement tool, because it can identify areas of strengths and improvement for individuals, single teams, and aggregate of teams and therefore inform training, coaching, and mentoring to improve practice.

Given the complexity of wraparound, a single measure may not be sufficient to capture the intricacies of the service. All of these tools are useful in ensuring high quality wraparound as they measure different aspects of the wraparound process (e.g., WFI-3.0 for the core elements, WOF 2.0 for the team meeting, and W-SAM for the the supervision structure). The information will benefit service providers as it will provide a tool for effective wraparound supervision and help the field further know “what it takes to do wraparound right” (Walker & Bruns, 2003, p. 3).

EMQ Children & Family Services provides wraparound services in three counties throughout California. Although the agency has over ten years of experience in providing wraparound, the systems in which we operate vary significantly and as such, have been a challenge for implementation. Thus, a wraparound supervision fidelity measure was developed as a means to ensure the same quality of wraparound provision, despite the different systems.

Method

The pilot was conducted throughout the three counties in which we operate. To increase the likelihood of participation in the study, the W-SAM was sponsored by the Clinical Directors in each region (as opposed to the Outcomes and Evaluation Department). Facilitators (primary clinical staff responsible for the wraparound services, including the Child and Family Team Meetings) were introduced to the topic within the context of the agency's commitment to continuous learning and provision of high quality wraparound services. As such, this measure was introduced as one aspect of quality care. Each facilitator completed the measure during staff meetings. The completed measures were submitted to the Outcomes and Evaluation Department to ensure confidentiality of the responses.

Table 1
EMQ Wraparound Supervisor Adherence Measure

1. My supervisor focuses on how I have helped families build community linkages.	Never	Rarely	Sometimes	Often	Almost Always
2. My supervisor provides me coaching and feedback on how I address both the child and family developmental needs.	Never	Rarely	Sometimes	Often	Almost Always
3. My supervisor demonstrates knowledge of and uses the EMQ Wraparound planning process in coaching/supervisory sessions.	Almost Always	Often	Sometimes	Rarely	Never
4. My supervisor provides me a model of how the ICFP and interventions are logically linked to expectations and outcomes.	Never	Rarely	Sometimes	Often	Almost Always
5. My supervisor teaches and role models good relationships with system partners. (e.g., social services, juvenile probation)	Never	Rarely	Sometimes	Often	Almost Always
6. My supervisor understands and helps me to integrate my own theoretical orientation as it relates to the EMQ Wraparound process.	Never	Rarely	Sometimes	Often	Almost Always
7. My supervisor provides me feedback on how I have helped the family understand, engage, and create alignment to the EMQ Wraparound process.	Almost Always	Often	Sometimes	Rarely	Never
8. When new needs are identified, my supervisor asks me questions to clarify and implement new strategies involving the child and family strengths.	Never	Rarely	Sometimes	Often	Almost Always
9. My supervisor regularly discusses with me the ways I foster empowerment and independence of the family in the treatment planning process.	Never	Rarely	Sometimes	Often	Almost Always
10. My supervisor strongly encourages me to focus on the natural ecology of the child and family.	Never	Rarely	Sometimes	Often	Almost Always
11. Supervisory recommendations are described in terms of EMQ Wraparound principles.	Never	Rarely	Sometimes	Often	Almost Always
12. My supervisor provides inquiry or feedback if meetings are not held at the convenience of the caregiver.	Almost Always	Often	Sometimes	Rarely	Never
13. My supervisor and I regularly discuss my strengths and needs with respect to adherence to EMQ Wraparound principles.	Never	Rarely	Sometimes	Often	Almost Always
14. My supervisor encourages me to focus on the strengths of the child and family team when discussing strategies.	Never	Rarely	Sometimes	Often	Almost Always
15. My supervisor ensures that I discuss both proactive and reactive safety plans when I report on children and families.	Almost Always	Often	Sometimes	Rarely	Never
16. When I reported a family was considering institutional care, my supervisor asked if I explored with the family what it "would take" for the family to feel safe and for the child to remain in the community.	Never	Rarely	Sometimes	Often	Almost Always
17. My supervisor regularly questions me about the transition plans of my families.	Never	Rarely	Sometimes	Often	Almost Always
18. My supervisor regularly helps me evaluate the level of family decision making.	Never	Rarely	Sometimes	Often	Almost Always
19. When flex-funds were suggested for use, my supervisor inquires whether I asked if community resources were available instead, and whether a plan was in place to use alternative resources in the future.	Almost Always	Often	Sometimes	Rarely	Never
20. My supervisor uses the Connectedness Model in exploring the natural human resources available to the child and family.	Never	Rarely	Sometimes	Often	Almost Always

Table 1 Continued

21. My supervisor focuses on the degree to which I have assisted the development of <i>individualized</i> child and family plans.	Never	Rarely	Sometimes	Often	Almost Always
22. When interventions or strategies are not working, my supervisor encourages me to go back to the team to identify the real need(s) that is not being met.	Never	Rarely	Sometimes	Often	Almost Always
23. My supervisor provides effective EMQ Wraparound trainings during POD meetings.	Never	Rarely	Sometimes	Often	Almost Always
24. My supervisor assists me in securing timely community and natural resources.	Almost Always	Often	Sometimes	Rarely	Never
25. My supervisor effectively manages the family specialists' schedules.	Never	Rarely	Sometimes	Often	Almost Always
26. My supervisor strongly encourages creativity in planning with the child and family team.	Never	Rarely	Sometimes	Often	Almost Always
27. My supervisor regularly asks me to follow up on progress of recommendations/interventions made in previous supervisory meetings.	Almost Always	Often	Sometimes	Rarely	Never
28. My supervisor creates and fosters a dynamic learning environment that encourages me to discuss both successful and unsuccessful interventions.	Never	Rarely	Sometimes	Often	Almost Always
29. My supervisor helps me identify the level of progress of children and families that are having difficulties.	Never	Rarely	Sometimes	Often	Almost Always
30. My supervisor observes my practice in the field at least once a month.	Almost Always	Often	Sometimes	Rarely	Never
31. I meet with my supervisor at least once a week.	Never	Rarely	Sometimes	Often	Almost Always
32. My supervisor requires that intervention plans be described in observable and measurable terms.	Never	Rarely	Sometimes	Often	Almost Always
33. My supervisor insists that child and family teams have final approval on all suggested interventions before they become a part of the individualized child and family plan.	Never	Rarely	Sometimes	Often	Almost Always
34. My supervisor explores with me concrete ways to manage my own resistance to any part of the plan, process, or family dynamics.	Almost Always	Often	Sometimes	Rarely	Never
35. My supervisor links potential interventions to the family's specific goals and objectives.	Never	Rarely	Sometimes	Often	Almost Always
36. My supervisor starts coaching sessions by asking me, "What's working?"	Never	Rarely	Sometimes	Often	Almost Always
37. My positive outcomes were acknowledged and celebrated with/by my supervisor.	Never	Rarely	Sometimes	Often	Almost Always
38. My supervisor helps me to use outcome data to inform my practice.	Never	Rarely	Sometimes	Often	Almost Always
39. My supervisor provides a good model of basic supervision (e.g., arrives on time; begins and ends meetings on time, is a good listener).	Almost Always	Often	Sometimes	Rarely	Never
40. My supervisor helps me explore ways to get people and teams to work together, even if there is significant resistance.	Never	Rarely	Sometimes	Often	Almost Always

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Results

The overall Cronbach's alpha was .98. There were high inter-item correlations, ($r(38) = .34, p < .05 - r(38) = .86, p < .01$) that suggest some overlap or redundancy in item content. However, at this point in the development, it may be premature to eliminate some items. The burden of paperwork is commonly reported as the number one source of dissatisfaction by agencies that must adhere to federal, state, and local regulations for medicare or medicaid billing. EMQ is not different. Subsequently, to minimize the sense of burden on staff, it was critical to have the measure introduced by senior management of the program within the context of providing quality care rather than as a mandate and a performance evaluation tool. Furthermore, it was important to inform the Clinical Program Managers, the subject of evaluation, prior to the administration of the measure and present the information as a coaching tool versus an appraisal tool. However, it was also clearly communicated that the information would ultimately inform their performance appraisals.

It is not uncommon for staffing patterns to change within the course of treatment or one's employment. This pilot illustrated the need to be able to track the movement between facilitators and clinical program managers as they strive to meet the daily needs of the children and families that we serve.

Conclusion

As the agency expanded its services, we learned that a structure for supervision was critical in maintaining fidelity to wraparound. Furthermore, the Mental Health Services Act in California is underway. Previously known as Proposition 63, the Act places a 1% tax on individuals with income of over \$1M, resulting in funds to support improvement in the state's mental health services systems. Consequently, provision of wraparound services for youth and their families is now a mandate in every county. The W-SAMS tool may assist counties in the implementation of wraparound.

In addition to ensuring high quality wraparound services, the W-SAMS has been used for quality improvement and management within the agency and each region's program. Data are aggregated for the clinical directors to improve supervision overall, by identifying areas of strength and areas for improvement as a program and on an individual supervisor level. Furthermore, the tool has been used as a performance-based evaluation tool that informs an individual with 360 feedback. 360-degree feedback is an evaluation method that incorporates feedback from the employee, his/her peers, superiors, subordinates, and customers. The managers share the results of these confidential surveys with the employee. Interpretation of the results, trends and themes are discussed as part of the feedback. The primary reason to use this full circle of confidential reviews is to provide the employee with information about his/her performance from multiple perspectives. From this feedback, the worker is able to set goals for self-development which will advance their career as well benefit the organization. With 360-degree feedback, the employee is central to the evaluation process and the ultimate goal is to improve individual performance within the organization (Tornow & London, 1998). As such, the W-SAM has been used as one aspect of the 360-degree feedback process.

While the W-SAMS is in its infancy of development, the measure appears to be a promising tool to support high quality wraparound services. The authors are continuing to gather data for further analyses (e.g., factor analyses). Nevertheless, a combination of these instruments that measure different aspects of the wraparound process (e.g., WFI-3.0 to measure adherence to the philosophical core elements, WOF 2.0 to measure the the child and family team meeting process, and W-SAM as a measurement of the supervision structure) may all contribute to ensuring the provision of quality wraparound services and delineate high quality wraparound services from the programs that are wraparound in name only.

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Symposium Discussion

Eleanor Castillo

Despite high fidelity to wraparound, the findings in the first two papers support the inconsistent findings in the wraparound literature. While there are some significant relationships between some elements of wraparound as measured by the WFI-3.0 and youth functioning, the relationships tend to be weak or moderate. Fidelity to community-based services appears to be the most consistent element related to youth functioning, but the relationship is weak. On the other hand, fidelity as measured by the WFI appears to have a more consistent and strong relationship to other aspects of wraparound services (e.g., satisfaction and family centeredness). This does not indicate that fidelity to wraparound is not related to treatment outcomes. Rather, the question might be more related to how fidelity is being measured by the WFI-3.0. Furthermore, as wraparound is a process for service delivery, perhaps there is a missing link between the specific interventions being delivered within that process and the philosophy of the services. It is postulated that use of evidence-based interventions within the model would result in more consistent treatment outcomes for youth and families involved in wraparound planning processes. The third paper presents another aspect of wraparound that may enhance fidelity to the model and ultimately improve treatment outcomes. Furthermore, although this measure is currently in a pilot phase, it appears to be a promising tool for quality assurance purposes, as well as a tool to ultimately better understand treatment outcomes.

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Wraparound in California: The Title IV-E Child Welfare Waiver Demonstration Project Evaluation

Charlie Ferguson

Acknowledgements: This research was funded by the Children's Bureau, the Administration for Children and Families, the U.S. Department of Health and Human Services, through the California Department of Social Services.

Introduction

This explanatory study is an evaluation of wraparound, one of two components of the Title IV-E Child Welfare Waiver Demonstration Project in California, sponsored by the US Department of Health and Human Services (USDHHS), and implemented by counties under the auspices of the California Department of Social Services. The USDHHS provided fiscal waivers allowing states to develop and implement innovative programming designed to improve the outcomes for federally eligible children in foster care. The present study is the final analysis of Wraparound in California, conducted by the Center for Social Services Research at the University of California at Berkeley. The study is relevant to practitioners and policy-makers interested in the use of wraparound approaches with maltreated children in the foster care system. Wraparound in California was targeted to children in the child welfare system living in the highest level of group care in California or who were at-risk of placement into that level of care. In each county, local non-profit social service organizations were contracted to provide wraparound. In each county, local non-profit social service organizations were contracted to provide a model of wraparound as described by the Wraparound Fidelity Index (WFI; Wraparound Vermont Evaluation Team, 2001).

The purpose of the study was to assess the effectiveness of wraparound at producing better outcomes for children in high-level group care, or at risk of such a placement setting. Specifically, the study tests three hypotheses: children receiving wraparound will have (a) higher levels of child safety than children receiving traditional services, (b) higher levels of placement stability, and (c) higher levels of permanence than children receiving traditional services.

Method

The data collection design for the present study was a posttest-only control group design. Children included in the study were federally-eligible child welfare dependents in a high level group care placement, or at-risk of such placement at the time of enrollment, and eligible for enrollment between June 1, 1999 and December 31, 2002. Children were randomly assigned at a ratio of 5:3, treatment group (wraparound) and comparison group (traditional child welfare services).

Data for the study were drawn from several sources. The Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1997) was used as the baseline measure of behavior. The primary purpose of the CAFAS was to assess the behavioral functioning of children in the two target populations for differences to ensure that the groups could be analyzed together. The Wraparound Fidelity Index (WFI; Wraparound Vermont Evaluation Team, 2001) was used to provide the assessment of model fidelity of the intervention in one county.

Quantitative data on the variables of child safety, stability, and permanence were the primary means with which comparisons were made between the treatment and comparison groups. These data were drawn from a longitudinal relational database containing data from California's child welfare management information system. Outcome analyses include: substantiated maltreatment while in the study, number of placement moves, stepping down from high level group care/stepping up into high level group care, types of placement change, and exiting from care due to permanency. The data were not aggregated; separate analyses were conducted for each county. Additionally, an analysis was conducted to determine whether a trend in the overall findings could be found that would point to better results for children receiving wraparound.

Results

Demographics

In Alameda County the sample included 212 children ($T_x = 133$, $C = 79$). In Los Angeles County the sample included 102 children ($T_x = 65$, $C = 37$). In Sacramento County the sample included 188 children ($T_x = 117$, $C = 71$). The majority of children in Alameda County and Los Angeles County samples were at risk of high-level group care placement. In Sacramento County, the distribution was more even, though the placement level of 11% of the sample could not be determined. The analyses of the CAFAS indicated that there were no statistically significant differences between the target populations in any of the counties on overall CAFAS score or on the distribution of scores across the categories of dysfunction.

The WFI analysis was conducted in Alameda County. The analysis of the WFI Overall Score showed a statistically significant ($p = 0.002$) difference between the average percentage for the treatment group (78%) and the comparison group (67%). The Overall Score for the treatment group indicated “good” adherence to the principles of wraparound.

Outcome Objectives

Table 1 provides an overview of the results of the outcome analyses. Only two of the comparisons between groups across all of the outcome variables revealed statistically significant differences. In the analysis of type of placement change, at the time of enrollment into the study, 39% of the children receiving wraparound in Alameda County were living in a family-based placement compared to approximately 33% of children receiving traditional child welfare services. At the end of the study period, the corresponding proportions were 57% and 33% ($p = 0.0022$), respectively. The finding held in a logistic regression analysis, controlling for time, where children in the treatment group had greater odds ($OR = 2.646$) of being in a family-based placement at the end of the study ($p = 0.0021$).

In the analysis of exits from care, no children from the treatment group in Sacramento County exited from care due to incarceration while four children in the comparison group (6%) exited from care for that reason. The difference was statistically significant ($p = 0.0193$). The number of events was too small to allow for a logit analysis.

The results of the trend analysis indicated no clear tendency in the outcome findings, with 10 positive outcomes indicating a positive trend and 10 outcomes indicating a negative trend. The trend indicators are also displayed in Table 1.

Conclusion

Overall, children receiving wraparound, as compared to children receiving traditional child welfare services, did not have higher levels of child safety, placement stability, or permanence. However, the results suggest that wraparound was having some positive impact on child welfare outcomes, most notably the findings that children receiving wraparound had greater odds of living in a family-based (i.e., less restrictive) environment at the end of the study and a smaller percentage were exiting foster care due to incarceration.

A number of factors may account for the less than robust findings. First, it is unlikely that the wraparound programs had attained programmatic “maturity” at the time of the analysis. Second, the samples had a high level of heterogeneity in a number of areas, a situation that may have limited the influence of the intervention on the outcomes. Finally, what appears to be the most likely reason for the findings is the distal nature of the outcomes selected (child safety, placement stability, and permanence) for assessment in relation to the intervention’s focus (changing/managing child behavior). It does not seem surprising that positive changes would be undetectable in such a relatively short amount of time in variables somewhat removed from the direct intent of the intervention.

The findings suggest a number of programmatic recommendations. First, a reduction in the heterogeneity of the target population would help concentrate the intervention. This could be accomplished through clearer program enrollment and discharge criteria. Second, a focus on the development of informal supports by the wraparound providers would increase the strength of the intervention. Third, improved capacity to work with family situations where a primary caregiver is not immediately identifiable may lead to improved outcomes, particularly in stepping children down to lower levels of care and in exiting from care. Fourth, as a question of policy, the findings appear to support the continuation of wraparound in California. Finally, given the inconclusiveness of the findings and relatively short period of the study, continued research and evaluation should be conducted in conjunction with any continuation of wraparound.

Table 1
Summary of Results

	<i>Sample (n)</i>	<i>Treatment %</i>	<i>Comparison %</i>	<i>OR \ RR</i>	<i>P-Value</i>	<i>Trend</i>
Substantiated Maltreatment (yes)						
Alameda	17 of 212	7.52	8.86		0.73	+
Los Angeles	15 of 102	18.46	8.11		0.16	--
Sacramento	16 of 188	9.40	7.04		0.57	--
Number of Placement Moves (3 or fewer moves)						
Alameda	162 of 212	—	—	1.167	0.66	+
Los Angeles	95 of 102	—	—	0.683	0.66	--
Sacramento	155 of 188	—	—	1.426	0.39	+
Step Down (yes)						
Alameda	30 of 42	—	—	1.596	0.53	+
Los Angeles	12 of 17	—	—	0.542	0.38	--
Sacramento	41 of 76	—	—	0.812	0.67	--
Step Up (yes)						
Alameda	46 of 169	—	—	1.445	0.46	--
Los Angeles	10 of 70	—	—	0.740	0.74	+
Sacramento	16 of 49	—	—	1.796	0.53	--
Types of Placements (in Family-Based at end study)						
Alameda	87 of 212	—	—	2.646	0.00	+
Los Angeles	47 of 68	—	—	1.134	0.82	+
Sacramento	61 of 146	—	—	0.940	0.86	--
Exits from Care (Incarceration)						
Alameda	7 of 212	3.76	2.53		0.71	--
Los Angeles	2 of 102	1.54	2.70		1.00	+
Sacramento	4 of 188	0.00	5.63		0.02	+
Exits from Care (Permanency)						
Alameda	7 of 212	2.26	5.06		0.43	--
Los Angeles		—	—			
Sacramento	3 of 188	2.56	0.00		0.29	+

OR / RR = odds ratio or risk ratio

P-Value: threshold for statistical significance was set at $p \leq .05$

Trend: + indicates a trend towards the desired outcome in the treatment group

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Assessment of Child and Family Team Functioning Using the Participant Rating Form

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Introduction

Wraparound is a process for planning and providing services to children with serious emotional disturbances (SED). Viewed as a promising practice (Burns & Goldman, 1999; U.S. Public Health Service, 2001), it has potential for improving service delivery to children and families. Guided by a set of key principles, wraparound is designed to empower families while a “child and family team (CFT)” develops an individualized plan of care (VanDenBerg & Grealish, 1996). Growing evidence suggests that children and families served through wraparound have better outcomes than those served through more traditional processes (e.g., Peterson & Rast, 2005; Rast, O’Day & Rider, 2005).

Because wraparound is a process based on general principles, its implementation varies considerably. Consequently, the National Wraparound Initiative has helped delineate a clearer practice model, including specific principles and activities, and minimum standards for practice (Burns, Osher, Walker & Rast, 2005). Such principles and standards are essential for understanding how, why, and under what circumstances wraparound is beneficial, which can facilitate better training and implementation of a successful model.

Developing means of assessing wraparound’s components can advance the practice model, by enhancing understanding of what processes are most beneficial and providing regular feedback for quality improvement purposes. To date, several measures/processes assess adherence to wraparound principles, differing in their complexity, comprehensiveness, and difficulty or cost of use.

One approach is the Wraparound Fidelity Index (WFI; Suter, Burchard, Bruns, Force, & Mehrtens, 2002). The WFI assesses 11 aspects of wraparound from the perspectives of resource facilitators (case managers), parents/caregivers, and youth, yielding fidelity scores on each scale and an overall fidelity score. Typically administered within a month after wraparound begins and at 6-month intervals, the WFI provides feedback to service providers and teams about how well wraparound is being implemented. In a national normative study, Bruns et al. (2004) found that providers tended to struggle with the following wraparound elements:

- incorporating important members on the team
- engaging youth in community life and relationships
- using family strengths in the plan
- using natural supports
- assessing outcomes

In addition, family members differed from resource facilitators on some elements. The WFI has been used in several studies demonstrating that “high fidelity” wraparound is associated with better outcomes than “low fidelity” wraparound (e.g., Peterson & Rast, 2005; Rast, O’Day & Rider, 2005). Furthermore, the WFI asks respondents to report on services and supports received over the past 30 days, which provides fairly timely information at the risk of having respondents base their responses on global impressions rather than specific behaviors/instances of the constructs. However, although the WFI provides relevant information, its items assess a combination of outcomes, system functioning, and team processes.

A different approach has been to observe the processes taking place in CFT meetings to determine if they are functioning in a manner consistent with accepted practice (e.g. VanDenBerg & Grealish, 1996). To that end, Epstein and colleagues (Epstein et al, 1998; 2003) developed the Wraparound Observation

Form (WOF), which has been modified by Davis and colleagues (Davis, Dollard & Vergon, 2005). These instruments rely on trained observers to rate CFT meetings on multiple dimensions. Epstein and colleagues (Epstein et al, 1998) reported reliability data, though their sample had very high performance levels, a factor that may result in inflated reliability estimates. That said, the measure can yield findings of interest to support work to implement the wraparound approach. For instance, Epstein et al. (2003) found that only 33% of 112 meetings included informal supports. Using the same form to rate 17 CFT meetings, Becker (2004) found that teams had problems developing and reviewing safety plans (17% endorsed), including nonprofessionals at the meetings (35%), and basing the plan of care upon strengths (41%). Describing 118 team meetings, Davis and Dollard (2004) reported similar results, with about 32% of meetings and 40% of the plans including informal supports. Moreover, strengths were “often not related to needs or goals”. Such results are of obvious value; however, while external raters provide the potential for relatively unbiased, detailed observations focusing specifically on the meeting’s processes, such observation is also quite costly.

Using videotaped meetings from 26 different teams in 13 communities, Walker, Koroloff, and Schutte (2003) reported similar findings. Approximately 40% of team meetings included informal supports, and only 15% of plans included informal community services or supports. They concluded that “attributes of high quality planning appear rare,” with only 15% of teams considering more than one option in decision making, and only one-third of teams discussing strengths during meetings. Additionally, fewer than 10% of CFTs were facilitating access to community supports.

In sum, these various observational studies (Becker, 2004; Davis & Dollard, 2004; Epstein et al., 2003; Walker et al., 2003), have found that many teams fail to implement some of the basic components viewed as central to wraparound. It is apparent that a key need for CFTs is a quick and simple means of assessing team functioning during meetings, so that teams can be provided with clear feedback about what they are doing well and about areas in need of attention.

Method

A new measure, the Child and Family Team Participant Rating Form (PRF), was developed through a rational process, involving parents, line workers, administrators, and university personnel. The PRF provides data about individual team meetings from the perspective of their participants. Specific aspects of the meeting are rated, rather than global perceptions. The PRF is simple to administer, score, and interpret, and yields data from multiple sources.

The CFT PRF consists of five separate, overlapping forms (parent, child, facilitator, service provider, and informal support) that team facilitators can quickly distribute at the end of each meeting. The form takes 5-7 minutes to complete and includes sections assessing *Access*, *Participants*, *Process*, and *Accomplishments*. Between 21 and 28 items are included, depending upon the form. The PRF was designed to be used alone or in conjunction with the Team Observation Form (TOF; an adaptation of Epstein’s Wraparound Observation Form), and its items focus primarily on participants’ perceptions of what took place at the meeting (e.g., the parent felt heard; participants know what they are to do) as opposed to readily observable characteristics of the meeting (e.g., the presence of a written agenda).

Results

The PRF has been used as part of a broader effort to assess team functioning in 98 meetings of 20 teams. Changes over time have been demonstrated, and the differential perceptions of facilitators versus families have been delineated, with facilitators often viewing meetings more positively than family members. Two different types of PRF-based meeting profiles have been found particularly useful to teams, specifically, comparisons of (1) the team’s functioning at a particular meeting compared to recent meetings of that team (Figure 1), and (2) the team’s profile and the average ratings of other teams (Figure 2). Such profiles can help facilitators or supervisors engage teams in discussions of their relative strengths and weaknesses, and PRF ratings can also be used to assess the impact of training or changes in team

Figure 1
Team Now vs. Prior Team Meetings

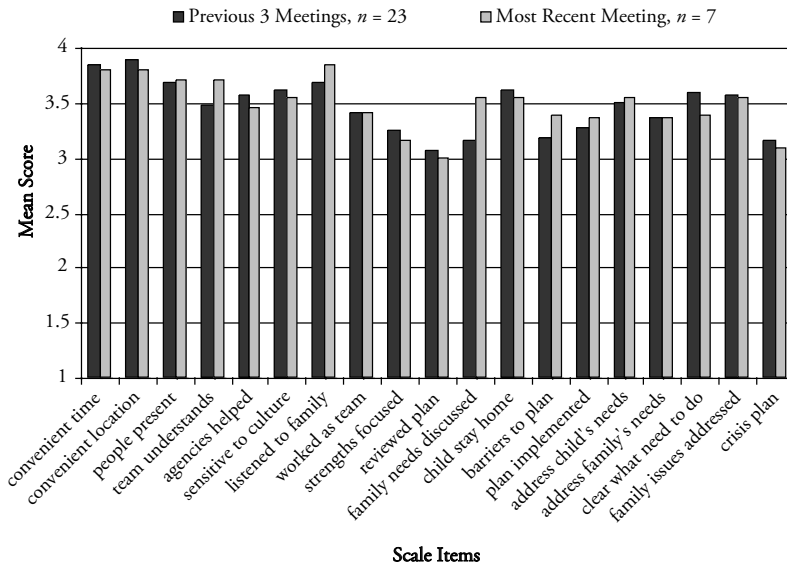
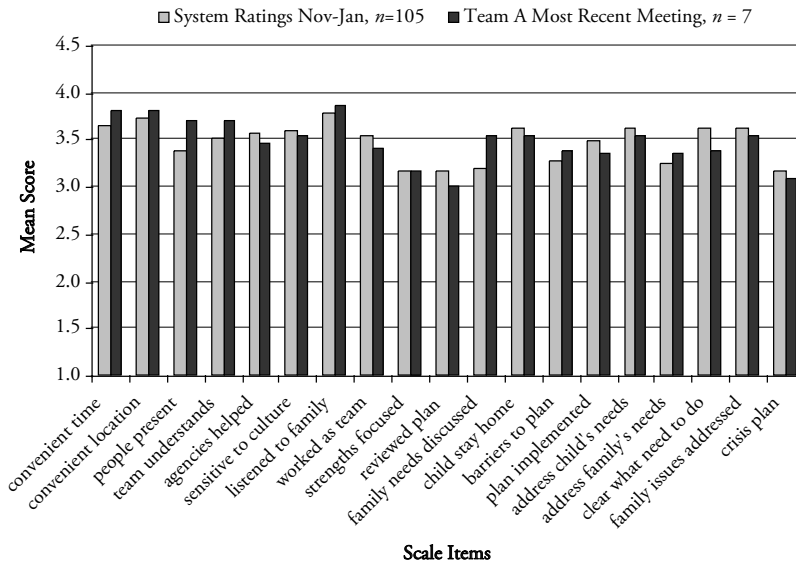


Figure 2
Team Now vs. System Ratings



composition. In the context of a “learning environment,” facilitators have asked for more specific and frequent information regarding changes in team functioning.

Although PRF items are not identical to those rated by trained observers on the TOF, it is possible to compare TOF and PRF ratings on similar items to assess the ratings’ validity. Although participants tend to rate the meetings more positively than trained observers, the patterns of relative strengths and weaknesses are quite similar. For example, 67% of the team members report it is “very true” that the team

meeting focused on the child's strengths, while observers indicated that child strengths were identified and discussed in 75% of the meetings.

Participants rated the meetings most poorly on the items:

- Everyone who needed to be at the meeting was present.
- We discussed things that may make it hard to follow the plan, and how to deal with them.
- All parts of the plan created at the last meeting were carried out.
- We have a good back-up plan for what to do in a crisis, if the main plan isn't working.

These items reflect many of the same issues identified in other studies of CFTs, such as the limited presence of informal supports and effective problem solving. Observer ratings also indicated that crisis plans were developed or reviewed in only 25% of the meetings, that non-professional supports were present at 29% of meetings, and that barriers to services or resources/interventions were identified and solutions discussed in 58% of meetings. Thus, there appears to be consistency in the ratings of the PRF and the observations of these particular meetings, and with findings from other studies.

Discussion/Conclusion

The Participant Rating Form is a simple means of providing feedback to CFTs. The feedback is based on the team's views of the meetings, and appears consistent with findings from trained observers. Although additional examination of its validity is needed, results suggest that the PRF is a promising approach to assessing and improving the degree to which teams implement the wraparound model.

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School Functioning for Children Enrolled In Community-Based Wraparound Services

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Introduction

Wraparound services seek to provide comprehensive treatment planning and supports for children with serious emotional disturbances (SED) who may experience behavioral and emotional difficulties that cut across settings: school, home and community. It has been suggested that utilizing a community-based wraparound approach to put school, home and community mental health professionals at the same table is advantageous in best meeting the needs of individual children (Cook-Morales, 2002). While studies have addressed the impact of school-based wraparound programs on children's school outcomes (e.g., Eber, Osuch, & Redditt, 1996), there has been little research addressing how a community-based wraparound approach impacts school-related outcomes for children. This study explores the effects of a community-based wraparound approach on school-related outcomes, including school functioning, grades, disciplinary actions, and IEP status.

Children with serious emotional disturbances (SED) who are served in the community often have school difficulties, including behavioral and learning problems in school. The national average number of students with a disability that qualifies for special education services is 11.46% (U.S. Department of Education, 2004). It is rare for SED to be the primary educational disability. SED accounts for 8% of all students with a disability or < 1% of student population. The educational outcomes of students with SED are the worst of any disability group. Fifty percent of students with SED drop out of high school, compared to 30% of all students with disabilities (New Freedom Commission on Mental Health, 2003).

The Coordinated Family Focused Care (CFFC) initiative has been undertaken by the Massachusetts Executive Office of Health and Human Services in order to better organize the care of children and adolescents who are at risk of hospitalization or residential placement because of their SED. The program builds on family strengths and available support systems to help children remain in or return to the community. CFFC has been designed to be consistent with the National Institute of Mental Health's CASSP (Children and Adolescent Support Services Programs) principles, which require services to be child-centered, family-focused, community-based, culturally competent, and provided in the least restrictive environment. In accordance with these principles, the CFFC program strives to deliver services in accordance with these core elements. Additionally, the services include flexible funds to provide whatever services the care planning team determines are necessary to the child and family, including concrete supports (e.g. shelter, clothes) and services that are not typically fundable through insurance mechanisms (e.g. respite care, summer camp). In essence, CFFC does strive to literally "wrap" needed services around the child and family in addition to working to adhere to the core principles of "wraparound" services listed above. Each child enrolled has a team assigned to them, which consist of the Care Manager (a Master's level clinician) and a Family Partner, (an individual who has been a primary caregiver for a child with serious emotional disturbance).

For the present study, school outcomes were examined for 377 children enrolled in the CFFC program between July 2003 and October 2005. We sought to understand factors related to school involvement on the wraparound team, and hypothesized positive changes in school functioning and school disciplinary actions (e.g. suspensions) over time in services.

Procedures and Methods

In order to be eligible for enrollment in CFFC, the child must be 3-18 years old (inclusive), at risk for residential or more restrictive placement, attain a score of 100 or higher on the CAFAS/PECFAS, reside in one of the five CFFC designated communities and have a serious emotional disturbance. A parent or caregiver must also agree to participate in the child's services and service team.

Measures. Standardized measures are collected by program staff at intake at set intervals throughout program enrollment. Additional demographic information as well as updates on treatment progress are collected by care managers. Additionally, the research staff at UMass complete telephone interviews with caregivers at 3 and 9 months into services to assess treatment fidelity and parent empowerment. All procedures are done in accordance with the UMass IRB.

Child functioning. The Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2000) is collected quarterly (at Intake into the program, and every 3 months thereafter). The CFFC program has established a CAFAS score of 100 as part of the entry criteria for the program. Overall, children in CFFC have average intake CAFAS scores of 140, indicating a likely need for “intensive treatment” (Hodges, 2000), compared with average reported intake scores in other system of care wraparound programs of 65 – 95 (Hodges, Doucette-Gates & Liao, 1999; Kamradt, 2000; Rosenblatt & Rosenblatt, 2000). For the purposes of best understanding change in the CFFC program, CAFAS severity categories were created to reflect the overall high level of severity upon intake into the program, as well as a reflection of the score distribution at intake (100 – 120, 130 – 150, and 160+; see Figure 1). In order to be seen as having a “positive change” a child needed to move to a lower category of severity.

Treatment Fidelity. To assess Treatment Fidelity, the Wraparound Fidelity Index (WFI-3; Bruns, Burchard, Suter, Leverenz-Brady, & Force 2004) is being used by the evaluation team to assess how closely the five CFFC sites are implementing wraparound. The WFI includes 11 elements such as Voice and Choice, and Strength-Based Services. The WFI contains a question which asks if a school person is on the wraparound team, which was the item used for this study.

Child Strengths. The Behavioral and Emotional Rating Scale. (BERS; Epstein, 1999) is collected at intake, 6 and 12 months into treatment to assess caregiver’s perceptions of child strengths. The amount and type of peer relationships, adult relationships, and being bullied are also collected at intake and 6 months.

School data. Information on school disciplinary actions (e.g. suspensions), grades, and attendance are gathered by the care manager working with the family, via interviews and school visits. This information is then recorded every 6 months, and submitted to the program.

Results

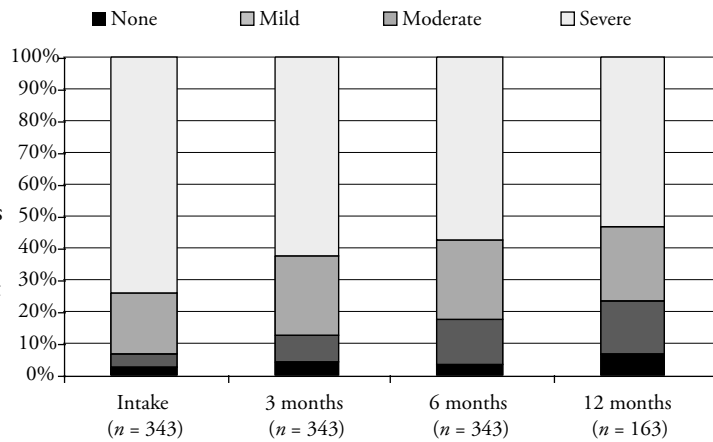
School behavior. Repeated measures analyses indicated no notable findings in the areas of school disciplinary behavior between intake and 6 months in treatment, including suspensions, expulsions, tardies, absences, and truancy.

School functioning. To assess functioning in school, the School subscale of the CAFAS was examined at intake, 6 months ($n = 343$) and 12 months ($n = 163$). Repeated measures analyses indicated significant improvement in the CAFAS school score from Intake to 6 months ($F = 60.32$; $df = 342$; $p < .0001$), and Intake to 12 months ($F = 24.73$; $df = 162$; $p < .0001$). Mean school CAFAS score at Intake was 26.7, at 6 months was 23.7 and at 12 months was 22.3. While these changes were statistically significant, the means scores still indicate very high degrees of impairment. At intake, about 75% of children scored in the highest impairment category (30 = severe), and over 50% of children scored in the highest impairment category at 6 and 12 months (see Figure 1).

School Strengths. On the BERS, scores in all areas except School Strengths improved from Intake to 6 months. The School Strengths subscale assesses the caregiver’s opinion of the child’s strengths in school areas, such as paying attention in the classroom.

Individualized Education Plans (IEP). Sixty-five percent of children are on an IEP at Intake ($N = 377$), 71% are on an IEP at 6 months ($N = 229$), and 78% are on an IEP at 12 months ($N = 94$). Most children on IEPs at Intake remain on them; 94% of those on IEP at Intake are still on an IEP at 6 months, and 97% of those on an IEP at Intake are still on an IEP at 12 months. Chi-square analyses

Figure 1
School CAFAS Over One Year



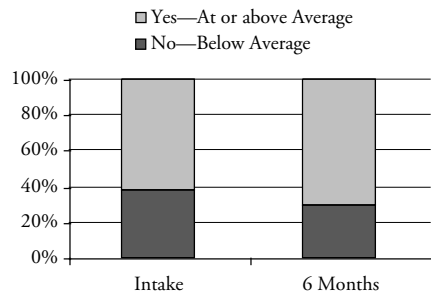
indicate significant movement onto IEPs while in services for those who are not on IEPs at Intake. Twenty-three percent of those *not* on IEP at Intake *are* on an IEP at 6 months ($\chi^2 = 100.983$, $N = 223$; $p < .0001$), and 39% of those *not* on IEP at Intake *are* on an IEP at 12 months ($\chi^2 = 55.728$, $N = 92$, $p < .0001$).

Grades. There was a significant increase in the number of children with average or above grades between Intake and 6 months. ($\chi^2 = 29.152$, $N = 192$, $p < .0001$; see Figure 2), with 8% more children in the above average category. The overall effect between Intake and 12 months was significant ($\chi^2 = 10.458$, $N = 79$, $p < .001$). However, almost as many children went from the below average to above average as moved from above to below, so the net effect was not a positive one.

Predictors of school personnel on Wraparound Team.

One of the questions the WFI addresses is if there is a school member on the CFFC team. At 3 months, 53% of parents report a school person on the Wraparound Team, and at 9 months, 59% of parents report a school person on the Wraparound Team. There is a large range across sites: 38% - 68% reporting a school member on the team at 3 months, and 50% - 71% at 9 months. At both the 3 and 9 month interviews, having a school member on the team was related to having a younger child (age 11 or younger), being on an IEP, and having a higher School CAFAS score. School behavior, academic performance, ethnicity, and gender were not significantly related factors to having a school member on the wraparound team.

Figure 2
Average Grades Intake to 6 Months (N = 204)



Discussion

This is one of the first studies to examine school outcomes for children receiving community based wraparound services. No changes were seen in school disciplinary behavior, such as suspensions. This was in contrast to expected findings, which hypothesized that community-based wraparound services would positively impact these areas. Non-compliance, defiance (Fields, 2004) and physical confrontations with peers (Dupper & Bosch, 1996) are among the most common reasons for school suspensions. We may therefore conclude that this service does not significantly impact those behaviors in the school environment. Conversely, many educators find punishment a more acceptable approach for managing students' challenging behaviors than positive reinforcement (Maag, 2001). A program such as CFFC focuses on meeting the needs of the child and family, but is less likely to have an impact on the culture and policies of educational institutions regarding difficult behaviors. Positive changes over time were seen in school CAFAS scores, grades at 6 months, and movement onto IEPs at 6 and 12 months. While the school CAFAS changes are encouraging, the children in this study still have very high levels of school impairment at 6 and 12 months into services, indicating a high need for school based services and supports. The movement to IEP programs show that the children who need specialized programs at school are being placed in them. Further, IEP status is an indicator of school personnel being involved on the wraparound team.

Since the study employs a pre-post design, we are not able to determine if the changes in school functioning, grades and IEP status are direct results of the program. Future research efforts should include matched samples of comparison programs, or care as usual, to better understand the effects of a wraparound services program such as CFFC.

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Relationships Between Fidelity and Outcomes in a Multi-Site Wraparound Initiative

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Christina Breault

Acknowledgements: This research was funded by a grant from the Center for Health Care Strategies (CHCS #99623)

Introduction

The Coordinated Family Focused Care (CFFC) pilot initiative has been undertaken in order to better coordinate the care of youth in Massachusetts who are at risk of hospitalization or residential placement because of their severe emotional disturbances (SED); 39% have had a hospitalization and/or stay in residential treatment at the time of intake into CFFC. There are five sites across the state, each serving up to 50 children at any given time. This wraparound program builds on family strengths and available support systems to help children remain in or return to the community.

Unique features of the CFFC program include a blended funding from public agencies in Massachusetts: the Departments of Mental Health, Social Services, Youth Services, Education and Medicaid. The Medicaid mental health carveout, Massachusetts Behavioral Health Partnership (MBHP), is managing the CFFC program. While one of the five CFFC sites (Worcester Communities of Care) has been a recipient of a SAMHSA System of Care grant, the program currently operates entirely on state monies. Through a grant from the Center for Health Care Strategies, the University of Massachusetts Medical School (UMass) is studying program outcomes.

CFFC has been designed to be consistent with the National Institute of Mental Health's CASSP (Children and Adolescent Support Services Programs) principles, which require services to be child-centered, family-focused, community-based, multi-system, culturally competent, and provided in the least restrictive environment. In accordance with these principles, the CFFC program strives to deliver services in accordance with these core elements. Additionally, the services include flexible funds to provide whatever services the care planning team determines are necessary to the child and family, including concrete supports (e.g. shelter, clothes) and services that are not typically fundable through insurance mechanisms (e.g. respite care, summer camp). In essence, CFFC does strive to literally "wrap" needed services around the child and family in addition to working to adhere to the core principles of "wraparound" services listed above. Each child enrolled has a two-staff team assigned to them, which consist of the Care Manager (a Master's level clinician) and a Family Partner (an individual who has been a primary caregiver for a child with serious emotional disturbance).

It is believed that adherence to the CASSP principles is related to more positive child and family outcomes. However, there has been little empirical research in this area. This paper seeks to understand whether fidelity to the wraparound model and CASSP principles is positively related to child outcomes. We first examine child outcomes in the areas of child functioning and strengths, and then examine the relationship to treatment fidelity.

Method

All data are from the CFFC evaluation. Consent for participation in the study is obtained by program staff upon intake into services. The risks and benefits are explained, and a consent form is signed that has been approved by the University of Massachusetts Medical School IRB. To date, 93% of families who have been invited have consented to participate in the evaluation; 7% have declined. The evaluation follows a pre-post design; there is no comparison group.

Participants. For this study, data were accessed for 293 children who enrolled, received services, and were discharged from CFFC, who were also part of the ongoing evaluation.

Measures. Standardized measures are collected by program staff at intake at set intervals throughout program enrollment. Additional demographic information as well as updates on treatment progress are collected by care managers. All data are submitted electronically by MBHP to UMass.

Child functioning. The CAFAS (Hodges, 2000) is collected quarterly (at Intake into the program, and every 3 months thereafter). The CFFC program has established a CAFAS score of 100 as part of the entry criteria for the program. Overall, children in CFFC have average intake CAFAS scores of 140, indicating a likely need for “intensive treatment” (Hodges, 2000), compared with average reported intake scores in other system of care wraparound programs of 65 – 95 (Hodges, Doucette-Gates & Liao, 1999; Kamradt, 2000; Rosenblatt & Rosenblatt, 2000). For the purposes of best understanding change in the CFFC program, CAFAS severity categories were created to reflect the overall high level of severity upon intake into the program, as well as a reflection of the score distribution at intake (100 – 120, 130 – 150, and 160+; see Table 1). In order to be seen as having a “positive change” a child needed to move to a lower category of severity.

Treatment Fidelity. To assess Treatment Fidelity, the Wraparound Fidelity Index (WFI-3; Bruns, Burchard, Suter, Leverentz-Brady, & Force, 2004) is being used by the evaluation team to assess how closely the five CFFC sites are implementing wraparound. The WFI includes caregiver ratings of the philosophical elements of the wraparound process. These elements include Voice and Choice, Youth and Family Team, Community-Based Services, Cultural Competence, Individualized and Strength-Based Services, Natural Supports, Continuation of Care, Collaboration, Flexible Resources and Outcome-Based Services. To address how involved parents and caregivers feel they are with their child’s services, the Competency subscale of the Family Empowerment Scale and the Family Participation Measure are also being administered with parents and caregivers.

Child Strengths. The Behavioral and Emotional Rating Scale (BERS; Epstein, 1999) is collected at intake, 6 and 12 months into treatment to assess caregiver’s perceptions of child strengths. The amount and type of peer relationships, adult relationships, and being bullied are also collected at intake and 6 months.

Results

Results of repeated measures analyses indicated statistically significant changes over time in the expected directions in all areas assessed. On the CAFAS, mean score at Intake is 139, and mean score at 6 months is 102 (Within Subjects Repeated measures: $df = 267$; $F = 328.74$; $p < .0001$). For children enrolled for a year or more, mean scores went from 143 at intake to 99 at one year (Within Subjects Repeated measures: $df = 116$; $F = 171.78$; $p < .0001$). All subscales also had statistically significant change. While all children had CAFAS scores at or above 100 at intake, 76% did at 3 months, 57% did at 6 months, 55% did at 9 months, and 54% did at 12 months.

In order to assess clinically meaningful change, CAFAS scores were grouped by severity as suggested on the instrument, with an additional category of extreme severity added. Subsequent analyses were performed looking not just at CAFAS change in the correct direction, but also for change into a category of lower severity. Results of distribution of these scores can be seen below.

Table 1
CAFAS Score Distribution at Intake

	<i>Frequency</i>	<i>Valid Percent</i>
100-120	100	37.4
130-150	89	33.1
160+	79	29.6
Total	268	100.0

By 3 months in the program, half the children experienced change into a lower category of severity, and by 6, 9 and 12 months, 74% had. Of those who did not, only a very small percentage of children moved into a more severe category (under 5%), so those children were grouped together with the No Change group for subsequent analyses. The median score for the Positive Change group at Intake was 140, and for the Same/Worse group was 130. The average change in scores for the Same/Worse group was 1 point, and for the Positive Change group was 48 points.

Table 2
Mean CAFAS Scores by 6 Month Change During Services

	<i>Intake CAFAS Mean</i>	<i>6 Month CAFAS Mean</i>
Same/Worse (<i>n</i> = 72)	130.56	129.17
Positive Change (<i>n</i> = 196)	141.94	93.11

Fidelity and CAFAS change

The WFI was administered at 3 and 9 months into services. At the 3 month interview (*N* = 196), children who had who had significant CAFAS change at the 3 month mark had significantly higher scores on the Community Supports element of the WFI-3 than those who did not have CAFAS change (*df* = 195; *F* = 5.612; *p* < .05). There were trends for higher scores in the area of Strengths Based services and positive CAFAS change at 6 months, 9 months and 12 months (*p* < .10).

Fidelity and Discharge Status

There were significant differences in almost all areas of treatment fidelity (at 9 months) by discharge status. That is, higher fidelity to the treatment model was strongly related to attaining graduation goals. In most areas, the lowest fidelity scores were related to those who withdrew from treatment without attaining graduation goals, although children who were discharged to out of home placements had lower fidelity scores in the area of Community Supports than those who graduated. In many areas, however, children discharged into restrictive out-of-home placements had fidelity scores similar to those who graduated. It should be noted that the numbers of children in these groups area small, and the results are preliminary.

Fidelity and Strengths

Finally, relationships between ratings on the strengths measure and fidelity were examined. There were significant positive relationships at both 3 and 9 months between all areas of strengths as assessed on the BERS and Community Supports on the WFI. WFI scores at 9 months in the areas of Cultural Competence, Continuation of Services, and Collaboration were also positively related to 12-month scores on the BERS in the areas of Family Involvement and Intrapersonal Strengths.

Discussion

There are some relationships seen in these data between aspects of fidelity and positive outcomes in the CFFC program. Notably, positive relationships were seen between the Community Supports and Strengths based Services areas of fidelity, and positive change on the CAFAS. We also found relationships between fidelity and attainment of graduation goals, although many caregivers of children discharged to out-of-home placements had fidelity ratings similar to children who graduated. The key difference was that caregivers of children who withdrew from services (voluntarily discontinued without meeting graduation goals) reported lower fidelity ratings. From this research, it appears that the caregiver's perception of services being strengths-based, and of connecting the family with community supports, are related to positive programmatic outcomes.

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Chapter Ten

Issues in Understanding and Treating Trauma Victims

The Design and Implementation of an Evaluation to Assess the Impact of a National Network for Serving Children who have Experienced Trauma: Is the Whole More than the Sum of its Parts?

**Christine M. Walrath
John W. Gilford
Mikisha Nation**

Acknowledgements: This research was funded by the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration (280-2003-1606).

Introduction

Children's mental health as a whole has received increased national attention and has become the focus of a number of national reports and studies in recent years, in part due to trends and events such as the dramatic increase in youth violence in the early 1990s; school shootings in the late 1990s; and the aftermath and aftereffects of the devastating events of 9/11 in 2001. Comprehensive national reports such as the 1999 *Surgeon General's Report on Mental Health* (USDHHS, 1999) and others have included repeated recommendations that future research and evaluation, and associated resources, be targeted toward filling gaps in knowledge in our understanding of children's mental health. Many of these reports collectively emphasize interdisciplinary approaches and a developmental perspective in accomplishing this goal, as well as the urgency of translating science to policy and practice to ensure that programs and interventions are empirically based and disseminated. Many share other key principles and components in their recommendations, such as the importance of creating effective interagency relationships among the key child-serving systems; developing a network of services organized along a continuum of care, offering a broad array of services; building interdisciplinary research and evaluation infrastructure; involving families in all phases of the planning and delivery of services; developing interventions that are developmentally appropriate; and creating service systems that are designed to respond to the needs of culturally diverse populations.

As the recent New Freedom Commission Report has suggested, without a coordinated and sustained effort to address the gaps in children's mental health science and practice, many children will miss an opportunity for care and recovery from traumatic experiences, as well as a chance "to live, work, learn, and participate fully in their communities" (NFC, 2003). In building a "bridge" between science and services the National Child Traumatic Stress Initiative (NCTSI) has the potential to simultaneously fulfill many priority needs identified by a consensus of experts, including the need for implementation of evidence-based interventions and information on their effectiveness when implemented in a community-based service setting.

The NCTSI was established in 2001 to improve access to care, treatment, and services for children and adolescents exposed to traumatic events and to encourage and promote collaboration between service providers in the field. As a part of the NCTSI, grants have been awarded by the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration to establish the National Child Traumatic Stress Network (NCTSN). Through these funds, a 70-member Network (45 current grantees and 25 previous grantees) has been created across the United States to raise the standard of care and improve access to services for traumatized children and their families.

Methods

As a part of its Congressional mandate (established by Public Law 106-310 Children's Health Act of 2000), the National Child Traumatic Stress Network (NCTSN) has been engaged in local evaluation efforts, including the collection of preliminary site-specific evaluation data. Additionally, in 2004, the NCTSN began piloting a Core Data Set across the participating Centers, marking the beginning of a process that will yield more comprehensive and detailed information regarding populations served and their outcomes. In collecting additional information through the cross-site evaluation, the NCTSN will be strengthened by expanding information about its own performance, effectiveness and efficiency, a key objective of the Government Performance and Results Act (GPRA) and an inherent NCTSN program requirement.

ORC Macro and their partners, Walter R. McDonald & Associates, Inc. (WRMA), the National Association of State Mental Health Program Directors (NASMHPD) Research Institute (NRI), and several expert consultants in children's mental health were funded to design and implement the Cross-site Evaluation of the National Child Traumatic Stress Initiative. The evaluation design, which includes eight study components, expands upon an existing National Child Traumatic Stress Network (NCTSN) management and evaluation infrastructure; involves data collection efforts directed by NCTSN centers and ORC Macro; utilizes multiple modes of data gathering, including Web-enabled surveying; includes consumer and provider respondents; and includes technical assistance and training to funded centers to assist in their portion of the evaluation's implementation.

The first year of the Cross-site Evaluation contract was a collaborative design and development year. Federal, Network center, consumer, and content expert stakeholders collaborated with ORC Macro in their development of a cross-cutting comprehensive evaluation approach that could systematically and robustly be implemented across pre-existing and future-funded center grantees. The logic model developed to guide the Cross-site Evaluation is included as Figure 1.

The NCTSI cross-site evaluation design focuses on the organization, collaborative efforts, function and impacts of the NCTSI as a whole, and draws upon the body of existing literature in multiple disciplines relevant to trauma treatment and services for children and families, including program evaluation conducted by the grantees to assess the effectiveness of the NCTSN in meeting the intent of Federal appropriations and its own stated goals. The overarching purpose of the Cross-site Evaluation is to assess the impact of the multilevel NCTSN on the access to care and quality of care for children exposed to trauma with four broad and guiding goals:

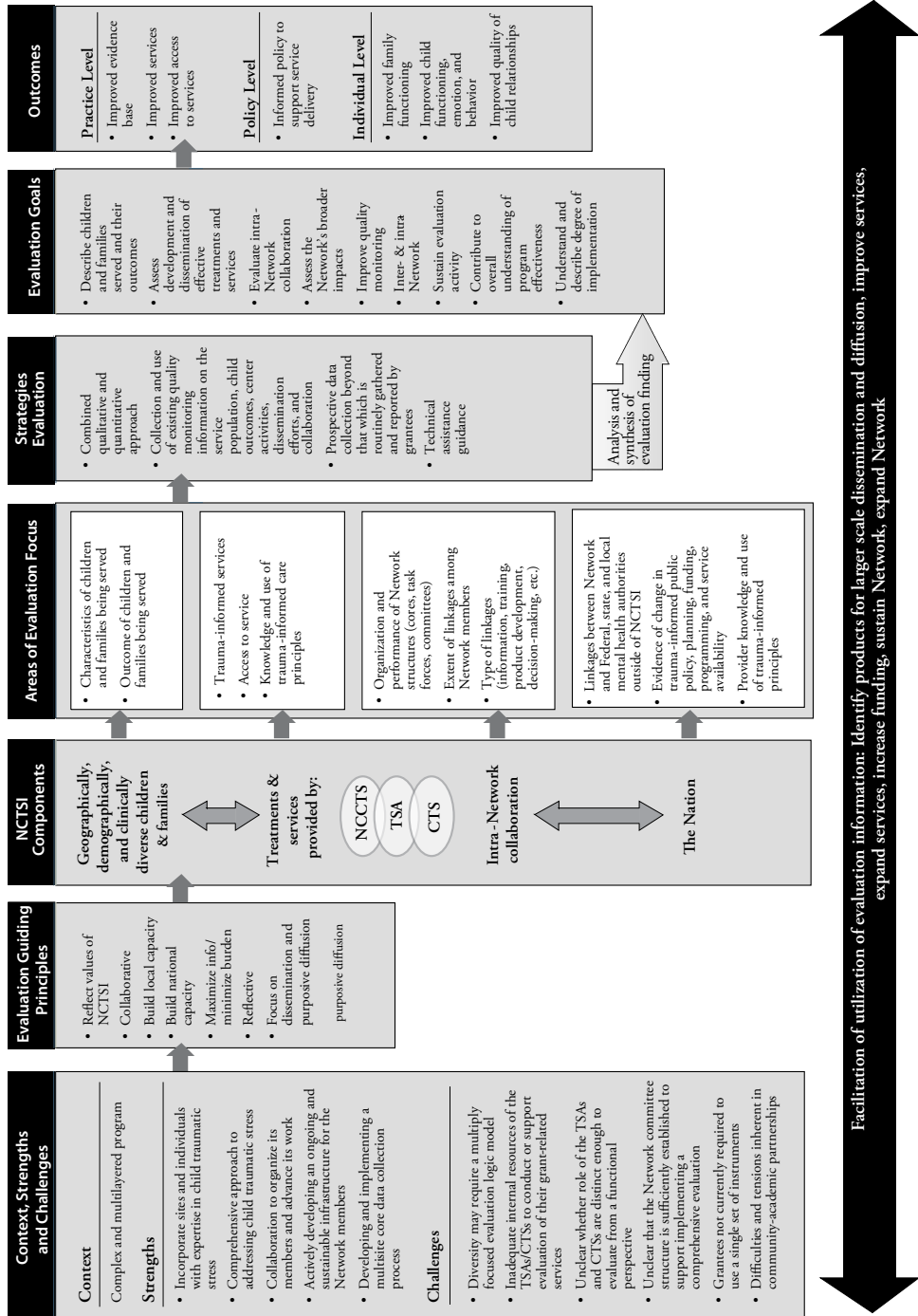
- Describe the children and families served by NCTSN and their outcomes
- Assess the development and dissemination of effective treatments and services
- Evaluate intra-Network collaboration
- Assess the Network's broader impacts beyond the NCTSN

The specific goals of the cross-site evaluation are to describe the children and families served by the NCTSN centers; describe the behavioral and clinical outcomes of children of children served; describe services utilized; assess the development and dissemination of effective products, treatments, and services; assess intra-Network collaboration; and assess the Network's impact beyond the NCTSN. The eight study components of the Cross-site Evaluation include: (1) Descriptive and Clinical Outcomes of Children Receiving Direct Clinical Mental Health Services, (2) Satisfaction with Direct Clinical Mental Health Services, (3) Provider Knowledge and Use of Trauma-informed Services, (4) Product/innovation Development and Dissemination, (5) Adoption of Methods and Practices, (6) Network Collaboration, (7) National Impact of the NCTSI, and (8) Utilization of the National Registry of Evidence-based Programs and Practices (NREPP).

Conclusions

There are many inherent and well recognized challenges in the development, design, and implementation of large scale federally funded cross-site evaluations (e.g., Holden, Stephens & Santiago, 2005; Howell & Yemane, 2006). Unique to Network evaluation such as this, is the added challenge associated with understanding if the impact of a Network rests solely on the merits of improved outcome among children being served. Consideration of this question, in addition to the complexity associated in gathering and disseminating information through evaluations designed to mirror the complex multi-faceted nature of federally funded programs, will result in more educated consumption of the information disseminated through these efforts, as well as the development of future evaluation designs of similar depth and breadth.

Figure 1
Cross-Site Evaluation of the National Child Traumatic Stress Initiative Logic Model:
Building a Bridge Between Science and Services and Between Services and Future Research



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Symposium

Children in Child Welfare Systems: Reentry, Perpetration, and Mental Illness

Symposium Introduction

Brigitte A. Manteuffel

Designing and implementing appropriate community level interventions for children and families experiencing child maltreatment and involved with the child welfare system requires knowledge of conditions that impact outcomes and maltreatment events. Three distinct but related studies are presented that examined reentry into child protective services (CPS), male perpetration, and mental illness for this population. All three studies present data concerning characteristics of children and families, comorbidity, and the interaction of outcomes and services. Implications of the research for treatment, community engagement, and policy are introduced for discussion.

Chair

Brigitte A. Manteuffel

Authors

John D. Fluke et al.

Gila S. Shusterman et al.

Anna Krivelyova et al.

Rereporting and Recurrence of Child Maltreatment: Findings from NCANDS

John D. Fluke, Gila R. Shusterman, Ying-Ying T. Yuan, & Dana Hollinshead

Introduction

Most children who are subjects of a report of maltreatment to the State or local child protective services (CPS) agency are involved just once with CPS during their lives. Other children are referred more than once and their referrals result in repeated investigations or assessments (rereporting). Some of these children are found to have been victimized or revictimized (recurrence). This study addresses rereporting and rereporting with victimization, to gain a better understanding of the circumstances surrounding children with repeated involvement with CPS. The study follows children for up to five years, using a multiyear, multistate case-level National Child Abuse and Neglect Data System (NCANDS) data set that spans the time period from 1998 to 2002.

The study focused on modeling the relative risk of factors associated with rereporting and rereporting with victimization that are available from the NCANDS data (Fluke, Shusterman, Hollinshead, & Yuan, 2005). The following general categories of factors were examined for their impact on a child experiencing any single rereport and rereport with victimization: child demographics; circumstances of maltreatment; family and child risk factors; and outcomes of intervention.

A key question is whether the factors associated with a child who is rereported are similar to those associated with a rereported child who is victimized. Another area of inquiry was the extent to which the provision of services was associated with either of these subsequent events.

Method

NCANDS case-level data consist of CPS investigation events at the child level. Only reports that receive an investigation or assessment response from the agency are included. Each record in the data file is referred to as a report-child pair. This indicates that there is a record for each child in each report that receives an investigation or assessment. Each report has a unique identification (ID) and many children can share the same report ID. Each child has a unique ID, thus the report-child pair is uniquely identified by the combination of its report and child IDs.

The number of States that voluntarily submit these data to the Children's Bureau under NCANDS increased from 11 States in 1993 to 42 States in 2002. For each investigation, CPS makes a disposition decision, which involves determining whether or not a child or children have experienced or are at

risk of maltreatment. A child is considered to be a victim of maltreatment if he or she has at least one maltreatment type coded as substantiated, indicated, or alternative response victim.

Compiling a data set consisting of multiple years of data involved two stages: (a) evaluating the quality of State submissions, and (b) using the data from States that met the analytic requirements to develop a single database. Nine States met the basic criteria for inclusion.

Data from all States were combined into a single file. Finally, data extracts were developed to support specific analyses. Further examinations of the data were conducted to address potential compatibility issues for specific analyses, and States may have been excluded accordingly.

The data analysis focused on four categories of events related to children. The first two pertained to all children in the data set, regardless of the disposition of their first investigation. Rereported (i.e., a subsequent investigation was conducted) and Rereported with Victimization (the subsequent investigation resulted in a disposition of victim) were the two categories. The second two dependent variables pertained only to children in the data set who were identified as victims in their first investigation. Victims who were rereported and victims who were found to have a recurrence (i.e., victims subsequently victimized again) were studied.

Findings regarding time to rereport events were obtained descriptively using a survival analysis technique called life tables. Cox regression or proportional hazards analysis, a form of multivariate survival analysis, was used to arrive at findings regarding factors that are associated with rereporting. A type of event history analysis that focuses on counts of multiple repeated events called trajectory analysis was used to address patterns of reentry.

Findings

Research questions and key findings are as follows:

What proportion of reported children were rereported, and when? (see Figure 1)

- Approximately one-third of children were rereported and a little more than 10% were rereported with victimization within five years.
- Most subsequent reports occurred within a few months after the initial report.

What proportion of child victims had a recurrence of maltreatment, and when? (see Figure 1)

- Among victims, almost 35% were rereported and 17% became victims again within five years.
- Most subsequent victimizations occurred within a few months after the initial report.

What factors were associated with children who were rereported over a period of time?¹

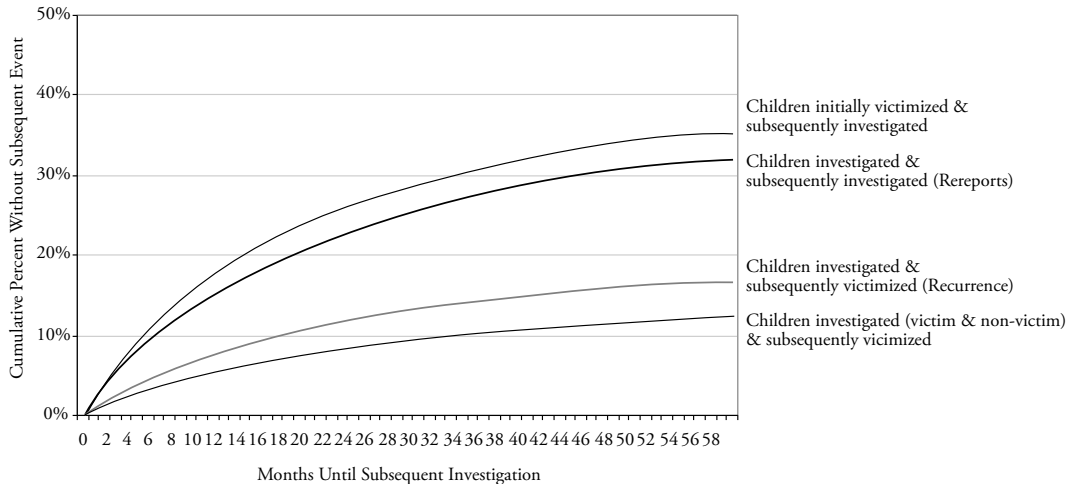
- Reports by medical and law enforcement personnel were associated with a lower likelihood of rereporting.
- Younger children had more rereports compared with older children.
- Males were at lower risk compared to females.
- White children were more likely to be rereported compared with African-American and Hispanic children.
- Children who received services were more likely to be rereported than children who did not receive services. However, children who were found to be victims in their initial report, and who received services, were less likely to be rereported compared with nonvictims who received services.

What factors were associated with children who were rereported with victimization over a period of time? (see Table 1)

- Initial conditions with respect to report source, age of child, child sex, and child race were similar to all rereported children. Similarly, the provision of services included both the main effects of increased risk and the interaction with victimization status and services.

¹Data available upon request.

Figure 1
Percentage of Children with Subsequent Reports Over Time
(Nine States)



- Children who had at least one intervening rereport that did not result in victimization were at increased risk of eventual subsequent victimization.

Multiple Rereports

This study also examined how many subsequent events occurred for an individual child, and the impact of the passage of time and the age of the child on this number of events. A total of 803,320 children who were initially reported during 1998 and 1999 in nine States were included in the analysis.

Time from Initial Report. This analysis examined how many events per child occurred for each six-month period after the first report. The number of subsequent CPS rereports per child declined steadily during each additional six months of follow-up. For all reported children, the average number of subsequent reports was 0.13 per child during the first six months of follow-up, whereas the number dropped to 0.05 reports during months 31–36.

Conclusion

Findings from this study highlight needed areas of improvement in the system of intervention, such as a focus on the small group of children who experience a brief period of intense involvement with the CPS system. This study also underscores the perplexing issues surrounding the use of rereporting and recurrence as performance measures for CPS. For example, the increased chances of rereporting and recurrence appears to be tied to providing services. Ideally, the analysis will help to facilitate the design and implementation of more effective and targeted services, and help in focusing continued inquiry regarding children who are at risk.

Table 1
Factors Associated with Rereporting with Victimization
(N = 495,900)

<i>Variables</i>	<i>Factor Categories</i>	<i>Risk Ratio with Rereporting with Victimization</i>	<i>P</i>
Source of Initial Report	Social and Mental Health Services	1.0000 ^a	0.0000
	Medical Personnel	0.8125	0.0000
	Law Enforcement or Legal Personnel	0.8818	0.0000
	Education Personnel	0.9971	0.9206
	Daycare and Foster Care Providers	0.8739	0.0245
	Nonprofessional and Other	1.0461	0.0552
	Unknown	1.0512	0.2939
Child Age at Initial Report	Infants	1.0000 ^a	0.0000
	1–Year Olds	0.9600	0.1282
	2–4	0.8030	0.0000
	5–7	0.7231	0.0000
	8–10	0.6507	0.0000
	11–13	0.6302	0.0000
	14–18	0.4291	0.0000
	Over 18	0.1572	0.0014
	Unknown	0.1553	0.0000
Child Sex	Female	1.0000 ^a	0.0000
	Male	0.7015	
Child Race & Ethnicity	White only	1.0000 ^a	0.0000
	American Indian and Alaskan Native only	1.1740	0.0000
	Asian and Pacific Islander only	0.6869	0.0001
	African-American only	0.8965	0.0000
	Hispanic	0.8795	0.0000
	Other and multiple race, non-Hispanic	1.3751	0.0000
	Unable to determine and missing	0.4427	0.0000
Child With Indication of Disability	No	1.0000 ^a	0.0000
	Yes	1.5198	
Caretaker Abuse of Alcohol	No	1.0000 ^a	0.0000
	Yes	1.2209	
Child's Initial Investigation Victimization Status	Nonvictim	1.0000 ^a	0.0000
	Victim	1.7293	
Postinvestigation Services Provided	No	1.0000 ^a	0.0000
	Yes	1.7508	
Child Placement in Foster Care	No	1.0000 ^a	0.0000
	Yes	4.2588	
Interaction of Victimization and Postinvestigation Services	No	1.0000 ^a	0.0000
	Yes (child victim and services provided)	0.8370	
Interaction of Victimization and Placement in Foster Care	No	1.0000 ^a	0.0000
	Yes (child victim and placed)	0.1987	
Intervening nonvictim report prior to subsequent victimization	No	1.0000 ^a	0.0000
	Yes (child rereported previously)	1.2474	

^a Reference Category

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Male Perpetrators of Child Maltreatment

Gila R. Shusterman, John D. Fluke, & Ying-Ying T. Yuan

Introduction

A lack of research on fathers and other male perpetrators who come to the attention of the child protective services (CPS) system hinders the advancement of future policy and practice initiatives. While many more women than men access child welfare services, nearly half of child maltreatment perpetrators were men, according to national data for 2002 (Shusterman, Fluke, & Yuan, 2005). Of these male perpetrators, just over half were biological fathers, and the other half were nearly equally split among (a) other men in “surrogate father” roles, such as stepfathers and mothers’ boyfriends, and (b) nonfathers, such as relatives, friends, and day care providers. A greater understanding of the extent to which fathers and other males maltreat children, and of the risks for child maltreatment by male perpetrators, will allow social service agencies to provide the outreach, education, and support necessary to prepare and support fathers in their parental responsibilities.

This research utilized a unique multistate data set of 180,502 perpetrators identified by the child protective services (CPS) system during 2002. The relationship of the perpetrators to the child victims, as well as whether the perpetrator acted alone or with another person, was considered along with demographic characteristics of victims and circumstances of the maltreatment.

The key research questions for this study were the following:

1. How do male perpetrators compare with female perpetrators in terms of their relationships to their victims?
2. What specific patterns of child maltreatment are associated with male perpetrators, acting alone or with the victim’s mother?
3. From a multivariate perspective, to what extent do the age and sex of the child victims, the number of child victims, and the type of maltreatment explain the variation in the types of male perpetrators?

Methods

Case-level data from 18 States from the 2002 National Child Abuse and Neglect Data System (NCANDS) were used to create the data set for this research¹. Data on all reports, children, and maltreatments were merged and recoded to represent the categories of reports, children, and maltreatments associated with each unique perpetrator. The NCANDS collects both gender and relationship of the perpetrator, and matches each perpetrator to other perpetrators. These variables were merged to create categories such as “biological father acting alone,” or “male nonparent acting with mother.” Data were screened to exclude perpetrators with missing data on either gender or relationship, or who were identified as having multiple, incongruous relationships with the same child, such as biological father and stepfather. Perpetrators with a combination of relationships were excluded. The resulting data set included 180,502 unduplicated perpetrators.

Findings

Male Perpetrators Compared with Female Perpetrators

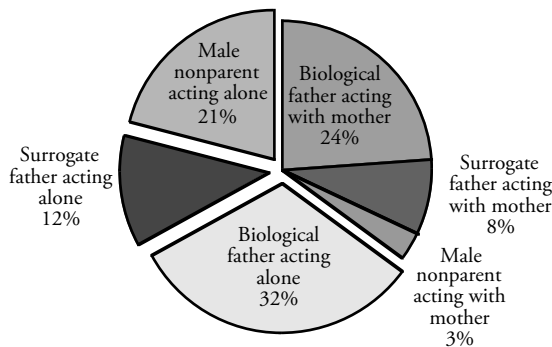
Forty-four percent of the unique perpetrators in the data set were male. More than half of all male perpetrators (55%) were biological fathers. The second largest group was male nonfathers (25%), who included male relatives and male nonrelatives. Surrogate fathers (including mothers’ boyfriends, stepfathers, and adoptive fathers) accounted for 20% of male perpetrators. Among female perpetrators, 87% were biological mothers, 10% were nonparents, and the remaining 3% were stepmothers, adoptive mothers, or fathers’ girlfriends.

¹These states were: Colorado, Delaware, Iowa, Illinois, Indiana, Kentucky, Massachusetts, Minnesota, Missouri, Mississippi, Montana, New Mexico, Ohio, Oklahoma, Texas, Utah and Virginia.

Patterns of Child Maltreatment Associated with Male Perpetrators

Male perpetrators in separate categories included: biological father with mother; father surrogates (a combination of stepfathers, adoptive fathers, and mothers' boyfriends) with mother; male nonparent with mother; biological father acting alone; father surrogate acting alone; and male nonparent acting alone. Figure 1 shows the relative proportions of each of these groups among all male perpetrators. Among all male perpetrators, 65% acted alone. Among biological fathers, 57% acted alone, and among father surrogates 59% acted alone.

Figure 1
Male Perpetrator Categories



Age of Child Victims

Because many perpetrators were associated with multiple children, the age of the youngest child victim was used for analyses. Biological fathers acting with mothers were associated with much younger child victims than were any of the other male perpetrator groups; nearly 60% were associated with children age three or younger. Surrogate fathers and nonparents acting alone were associated with older victims; approximately 40% of perpetrators in these groups were associated only with children age 12 and older.

Sex of Child Victims

Perpetrators were categorized as having been associated with girls, boys, or both boys and girls. A similar pattern was found for male perpetrators acting alone or with the victims' mother. Biological fathers were approximately evenly distributed in the proportions that were associated with only girls or with only boys. The proportion of perpetrators associated only with girls increased among surrogate fathers, and increased further for male nonparents. The proportion of perpetrators associated with only girls was largest for male nonparents acting alone (68%).

Number of Child Victims

More than half of all male perpetrators were associated with only one child victim, however, the likelihood of being associated with multiple children decreases steadily as the perpetrator's level of integration with the mother and the family decreases. Among biological fathers acting with mothers, 46% were associated with two or more children. Among male nonparents acting alone, only 17% were associated with two or more children.

Type of Maltreatment

Among all the perpetrators acting with the mother, the predominant maltreatment type was neglect, although this was most pronounced among biological fathers, for whom 70% were responsible only for neglect. Compared with biological fathers, surrogate fathers acting with the mother were associated less with neglect (46%), but more with physical abuse (18%), sexual abuse (9%), and multiple maltreatment

(22%). Approximately 78% of nonparents acting alone were associated only with sexual abuse. Biological fathers acting alone were associated in similar proportions with neglect (40%) and physical abuse (34%). Surrogate fathers acting alone were associated in similar proportions with physical (42%) and sexual abuse (35%).

Multivariate Analyses

The multinomial logistic regression model assessed the likelihood that a male perpetrator was a biological father, surrogate father or nonparent acting with the mother, or a biological or surrogate father acting alone, rather than a nonparent acting alone. In general, the model confirmed the findings from the bivariate analyses that biological fathers and other male perpetrators acting with mothers were more likely to be associated with younger children, and with more than one child. Neglect was associated more with biological fathers, and male nonparents were more likely to be associated with sexual abuse, regardless of whether they acted alone or with the child's mother. Physical abuse was associated more often with perpetrators acting alone.

Conclusion

The NCANDS data provide a comprehensive view of the range of child maltreatment circumstances among CPS populations, and remain an important resource in developing more effective prevention, intervention, and treatment approaches for victims and perpetrators of child maltreatment, as well as those at risk for becoming one or the other.

The findings from this research support the case for targeting prevention and treatment interventions for child maltreatment to men as well as women. If services are provided only in the home or in the context of the child's family, men who maltreat children but who are not living in the child's home may not benefit from these services. Nearly two-thirds of all male perpetrators acted alone, rather than with the child victim's mother. Further efforts to reach out to these men and involve them in services to prevent continued maltreatment are critical.

While the male perpetrator categories show unique patterns of child maltreatment, sometimes the relationship itself distinguishes the pattern and sometimes the association or lack of association with the mother distinguishes the pattern. The classification scheme presented could be refined and combined with more information about victims, and ultimately families, resulting in a data driven classification scheme of CPS populations for whom specific and targeted interventions may be designed.

The six groups examined here can be viewed as having decreasing levels of integration with the family, from biological father acting with the mother to male nonparent acting alone. It is possible that any of the perpetrators acting with the mothers, even the nonparents, may be more tied in to the family than even the biological fathers acting alone. This is evidenced by the number of children with whom they are associated. Both biological and father surrogates acting with the mothers were mostly associated with neglect, but when they acted alone, they showed very different patterns—biological fathers divided between physical abuse and neglect, while father surrogates divided between physical and sexual abuse. Potentially different strategies for intervention are needed for male perpetrators who have acted alone than those that are offered to the mother and father together. Also, these analyses point to some differences between biological and surrogate fathers that may demand different interventions.

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Characteristics of Children Referred from Child Welfare, their Service Use and Clinical Outcomes in Systems of Care

Anna Krivelyova, Ebony R. Montgomery, & Bhuvana Sukumar

Introduction

Children involved with child welfare agencies are more likely to receive mental health services (Farmer et al., 2001) than children in the general population. Many of the circumstances such as physical and sexual abuse, maltreatment and a family history of domestic violence, lead to child welfare agency intervention and contribute to the development of certain mental health disorders (Burns et al., 2004). The Comprehensive Community Mental Health Services for Children and Their Families Program of the Center for Mental Health Services (CMHS) funds communities to develop systems of care for youth with serious emotional disturbance. The program promotes the development of service delivery systems that are integrated across all child-serving agencies (i.e., child welfare, juvenile justice, special education) for the provision of services that are individualized to meet the needs of children with an array of mental health diagnoses. This program has funded 121 system-of-care communities since 1994 throughout the United States and its territories.

This study describes the demographic and clinical characteristics of children referred to funded systems of care from child welfare agencies and compares them to children referred to systems of care from all other sources. In addition, it examines their service use during the first 12 months following entry into services.

Methods

Participant

The 3,997 total participants used for analysis were taken from the longitudinal outcome study of the national evaluation of the Comprehensive Community Mental Health Services Program for Children and Their Families. They represent all children with available data for the measures included in the current study.

Measures

The measures used included descriptive data from the Descriptive Information Questionnaire, DSM-IV diagnoses (American Psychiatric Association, 1994) from the administrative record, service use data from the Multi-Sector Service Contacts (MSSC; Macro International, Inc., n.d.) Questionnaire, education outcomes from the Education Questionnaire and two clinical outcome measures: the Child Behavior checklist (CBCL; Achenbach, 1991) and the Behavioral and Emotional Rating Scale (BERS; Epstein & Sharma, 1998). The CBCL is designed to assess the child's competencies and any problems a child may experience behaviorally and emotionally. The BERS measures the child's strengths and competencies through the child's behavior.

The Reliable Change Index (RCI) is used as a quantitative indicator of meaningful clinical change and compares clinical scores at two different points in time to indicate whether a change in scores reveals clinically significant improvement, stability, or deterioration. RCIs were used to measure changes in clinical outcomes, school performance, and school attendance. Chi-square tests were used to test group differences in the dichotomous measures and *t*-tests were used for continuous measures.

Results

Descriptive Characteristics

Nearly 9% of children in systems of care were referred from child welfare agencies (Table 1). Compared to children referred from other sources, these children were more likely to be male; to

be physically abused, sexually abused, or both; and to have used residential treatment or inpatient psychiatric hospitalization services within 12 months prior to entry into the system of care. They were also more likely to have run away without their caregiver knowing their whereabouts, to have a family history of domestic violence, to have a parent convicted of a crime, and to have a family member with a history of substance abuse.

Table 1
Descriptive Characteristics of Children Entering Systems of Care by Referral Source

<i>Individual Characteristics</i>	<i>Referred from Child Welfare Agency (n = 343)</i>	<i>Referred Through Other Sources (n = 3654)</i>
Mean Age	12.1	12.1
Male**	43.4%	30.5%
White	58.0%	62.3%
DSM-IV Diagnosis		
Substance Abuse	6.1%	6.5%
Psychosis	4.4%	3.2%
Mood Disorder*	29.7%	35.1%
Autism	1.8%	2.2%
Anxiety Disorder	5.0%	5.7%
Adjustment Disorder*	13.4%	10.0%
Post Traumatic Stress Disorder	11.7%	8.6%
Impulse Control*	6.1%	3.9%
Oppositional Defiant Disorder	25.4%	27.5%
ADHD	39.4%	40.8%
Conduct Disorder	9.3%	8.7%
Disruptive Behavior Disorder	4.1%	5.8%
Personality Disorder	2.3%	1.2%
Mental Retardation	3.2%	3.3%
Learning and Related Disorders	3.5%	5.6%
Child History		
Received outpatient mental health services prior to intake	72.0%	73.1%
Received school based mental health services prior to intake	59.2%	61.0%
Received mental health day treatment services prior to intake	16.0%	15.2%
Received residential treatment mental health services or inpatient psychiatric hospitalization prior to intake	37.6%	26.4%
History of physical abuse**	37.0%	22.8%
History of sexual abuse**	31.2%	20.8%
History of both sexual and physical abuse**	19.2%	10.8%
History of run away attempt **	40.2%	31.1%
History of suicide attempt	15.2%	16.7%
History of substance use	17.2%	18.1%
Sexually Abusive to Others**	12.5%	6.9%
History of domestic violence**	60.1%	49.3%
Family History		
History of mental illness among biological family members	60.1%	58.5%
Parents Convicted of a Crime**	56.3%	47.5%
Family history of substance abuse**	70.3%	63.3%
Clinical Measure		
CBCL Internalizing problems in the clinical range*	53.1%	59.2%
CBCL Externalizing problems in the clinical range	76.7%	74.5%
CBCL Total problems in the clinical range	74.3%	77.8%
BERS below average	54.8%	57.1%

* $p < .05$; ** $p < .01$

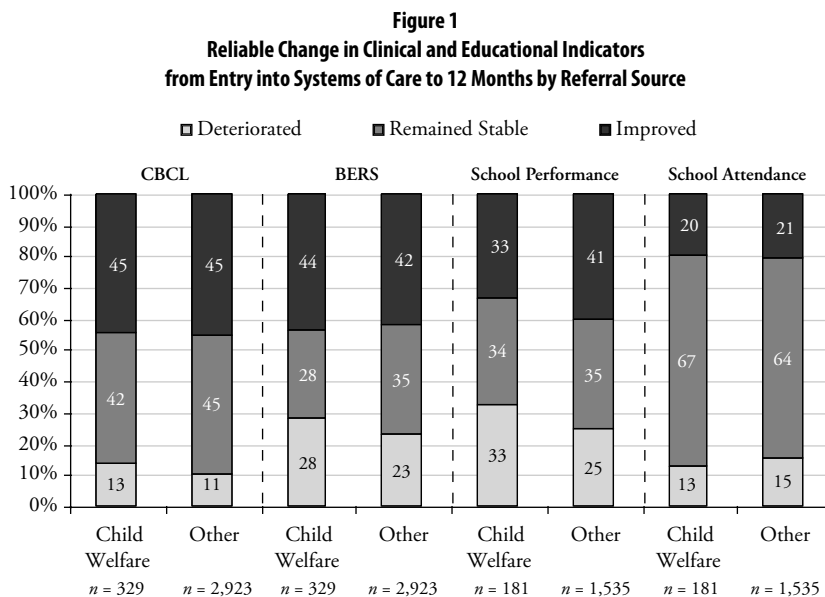
Children referred from child welfare were less likely to be diagnosed with mood disorder, but were more likely to be diagnosed with adjustment disorder and impulse control disorder. At intake, these children also were significantly less likely to have internalizing problems in the clinical range than children referred from other sources, as measured by the CBCL.

Service Use

Youth ($n = 2120$) referred from child welfare were more likely to use therapeutic group home services (9.9% vs. 4.5%, $p < .001$) and group therapy (41.9% vs. 32.4%, $p < .01$) six months after entry into the system of care and were more likely to use family preservation services 12 months after entry into system of care (17.6% vs. 11.2%, $p < .01$). At both 6 and 12 months following entry into systems of care, youth referred from child welfare were more likely to use residential treatment center services (6 months: 13.5% vs. 6.9%, $p < .001$; 12 months: 13.1% vs. 7.8%, $p < .01$), therapeutic foster care (6 months: 12.2% vs. 3.2%, $p < .001$; 12 months: 10.8% vs. 3.2%, $p < .001$), independent living services (6 months: 7.2% vs. 2.1%, $p < .001$; 12 months: 7.7% vs. 2.7%, $p < .001$), transportation services (6 months: 29.7% vs. 23.1%, $p < .05$; 12 months: 27.0% vs. 21.2%, $p < .05$), and respite services (6 months: 21.2% vs. 14.3%, $p < .01$; 12 months: 20.3% vs. 13.0%, $p < .01$).

Change in Outcomes over Time

Examination of clinical and educational outcomes revealed that the majority of children served by systems of care maintained stability or improved 12 months after entry into services (see Figure 1). The analysis also revealed that a significantly larger percentage of children referred from child welfare deteriorated in the BERS clinical measure ($p < .05$) and school performance ($p < .05$) than children referred to the program through other sources.



Conclusions

The system of care appears to provide a therapeutic environment for all children served, as evidenced by the majority of children from all referral sources who either remained stable or improved. Upon entry into the system of care, children referred from child welfare agencies do not exhibit more severe clinical symptoms. However, they are likely to have experienced more risk factors (e.g., history of abuse).

Results indicate that children served in systems of care experience services that are individualized to meet their unique needs. The services used more frequently by children referred from child welfare appear to reflect their greater likelihood of reported child and family risk factors. Their relatively higher frequency of use of 24 hour residential treatment services potentially reflects the instability of their families' living situations at entry into services.

While the majority of children referred from child welfare and from other sources exhibited stability or improvement in outcomes, some children referred from child welfare agencies still experienced certain challenges in their ability to perform in school, as well as with their emotional strengths, behaviors and competencies. This exposes a need for additional focus to be directed toward advocating for the provision of specific services and support systems that will enable children involved with child welfare to improve their level of functioning as it relates to educational performance and emotional strengths and competencies. Future research will explore factors predicting deterioration in these outcomes among youth involved with child welfare agencies.

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Symposium Discussion

Brigitte A. Manteuffel

Data used in this symposium come from two national databases, NCANDS and the National Evaluation of the System of Care, yet draw similar conclusions about the need for additional research to be focused on the development of more targeted services for children and families involved in the child welfare system. When looking at the characteristics surrounding the rereporting of child welfare children who have been victimized, children who receive services are more likely to be rereported than children who did not receive services. Children who have been victimized at the hands of a male perpetrator alone are less likely than children victimized by a male perpetrator acting with the mother to receive services provided in the home or family environment. Two-thirds of male perpetrators of maltreatment of children in the child welfare system act alone. Therefore, it is necessary that services are developed to reach this generally inaccessible population of male perpetrators. Analysis of outcomes of children with behavioral and emotional problems showed that children referred to systems of care from child welfare have a greater likelihood of child and family risk factors yet show similar levels of stability or improvement in outcomes compared to children referred to the system of care from other sources. Services to improve educational outcomes and emotional and behavioral strengths and competencies for children referred from child welfare are still needed.

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Special Topic Discussion

Addressing Suicide Issues in Systems of Care

Sylvia K. Fisher
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Background

According to the National Center for Health Statistics at the Centers for Disease Control and Prevention (CDC), more than 30,000 Americans commit suicide every year. Suicide is the third leading cause of death among young people ages 15-24 years and the fourth leading cause of death among children 10-14 years in the United States (US Public Health Service, 1999). Research indicates that more than nine out of ten children who commit suicide have a pre-existing mental health problem. Recently, the Substance Abuse and Mental Health Services Administration (SAMHSA) released data indicating that approximately 900,000 youth had made a plan to commit suicide during their severe or most recent episode of major depression; 712,000 attempted suicides occurred during such an episode of depression (Bowen, 2005). The data, extracted from the 2004 National Survey on Drug Use and Health, asked youth ages 12-17 about symptoms of depression, including thoughts about death or suicide. Over 7% of youth ages 12-17, 1.8 million youth, had thought about killing themselves during their worst or most recent episode of major depression. Unfortunately, many teens do not disclose their depression or suicidal ideation to mental health professionals and do not seek help for their problems.

There is also evidence to indicate that the rates of suicide may be substantially higher among different subgroups of children and youth. For example, suicide rates among young African American males (15-19 years) increased by 105% between 1980 and 1996 (O'Donnell, O'Donnell, Wardlaw & Stueve, 2004). According to the U.S. Surgeon General, the rate among Native youth ages 15-24 is more than three times higher than the national average. In some parts of Indian Country, especially the Great Plains, it is even much higher. Hispanic youth are the fastest-growing segment of the U.S. population, accounting for 48% of the total Hispanic population and 26% of Hispanic suicides (CDC, 2004). Cody (n.d.) reports that gay, lesbian, bisexual, and transgender youth (14-24 years) attempt suicide at a rate 2-3 times higher than their heterosexual peers. Some studies indicate that the rate of attempted suicide for transgender youth is higher than 50% (Cody, n.d.).

Implications for Systems of Care

In their study of suicide, Walrath, et al. (2001) found that a relatively large proportion (21%) of children in systems of care (SOCs) have a history of attempting suicide; this finding was similar to that reported in other studies of youth receiving community or outpatient mental health treatment within the literature (Indianz.com News, 2005). Although there is a very low incidence of suicide in SOC, the devastating consequences of completed suicides among SOC youth mandates that an integrated and comprehensive plan be established within the SOC program to address the issue of suicide. Despite its low incidence within the target population of children and youth in SOC, suicide is still a growing concern among today's SOC youth, particularly within certain vulnerable populations, including Tribal, Latino, African-American, and GLBTQ (e.g., gay, lesbian, bisexual, transgender, and questioning) youth. It would be useful to identify strategies that directly address suicide-related behavior and reduce the potential for negative suicide outcomes. In addition, a more precise ideation and measurement of suicidal outcomes would be beneficial.

In order to identify and help prevent suicides among SOC youth, useful and appropriate protocols must be instituted at various levels (including the clinical and policy levels). These protocols should also serve to facilitate the identification of early risk indicators of suicidal behavior and trends within these groups. Great improvement in the areas of research, program development, evaluation of symptoms, and communication is required in order to achieve success in measuring and preventing instances of suicide within the SOC program.

Method

The goal of this Special Topical Discussion session was to collect feedback and suggestions from participants regarding the possible components of such a plan, the utility of a plan, and how such a plan could be instituted and evaluated effectively.

The following action steps were identified as part of an integrated approach to addressing the issue of suicide in SOC and served as a point of discussion for session participants: (1) developing a policy statement addressing the topics of suicide across SOC communities, including an articulation of policy focusing on prevention, intervention, and postvention; (2) determining the most appropriate methodological protocols to measure suicidal outcomes; (3) identifying program planning and development issues from a prevention perspective; (4) establishing how to intervene with families after a completed suicide; (5) examining how national and local evaluation efforts could be used as resources in addressing the issue of suicide in systems of care; and (6) instituting a continuous quality improvement protocol to ensure that policy and procedures are continually monitored and that strategies are developed to institute changes as-needed.

Results

Comments and feedback received from session participants included:

- establishing a partnership with educational systems as a method of instituting prevention activities;
- training front-line staff to read signals, secure trust, and promote relationships to benefit youth so interventions can be incorporated during SOC program participation;
- examining evaluation data on suicidal outcomes to identify where and with whom suicidal ideation and the potential for suicide-related behavior exists so action-driven protocols can be put into place immediately;
- identifying high-risk children by doing work with SOC sites (this might entail having protocols in place both at the site-and program-levels);
- addressing suicide in a “safe and sound” manner to maximize positive results;
- informing and involving law enforcement on an as-needed basis;
- considering secondary traumatization as a part of postvention strategy and instituting protocols to address the needs of family members and others who have been secondarily traumatized;
- offering culturally-appropriate spiritual interventions for Tribal communities and leaders where youth suicides have been particularly virulent;
- considering mortuary staff as possible partners in a program plan and a source of information and techniques for identifying common suicide-related behaviors;
- addressing homicide and other sources of child loss (e.g., accidents, illness, etc.) as part of a comprehensive plan;
- determining what technical assistance SOC can provide to affected individuals, families, and communities;
- informing wraparound assistance and formal and informal supports after a child death that would encompass the needs of family and others in the child’s sphere;
- collaborating with the National Center for Suicide Prevention to identify appropriate and successful prevention policies; and
- involving Project YES (Miami) and American Association of Suicidology & Parent Support Network & CDC & School Nurses Association in activities to develop this coordinated approach to the issue of suicide in SOC.

Feedback received from participants was very useful and represented broad-based perspectives on this difficult issue. The suggestions offered by participants will be integrated into the planning process and will eventually be incorporated within a final plan for addressing suicide in systems of care. Feedback will be collected from interested parties from a multiplicity of other venues as a part of an ongoing information-gathering process. As a next step, a meeting addressing suicide issues in SOC is planned for early September, 2006, to identify strategies that can be implemented program-wide in the areas of prevention, intervention, and postvention.

The results of this activity will yield a culturally-appropriate, sensitive, and tailored approach to the issue of suicide within the areas of prevention, intervention, and postvention and serve to meet the needs of children, youth, families, and communities.

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Violence Exposure Rates and Trauma Symptoms among Rural Youth

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Acknowledgements: This research was supported by funding through the Safe Schools/Health Students Initiative (#S184L020327), the Center for Mental Health Services (SAMHSA: #1H795M53468-01), and the Suwannee River Area Health Education Center.

Introduction

Urban communities have traditionally been the focus of studies examining the prevalence of community violence and its effects on school-age youth (Buka, Stichick, Birdthistle, & Earls, 2001; Stein, Jaycox, Kataoka, Rhodes, & Vestal, 2003; Warner & Weist, 1996). The rates of violence exposure in such communities have been linked to a variety of emotional problems for children, including anger, depression, anxiety, and traumatic stress (Singer, Anglin, Song, & Lunghofer, 1995). While inner-city communities are attempting to manage growing rates of violence, rural communities are not immune. Although often perceived as “safe havens” from violence (Slovak & Singer, 2002), recent literature has indicated that violence exposure rates may be higher than previously thought in America’s rural communities (Sullivan, Kung, & Farrell, 2004).

Rural youth are often exposed to multiple risk factors (Spoth, Goldberg, Neppl, Trudeau, & Ramisetty-Mikler, 2001), similar to their urban counterparts, resulting in poorer health and reduced access to services (Cutrona, Halvorson, & Russell, 1996; Elliott & Larson, 2004; Sears, 2004). These risk factors, compounded with violence exposure, increase the likelihood of emotional disturbance, such as traumatic stress. Assessing the level of violence exposure among rural youth can inform violence prevention and intervention services to reduce symptoms and improve functioning.

Method

Clinical researchers from the National Rural Behavioral Health Center (NRBHC) at the University of Florida, in cooperation with the Columbia County School District, administered a violence exposure questionnaire to 1,468 middle and high school students in Columbia County, Florida. The county is an economically depressed and educationally disadvantaged rural region, with levels of poverty, illiteracy, crime, and a lack of basic health care that far exceeds the state averages (Florida Department of Health, 1998). Resources for children and their families are inconsistently available and there are numerous barriers to access, particularly for mental health services that address trauma.

Measures

As noted above, researchers participated in the annual administration of the Risk Incidents for Schools Inventory (RISci; Radunovich & Wiens, 2005) to middle and high school students in the Columbia County School District. The survey is anonymous and assesses, among other at-risk behaviors, the frequency of violence exposure. Specifically, it asks about being either a victim or witness to various forms of violence, including threats, hitting/slapping, and weapon violence in the past 12 months.

Subsample

To determine the need for a school intervention program for students exposed to violence, the association between violence exposure and rates of traumatic stress was assessed among a sub-sample of middle school students. A brief screening instrument containing modified versions of the Life Event’s Scale (LES; Singer et al., 1995) and Child PTSD Symptom Scale (CPSS; Foa, Johnson, Feeny, & Treadwell, 2001) was administered to 140 students. The LES assesses violence exposure by asking students to rate on a Likert-type scale the frequency with which they have either witnessed or been the victim of verbal threats, hitting/slapping, beatings, or weapon violence in the past 12 months.

In the original LES, students are asked these questions in different contexts, including school, the neighborhood, or home. The present version collapsed items across location, resulting in nine items. The original CPSS is a 30-item self-report scale assessing Posttraumatic Stress Disorder (PTSD) symptoms. In this brief version, only seven items with high sensitivity and specificity were administered. Both the LES and CPSS have been used by Stein and colleagues (Stein et al., 2003) to screen for violence exposure and PTSD symptoms. The abbreviated versions, containing 16 total items and known together as the Short Violence and Trauma Screen (SVTS), are being validated by Stein and colleagues as a brief screener to efficiently assess levels of violence exposure and traumatic stress in school settings.

Results

A total of 1,468 RISCl protocols were analyzed. The sample included students in the 6th through 12th grades, ranging in age from 11 to 18 years. Student ethnicity was consistent with county demographics. A majority of students were Caucasian (69%), followed by African American (19%), Latino/Hispanic (4%), mixed origin (4%), Asian/Pacific Islander (1%), and Native American (<1%), and there were more females (53%) than males.

The majority of students (74%) reported being exposed to violence in the past 12 months. More students reported being exposed to violence at school (62%) than in their neighborhood (46%) or at home (20%). Levels of violence exposure did vary by age, with 14 year-olds reporting the highest rates, followed by 13, 15, and 12 year-old students. The middle school grades, 6th through 8th, reported the highest exposure (see Figure 1). Rates of exposure by ethnicity were similar for all groups except the Asian/Pacific Islander students, the majority of whom reported no violence exposure (60%), as opposed to the other groups who all reported significant exposure. Contrary to previous literature on violence rates, there was no significant difference between male and female reports of exposure.

The SVTS was administered to a subset of 6th and 7th grade students ranging in age from 11 to 14 years. The violence rate was similar to the overall sample, with 76% of students reporting significant exposure during the past 12 months. Of primary interest was the level of traumatic stress reported by these students. For those that reported significant violence exposure, defined as a raw score of 3 or higher on LES items, 38% also reported symptoms of traumatic stress, as defined by a raw score of 4 or higher on the CPSS items (Figure 2).

Figure 1
RISCl Total Violence Exposure by Grade

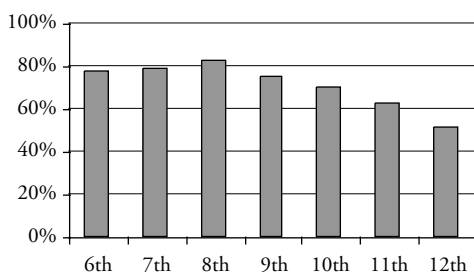
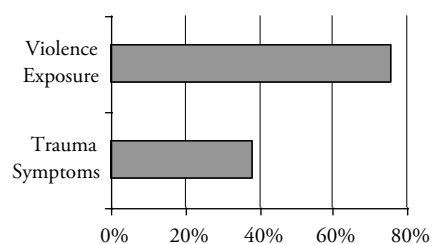


Figure 2
SVTS Violence Exposure and PTSD Symptom Rates



Conclusion

Violence prevalence rates in this rural community are consistent with recent literature that indicates rural youth are reporting higher violence rates than previously expected. Such findings underscore the need to improve access to violence prevention and mental health programs aimed at decreasing the negative effects of violence. The majority of students reported violence exposure in at least one setting in the past year. Surprisingly, the school had the highest rates of exposure relative to the neighborhood or home, which highlights the importance of school-based or school-linked services that can reach children and families in under-served areas with limited resources.

Increasing intervention programs, however, will be ineffective unless students who would benefit are identified. The rate of PTSD symptoms among the present sample of students with violence exposure was alarmingly high. Many of these students would go undetected and untreated if traditional referral sources alone were utilized. Through the use of a brief screening measure like the SVTS, large groups of students can be screened in a matter of minutes. This method can identify students who may be experiencing anxiety or traumatic stress, but who may not present with externalizing symptoms and therefore not come to the attention of teachers or school staff.

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A Collaborative Effort to Disseminate Evidence-Based Research on Children Who Witness Domestic Violence

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Acknowledgements: This research was conducted by INNOVATIONS in Community Research and Program Evaluation of Cincinnati Children's Hospital Medical Center in collaboration with the YWCA Hamilton County Family Violence Prevention Project, Cincinnati, Ohio.

Introduction

The national focus on providing integrated and evidence-based mental health care for children has resulted in many challenges with respect to the implementation of services in the “real world.” As agencies strive to take evidenced-based research (EBR) from the bench side to the bed side, they find a number of constraints, including: a lack of available funds to support staff training and to pay for technical assistance after the training, a lack of available staff to provide coverage for staff members who are being trained, and difficulty evaluating program fidelity and effectiveness. To address these constraints, many organizations have utilized a train-the-trainer approach in which staff receive information about the EBR and train others from their agencies or the community. Staff members acting as trainers may include social service workers, counselors or court magistrates. This approach can be cost-effective and practical, and may produce systems level changes as many providers across the community are trained.

Evaluation of a train-the-trainer program is essential to determine how effective trainers are at disseminating the EBR and the subsequent impact the EBR has on the community. This summary highlights a collaborative training effort across a broad range of service providers (e.g., 411 operators, community mental health workers, court advocates, school personnel, Children's Law Center, and Mental Retardation and Developmental Disabilities) in an effort to make a systems-wide impact to prevent violence against children. Specifically, this paper will discuss (1) the strengths and limitations of utilizing training evaluation to disseminate EBR; (2) how evaluation data can be used to demonstrate change at the individual and agency level; and (3) how this data can also be used to inform public policy and assess community impact over time. The Children Who Witness Domestic Violence Initiative (CWWDV) will be used to illustrate how evaluation data can be used to show individual, agency, and systemic impact.

Strengths and Limitations of Using Training Evaluation to Disseminate EBR

Different models of training evaluation have been proposed, but the majority of training evaluations adhere to Kirkpatrick's model (Kirkpatrick, 1994). According to this model, optimal evaluation of a training program occurs at four levels: (1) Reaction; (2) Learning; (3) Transfer of Learning; and (4) Systems Impact. As with all evaluation methodologies, strengths and weaknesses can be identified; below are those specific to utilizing training evaluations to measure success in disseminating EBR.

Strengths

- Measures (e.g., satisfaction surveys) provide insight into trainers' engagement, biases, and the successes and limitations of the train-the-trainer program. They can also provide information that allows for improvements to the curriculum (formative evaluation).
- Training evaluations can provide evidence that change has occurred at the individual and agency level which can motivate trainers to conduct trainings.
- These evaluations help to provide evidence of change at the agency level by demonstrating that participants implemented the EBR. This data can be used to develop a public policy agenda.

Limitations

- Since evaluation of a train-the-trainer program usually occurs right at the end of the program, participants may not have had time to reflect on the training and use it in the “real world.” Thus, changes to the program based on trainer post-feedback may be premature.
- Evaluating whether trainers have mastered the curriculum and are effectively training others can be time consuming. Consulting or contracting with experts in this area may be helpful in developing a valid measure of learning.
- Measuring systems impact can be time consuming, and may require significant expertise to implement.

Example: Using Evaluation Data to Demonstrate Change at the Individual and Agency Level: Children Who Witness Domestic Violence Initiative (CWWDV)

Background. Agencies in Cincinnati have formed a collaborative effort to disseminate evidence-based research for at-risk children across Hamilton County. The Hamilton County Family Violence Prevention Project (FVPP) strategic initiatives address the following forms of family violence: Abuse of People with Disabilities; Child Abuse; Elder Abuse; and Intimate Partner Abuse. The long-term goal of the Children Who Witness Domestic Violence Initiative (CWWDV) is to build the capacity of Hamilton County to address the needs of children who witness domestic violence. As a first step, the CWWDV developed an evidenced-based curriculum and initiated a train-the-trainer program which focuses on educating professionals in the community to identify and refer children who have witnessed domestic violence (DeBellis & Putnam, 1994; Trickett & McBride-Chang, 1995; Watts-English, Fortson, Gibler, Hooper, & DeBellis, 2006; Zink et al, 2004).

Method

In an effort to determine the effectiveness of this train-the-trainer program, the following were evaluated: trainer effectiveness, participant knowledge, skills and attitudes, and participant implementation. The proposed outcome is that community-based trainers can effectively disseminate the information across the county and this can become a model for other states hoping to address the problem of children who witness domestic violence within their communities.

Thirty-five trainers representing 16 mental health, school-based, and social service agencies throughout Hamilton County were trained in March 2004. Each trainer completed an application that was reviewed by the CWWDV Board, which consists of representatives from the collaborating agencies. These trainers conducted a total of 63 training sessions from March 2004 to July 2005 for community-based professionals. A total of 1,034 persons attended the training sessions. Data were available on 334 participants. Participants for training sessions were recruited by trainers (e.g., members of their agency), CWWDV board members, or other domestic violence organizations. Participants were selected to participate if they met the following criteria: conducted educational presentations and trainings as a part of their job, had a sound understanding of domestic violence, and were committed to conducting at least five trainings on CWWDV on behalf of the FVPP during the next 12-18 months.

The train-the-trainer curriculum was developed by experts in the field of family violence and focused on three main areas: understanding the impact of witnessing domestic violence on children; recognizing the signs of witnessing domestic violence and identifying children who have witnessed domestic violence; and creating a supportive environment for children who witness violence to decrease their risk factors for engaging in future acts of violence themselves.

Results

Using SPSS 12.0 (Norusis, 2004), all data were analyzed independently by a team of psychologists and staff members from INNOVATIONS in Community Research and Program Evaluation of Cincinnati Children's Hospital Medical Center.

Trainer effectiveness was evaluated utilizing a workshop evaluation. Results of the workshop evaluation indicate that 88.4% of participants rated workshops as meeting all objectives and 92.8% of participants reported that their level of understanding of issues related to domestic violence and children increased after the training.

Participant knowledge, attitudes, and skills were assessed utilizing a pre-post test evaluation. Results of the evaluations showed that 94.6-98% of target audience members experienced an increase in awareness, were knowledgeable of a best practice, and understood signs and symptoms children who witness domestic violence may exhibit.

Participant implementation was assessed via the workshop evaluation. Specifically, participants were asked how they would utilize the information gained in the workshop ($N = 334$). Results are summarized in Table 1.

Additionally, one agency mandated training for all employees on this topic. An on-line follow-up survey was emailed to participants to assess their success at implementing the activities introduced through training. Results from the follow-up survey ($N = 22$) are included in Table 1.

Table 1
Participant Ratings of Implementation Activities

<i>Implementation Activity</i>	<i>Percentage Reported Plan to Implement At Post-Test (N = 334)</i>	<i>Percentage Reported Implemented Activity At Follow-Up (N = 22)</i>
Make referrals for children who witness domestic violence to appropriate agencies	48%	50.0%
Share information from this training with staff and/or friends	55%	95.5%
Request training for staff and/or friends	15%	59.1%
Request additional reading material or resources from trainer	11%	9.1%
Use patience/empathy when working with parents/children who have witnessed domestic violence	55%	100.0%
Recommend a policy that new staff members receive training in domestic violence	15%	22.7%
Start a program for children who witness domestic violence	6%	4.5%
Advocate for a policy for identification and intervention with children who witness domestic violence	15%	27.0%
*Other: Inform; Continue education in this area of child abuse; Incorporate ideas into daily interaction with all persons; Loved it; Make sure all staff know who the contact person is for domestic violence, is it the psychologist, principal, teacher, etc.	3%	0.0%

* This was an open-ended item on the survey

Discussion

This paper highlights how a train-the-trainer approach may be implemented collaboratively across mental health, social service, and school based agencies to disseminate the EBR. Currently, CWWDV data indicate that trainers are effectively disseminating the information. Participants appear to be gaining knowledge and skills that will help them to identify and refer children who witness domestic violence. CWWDV has effectively assessed change at the individual (trainee) and agency levels and has helped the community to understand and promptly address this problem. The efforts of this endeavor have also increased local access to resources within the community and promoted community engagement around this issue.

This project serves as a model for how local government and community-based agencies can work together to address the problem of children witnessing domestic violence in their community. This collaboration has increased access to information and resources in this area. Future plans include a provider network and training sessions targeted toward one group (e.g., home visitors). In addition, evaluation data from this type of project can be used to leverage additional funding for larger or more targeted prevention efforts. In addition, evaluation data can be summarized and made available to agencies as a way of increasing awareness about family violence and evidence-based treatments.

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Mental Health Correlates of Fatal Child Maltreatment: Findings from Florida Child Abuse Death Review Cases

Acknowledgements: This research was funded by the Florida Department of Children and Family Services Children's Justice Act Task Force.

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Introduction

An ongoing study, involving a collaboration between the University of South Florida Louis de la Parte Florida Mental Health Institute and Children's Medical Services in the Florida Department of Health, has been examining specific adult characteristics and how they relate to becoming a child abuse perpetrator. The current study provides an overview of the Florida statewide multidisciplinary, multi-agency child death review system, and explores results of the research on fatal child maltreatment cases that occurred over a four-year period (1999-2002) in the State. Mental health risk and protective factors associated with perpetrators and child victims were examined. These factors have been explored to better understand the etiology of child abuse. Such information may be useful in reviewing alleged abuse cases and in determining appropriate interventions. This knowledge may assist professionals in designing prevention programs that have a higher likelihood of being effective.

Design and Procedure

The study design consisted of a two-group comparison: a group of children who died as a result of abuse and a group of children who died as a result of neglect. There was no statistically significant difference between the groups when compared by gender, age, minority status, or presence of mental health or any other medical problems.

Data were collected through reviews of the records of children who died in Florida during the period January 1, 1999 to December 30, 2002 as a result of child abuse or neglect and who also had at least one prior report of child maltreatment. This sample included all available records and totaled 126 cases. These child death review files consisted of Department of Children and Families (DCF) records as well as other available documentation, such as the autopsy report, medical records, law enforcement report, social services history, and media coverage. Variables from the review process included the child's cause of death, perpetrator characteristics, family dynamics, and history of involvement with social services. The researchers triangulated case record data with information from administrative datasets to better gauge existing risk and protective factors among perpetrators of child maltreatment as well as the child victims (e.g., mental health issues or substance abuse). In the final stage of analysis, Geographic Information System (GIS) indicators were used to compile, process, and analyze the data for the child abuse study. Most of these data were at the level of individual counties, but more detailed enumeration areas or locations were used where available and deemed pertinent. This summary focuses on the findings related to mental health correlates in the fatal child abuse cases.

Analytic Approach

Bivariate descriptive analyses were performed to describe the sample. Statistical analyses consisted of survival analyses (Cox, 1972) and logistic regression. Specifically, the percentages were obtained from Life Tables using the Kaplan-Meier procedure (Kaplan & Meier, 1958). Among child fatality cases, predictors for abuse versus neglect related death were analyzed using competing-risks survival analysis (Singer & Willett, 2003). The competing-risks survival analysis allows for modeling the rate at which particular types of events occur in time (Hachen, 1988). We distinguished between two types of child death: death as a result of abuse and death as a result of neglect. These two types of events are examples of competing risks. We assumed conditional independence of these risks, such that the risk of dying from abuse and the risk of dying from neglect are mutually exclusive. In a competing-risks context, censored

observations are referred to those participants who either did not experience the event by the end of the study or experienced a competing event. Because all children died by the end of this study only event censored observations were used in the analysis. Specifically, children who experienced a competing event (i.e., died from neglect) were included in the analysis as censored observations. The dependent measure was the number of years between birth and subsequent death of the child as the result of either abuse or neglect. Logistic regression analyses were used to examine the probabilities of experiencing abuse or neglect that resulted in death. Odds ratios were calculated to estimate the likelihood of death related to abuse or death with each predictor. All statistical tests were performed at the $\alpha = .05$ level of significance.

Sample Description

A total of 126 cases were included in the analysis. All cases of fatal child maltreatment in a 4-year period (i.e., 1999 through 2002) that were reviewed by the Florida Child Abuse Death Review team ($N = 126$) were included in the sample. There were considerably more males (61%) than females in the sample (39%). The racial composition of the whole sample was 51% Caucasian, 37% African American, 10% Hispanic, and 2% Other. At the time of death the average age of the children was 4 years ($M = 3.81$, $SD = 4.24$), ranging from birth through 17 years. About 17% of children in the sample were under 1 year of age. Approximately 12% of children had behavioral health problems, including developmental delays, and approximately 18% of the sample had medical or physical problems. Most children (65%) were seen by community agencies, and one third of children in the sample were enrolled in childcare prior to death.

The highest proportion of death cases took place in Broward County (9.5%) and Miami-Dade County (8.7%). The majority of children in the sample (63%) were at home at the time of death, and in 32% of cases either an adult or a child witness was present.

Results

Life Tables Findings

Life Table analyses indicated that among the study sample 15% of minority children died before the age of 1 compared to 9% of nonminority children. Approximately 33% of children who had mental health problems died before the age of 5; however, 83% of children who did not have mental health problems suffered a fatal maltreatment incident during their early childhood. The median length of life for children without mental health problems was approximately two and a half years compared to 12.5 years for children who had mental health problems. Life Table analyses also indicated that for the group of children who had health problems the median time to death was 4 years compared to 13 and a half years for those who did not have medical problems.

Competing-Risks Survival Analysis

In the competing-risks survival analysis, the initial analysis was based on the model where children who died from neglect were treated as censored observations. Gender, minority status, presence of physical problems, and presence of mental health problems were included in the model as predictors. Table 1, Model 1, presents results from a multivariate analysis for children who died from abuse only. As indicated in the Table, presence of mental health problems and minority status were significantly associated with the likelihood of dying from abuse. In particular, minority children were almost 1.7 times more likely to die as a result of abuse than non-minority children ($OR = 1.68$, $p < .05$). Conversely, children with identified mental health problems were two and a half times less likely to die from abuse than children who did not have identified behavioral health concerns ($OR = 2.52$, $p < .05$).

As recommended by Singer and Willett (2003) the same set of predictors was included in the second model where children who died from abuse were treated as censored observations (see Table 1, Model 2). Similar to the results obtained in the first model (i.e., when only children who died from abuse were

examined), children who had mental health problems were almost 3 times (Odds Ratio = 2.87, $p < .01$) less likely to die from neglect than children without behavioral health concerns. However, minority status was not significantly associated with death from neglect.

In the “global” model, presence of mental health problems was the only predictor significantly associated with fatal child maltreatment (see Table 1). Specifically, children who had mental health problems were two and a half times less likely to die by the age of 17 (Odds Ratio = 2.68, $p < .05$) than children who did not have an identified behavioral health issue. Therefore, it appears that the identification of mental health needs can have a protective function in safeguarding children by creating greater community visibility and involvement with the child and family.

Table 1
Multivariate Models for Abuse & Neglect

Risk Factors	Cox Regression Model Parameters			95% Confidence interval for risk ratio	
	B	Wald $\chi^2(1)$	Odds Ratio	Lower	Upper
Multivariate Model 1: Abuse Cases Only (N = 126)					
Gender	0.35	0.02	1.04	0.62	1.73
Minority Status	0.52	3.83*	1.68	0.99	2.83
Mental Health Problems	-0.93	4.77*	0.40	0.17	0.91
Physical/medical Problems	-0.32	0.76	0.73	0.36	1.49
Multivariate Model 2: Neglect Cases Only (N = 126)					
Gender	0.11	0.17	1.12	0.65	1.93
Minority Status	-0.13	0.20	0.88	0.51	1.53
Mental Health Problems	-1.06	6.75*	0.35	0.16	0.77
Physical/medical Problems	0.12	0.14	1.13	0.60	2.13
Multivariate Cox Regression Model: Factors Associated with Child Death (N = 126)					
Gender	0.08	0.19	1.09	0.75	1.58
Minority Status	0.22	1.27	1.24	0.85	1.80
Mental Health Problems	-0.99	11.33**	0.37	0.21	0.66
Physical/medical Problems	-0.08	0.12	0.92	0.58	1.47

Note: * $p < .05$. ** $p < .01$.

Logistic Regression Analysis Findings

When bivariate relationships between predictor variables and the type of death were examined using logistic regression, minority status, being seen by a community agency, and being at home at the time of the fatal maltreatment incident were significantly associated with the type of death (see Table 2). However, when multivariate analyses were performed, being seen by a community agency was the only variable that predicted a specific type of maltreatment that resulted in death, Wald $\chi^2(1, N = 126) = 4.07$, $p < .05$ (see Table 3). In particular, if the child was seen by a community agency he/she was almost 2 and a half times (2.4) more likely to experience an abuse-related death.

Table 2
Bivariate Relationships Between Predictor Variables and Abuse Resulted in Death (*N* = 126)

<i>Logistic Regression</i> Variables	Beta	df	Wald χ^2	Odds Ratio	95% Confidence interval for risk ratio	
					Lower	Upper
Age	-0.01	1	0.11	0.99	0.92	1.06
Gender	0.05	1	0.02	1.05	0.51	2.14
Minority	0.71	1	3.84*	2.04	1.00	4.14
Mental Health Problems	-0.26	1	0.22	0.77	0.26	2.27
Physical/medical Problems	-0.56	1	1.39	0.57	0.22	1.45
Any Health problems	-0.38	1	0.86	0.68	0.30	1.54
Child seen by community agencies	-0.86	1	5.02*	0.42	0.20	0.90
Child enrollment in childcare	0.22	1	0.33	1.24	0.59	2.59
Presence of child witnesses	-0.53	1	1.75	0.59	0.27	1.29
Presence of adult witnesses	0.04	1	0.01	1.04	0.35	3.08
Presence of any witnesses	-0.43	1	1.27	0.65	0.31	1.38
Home location of the incident	0.77	1	4.23*	2.16	1.04	4.52

Note: * $p < .05$.

Table 3
Predictors of Abuse Resulted in Death: Multivariate Model (*N* = 126)

<i>Logistic Regression</i> Variables	Beta	df	Wald χ^2	Odds Ratio	95% Confidence interval for risk ratio	
					Lower	Upper
Minority	0.63	1	2.75	1.87	0.89	3.93
Child seen by community agencies	-0.79	1	4.07*	0.45	0.21	0.98
Home location of the incident	0.56	1	2.04	1.75	0.81	3.79

Note: * $p < .05$.

Discussion

The tragedy of fatal child maltreatment has galvanized efforts to transform child maltreatment prevention policy, and the examination of cases involving child deaths due to abuse or neglect is an essential component in developing preventive interventions for families. While there is variability across the cases, an analysis of trends points to relevant issues that may affect outcomes for vulnerable children and their families.

The findings suggest that the presence of mental health problems among children had a significant negative association with fatal child maltreatment. It appears that identification of mental health needs of children can have a protective function in safeguarding children by creating greater community visibility and involvement with the child and family. Mobilizing resources at the local and state level to enhance identification and intervention practices for children with mental health correlates may increase the likelihood of improvements in the service system to benefit the health and well being of children and families.

Conversely, minority status and being seen by a community agency were significantly associated with abuse related fatal child maltreatment. This trend provides important information on the extent to which current services and community resources are effective and culturally appropriate. Prevention and treatment interventions for child maltreatment need to be differentially targeted toward various populations in order for a large proportion of perpetrators to benefit from these efforts. For example, male perpetrators who are not biological fathers are more commonly associated with physical abuse; therefore, in-home services may be missing the opportunity to involve men who maltreat children but are not living in the home.

The death of a child is a sentinel event in a community that can mobilize action and foster a response to the contributory factors associated with these incidents. Although fatal victimization of children comprises a heterogeneous class of events, conceptualizations of this public health issue can be clarified through ongoing research into the complex interplay of correlates. This knowledge may subsequently contribute to creative and effective policies that expand the capacity to promote child well being as a community norm and mobilize communities to take notable action in the form of support, education, and organizational practices for the benefit of children and their families.

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Transforming Multi-System Response to Child Sexual Abuse: Theory-Based Administrative Team Development

Rosalyn M. Bertram

Introduction

Investigation, prosecution and treatment of child sexual abuse is proscribed by legally mandated roles with overlapping or complementary responsibilities for police, protective services, prosecutors, family court and service providers. Kansas City's Child Protection Center was established in 1996 to improve response to families when child sexual abuse was reported. As part of forensic evaluations the Center conducted "collaborative case reviews" as means to integrate these agencies' efforts. This case-by-case approach to systems integration functioned adequately until funding cuts, staff turnover, and politically sensitive cases damaged trust and reviews collapsed in conflict. By 2003 efforts to improve multi-system response to child sexual abuse had stalled.

A consultant from the University of Missouri-Kansas City (UMKC) School of Social Work was engaged through Kids Safe funds by Heart of America United Way to re-establish a basis for inter-agency collaboration through the Center. A theory-based model for building collaborative teams was applied. This model emerged from research in a Chicago area Center for Mental Health Services grant (Bertram & Bertram, 2003; Malysiak-Bertram, Bertram Malysiak, Rudo, & Duchnowski, 2000) that built upon developmental disabilities research on team development (Eno-Hieneman, 1997; Anderson, Russo, Dunlap, Albin, 1996; Bombara & Knoster, 1995). These studies suggested theory-based team development and ecological systems theory formed a useful base to structure collaborative efforts and emphasized that effective teams first define goals, information sharing and decision-making rules to create a basis for strengths-based ecological assessment and intervention (Bertram & Bertram, 2003). However, these studies had focused upon direct practice with families. This project offered the opportunity to evaluate this theory as a basis to forge common structure and direction from an administrative level across multiple systems engaged with the same population. The following theory-based constructs guided that effort:

- The power and challenge of collaborative models of practice is that they bring together differing perspectives of a situation.
- Team composition affects assessment and outcomes.
- To effectively engage differing perspectives requires clear team structure.
- Team efforts are best structured through four sets of related agreements: overall goals, rules of operation, ecological assessment of assets and constraints culminating with agreement on current status (a systemic hypothesis of problems-in-context), and plan development, implementation & evaluation

Method

For this project, key administrators from the Kansas City Police Department's Victims Crimes Unit, Jackson County Children's Division of Missouri's Department of Social Services, Jackson County Family Court and Prosecutor Office, the Child Protection Center, Children's Mercy Hospital, and the Director of Community Programs for Heart of America United Way were interviewed to clarify the history of their efforts to improve multi-system response to child sexual abuse and to prepare them to create a collaborative team structure through four sets of agreements. Their agreements are described below.

Overall Goals

Participants agreed that they would work together through the Child Protection Center to provide timely, efficient, co-investigation of child abuse allegations and to inform decisions each agency must make to support children and families in a culturally competent manner.

Rules of Operation

Administrators agreed it was necessary to share information about practice with families, agency policy, resources, and projects. They classified discussions by whether they were confidential, simple information sharing, exploratory, or decision-making. Decision-making rules included a menu of options in the event that talking to consensus or voting seemed problematic. Dissenting perspectives were recorded. If a decision wasn't productive, dissenting viewpoints could be revisited. Conflict resolution procedures were established.

Ecological Assessment and Status

Their assessment was ecological and multi-layered, examining their agencies' direct practice with families, multi-system administrative interactions that should provide guidelines for that practice, and a community level in which their agencies could contribute to change in laws or funding. Composition, information needed, roles and responsibilities, assets and constraints were assessed for each level of multi-system activity.

Most team planning processes move directly from assessment into designing interventions (Bertram & Bertram, 2003; Bertram, in review). This theory-based team development required assessment to culminate by building agreement on current status. This step provides opportunity to examine assumptions and ideas about how participants make meaning of the assessment which otherwise might remain unstated and potentially divisive. Their status agreement was:

"We lacked clarity for different levels of our activities. This contributed to confusion on roles & responsibilities. We lacked shared means to ensure systematic, efficient information gathering as well as shared guidelines for decision making. This compromised our best intentions to enhance our assets and address constraints."

Plan of Action and Evaluation

This agreement was used with their overall goals to target constraints and develop interventions in a multi-system plan of action. Despite altered team composition when some administrators changed jobs, and a fiscal crisis when the new Governor cut funds for child protection, the following action plan was completed within one year:

1. Define best practice from initial report, through investigation, forensic evaluation, and collaborative review for prosecution and referral for services.
2. Write a shared protocol that defines roles and responsibilities in this practice.
3. Write a shared manual that provides detailed guidance for these roles and responsibilities.
4. Provide joint training to present these new guidelines for staff performance.
5. Identify quality assurance data points within this protocol for inclusion in a shared database that administrators review together monthly to evaluate practice fidelity and inform further multi-system improvements.

A UMKC Center for the City grant provided funds for the shared database and semi-structured interviews with participants to evaluate use of this theory to refine multi-system response to child sexual abuse. Interviews were analyzed, seeking points of convergence or divergence of perspective.

Findings

Interviews confirmed premises of key theoretical constructs while evaluating systems integration and collaboration efforts before and after application of this theory-based team development. Initial data suggest that although this theory was developed around teamwork with families, its core constructs applied well at an administrative level to refine multi-system responses in child welfare. Key perspectives shared by all administrators follow.

Prior to Theory-Based Team Development

- All participants reported little collaboration occurring. Attempts to integrate responsibilities were often revisited as each agency advocated for its perspective and goals.
- Participants reported no explicit rules for information sharing or decision-making. They assumed discussions would forge understanding and votes would resolve differences on direction. When this failed, participants became suspicious and revisited decisions, stalling their work.
- Since the inception of the Center, no multi-systems strengths-based assessment had been conducted. Conflict clouded their vision. They lacked trust.

After Theory-Based Team Development

- Clarity, trust, and the sense they could influence another agency emerged from developing and working toward shared goals within rules they had created. Shared goals and rules provided direction and structure for collaboration in assessment.
- Working toward shared goals within shared rules in a mutual process of assessment clarified each agency's concerns and helped identify assets overlooked in their conflict. This gave previously pessimistic administrators hope because there was something from which to build.
- Culmination of assessment with a current status agreement encouraged them to consider why they had been stuck in conflict. Using it with shared goals to prioritize steps in a plan of action contributed to ownership and successful implementation of their plan despite separate funding streams, supervisory structure, and agency mandates.

Conclusions

Establishing a meaningful system of care from legal mandates and separate funding streams is difficult even when guided by value-based principles. Data from these interviews and successful fulfillment of each strategy in these administrators' plan affirmed key constructs of this theory and its use in multi-system change efforts in child welfare. Practical steps guiding this theory may prove useful to collaborative development of logic models and systems transformation efforts for other client populations. However, further tests lie ahead. Administrators are completing annual revisions to the four sets of agreements to structure further systems refinement. In 2006 they will examine monthly reports from their shared database on protocol implementation. Reports will inevitably suggest an agency lags in protocol implementation. This will provide another test of the theory and the structure administrators created through applying it.

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Transforming Supervision to Support Collaborative Team Efforts in Child Welfare

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Introduction

Child welfare interventions are typically focused through expert practice models of crisis intervention and case management. However, within these models, staff members apply a potpourri of theories that may not address contextual correlates of child abuse and neglect (Samantrai, 2004). Driven by tight legal decision-making timelines, child welfare interventions often overlook, fail to engage, or actually constrain strengths in the families and their communities (Melton & Barry, 1994). Staff supervision in child welfare strongly focuses upon meeting timelines and addressing crises in the most problematic cases, often on a “catch-as-catch-can” basis. Supervisors have little training in clinical supervision and have usually not been exposed to structured, theory-based approaches to enhance staff members’ abilities to more fully engage families and their community to foster family resilience and to protect children (Minuchin, Colapinto, & Minuchin, 1998).

This paper presents the organizational framework and baseline data from a Kansas City Missouri child welfare pilot project initiated in 2005 that has engaged over thirty staff and six supervisors in a theory-based transformation of child welfare practice and supervision focused upon staff and team development and model fidelity. The project applies lessons from developmental disabilities research on theory-based team development (Eno-Hieneman, 1997; Anderson, Russo, Dunlap, Albin, 1996; Bombara & Knoster, 1995), and lessons from a Center for Mental Health Services (CMHS) grant site on supervision of ecological, strengths-based, collaborative team practice (Bertram & Bertram, 2003; Malysiak-Bertram, 2001). In 2006-7, this project will produce two theory-based instruments to support this transformation: one measuring model-pertinent staff knowledge and skills, and the other measuring team composition, structure, focus, and cohesion. Both instruments will be tested and integrated into supervision. In 2007-2008 these instruments will act as measures of staff development and model fidelity in an examination of child and family outcomes. Results will inform our understanding of organizational, supervisory, and practice elements necessary to foster collaboration with families and their communities in the legally mandated context of child welfare.

Method

Before initiating this project a thorough historical analysis of the child welfare system was conducted, including the theory and paradigm base of its practice, supervision, and organizational structure, as well as the persistence of its initial assumptions about abuse that were later contradicted by examinations of the client population. This analysis helped project leaders establish realistic expectations and timelines for transforming supervision and for staff development. This step and subsequent pre-implementation activities mirror core components of project feasibility identified by Fixsen, Naoom, Blase, Friedman, and Wallace (2005) in their meta-analysis of implementation research.

Through winter 2005, supervisors from the project site refined training developed in a CMHS grant (Malysiak-Bertram, Bertram-Malysiak, Rudo, & Duchnowski, 2000) to address legal complexities of child welfare practice, and met with the guardian ad litem office and family court to secure support. Guardian ad litem staff and all project site Children’s Division staff participated in project orientation. Five subsequent training sessions presented guiding constructs of theory-based team development, ecological system theory, and the family life cycle. These following constructs now guide practice and supervision on cases opened since April 2005:

- Team composition affects assessment and outcomes.
- The power and challenge of collaborative models of practice is that they bring together differing perspectives of the family situation. This requires clear team structure.

- To clarify roles and responsibilities child welfare teams are organized into three sub-systems. The core team is composed of those who best know the family or influence use of needed resources. They meet more frequently, especially in the beginning of a case. Working in tandem are two other sub-systems, an extended team (those engaged with family in specific interventions), and a legal team composed of judges, lawyers, and guardian ad litem who share legal responsibilities, but who also have less intimate or frequent knowledge of the family.
- Sub-systems of the team are made cohesive through a structure of four agreements: (1) ultimate goals, (2) rules of operation, (3) ecological assessment of assets and constraints culminating with agreement on current status, and (4) plan development, implementation & evaluation.
- Team goals and rules create the basis for collaboration in assessment, planning, and interventions. Team members identify information necessary to achieve their goals, how to share it, how to make decisions, especially when they cannot agree, and how to resolve conflict.
- Effective assessment includes assets, competencies, constraints and challenges in the home, school and community aspects of family life. It includes a status agreement about patterns of interaction within and between systems that allow problem behavior to continue.
- Changing these patterns to achieve team goals is the basis for plan development using assets and competencies as levers for change.
- Information gathered from evaluating plan implementation and outcomes is used to refine team composition and structure.

Supervision and Staff Development: New Structures and Theory-Based Measures

Training alone does not facilitate change from expert to collaborative models of practice (Bertram & Bertram, 2003; Cupit Swenson, Randall, Henggeler, & Ward, 2000). In addition to a systematic theory-based focus in weekly scheduled supervision, project leaders guide staff in weekly learning groups to re-enforce these theory-based constructs, and a separate group for supervisors supports their own development. Cases are reviewed in both individual and group supervisory formats examining the manner in which teams develop and work within their structure of sub-systems and agreements. Beginning in February 2006, the project began to test and apply two theory-based instruments. One measures model fidelity (team composition, structure, focus and cohesion) and one measures model pertinent staff knowledge and skills. These instruments allow systematic comparison of team development with development of staff knowledge and skills. In 2007-8 data from both instruments will be compared with Children's Division child and family outcome data as part of overall project evaluation.

Baseline Data

Before training began, two graduating University of Missouri—Kansas City MSW students evaluated project site practice and supervision through a survey of 54 Children's Division and guardian ad litem staff. These data produced no surprises and reflected patterns identified in the historical analysis of child welfare. Though many family members might be invited to team meetings, few came, fewer participated, and fewer still were involved in decision-making. Goals were established and decisions made primarily by the guardian ad litem or by Children's Division staff. Ad hoc supervision tended to focus upon the most problematic cases, staff morale, or policy guidelines. Staff knowledge of ecological systems theory or theory-based team development and their ability to develop a systemic hypothesis of problems in context was limited.

As expected, it's been difficult for supervisors to provide set times to guide staff development in a structured, case-by-case manner. The intensity of concerns regarding child safety and legal timelines, as well as staff turnover, pull supervisors back toward ad hoc, crisis-oriented patterns of supervision. Two months post-training, only half of the staff had been engaged in weekly scheduled, systematic, theory-based supervision focused upon team and staff development. Nevertheless, supervisors met their target to consistently provide such supervision in the fall of 2005, and supervisors embraced live observation of staff efforts as the most potent means to enhance staff knowledge and skills. In so doing, they have overcome barriers to transformation of supervision identified when this model was examined in a CMHS grant (Bertram & Bertram, 2003; Malysiak-Bertram, 2001).

A key dynamic noted in the first year of the project has been vulnerability and exposure that characterize the shift from expert to collaborative models of practice. Supervisors and their staff were revealing their practice to each other and were guiding team development in a significantly different manner without yet having full confidence in their abilities to do so. Constant efforts were necessary to maintain a positive, strengths-based focus on both supervisor and staff development in both group and individual learning formats. More experienced staff with decades of child welfare practice were often the most hesitant to change, requiring project leaders to reframe core constructs of the theory-based team development into the worker's language without compromising its key differences.

Initial data from testing the instrument that measures team composition, structure and cohesion are encouraging. Many identified in the baseline survey of practice as making most team decisions (Guardian ad Litem) have tended to verbalize discontent with how teams were now structured, yet their responses to instrument questions showed remarkable cohesion with other members of the team. Conversely, those who in the baseline data had the least influence on decision-making (family members) have tended to demonstrate more engagement and commitment to the changed team structure and process, while their responses to instrument questions also show remarkable cohesion with other members of their team.

Conclusions

Key aspects of implementation research identified in a recent synthesis of the literature are integrated in this project including feasibility assessment, defining core implementation components related to training and supervision, evaluation and fidelity, and addressing organizational context and external influences (Fixen, et al, 2005). Initial organizational lessons about transforming child welfare practice and supervision to support collaborative team efforts may be relevant to others engaged in systems transformation, particularly in systems with legal responsibilities. Deeper lessons in staff and team development will emerge as theory-based measures are systematically applied and integrated into supervision.

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Chapter Eleven

Strategies for Continuous Quality Improvement and Financing

Symposium

From Discovery Research to Implementation to Application: Closing the Loop on Service Quality to Realize Data-Based Decision-Making

Symposium Introduction

Melanie Barwick

The papers included in this symposium sought to extend thinking from discovery research, to implementation science, to data-based decision-making as a necessary component in the cycle of improving systems of care in children's mental health. This journey was told through four presentations: (a) the vision for data-based decision-making in the Ontario system of care (Barwick); (b) a description of the challenges inherent in developing system-wide accountability in Maryland (Patel); (c) the success achieved in organizational data-based decision-making at the Barber Institute (Curcio); and (d) the solution-focused process-based Continuous Quality Improvement (CQI) tool that has made these successes possible and that holds promise for data-based decision-making in both individual organizations and in systems of care (Rumberger).

Chair

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Continuous Quality Improvement and Data-Based Decision-Making in Children's Mental Health: A System of Care Perspective

Melanie Barwick, & Bruce Ferguson

Introduction

Over the last five years, a number of events have converged to set the stage for addressing service quality improvement in Ontario's children's mental health (CMH) system. Training and implementation of screening and outcome measurement tools mandated in 2000 across 107 organizations has laid the groundwork for describing the mental health problems of children and youth who seek service, evidence-based triaging of wait listed clients, and determining treatment response- new capacity for our CMH system (Barwick, Boydell, Cunningham, & Ferguson, 2004). Progressing in tandem have been recent efforts on the part of the National Child and Youth Health Coalition and the Health Council of Canada to develop national health and mental health indicators (National Child and Youth Health Coalition, 2004; Health Council of Canada, 2005). Of equal significance is the provincial political agenda that strives for increased accountability and improved quality in mental health (Government of Ontario, 2003). Taken together, these events point to the necessity for CQI to become an integral part of mental health service provision in Ontario.

This project represents an opportunity to take another important step toward evidence-based care by evaluating the feasibility and benefits of implementing a systematized CQI process tool in two children's mental health organizations. Piloting of the CQI tool is a significant step toward evaluating the feasibility and potential benefits that could be realized in a larger, system-wide implementation.

Project Goals And Objectives

The design is a pre-post comparison, where changes within two organizations of different size are evaluated as a result of implementation of a CQI process based software tool called TOTAL:Quality. The project seeks to achieve the following four goals:

1. To pilot implementation of the TOTAL:Quality tool in two service provider organizations of different size;
2. To evaluate the extent to which decision-making for service delivery is *empirically* supported by the TOTAL:Quality CQI process in these organizations;
3. To examine whether TOTAL:Quality facilitates compliance with Children's Mental Health Ontario (CMHO) accreditation standards in these organizations; and
4. To survey the CQI practices of children's mental health organizations across Ontario.

Research Plan/Methodology

Project Development

The project arose through ongoing dialogue between Dr. Barwick and members of Esteam, and developed with considerable community involvement. Esteam was founded as a venture between Pressley Ridge and Innervate, two Pittsburgh-based organizations. Pressley Ridge is a non-profit organization founded in 1832, and one of the oldest and most highly regarded innovators of best practices in children's mental health in the United States. Innervate, a technology company, offers consulting and software services to the health and human services fields. Principal members of Esteam were invited to present their TOTAL:Quality approach at a children's mental health conference held for over 120 participants¹ in Toronto in December 2004, where they generated significant interest from children's mental health practitioners and organizations. This interest led to a web cast demonstration of the TOTAL:Quality tool, broadcast in early February 2005 to an audience of 11 service provider organizations and over 20 individuals; two organizations involved their entire management teams.

Project Participants/Collaborators

The aforementioned events led to five children's mental health (CMH) organizations expressing interest in collaborating as demonstration sites; reflecting unprecedented and noteworthy outpouring of interest from the field. Three organizations completed a readiness questionnaire detailing the human resources they could bring to the project, confirming their IT compatibility with the TOTAL:Quality software, and declaring their readiness and interest. The Hospital for Sick Kids team's experience in system-wide implementation of evidence-based practices, combined with the Esteam consultants' implementation experience, determined it was practicable to focus on two service providers in this pilot demonstration; level of funding available was also a consideration. The two organizations were selected according to readiness, capacity to participate, and size. Organizational resources and capacity reflected by annual dollars offers an interesting point of comparison regarding the feasibility of a larger system implementation² The organizations with the smallest and largest annual budgets were invited to collaborate.

TOTAL:Quality

The purpose of TOTAL:Quality is to create or otherwise support organizational assessment and improvement of quality. TOTAL:Quality software is an electronic "process" tool designed to support continual self-assessment. As such, it provides a formal and systematized process to monitor and evaluate the quality, utilization, safety, appropriateness, efficiency, and effectiveness of mental health care and service delivered to children and youth. The software and implementation consultation by Esteam focuses the organization on opportunities for improving operational processes as well as health outcomes and client satisfaction. In this way, the TOTAL:Quality tool seeks to promote and foster accountability of service provider organizations and practitioners for the quality and safety of care and services provided to children and youth. Specifically, the TOTAL:Quality application provides a mechanism for service providers to: (a) Continuously monitor performance according to, or in comparison with objective, measurable performance standards—National, Provincial, and/or Regional; (b) Analyze information and data to identify trends; (c) Prioritize opportunities for improvement; (d) Design interventions for improvement; (e) Implement those interventions; (f) Re-measure the processes; and (g) Evaluate the effectiveness of the interventions and identify additional opportunities for improvement.

¹ Conference participants included children's mental health practitioners, leaders of service provider organizations and in the children's mental health field, policy makers from the Ministry of Children and Youth Services, Research and Outcome Measurement Branch and Juvenile Justice Division, and children's mental health experts affiliated with university and academic health science centres.

² Data from 54 CMH organizations recently surveyed reports that 7.4% have a budget of less than \$1million, 50% are between \$1-5 million, 35.2% are between \$6-10million, and 7.4% are at \$11million or higher (Barwick et al., 2005).

TOTAL:Quality allows service providers to track and demonstrate, in an empirical way, the quality of their services against criteria-based benchmarks. As system-wide indicators and benchmarks have not been defined, these are typically set arbitrarily by program and senior managers. Once established in-house, however, program managers are able to compare their performance-based data against these criteria-based benchmarks. More importantly, it takes providers beyond the data collection and report generating activities of quality indicators or accreditation standards and pushes them to address the question, “what do our indicator data show us and what are we doing as a result?” Consider that data collection and reporting are not in and of themselves “functional”—nothing about merely collecting quality data compels providers to *act* on that data. TOTAL:Quality works to close the “CQI loop” that is often lacking in the process of improvement and self-evaluation, and in doing so quality indicators become *dynamic*. The tool provides a means to support and manage the quality improvement process and actively support service decisions as intended and expected by oversight and accrediting bodies (i.e., Ministry of Children and Youth Services, Children’s Mental Health Ontario, or COA).

Procedures for Implementation

Procedures related to the planned implementation of the CQI demonstration will be described, including pre-situational analysis, overview of organization’s current CQI practices, launch of implementation and training, work group development, and follow-up.

Procedures for Evaluation

Indicators and outcomes for evaluating the application and impact of TOTAL:Quality in two organizations are described in the Logic Model (see Table 1). The study utilizes a mixed methods approach. Briefly, a baseline description of pre-implementation CQI practices and related organizational structure will be measured through notes/documentation stemming from the situational analysis, the CQI Climate Survey, interviews with program and senior managers and CQI leads, and collection of any existing CQI documentation (e.g., reports, presentations). System set up and training will be captured through the organizations’ installation of the software tool and completion of the training phases, observational field notes from meetings and trainings, and interviews with the CQI leads and consultants. Following a six-month period during which the organizations will use the tool, a post-implementation assessment will be conducted with the CQI Climate Survey, interviews with CQI leads, senior, and program managers, and an analysis of tool usage based on the organizations CQI report generated by the software tool. From the CQI report, frequencies are coded for content of observations, remedies, and close-outs/outcomes.

Procedures for CQI Scan

The goal of surveying the children’s mental health field regarding current CQI practices is essentially to inform the feasibility of a larger system-wide deployment. The CQI Climate Survey will be distributed electronically to the executive directors of 107 children’s mental health organizations across Ontario using SurveyMonkey web methodology. The research team has used this methodology to survey executive directors in the past (Barwick, Boydell, Stasiulis, Ferguson, Blase & Fixsen, 2005; Barwick, Boydell, & Omrin, 2002) and has experienced a high rate of return (72.5%). We expect a similar rate of return and will use repeated telephone and email follow-up to maximize the response rate.

Current Status

The project is currently under development, however will have implications for large-scale implementation of CQI as a necessary component of quality evidence-based and data-driven mental health service. While broad timelines are indicated in the Logic Model (Table 1), the practice change aspect of this project, involving CQI assessment, training, deployment of the CQI tool, and requisite behavior change among managers makes it difficult to narrow in on a specific timeline. The knowledge transfer and dissemination activities will occur throughout the life of the project and conceivably well beyond the project funding end date.

Table 1
Logic Model

	<i>Activities/Outputs</i>	<i>Short Term Outcomes</i>	<i>Measurement Indicators</i>
Year 1¹ 2005-2006			
Winter 2005	1. Situational Analysis: Pre-assessment of service provider CQI activities: management structure, indicators, & process for informing decision making & service delivery.	1. Description of baseline pre-implementation assessment of CQI activities	<ul style="list-style-type: none"> • CQI Climate Survey • Interviews with senior management team • Any existing, baseline CQI documentation, reports for the organizations. • Notes taken through situational analysis meetings
Winter 2005	1. Scan of CQI practices in 107 children's mental health service providers across Ontario. We anticipate 3 months	1. Description of CQI practices for 107 CMH organizations.	<ul style="list-style-type: none"> • CQI Climate Survey
Spring 2006	1. Implementation of TOTAL: Quality in 2 organizations: a) System set up b) Training	1. System goes online 2. First workgroup trained Dec /05 3. Consecutive workgroups trained Jan/06 to mid Feb/06	<ul style="list-style-type: none"> • IT installation of software; • completion of training phase & # trained • observations & interviews with CQI leads & consultants.
Spring-Fall 2006	1. Live deployment (use) of TOTAL: Quality in 2 organizations. Organizations will use the tool from early Mar /06 through Sep/06 (6 months).		
Year 2 2006-2007			
Summer – Fall 2006	1. Post-implementation assessment of CQI activities	1. Evidence of decision-making for service delivery that is based on CQI indicators. 2. Satisfaction with the TOTAL: Quality tool and process 3. Ease of Accreditation process (CMHO standards)	<ul style="list-style-type: none"> • CQI Climate Survey (post) • Interviews with CQI leads, senior & program managers • Analysis of tool usage: historical tracking of CQI thread (frequencies of observations, remedies, close outs) captured on the tool.
Winter 2006 – Spring 2007 Post funding	Knowledge transfer and dissemination: 1. ongoing communication of project status, successes, and challenges to advisory group throughout the life of the project (i.e., action research) 2. intermittent reports of project progress to the children's mental health field in brief summaries distributed via CMHO and Sick Kids contacts and electronic mechanisms (web, email) 3. final report to funder 4. final report to service provider community, distributed electronically to all CMH organizations in Ontario 5. presentations to service providers in Ontario 6. presentations to scientific community 7. peer-reviewed publication 8. involvement in workgroup for next steps in provincial deployment	1. Expressed interest from other service providers to participate in the next demonstration pilot; 2. Expressed interest from MCYS to explore and possibly fund phase 2 deployment 3. Invitations from service providers to share findings 4. Invitations to academic meetings / conferences 5. Successful peer reviewed publications 6. Distribution (# of points of web access, web traffic to download, # of requests)	<ul style="list-style-type: none"> • Observation • Documentation • Future funding

¹Timelines—The practice change aspect of this project, involving CQI assessment, training, deployment of the CQI tool, and requisite behavior change among managers makes it difficult to narrow in on a specific timeline. Broad timelines are indicated in the Logic Model (Table 1). The knowledge transfer and dissemination activities will occur throughout the life of the project and conceivably well beyond the project funding end date.

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The Struggle to Develop Accountability: Provider-Policymaker Perspectives on Implementing a Standardized Outcomes System in Maryland

Vaishali Patel

Introduction

The collection of outcomes data within mental health settings is becoming more common. A practitioner survey conducted of American Psychological Association found that 40% of providers in medical settings reported some form of outcomes measurement as part of their primary practice (Phelps, Eisman, & Kohout, 1998). In response to increasing pressure to provide accountability and address issues regarding quality of care, various initiatives across the United States and Canada have developed Outcome Management Systems (OMS) for child and adolescent mental health settings, including Ontario (Barwick, Boydell, Cunningham & Ferguson, 2004; Boydell, Barwick, Ferguson & Haines, 2005); Pressley Ridge in Pennsylvania (Beck, Meadowcroft, Mason, & Kiely, 1998), Texas Children's Mental Health Plan (Rouse, Toprac & MacCabe, 1998), Virginia (Koch, Lewis, & McCall, 1998), and Michigan (Savas, Fleming and Bolig, 1998) amongst others. This trend reflects in part the influence of accreditation and other regulatory bodies requiring the collection of outcomes and other performance data as part of the accreditation process or for obtaining licensure (Joint Commission, 2002).

Although national interest exists to use outcomes information to provide accountability and improve the quality of child mental health services, little is known about how outcomes management systems are implemented and how this information can inform decision-making at various levels of the organization: clinical, program management and executive leadership (Hodges, Woodbridge, & Huang, 2001). The goals of this study are to identify the conditions under which the use of outcomes information is supported and hindered, and describe the experiences of various staff within child mental health organizations in using outcomes data. The views of policymakers regarding their vision for a statewide outcomes evaluation system and the potential challenges to implementing such a system are also explored in this study.

Methodology

A multiple case study of two Residential Treatment Centers (RTC) and two Treatment Foster Care (TFC) programs using same Internet-based OMS in Maryland was conducted. The system was developed by their professional organization, Maryland Association of Resources for Families and Youth (MARFY) through a stakeholder driven process (Streider, 1998). The OMS captured the following data: demographic, family history, behavioral/social issues, psychiatric diagnoses, treatment history, services, and functioning rating scale.

The selection of RTCs and TFCs was based upon our desire to contrast the use of outcomes information in these programs as they differ most in terms of the intensity of services they offer, costs, and potentially in the quality of care they provide amongst out-of-home care settings (U.S. DHHS, 1999).

Within each program, information was gathered from staff members representing different groups of users (clinician, program manager/clinical supervisor, quality improvement, executive director) using tailored semi-structured field guides. Treatment team meetings and quality improvement meetings were observed to describe the decision-making processes, including how and who discussed outcomes information and other types of data at these meetings.

The Maryland State Assembly passed legislation in 2004 that mandated that child-serving state agencies plan for and make recommendations regarding developing a statewide OMS for out-of-home care placements (RTC, group home, TFC). In response to that legislation, state agencies responsible for out-of-home placements formed a committee that met in 2005 and drafted a report. Semi-structured interviews were conducted with state agency representatives who participated on this committee and other key personnel from state agencies. In addition, semi-structured interviews were conducted with legislators and advocates involved with the passage of the bill. Specifically, data collection consisted of:

- 35 Semi-Structured Interviews within Provider Organizations (17 Clinical Staff, 18 Quality Improvement (QI) and other management staff, 4 Executive Directors)
- Observations of QI and Treatment team meetings
- 11 Semi-structured Interviews with key legislators, advocates, and members of the workgroup responsible for responding to legislation
- Document Review (Legislative Hearings, Legislation, Reports in response to legislation)

Interviews lasted approximately one hour and were audio-recorded and transcribed. IRB Approval was granted from Johns Hopkins Bloomberg School of Public Health Committee on Human Research.

The analysis of the data collected—text from the transcribed interviews, documents related to Legislation and field notes describing observations related to meetings—has been guided by grounded theory (Corbin & Strauss, 1998) and case study methods (Yin, 2003). The use of Atlas.ti software (Scientific Software Development, 1997) has facilitated both the management of the data as well as analysis. Data triangulation was done to check the consistency and convergence of the findings obtained from different sources by comparing interviews with observations of meetings. Member checking has also been done by presenting initial findings to participants to elicit feedback.

Results

Both providers and policymakers recognize the potential importance of outcomes data to providing accountability:

“The longer I’m in the business the more I realize how much we don’t know - how much we’re shooting in the dark... so we collect the data that begins to let us know in a systematic way what impact we’re having.”

—Provider

“The state is interested in taking a look at outcome measures with regard to kids... not only because they want to be able to be funding the things that work, but they also want to be making some policy priorities around children.”

—State Agency Staff

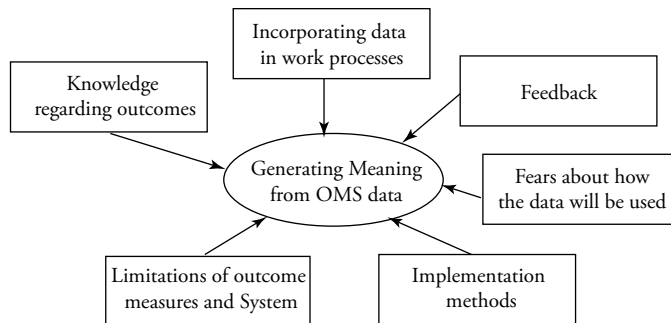
Specifically, providers recognize the need to use outcomes for demonstrating the value of the services they provide and for addressing the subjective nature of current decision-making processes within their organizations. Policymakers envisioned using outcomes to achieve accountability through a number of different mechanisms, including: developing a pay-for performance system that awarded organizations that achieved better outcomes; using outcomes to identify and promote best practices across organizations; informing decision-making at all levels; creating a system of feedback to providers that included some form of benchmarking; and identifying areas of greatest need in order to make decisions regarding allocation of resources and making service-related decisions.

Though both providers and policymakers envision the potential for outcomes to inform changes in the way care is delivered, in practice, providers’ didn’t make use of the outcomes data. Outcomes data rarely informed treatment and quality management decisions. The ability of OMS to inform decisions was stuck at a key step: staff struggled to generate meaning from the outcomes data that they have collected. This limited the utility of the data. As one Executive director of a TFC program put it:

“I don’t know... that they are seeing a correlation between the data we are collecting and the information that they are getting or the decisions that are being made organizationally.”

The specific barriers that providers identified that contributed to this struggle to generate meaning are outlined in Figure 1, and are based upon data provided by clinicians, managers and executive directors of both RTC and TFC programs.

Figure 1
Barriers to Implementation of Outcomes System Identified



Polymakers, and state agency representatives, in particular, also voiced a number of concerns and identified a number of potential barriers to implementing a state-wide outcomes system. These barriers included institutional barriers. As multiple agencies are responsible for overseeing out-of-home placements, there is divided accountability and lack of ownership over the entire process. The agency responsible for coordinating activities across the agencies often has very weak powers. Limited knowledge regarding outcomes, even amongst senior agency staff was identified as a problem as well. A strong resistance on part of child agencies regarding using and sharing outcomes data exists. This resistance is driven, in part by fear of being criticized by the state legislators and the public. The organizational culture of lack of transparency is reflective of these fears. In addition, state agency representatives also felt overwhelmed as they are understaffed to take on another major initiative. Issues relating to the implementation and potential uses of the system also exist. Concerns about the costs of implementing a statewide system as well as different visions on how to implement and fund the data collection exist. State agency staff voiced concerns about the ability to use outcomes for performance measurement without case-mix adjustment and considering the complexity of care provided within these settings of care. Another concern was that because of limited provider capacity, outcomes data might not be utilized in order to inform decisions regarding placement into care.

Conclusion

While there is recognition that outcomes have the potential to provide accountability at various levels of the service system, barriers exist both at micro-level (within provider organizations) and at the macro-level (across child-serving government agencies). The challenge will be to implement a transparent system that informs policy decisions and is useful to clinicians as well. Infrastructure support is critical in order to emphasize data analysis, feedback and integration of data into work processes, for both provider organizations and state agency staff. In addition, addressing both provider and state agency fears regarding sharing outcomes data will have to be addressed. Otherwise there is a danger that all the efforts will be placed upon data collection and not on actually utilizing and sharing the data. The potential end result: “Somebody made the analogy of the roach motel... everything goes in and nothing comes out...”

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Quality Management from an Organizational Perspective

A. Chris Curcio & Paul DeSante

Summary

The word “quality” has taken on new meaning and impact within our society. We use the term to describe our hotel chain, our shopping channel, our snowplowing services and even the type of automobile we build. Any particular “thing” with the word “quality” attached to it represents a very good thing in the mind of the consumer. Thus the term quality connotes excellence in the minds of many. In the past, we looked for said quality in our products we used more so than in the services we received. However, as our culture has evolved so too has our expectations for “quality” in every aspect of our lives. The element of “choice” has offered the consumer more options related to selecting only the best product or service to meet their needs. The phrase “only the strong survive” has taken on a new meaning indicating that only those business and service delivery providers who listen to their customers will survive in a competitive marketplace.

Organizational Quality

Today one of the fastest growing indicators of excellence within the community service delivery sector is the “quality” of the organization. Defining and delivering of a “quality” service has represented a difficult process. In the past, organizations developed services and then enrolled persons with disabilities in the service delivery system. Many times systems were, in fact, developed with little to no market analysis of the need for said service within the local community. The organization defined the “benchmarks” of quality within the system based upon adherence to self-made policies, procedures and guidelines as opposed to looking at the recipients of services and determining if the services were meeting their expectations and needs. Data systems have been prevalent however the systems themselves have been varied and have involved methodologies which have required volumes of paper that have not been integrated into any system. In addition, the element of “real-time data” has been almost non-existent. Thus it has been extremely difficult for the community-based system to utilize quality data results to institute the change process when and where it was needed. In short, the core of the system has proven to be a failure. The question has remained: How can the community-based health care industry utilize best practice with regards to design, development and implementation of a real-time evidence-based system within all settings? This question has prompted governments at all levels to begin to require providers to begin looking at the overall culture and climate of their organization and to institute best practice that has a proven record in business and emphasizes efficiency as well as efficacy.

Self-Analysis

In order to address the presenting problems within the service-oriented world it was necessary to conduct a self-analysis of the culture of the organization. A “baseline” of who we were and where we were, in comparison to our business world counterparts, was required prior to the design of any business plan. The findings of those activities indicated that our operations within the Dr. Gertrude A. Barber National Institute—a major community-based service provider—followed many business practices that did not align with those on the corporate side of the fence. We found we had many services that were meeting self-established and governmental standards but had no performance outcomes or measures to illustrate our commitment to the continuous improvement process. Additionally, we found that many of the services that we offered in the community setting were viewed by consumers as “quality” programs but the majority of those findings were based solely on anecdotal data, as opposed to clear, measurable performance indicators.

The organization itself had a very strong mission and vision, and a majority of the 1600+ employees of the organization had an understanding and an alliance with the mission. However, most of the services within the organization lacked a strong vision for their individual services. Thus there existed some lack of purpose and commitment within each of the 50+ service systems. Finally,

there existed a great deal of confusion surrounding data systems. Some persons were utilizing excel spreadsheets to collect and analyze data points within their service system, while others were using self-made word document templates to do data tracking. Analysis of the data collected was based more upon anecdotal comments than on empirical methodology. When data were utilized they were often dated, and their validity was questioned.

TOTAL:Quality

Against this background a forward-thinking approach toward the creation of a culture of excellence was presented. A business plan was conceived and developed based upon sound corporate management approaches and techniques. This plan incorporated the use of a real-time software support system that could be used throughout the organization to indicate what was being done, where, and by whom, and how the work was going periodically. The system needed to be sensitive to the various service systems, including support systems, and had to be relatively easy to operate. The system also had to demonstrate some interoperability with other systems in terms of using data regularly collected in conjunction with performance measures established. Said system, TOTAL:Quality, was secured and implemented. A formal deployment plan was instituted in late summer 2004. Over the course of a nine month period the system roll-out occurred and approximately fifty agency administrative and management staff were trained in system operation and implementation procedures. Service Line Directors were trained in the use of the system to manage the service line and how to “manage by mouse” within their service line. While this training was occurring, a business plan was deployed which emphasized the design of service line vision statements, the development of corporate values and the blueprint for a corporate compliance framework. To make a TOTAL: Impact on the organization there needed to be a cultural change within all levels of the organization. As a quality organization we needed to place emphasis on everyone recognizing the need for good performance outcomes, strong performance measures and the need to celebrate our accomplishments.

TOTAL:Quality—Information Technology Support for Organizational Quality Management, Implications for System of Care Evaluation, Management and Improvement

David Rumberger

Summary

For both providers and system of care evaluators, there is no shortage of data being collected, reviewed and discussed. Each year the Florida annual research conference on systems of care in children's mental health showcases this data collection and invites discussion. However, a significant impediment to posting notable progress from the system of care movement has been an inability to support, long-term, evaluation of system of care principles in a cost-effective manner. Part of the reason for this deficiency is an absence of the right tools.

TOTAL:Quality software is an electronic "process" tool designed to support continual organizational assessment. Previous efforts related to quality monitoring have typically been approached from a "content" perspective. In other words, CQI approaches and software applications have focused on *collecting information*, as opposed to focusing on *the process of linking people's behavior to their data*. TOTAL:Quality helps organizations and systems clearly define the parameters of quality; capture relevant performance measures and most importantly corrective, solution-focused actions for future follow-up. As such, it provides a formal and systematized process to monitor and evaluate the quality, utilization, safety, appropriateness, efficiency, and effectiveness of mental health care and service delivered to children and youth.

Different than individual assessments of quality (e.g. clinical progress assessment or assessment of individual therapies), the TOTAL:Quality focus is on organizational assessment. As such, aggregate data evaluated with respect to a system-prescribed or organizationally-defined benchmark is primary. Individual assessment of quality is a close "cousin" of organizational assessment; however, the focus from a management perspective is notably different. Managing an organization or a system of care involves defining the right quality performance measures, evaluating aggregate data collection against a benchmark and making (and tracking) action-oriented decisions with respect to "falling short" or surpassing a benchmark. TOTAL:Quality fully supports this process.

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Maximizing Medicaid and Other Financing Strategies for Children with Serious Emotional Disturbances

This study is conducted as part of the research agenda of the Research and Training Center for Children's Mental Health, jointly funded by the National Institute on Disability and Rehabilitation Research, U.S Department of Education and the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration under grant number H133B040024.

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Introduction

This study aims to identify critical financing structures and strategies to support effective systems of care. In addition to the introduction of managed care strategies for Medicaid behavioral health services, funding sources for children's mental health services have diversified over the past 30 years resulting in multiple funding sources across multiple systems. The study uses a case study design to test our theory regarding a hypothesized set of financing structures and strategies, and to investigate and describe how these factors operate separately, collectively, and in the context of their community to create effective financing policies for systems of care. A related goal of the study is to promote policy change through dissemination, targeted technical assistance, and utilization of its findings by state and community planners and policymakers.

Methods

The information for this study will be gathered through a participatory action research approach and a multiple-case embedded design.

Participatory Action Research

A participatory action research approach has been selected because the study team believes it will contribute to the development and dissemination of products that are useful for the intended users of the research findings. During Phase I, the study team continued to develop its theory of change regarding how financing structures and mechanisms contribute to and operate within effective systems of care. The team convened a panel of national financing experts, family members, and state and county administrators to review the list of critical financing components and related evaluation questions, and to contribute to the study's theoretical framework regarding financing structures. The panel was asked to review each component to ensure significance and comprehensiveness, and to review and provide input regarding key questions to be explored related to each factor. Table 1 lists resultant critical financing strategies within their component categories.

Multiple Case Study Design

The multiple case study design will serve a number of purposes. A case study design is recommended when the goal is to explain causal linkages in complex environments where survey or experimental designs cannot be tested (Yin, 2003). The multiple case design is preferable over a single case design because it allows for replicating findings across a number of sites with varied circumstances, such as communities with established and potential financing strategies. The embedded unit of analysis will be the financing implementation processes at selected sites. Each selected site will be the subject of an individual case study, and the critical financing components detailed above will serve as the embedded units of study within each site.

Site Selection. A pool of potential sites was nominated by state children's mental health directors and the panel of experts assembled in Year 1 of the study. To meet the study's overall sampling criteria, all participating sites must have an expressed commitment to system of care values and principles. The study

will include ten case study sites. In order to test the theoretical framework, sites will be selected for their perceived ability to predict similar or contrasting results across sites.

In addition to the ten sites that will be visited, we will include telephone interviews for up to five additional sites with promising financing strategies recommended by the expert panel. This additional complement of sites provides an opportunity to further test the financing strategies and structures.

Site Visits. The method will include site visits to ten communities having some promising financing features. This will be the primary activity of Phase II, beginning in the last quarter of Year 1 and

Table 1
Critical Financing Strategies

<i>I. Development of a Strategic Financing Plan</i>
1. Determine expected utilization and cost of behavioral health services for a defined population.
2. Identify types and amounts of behavioral health funding across systems.
3. Develop a strategic financing plan.
<i>II. Realignment of Funding Streams and Structures</i>
1. Utilize diverse funding streams.
2. Maximize the flexibility of state and/or local funding streams and budget structures.
3. Coordinate cross-system funding.
4. Maximize federal entitlement funding.
5. Redirect spending from “deep-end” placements.
6. Incorporate financing strategies to support a locus of accountability for service, cost, and care management for high-need populations.
7. Incorporate mechanisms to finance services to uninsured and underinsured children and their families.
8. Incorporate effective financing strategies for tribal systems of care.
<i>III. Financing of Appropriate Services and Supports</i>
1. Support a broad service array.
2. Promote individualized, flexible service delivery.
3. Support and incentivize evidence-based and promising practices.
4. Promote and support early identification and intervention and early childhood mental health services.
5. Support cross-agency service coordination.
<i>IV. Financing to Support Family and Youth Partnerships</i>
1. Support family and youth involvement in policy making.
2. Support family and youth involvement and choice in service planning and delivery.
3. Support services and supports to families/caregivers.
<i>V. Financing to Improve Cultural/Linguistic Competence and Reduce Disparities in Care</i>
1. Support culturally and linguistically competent services and reduce ethnic/racial disparities in access.
2. Reduce geographic disparities in access.
<i>VI. Financing to Improve the Workforce and Provider Network for Behavioral Health Services to Children and their Families</i>
1. Support a broad, diversified, qualified workforce and provider network.
2. Provide adequate provider payment rates.
<i>VII. Financing for Accountability</i>
1. Incorporate utilization and cost management mechanisms.
2. Utilize performance-based or outcomes-based contracting.
3. Evaluate financing policies to ensure that they support and promote system of care goals and continuous quality improvement.
4. Support leadership, policy, and management infrastructure for systems of care.

Note. For complete details on system-level outcomes, indicators, data sources, and data analysis plans, see <http://rtckids.fmhi.usf.edu/finance/default.cfm>

continuing in Years 2 and 3 of the Center. The selected sites for Year 2 of the study are: (a) Maricopa County, Arizona, (b) State of Vermont, (c) Bethel, Alaska, (d) State of Hawaii, and (e) Central Nebraska.

Each site will be asked to identify key informants prior to the site visit. Guidance will be provided so that the selected key informants have intimate knowledge of policy and operational decision-making related to financing strategies and knowledge of the outcomes achieved by these strategies, including the fundamental role they play in the development and sustainability of effective systems of care. The study team developed a semi-structured interview protocol that was reviewed and modified with the expert panel. The protocol questions relate to the critical components identified in Table 1, as well as current challenges, priorities, and system expectations.

Results

A final theory of change and set of financing critical structures and strategies was developed during the first year of the study. These structures and strategies were reviewed, revised and approved by a panel of experts in the field. A technical assistance tool (A Self-Assessment and Planning Guide: Developing a Comprehensive Financing Plan, by Armstrong, Pires, McCarthy, Stroul, Wood, et al., 2006) was also developed in Year 1. The tools and protocols will continue to be revised and refined. The final product will be a self-instructional guide that state and community policymakers and planners in community-based systems of care can use to assess the effectiveness of their financing structures and mechanisms. During Phase 2, brief case study reports will be developed and disseminated, both through mailings and on the Center's website. These reports will focus on the distinguishing features of established communities, and detailed descriptions of the promising features of their financing structures and strategies. In addition, as the case studies are conducted, the financing team will refine the data collection methods, tools, and protocols. The expected outcome is a set of protocols and tools that will be made available through the Center's website at the end of Phase 3.

Conclusion

During the final year of the Center, follow-up data collection will take place to see how much the self-instructional guide and other products were utilized, by whom, its perceived effectiveness, and outcomes of its use. The intent is that the study will result in the identification of a set of critical financing structures and strategies that support effective systems of care. The findings also will describe how these factors operate separately, collectively, and in the context of individual states and communities to create effective financing policies for systems of care.

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Maximizing Medicaid for Children with Serious Emotional Disturbances

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Introduction

The goals of this study were to identify unique and effective examples of the Comprehensive Community Mental Health Services for Children and their Families Program grantee sites using Medicaid to achieve sustainability by paying for community-based, individualized, behavioral health services and to describe these practices in the context of States' Medicaid Plans. The study findings identified creative and pioneering approaches to Medicaid as a mechanism to fund system of care services for children with serious emotional disturbances and suggested strategies useful to state-level systems administrators and grantee sites' program directors for developing sustainability plans.

Methods

The information for this paper was gathered in two phases. In phase one, survey data were collected and analyzed to identify grantee sites interested in participating in the study. In phase two, data collected through site visits were analyzed to identify key factors and strategies related to using Medicaid to provide reimbursement for system of care community-based services for children with serious emotional disabilities (SED) and their families.

Environmental Scan of CMHS Grantee Sites

In November 2003, Principal Investigators and Project Directors from 92 active and graduated grantee sites were surveyed regarding their use of Medicaid. These sites represent all SAMHSA-funded grantees sites as of October 2003. The survey asked about grantee sites' use of Medicaid Options and Waivers, the State Children's Health Insurance Program (SCHIP), The Early Periodic Screening, Diagnosis, and Treatment (EPSDT) program, other Waivers, financing mechanisms, and the availability of specialized managed behavioral health care systems. In addition, grantee sites were invited to self-identify as innovative in using Medicaid to finance wraparound services and were asked if they were interested in participating in the site visit study. The survey was reviewed and edited by experts in the field including children's mental health providers, administrators, researchers, and family members. The survey was approved for use by the University of Massachusetts Medical School (UMMS) Institutional Review Board (IRB). Fifty-four surveys were collected from November 2003 to May 2004, for a 59% response rate.

Site Selection

A National Advisory Group comprised of experts in children's mental health, Medicaid, financing, and systems of care was formed to provide guidance and feedback in selecting six sites to visit. Study investigators, in consultation with the National Advisory Group, developed selection criteria for site visits. Selected sites represented states with a range of Medicaid State Plan services and Waivers, financing mechanisms, and demographics of population served, i.e., race/ethnicity of populations and population characteristics, and represented a mix of geographic distribution. All selected sites had either recently graduated or almost graduated, as these would have the most experience working toward sustainability and interacting with Medicaid.

Study investigators developed a semi-structured interview protocol to capture information on relevant dimensions to Medicaid, financing and sustainability. The protocol was developed in consultation with the National Advisory Group, and was reviewed and approved for use by the UMMS IRB. An initial pilot was then conducted with one grantee site.

Site Visits

From September 2004 through January 2005 study investigators visited each of six grantee sites for two days. During these visits investigators met with and interviewed grantee sites' Principal Investigators and/or Program Directors, grantee site finance administrators, family members, partner agencies, provider agencies and, when possible, state/county Medicaid and/or SCHIP mental health liaisons. Interview questions were tailored to specific respondents. Interview questions focused on the background of the program, use of Medicaid, use of SCHIP, program financing, eligibility, and agency context. On the last day of the visit, investigators presented a summary case study report to the Principal Investigator and/or Program Director for feedback. Case studies were revised after site visits and additional feedback from grantee site program staff and participants were requested and integrated via email and telephone.

The following programs were selected for site visits: (a) Bridges (Appalachia/Eastern Kentucky; awarded 1998); (b) The Burlington Partnership (Burlington County, New Jersey; awarded 1999); (c) Community Connection for Families (Allegheny County, Pennsylvania; awarded 1998); (d) The Dawn Program (Marion County, Indiana; awarded 1999); (e) Partnership with Families/Transitions (St. Charles County, Missouri; awarded 1998/St. Louis City and St. Louis County, Missouri; awarded 2003); and (f) Spirit of Caring (Contra Costa County, California; awarded 1999).

Results

Table 1 summarizes the financing strategies identified within each site. The variety of approaches allowed investigators to identify innovations as well as commonalities across sites.

Grantee sites reported Leadership and Shared Vision, and Partnerships and Collaboration as most important and essentially as prerequisites to their ability to access Medicaid and to utilize this funding source as one strategy toward sustaining their programs. Grantee sites also reported Understanding the Culture of Medicaid as a challenge to accessing Medicaid in an effort to sustain programs. Lessons learned were identified from the study findings: all sites reported incorporating many of the strategies listed below.

Leadership and Shared Vision

1. Achieving consensus on a common vision among key stakeholders at state and local levels
2. Using legislation as a strategy

Partnerships and Collaboration

1. Developing strong partnerships/relationships with the state mental health authority to facilitate a parallel process at the state level
2. Developing strong partnerships/relationships and collaboration with Medicaid at the state level
3. Creating a governance board with decision-making power
4. Partnering with families
5. Forming partnerships to create innovative funding streams

Understanding the Culture of Medicaid

1. Finding creative uses of traditional Medicaid mechanisms
2. Developing infrastructure related to information technology (IT)
3. Emphasizing Medicaid eligibility
4. Understanding Medicaid's rules to work effectively within them and propose changes when necessary
5. Educating stakeholders regarding the culture of Medicaid
6. Utilizing options and waivers to maximize flexibility

Table 1
Financing Strategies by Site

Bridges (KY)

- Rehab Option: Expansive definition of where services can be provided, strong utilization of Option to provide services in schools
- Targeted Case Management Services (for service coordination)

The Burlington Partnership (NJ)

- Pool and braid funds to leverage Rehab Option and EPSDT
- Use of rate setting methodology to reflect market rates
- Use of administrative claiming to fund parts of the Family Service Organization and Administrative Service Organization
- Household-of-one designation
- Presumptive eligibility

Community Connections for Families (PA)

- Mental health portion of Medicaid carved out by state and administered by county
- Incremental mandatory state managed care program under 1915b Waiver
- EPSDT used to expand services including Mobile Therapist, Behavioral Specialist Consultant, and Therapeutic Staff Support
- Bundle of services known as wraparound

The Dawn Project (IN)

- Under Rehab Option services must be provided by CMHCs - case managers/supervisors employed by CMHCs
- Utilization of Clinic Option to pay for therapy and day treatment
- Utilization of case rate- each referral source pays fixed monthly rate upon enrollment
- IT system facilitates billing of Medicaid

Partnership with Families/Transitions (MO)

- Part of Medicaid administered under 1115 and 1915b Waivers known as Missouri Care Plus (MC+)
- Utilization of both Fee For Service and Managed Care systems based on geography
- Rehab Option, known as Community Psychiatric Rehabilitation, carved out under MC+ (used to provide in-home services)

Spirit of Caring (CA)

- Mental health portion of Medicaid (MediCal) carved out by state and administered by county
 - County serves as Medicaid managed care entity
 - Child mental health services carved out from physical health
 - Rehab Option used to access broad array of community-based services
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Discussion/Conclusion

This study revealed that the federal Medicaid program has been effectively utilized by a number of states to expand community-based services within the framework of systems of care for children with serious emotional disorders (SED) and their families. Medicaid has therefore become an extremely significant factor in enabling these systems of care to be sustained after federal demonstration support ends. The study has revealed the great value of the Rehabilitation Option in enabling children with SED to access a range of community-based services, and highlighted the role of the Targeted Case Management Option in helping Medicaid-eligible children with SED gain access to non-Medicaid supports and services such as mentoring, respite, and individualized education and recreation interventions, states and communities are faced with the prospect of losing access to these important services.

Finally, the study found very little reliance on SCHIP to assist this population in accessing non-traditional community-based behavioral healthcare services such as wraparound, individualized treatment team planning, behavioral aides, etc. This was attributable, at least in part, to the fact that most of the SCHIP plans in the states visited mirrored private health insurance and therefore did not contain the flexibility provided through the various Options and Waivers under Medicaid.

In summary, leadership, shared vision, partnerships, collaboration, and understanding and bridging the Medicaid and behavioral health cultures were key elements in enabling sites to maximize their utilization of Medicaid to cover services delivered through systems of care to children with SED and their families. These elements will continue to be critical in the future as national, state, and local public officials and communities consider changes being proposed for the Medicaid program and how those changes might impact the well being of this population.

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Managing Risk and Costs Using Data-Based Decision Making

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Introduction

The Dawn Project, which is the system of care in Marion County (Indianapolis), Indiana, serves youth with serious emotional disorders who are at-risk for or have a history of residential placement. The Dawn Project receives referrals from several child-serving systems including child welfare, juvenile justice, education, and mental health. At the time of referral, approximately 60% of youth are in costly out-of-home placements. These youth represent a substantial financial burden to the systems mandated to serve them. Consequently, the Dawn Project has sought innovative ways to stabilize costs and find community-based solutions for serving these youth.

The Dawn Project manages costs within a per-client, per-month, case rate (\$4379) paid by the referring agency. This funding structure provides the flexibility needed to deliver individualized, family-driven, community-based, strength-based, and culturally competent care. Through the case rate structure, child and family teams (which include the youth, family members, a Dawn Project service coordinator, representatives from the referral agency, providers and other individuals identified by the family) have the ability to develop service coordination plans and to purchase needed services that help youth and families succeed at home, in school, and in the community.

Now in its ninth year, the Dawn Project has learned that the challenge with using a case rate is that risk is inherent within this funding structure. The case rate, like insurance premiums, presupposes that you will make money in some instances and lose money in others. However, this balancing out is not guaranteed. The Dawn Project learned this lesson first hand a few years ago when costs were soaring and sustainability was threatened.

The purpose of this study was two-fold. First, it was hypothesized that the methods used by managed care organizations to manage costs and risk could be employed successfully at the Dawn Project. Second, it was hypothesized that employing such risk management methods would not adversely impact youth outcomes.

Method

In the managed care literature, there are three things that you need to know or be able to estimate in order to manage risk: how many youth will use services, how many units of services each youth will use, and how much one unit of service costs (Broskowski, 1997; 1998)? Once these three pieces of information are known, the key to managing costs and risk is managing each one of those factors to the extent possible. Since expenditures on residential treatment account for 56% of total expenditures at the Dawn Project, each of the risk determining factors was examined by using residential treatment data.

The Dawn Project experienced increased spending during its sixth and seventh year of operation. In an effort to understand the cause for this increase, the data were analyzed to look for changes over time. Time was defined in terms of the year of Dawn Project enrollment. In other words, all youth enrolled during the first year of operation were assigned to the first year, all youth enrolled during the second year of operation were assigned to the second year, etc. The year of disenrollment was not taken into consideration.

Youth outcomes were tracked over time by using the Child and Adolescent Functioning Assessment Scale (CAFAS; Hodges, 1996) to ensure that any changes made when managing risk did not negatively impact the youth.

All juvenile justice and child welfare youth referrals enrolled between May 1, 1997 and April 30, 2005 were examined ($N = 667$). The data were obtained from The Clinical Manager (TCM; Clinical Data Solutions LLC, 1998), which is the information management system used by the Dawn Project to collect clinical, fiscal and outcome information.

Results and Discussion

The data were analyzed using SPSS (SPSS Inc., 2002). All statistically significant results rely on an alpha level of .05.

How many youth will use services?

The proportion of youth in residential treatment at the time of Dawn Project enrollment is shown in Figure 1. The youth were considered as being in residential treatment at time of enrollment if they were either in residential treatment or placed in residential treatment within 31 days of enrollment. Steady increases are shown in the proportion of youth in residential treatment over time, reaching all time highs in Dawn Project years six and seven (57.3% and 62.7%, respectively).

The increase in residential treatment reflects a change in the referral agency's behaviors. Over time, the referral agencies started referring more and more youth in residential treatment the Dawn Project. This makes sense for the referral agencies because the Dawn Project case rate was less expensive than paying for residential treatment directly. However, the Dawn Project case rate was not able to accommodate this many youth in residential treatment. The Dawn Project was able to use this data to explain to the referring agencies that the increase in residential referrals was jeopardizing the Dawn Project. As a result, the proportion of youth referred in residential treatment dropped from 62.7% at seven years to 30.1% at eight years ($\chi^2 (1, N = 185) = 19.5, p = .00$).

How many units of services will each youth use?

The average number of days spent in a residential treatment facility for those youth with residential treatment during their Dawn Project enrollment is shown in Figure 2. The average number of days stayed relatively constant for the second ($M = 120.7, SD = 99.0$), third ($M = 131.1, SD = 101.8$), fourth ($M = 121.4, SD = 95.7$), and fifth ($M = 120.3, SD = 119.3$) years of the Dawn Project, but increased by about 40 days in the sixth ($M = 160.0, SD = 103.2$) and seventh ($M = 157.5, SD = 102.8$) years. The reason for these increases is not known. However, in response to these data, the Dawn Project began tracking residential lengths of stay more closely. The amount of time spent in residential treatment was tracked for all youth. If a youth was still in residential treatment after six months, a staffing occurred and

Figure 1
Proportion of Youth in Residential Treatment
at Dawn Project Enrollment by the
Youth's Dawn Project Enrollment Year

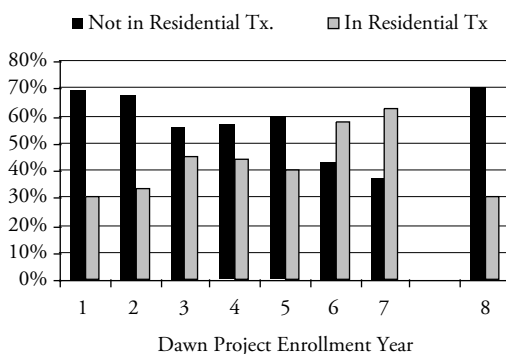
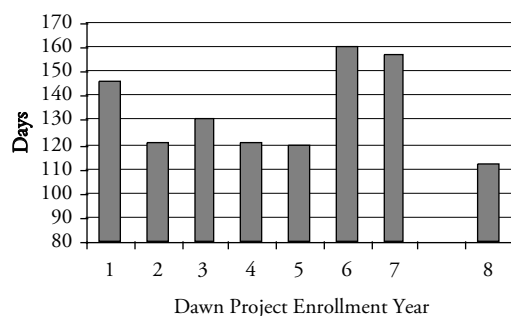


Figure 2
Average Number of Days Youth Spent
in Each Residential Treatment Facility
by the Youth's Dawn Project Enrollment Year



other options were explored. These efforts lead to a programmatically meaningful decrease of 45 days between the seventh and eighth years. An independent samples *t*-test revealed that the difference was approaching statistical significance ($t(109) = 1.6, p = .12$).

How much does one unit of service cost?

An omnibus ANOVA revealed that the average per-day rate for residential treatment did not vary as a function of Dawn Project enrollment year ($F(7,558) = 1.3, p = .24$). The average per day rate was \$239 ($SD = 52.5$).

CAFAS

Individual functioning was assessed using the CAFAS (Hodges, 1996) to determine whether changing the proportion of youth in residential treatment at time of enrollment or changing the average number of days spent in residential treatment influenced youth outcomes. Total CAFAS scores were computed at the time of enrollment and disenrollment from the Dawn Project. The difference score was obtained by taking the total score at disenrollment from the total score at enrollment. The difference scores during the seventh and eighth years of the Dawn Project are of interest in the context of the changes described above. The average difference score in the seventh year was 43.8 ($SD = 48.8$); a one-sample *t*-test revealed that the mean was statistically different from zero ($t(55) = 6.7, p = .00$). The average difference score in the eighth year was 31.9 ($SD = 59.4$); a one-sample *t*-test found that the mean was statistically different from zero ($t(36) = 3.3, p = .00$). Importantly, there was no statistical difference found between the seventh and eighth years ($t(91) = 1.1, p = .30$). Furthermore, both years difference scores reach clinically significant levels as defined by a 20 point decrease in total CAFAS score (Hodges, 1996).

Conclusions

It was found that the framework used by managed care organizations to manage costs and risk were employed successfully to residential treatment services at the Dawn Project. In fact, after employing these risk management methods the Dawn Project saw the average per client per month cost decrease by \$1626. Additionally, using the selected risk management methods did not adversely impact youth outcomes. This suggests that the risk management methods used by managed care organizations can successfully be used in a system of care environment. These are powerful tools that can be used to decrease costs and manage the inherent risk assumed when using a case rate funding structure.

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Matching Service Expenditures with Clinical Outcomes in a System of Care: Preliminary Findings

James M. Papp

Introduction

Service delivery systems across the country are challenged to develop new and creative ways to meet the complex needs of children and families. In an era of limited resources, programs must be proven clinically effective and demonstrate value for both participants and funders. Hamilton Choices, LLC (Choices) manages the Mosaic Project, an integrated system of care (SOC) in Hamilton County, Ohio. Mosaic serves at-risk youth and families in the greater Cincinnati, Ohio area by providing intensive care coordination through the use of child and family teams (CFTs). A wraparound (Burns & Goldman, 1999) approach is used and a case rate reimbursement system is in place.

In their final report, *Achieving the Promise: Transforming Mental Health Care in America*, the New Freedom Commission on Mental Health (2003) identifies programs operating within a system of care framework as models for providing services to children with serious emotional disturbances and their families. Benefits cited include positive clinical outcomes and reduced costs. Recent system of care research (Kutash, Duchnowski, & Friedman, 2005; Rosenblatt, 2005) supports this claim of effectiveness citing positive clinical outcomes for youth studied. Additional studies (Foster & Connor, 2005) addressed cost and outcomes, citing reductions in juvenile justice and child welfare expenses for youth served in a system of care. Although reductions in other child serving systems failed to completely offset the increased cost of mental health services in the SOC site studied, further analyses revealed other positive outcomes for youth in the SOC compared to the matched site (Foster & Connor, 2005).

This paper advances the methods used in an earlier service expenditure study (Papp, 2006) by examining youth functioning over time in relation to service expenditures for those youth during the same period. Of primary interest was whether or not youth participating in wraparound, a planning process commonly used within a system of care that emphasizes natural supports and low or no cost resources, could evidence both improved functioning and reduced average service expenditures.

Methods

Participants

Several criteria were established to identify participants in the study. First, youth had to be discharged between November 2002 and February 2006. Second, youth had to be enrolled in Mosaic a minimum of fifteen months. Fifteen months serves as the review period for the study and was chosen as it is equal to the average length of stay (LOS) for all disenrolled youth to date. Third, ratings on the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1996) had to be available at the following rating intervals: enrollment, three months, six months, nine months, twelve months, fifteen months, and discharge.

During the period, Mosaic had 448 program discharges. Of these, 234 were enrolled less than fifteen months and were removed from the analysis leaving 214 possible participants. Of these 214 participants, 100 were excluded from the analysis because CAFAS ratings were not available at all required administration points. There are three primary reasons that CAFAS ratings were not completed on these youth. First, CAFAS ratings are not completed on youth ($n = 25$) with developmental disabilities whose clinical profile makes them inappropriate for rating on the CAFAS. Second, the fifteen month CAFAS rating was not completed for 27 youth because program discharge occurred ninety days or less from the twelve month CAFAS rating. Third, one or more CAFAS ratings were not completed for 48 Mosaic youth. Thus, 114 youth met all study requirements and were the basis for further analyses.

To test for differences between included and excluded records and to measure change in functioning for all youth disenrolled from Choices irrespective of length of stay, analyses of average enrollment and discharge CAFAS scores were conducted for all discharged youth, discharged youth with less than fifteen months LOS, and discharged youth with greater than fifteen months. Statistically significant CAFAS reductions (indicating an increase in functioning) were found for each group. A secondary analysis reviewed average service expenditures per enrollment day (E Day) for youth with a minimum fifteen month LOS, but failed to also meet CAFAS inclusion criteria. Similar statistical findings were found for this group ($n = 71$) and the study group ($n = 114$).

Procedure

Service expenditures were extracted for each service paid for by the project during the same fifteen-month period measured by the CAFAS. Using an ordinal month strategy, these expenditures were coded based on the number of months elapsed from enrollment to the month in which the expenditure occurred. By using this method, expenditures occurring during the first month of enrollment (and successive months) are grouped irrespective of enrollment date. Following this, ordinal month values were assigned to quarters (e.g. months one, two, and three equal to quarter one).

Quarterly service expenditures were summed and then divided by quarterly E Days for the 114 participants. E Days are used to determine monthly project reimbursement. Each day that an enrollee is in open case status during a calendar month is equal to one E Day. Monthly E Days for all enrollees are multiplied by a predetermined dollar amount (case rate) to generate monthly operating funds. The E Day metric is essential to the service expenditure analysis and is used to help establish monthly parity. Without this qualifier, analyses of quarterly service expenditures could be skewed due to the variation that can occur in the number of monthly service days.

Although the same 114 records were reviewed in each quarter, days of service varied based on individual enrollment dates. Rather than taking average E Days per quarter by multiplying 114 youth times average days in a month (30.42) times 3 (number of months in a quarter), the analyst calculated exact E days for each youth for each month of enrollment. The ordinal month strategy described above was applied to ensure that service expenditures were paired with the corresponding days in which those expenditures were incurred. As the CAFAS is rated at three-month intervals, with the preceding ninety days used to rate level of functioning in eight life domains, service expenditures for youth in the first ordinal quarter can be equated to the three month CAFAS rating as the service expenditures associated with that period of review were accumulated in the preceding three months.

A second variable addressed to ensure accuracy in the average service expenditure per E Day calculation was youth placement status. Due to the fact that Mosaic is not responsible for payment while youth are placed in a psychiatric hospital and that, for the most part, formal paid services other than care coordination are “on hold” while in an absent without leave (AWOL), juvenile detention, or psychiatric hospital placement status, the E Days associated with these stays were accounted for and subtracted from the final quarterly divisor. As withheld days were only a small percentage of the total days in each quarter, results in which E Days were controlled vs. not controlled in this manner revealed no differences. Despite this finding, failing to control for days could have artificially lowered quarterly average service expenditures per E Day as the E Day divisor would have been higher than the actual number of community days during which these expenditures were incurred.

Data Sources

The CAFAS (Hodges, 1996), is a clinician-rated measure of functioning for youth aged 6 to 17 years of age and is divided in to eight life domains or subscales. CAFAS analyses use scores obtained from Mosaic’s information management system, The Clinical Manager (TCM; Clinical Data Solutions, LLC, 1998). Service expenditure data is also obtained from TCM and does not include Medicaid claims payments due to delays between date of service and payment that can range up to 365 days.

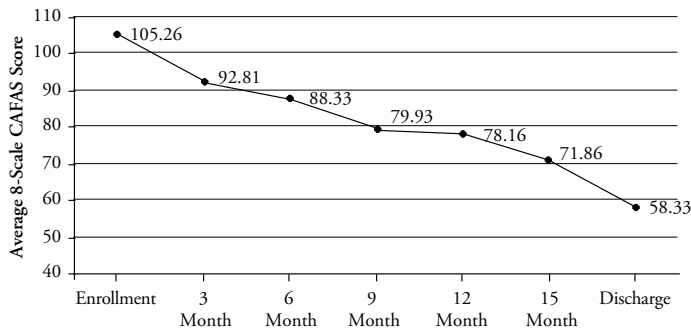
Results

Analyses were conducted using SPSS (2002). Paired-samples *t*-tests were conducted to compare mean CAFAS scores at enrollment, three months, six months, nine months, twelve months, fifteen months, and disenrollment and to compare mean service expenditures per E Day across five quarters (each quarter represents three ordinal months of service) for 114 participants.

CAFAS

Statistically significant decreases in CAFAS scores, reflecting an increase in functioning, were observed between enrollment ($M = 105.26$, $SD = 43.54$) and three months ($M = 92.81$, $SD = 41.47$), $t(113) = 3.898$, $p < .001$; between six months ($M = 88.33$, $SD = 42.15$) and nine months ($M = 79.93$, $SD = 42.36$), $t(113) = 2.746$, $p < .01$; between enrollment ($M = 105.26$, $SD = 43.54$) and fifteen months ($M = 71.86$, $SD = 47.50$), $t(113) = 6.579$, $p < .001$; and between enrollment ($M = 105.26$, $SD = 43.54$) and discharge ($M = 58.33$, $SD = 41.07$), $t(113) = 9.278$, $p < .001$ (see Figure 1).

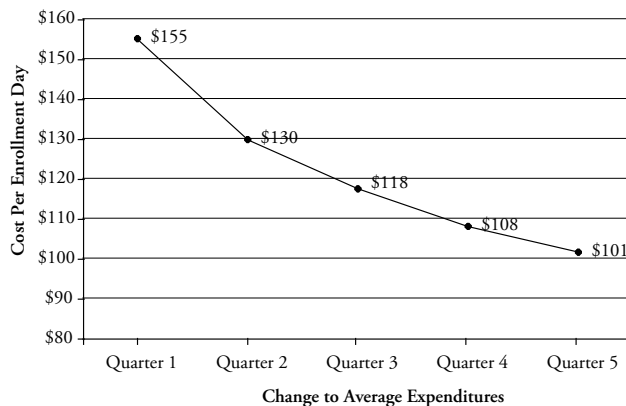
Figure 1
CAFAS Change Over Time
($N = 114$)



Service Expenditures

Average service expenditures per E Day also decreased significantly during the time period analyzed. Specifically, this decrease was observed between Quarter 1 ($M = \$154.71$, $SD = 111.06$) and Quarter 2 ($M = \$129.62$, $SD = 89.92$) $t(113) = 3.272$, $p < .001$; and between Quarter 1 ($M = \$154.71$, $SD = 111.06$) and Quarter 5 ($M = \$101.03$, $SD = 76.93$), $t(113) = 5.178$, $p < .001$. (see Figure 2).

Figure 2
Service Expenditures Per Enrollment Day
($N = 114$)



Discussion

Preliminary findings suggest that the Mosaic Project administered and managed by Hamilton Choices, LLC has demonstrated the ability to achieve positive clinical outcomes (i.e., improved functioning as measured by CAFAS) while maximizing available resources. Statistically significant reductions in CAFAS average 8-scale score between enrollment and fifteen months and between enrollment and discharge indicate that after individual lengths of stay equal to the program's historical length of stay and more importantly between enrollment and discharge, benefits for enrolled youth and their families can be found in the form of improved functioning.

Positive downward trends in service expenditures are also evident. Matching service expenditures to the same period of time measured by the CAFAS, significant reductions are observed. This seems to indicate that given a minimum length of stay, Mosaic is able to positively impact both clinical outcomes and service expenditures. Although additional study is needed to better understand optimal service dosage and its relationship to outcomes and service expenditures, one possible interpretation of these early findings is that a minimum of nine months is needed for significant CAFAS improvement. Months nine through fifteen also reveal an interesting trend. During this period, no significant additional improvement in CAFAS is found. It is hypothesized that this may be a period during which gains realized in the first nine months are fostered and further engrained as youth enter a transition phase and discharge approaches. Lastly, as average service expenditures during months nine through fifteen are relatively flat and reveal no significant increases, it appears that this hypothesized maintenance of gains period does not include additional resource allocation. Confidence in findings is supported by the fact that youth not meeting study inclusion criteria showed similar scoring patterns in average 8-scale CAFAS and in average service expenditure per enrollment day to youth who did, indicating that little or no difference exists between the two groups.

Conclusion

Social service providers must learn to effectively balance the achievement of outcomes with the resources necessary to produce those same outcomes. If this ratio of outcomes to required resources is prohibitive, program sustainability is jeopardized. This in turn can place additional strain on the delivery system, resulting in potential service gaps for children and families. To have a significant policy impact, capable of driving system transformation and change, research must show not only what works clinically but also the associated costs. Although this study is limited to a relatively small sample, contains no comparison expenditure data, excludes Medicaid, and uses only Mosaic program service expenditures rather than the much broader set of data that would be necessary to analyze *cost*, by matching service expenditures to the same period during which clinical outcomes are tracked, a basic method is introduced that is ripe for refinement and additional rigor. With added study, additional data to more completely represent cost, and advancements in methodology and statistical testing, questions regarding the effectiveness and efficiency of wraparound and systems of care can be better understood with findings used to inform public policy debate, decision making, and system planning.

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Development and Testing of a Model Fidelity Assessment Package for an Ecological Family-Based Intervention Program

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Introduction

With the national movement to identify and implement evidence-based treatments, model fidelity has emerged as a central issue. Akin to the conundrum that an instrument cannot be valid unless it is reliable, an intervention may be empirically validated but cannot be effective if it is not faithfully implemented. This paper reports on the efforts of the Girls and Boys Town National Research Institute to develop and implement the results from a set of model fidelity tools.

Since 1989, Girls and Boys Town Family Based Services have been used to help families in crisis. Designed as a home-based, family-centered alternative to out-of-home placement for children at risk of removal, the program was adapted from a long-term, family-style residential care and education program. A family consultant provides services with the goal of providing assessment and treatment in order to stabilize and strengthen the family. Preliminary program evaluation findings indicated significant improvements in child behavior problems, parenting stress and referral problems at departure, which were maintained at three months follow-up (Thompson, Sinisterra, North & Castrianno, 2001).

Due to the complex nature of families in crisis, we recently expanded this intervention to make the emphasis on the family's environment more explicit. Treatment was expanded to incorporate a more ecological approach in which the primary emphasis is on making the environment in which a child and family live more functional, resource rich and supportive (Munger, 1998). Combining the original program concepts, teaching components and relationship building, with a more thorough examination of environmental factors, the child's entire ecology is organized around positive peer, school and neighborhood support systems (Larzelere, Daly, Davis, Chmelka & Handwerk, 2004). Further, by linking the family with community resources and utilizing the family's natural therapy systems, there are also more natural supports in place that families can continue to utilize after services have ended.

This new approach is called the Ecological Family Based Model (EFBM) and consists of three stages. The primary focus of *Stage I* is to build relationships with family members to establish a foundation to engage and motivate change in the child and family. *Stage II* focuses on teaching skills, and building on identified strengths. Additionally, various resources in the family's natural environment are identified and utilized to provide the resources and skills needed to change. The focus of *Stage III* is on generalizing skills and establishing the family's independence and competency within their ecology.

Before embarking on a systematic outcome evaluation of the revised program, it was necessary to clearly define the model, create assessment, training and supervision tools, and develop practical measures to assess model fidelity. We recently conducted a pilot study to test and refine a new comprehensive model fidelity package, including an observation technique, service delivery tracking form, consumer survey, and file review process.

The goals of the pilot study were to: (a) determine the feasibility of the model fidelity tools; (b) give interviewers, file reviewers and observers practice using the methods; (c) identify terminology or jargon problems; (d) identify whether the response scales were appropriate; and (e) suggest program refinements based on data collected.

Method

A 5-week pilot study of the revised program was conducted at one implementation site. Evaluators, supervisors and staff administered each of the four model fidelity data collection tools. Evaluators were on-site during week one of the pilot study completing observations, file reviews, and service delivery tracking

forms. Further, evaluators trained site staff to use the tools. Site staff administered the model fidelity tools during the final four weeks of the pilot study. This multi-method approach was used to accurately capture the fidelity of the intervention, which occurs in diverse settings and across several treatment activities.

Instruments. The *observation instrument* was designed to detect individual and program-level implementation. It involves an external observer and specific item definitions, descriptive notes on the observation, ratings on implementation of specific components of the model, ratings of overall treatment implementation, and automated report features. Three key areas are assessed: teaching components, relationship building and enhancing natural therapy systems. Specific items were rated on a five-point anchored scale. Overall ratings are also completed for each area. The *service delivery tracking form*, based on a study conducted by Cash and Berry (2003), provides data on service elements that a family consultant may provide the family during visits. The family consultant self-reports services he/she provides the family during in-home visits. The *consumer survey* includes 18 statements for families to rate their opinions and experiences of services they received. The *file review* process involves an examination of client files. Initial assessment documentation, treatment plans, and progress reports are evaluated by an objective third party to assess model fidelity.

Findings

Both evaluators and supervisors felt that the observation instrument provided a more concrete and objective way to assess fidelity and provide feedback to family consultants than existing observation methods. In addition, the automated report features offered a variety of useful ways to share the feedback. Results from testing the observation instrument indicated a variety of high and low scoring items. Table 1 outlines the three highest and lowest rated items for teaching components and relationship building. These components were suggested as areas of strength and weakness for program implementation.

The service delivery tracking form served as an excellent supplement to the observation instrument because evaluators and supervisors were unable to observe every model component during a time-limited home visit. Combined with the observation instrument, the service delivery tracking form provided a more complete picture of model adherence. Consultants found that the service delivery tracking form was user-friendly and time efficient. It also served as a reminder of service activities when writing progress notes. Data collected indicated that the highest percentage of model components utilized during visits occurred in the individual and family domains (see Table 2).

During the pilot study only three consumer surveys were completed. Early testing of the file review process indicated acceptable inter-rater reliability (93% agreement). The process was informative, but time-intensive (30-40 minutes/file). A review of initial assessment documentation from the file review indicated that family consultants assessed all five domains at least 90% of the time (see Table 2). However, the majority of treatment plans incorporated only the individual and family domains.

Conclusion

The results of this pilot study suggested that the observation instrument and the service delivery tracking form were the most practical model fidelity assessment tools. These tools proved useful for treatment supervisors in helping family consultants adhere to the program model. However, the file review method was reliable but time intensive, and a consumer survey had a very low response rate. Results also suggested that initial assessments addressed all environmental domains, but service components and interventions tended to focus more in the individual and family domains rather than other environments that can provide important natural supports to the family during and after treatment. Based upon these results the model fidelity tools are being revised. In particular the natural family therapy systems section is being expanded and defined more carefully. Supervisors and evaluators will use the revised tools to promote model fidelity and assess implementation during a more comprehensive outcome study of the revised program. Further, it is our hope that the field will benefit from a more rigorous refining of fidelity concepts and testing of their application.

Table 1
Highest and Lowest Rated Observation Instrument Items

<i>Teaching Components Items</i>	<i>N</i>	<i>Mean</i>
Highest Rated		
Models appropriate standards of dress/grooming	25	4.20
Models appropriate behaviors (behaviors generally acceptable to society and to other professionals)	24	3.96
Asks questions in a friendly, warm and respectful manner to explore how the individuals and their ecology can be helped	23	3.91
Lowest Rated		
Uses confrontation to express concern that behavior needs to change or that feedback should be implemented	12	2.25
Ensures adequate practice of skills	14	2.36
Uses circular refocusing to bring the individual back to a solution-oriented focus	11	2.82
<i>Relationship Building Items</i>		
Highest Rated		
Maintains quality components (pleasant voice tone, warmth and compassion, comfortable proximity, eye contact, appropriate humor)	23	4.09
Demonstrates appropriate roles and boundaries	25	3.92
Models the “Pillars of Character” (trustworthiness, respect, responsibility, fairness, caring, citizenship)	20	3.80
Lowest Rated		
Assures families that other families have been in similar situations	8	2.25
Includes all family members in the intervention strategies	22	3.14
Appropriately discloses past personal experiences that relate to the family’s current situation	8	3.38

Table 2
Service Delivery Tracking Form and File Review Assessment and Treatment Results

<i>Domain</i>	<i>Service Delivery Tracking Form Service Components Utilized by Consultants (%)</i>	<i>File Review Assessed in Assessment Guide (% Yes)</i>	<i>File Review Incorporated in Treatment Plan, when appropriate (% Yes)</i>
Individual	48.0	100.0	100.0
Family	50.0	100.0	100.0
Peer	20.7	93.3	18.8
School	29.6	100.0	56.3
Community	19.5	100.0	31.3

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Using Organizational Data to Create the Essential Context for System Transformation in Child Welfare

**William Deveney
Joanne Nicholson**

Acknowledgements: This work was funded by the Massachusetts Department of Social Services and the W. T. Grant Foundation through a Distinguished Fellowship to the second author. The authors acknowledge the contributions of the MA/DSS CQI team to the development of the model: Ruben Ferreira, Michael MacCormack, and Jan Nisenbaum.

Introduction

“Incorporating new ways of relating to families into our practice, while juggling the emotional and work demands of eighteen or more families...requires... ‘building a bridge while crossing it’” (Commissioner L. H. Spence, Massachusetts Department of Social Services, October 6, 2004).

The President’s New Freedom Commission on Mental Health (2003) recommends transforming mental health care delivery in America. Transformed mental health care, particularly for children, youth and families, requires change, not only in the mental health system, but in the multiple child-and-family-serving systems (e.g., child welfare), that “provide and pay for significant amounts of mental health services, often more than the specialty mental health system” (Huang, et al., 2005, p. 624). State Medicaid spending for foster children approached \$4 billion in 2001; these data do not include Medicaid spending on children who were involved with child welfare agencies but living with their parents (Geen, Sommers, & Cohen, 2005). Foster children use Medicaid-reimbursed mental health services at a rate 8 to 15 times higher than other eligible youth (Geen et al., 2005).

Recommendations for the transformation of mental health care have focused on changing “what” services people receive (i.e., the emphasis on implementing evidence based practices), and “how” and “where” they are provided (e.g., individualized, culturally competent services provided in community-based settings). Recommendations generally focus on speeding up research on treatment and recovery to bridge the gap between science and service (President’s New Freedom Commission, 2003). What is largely missing from the discussion on transformation is the fact that changing the “what,” “how,” and “where” of mental health service provision requires major changes in all of the child-and-family-serving systems, to create organizational contexts and contingencies that encourage, support and sustain these changes. The New Freedom Commission report highlights advances in health technology and information systems that potentially benefit consumers. However, Huang and colleagues (2005) point to the lack of reliable and relevant data and accountability mechanisms to inform system changes, to “guide decision making and quality improvement at both the system and service delivery levels” (p. 624). Quality improvement data and mechanisms have not been brought to bear in the systems transformation process.

A Child Welfare System Transformation Initiative

The Massachusetts Department of Social Services (MA/DSS) has embarked upon a comprehensive system transformation initiative to translate the values of “child-driven,” “family-centered,” “community-focused,” “strength-based,” “committed to diversity and cultural competence,” and “committed to continuous learning” into an active child welfare policy and practice agenda (Massachusetts Department of Social Services, 2006). The learning organization framework (Senge, 1990) has been adopted as a set of principles to guide system transformation, and the shift in organizational context and contingencies essential to implementing and sustaining new practices. A continuous quality improvement (CQI) model is being used as a tool to transform the Massachusetts child welfare system, drawing questions from, providing feedback to, and ultimately shaping the behavior of MA/DSS personnel in the system, managerial, and practice domains.

Using Continuous Quality Improvement Strategies

CQI efforts within human service organizations traditionally provide feedback to managers and staff in the form of data on staff productivity and easily quantifiable client outcomes. In child welfare, traditional federal performance benchmarks include six data measures addressing maltreatment recurrence, maltreatment in foster care, timeliness of adoptions, timeliness of reunifications, placement stability, and permanency for children. Child welfare policy and practice are shaped in large part by these performance benchmarks, particularly because federal funding to states is contingent upon achieving set levels of compliance.

CQI in a learning organization is an interactive, iterative, participatory process that not only reflects change in organizational values, and catalyzes and guides improvements in policy and practice, but depends on change in organizational culture and climate. For example, if the organization is committed to continuous learning, the review process (i.e., the ways in which data are reported, interpreted, and used), must be characterized by learning and reflection (i.e., appreciative inquiry (Hammond, 1996)). If a goal of the organization is to promote strength-based practice with children and families, then strengths must be identified at every level of the organization, with managers, direct care staff and client families. Areas requiring improvement must be identified as well, to set relevant learning objectives. A focus on community and a commitment to cultural competence imply that all stakeholders must be involved in developing and implementing the 'next generation' CQI measures and review process.

The MA/DSS system transformation initiative required a re-framing of the CQI process and traditional benchmarks, to be consistent with the agency's values and supportive of the new way of doing business. The traditional performance benchmarks were expanded to include measures that reflect not only the more typical distal outcomes of child and family functioning and well-being, but also process and proximal measures of practice and service delivery, organizational context, and system functioning that reflect organizational fidelity with the agency's transformation agenda and values.

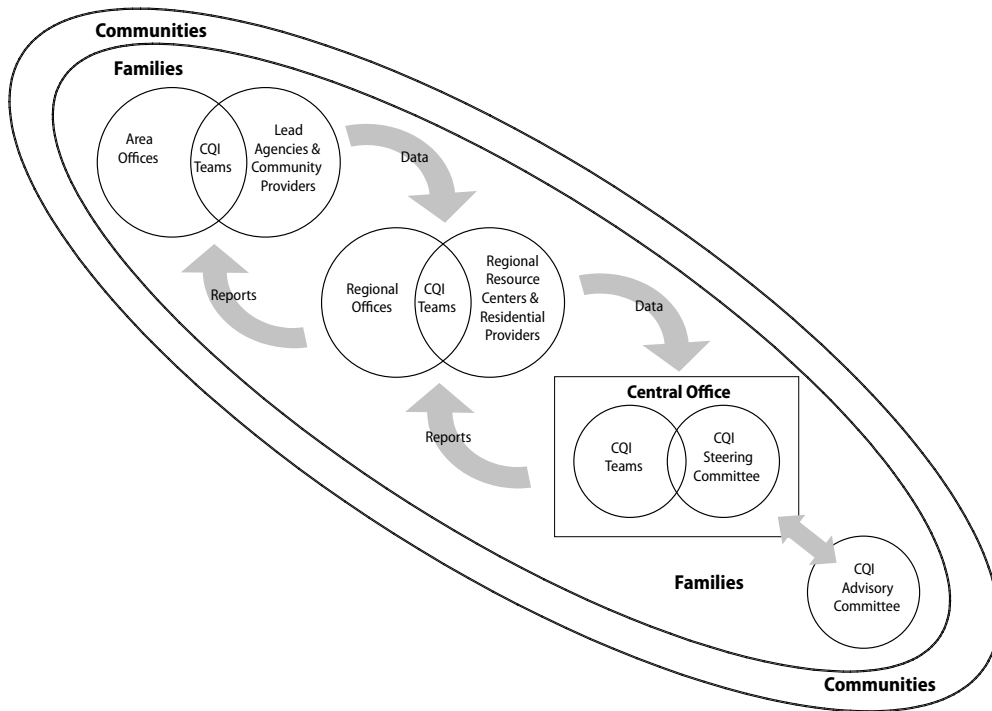
CQI Teams at each structural level of the organization, Area, Region, and Central Offices, will review data to identify areas of success as well as needs for improvement (see Figure 1). Team membership reflects key players at each structural level, including agency, provider, family and foster family, and community representatives. Representatives from the practice, managerial, and system domains of functioning will participate in quarterly (at the Area and Regional levels) and semi-annual (at the Central Office level) Learning Forum sessions, facilitated by trained leaders, to focus on critical issues identified through on-going CQI activities of the Teams. Sources of data include the FamilyNet state-wide data base; foster care reviews; quality service reviews; reports from specific units, lead agencies and providers; feedback from Area, Regional, and Central Offices; and client satisfaction, family-centered and strength-based care surveys. The CQI strategy will be piloted in the Summer of 2006 beginning in six Area offices.

Discussion

MA/DSS-CQI staff members identified anticipated challenges to implementing a meaningful, useful CQI model that supports both learning and accountability in informal interviews. According to CQI staff, CQI can be viewed by agency field staff as an "unwelcome add-on" when other changes in the organization take a great deal of time and energy. According to one CQI staff member, successful CQI efforts require "getting the right data to the right people, and helping them know how to use it" to support reflection in practice. CQI staff members agreed that a context of trust and cooperation is required, so that feedback is viewed as a learning opportunity, rather than as negative evaluation or criticism. As one staff member suggested, "For CQI to work requires an open process, where people have equal say in providing and responding to feedback, and making recommendations."

System transformation in child welfare has implications for workforce development and professional training. The Child Welfare Institute, a public-academic partnership between MA/DSS and two state university campuses, Salem State College and the University of Massachusetts Medical School, is aimed

Figure 1
The Massachusetts Department of Social Services CQI Model



at supporting system transformation through professional development at all levels. As the MA/DSS learning organization concept unfolds, and as the system evolves to translate the core values into policies and practice, areas for staff training and development, as well as relevant research, are emerging via the CQI process.

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Chapter Twelve

Instrumentation and Methodology

Psychometric Analysis of the Pediatric Symptom Checklist with Children Enrolled in Medicaid

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Background

The President's New Freedom Commission on Mental Health identified early mental health screening, assessment, and referral to services as one of the six goals for transforming mental health care in America (New Freedom Commission on Mental Health, 2003). The Commission report identified a number of settings where mental health screening for children should occur, and specifically recommended that screenings take place in primary health care facilities. Since 1965, the Medicaid program has made available screening for children for both physical and behavioral health problems through its Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program. A growing body of research offers evidence that early identification, assessment, and intervention for mental health problems for young children can help prevent more serious problems, such as academic failure, substance abuse, involvement in the criminal justice system, or suicide. In August 2005, the Substance Abuse and Mental Health Services Administration issued a background statement on Screening and Early Detection of Mental Health problems in Children and Adolescents. This document includes as one of its principles and standards, that screening instruments must be shown to be valid and reliable in their ability to identify children in need of further assessment. The purpose of this study was to examine the psychometric properties of the Pediatric Symptom Checklist for children enrolled in Florida's Medicaid program.

Methods

Sample

The results presented in this paper reflect a sample of children ages 6-21 who were enrolled in Florida's Medicaid program in one of six areas in the state (i.e., Jacksonville, Orlando, Pensacola, Sarasota, St. Petersburg, Tampa) and whose caregivers participated in the Florida Health Services Survey at least once between 1997 and 2004. The caregivers of 13,495 children were surveyed during this period and 5,012 completed questionnaires were returned for an unadjusted response rate of 37.2%. When adjusted for incorrect addresses and children who were deceased, the adjusted response rate was 44.6%.

Pediatric Symptom Checklist

Children's mental health status was assessed using the Pediatric Symptom Checklist (PSC; Jellinek, Murphy, & Burns, 1986), a 35-item caregiver self-report psychosocial screening measure. Caregivers report the frequency that their children exhibit specific behaviors such as "being irritable or angry," "having trouble concentrating," "feeling sad or unhappy," "getting in fights with other children," and "not listening to rules" on a three-point scale ranging from 0 = *Never* to 2 = *Often*. Studies have documented high levels of agreement between parents' and professionals' PSC ratings (Jellinek, et al., 1988; Murphy, Jellinek & Milinsky, 1989; Murphy, Reede, Jellinek, & Bishop, 1992), good internal consistency (.89) and test-retest reliability (.86) (Jellinek, et al., 1988), and acceptable validity (Jellinek & Murphy, 1990). Normative data suggest that PSC scores of 28 or above reflect a need for further psychosocial evaluation and that 10% to 13% of children in a general pediatric sample exceed this threshold (Jellinek & Murphy, 1990; Jellinek, Murphy, & Burns, 1986; Jellinek, et al., 1999). The measure has good sensitivity (87 to 95) and specificity (68 to 100) (Jellinek, et al., 1988; Murphy, Reede, Jellinek, & Bishop, 1992; Walker, Lagrone&Atkinson, 1989).

Mailing Procedures

As previously noted, data were collected as part of a larger population-based study examining the effects of managed care on Florida children's access to and quality of health and behavioral health services.

A highly systematic and structured mail survey methodology was used similar to that recommended by Dillman (1978) and Salant and Dillman (1994). In total, five separate mailings were conducted.¹ These mailing procedures were based on the findings of a feasibility study conducted to assess the validity of using mail survey procedures with a Medicaid population. The findings from this feasibility study are summarized in Boothroyd and Shern (1998). Telephone coverage was available weekdays until 8:30 pm so that caregivers not able to call during the day could call during the evening.

Results

Characteristics of the Children

The characteristics of the children whose caregivers' responded to the survey are summarized in Table 1. With respect to gender, 57.2% of the children were boys and 42.8% were girls. Approximately, 38% of the children were Caucasian, 39.5% were Black/African American, and 22.0% were categorized as "other" but the group was largely comprised of Hispanic children. Approximately 44% of the children were enrolled on Medicaid because they had a disability and were receiving Supplemental Security Income (SSI) while 42.0% were children living in families receiving Temporary Aid to Needy Families (TANF). The remaining 14.1% of the children either had another Medicaid eligibility status or it was unknown. The majority of the children were currently enrolled in school (91.1%). The children averaged 12.6 years old ($SD = 3.98$) and ranged in age from 6 to 21 years old.

Table 1
Children Characteristics

<i>Characteristic</i>	<i>Respondents</i> <i>(N = 5,012)</i>		<i>Non-Respondents</i> <i>(8,447)</i>		<i>p <</i>
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
Gender					NS
Male	2865	57.2	4734	56.0	
Female	2147	42.8	3713	44.0	
Race/Ethnicity					.001
White	1927	38.4	2650	31.4	
Black/African American	1980	39.5	4104	48.6	
Other (mostly Hispanic)	1105	22.0	1692	22.0	
Medicaid Eligibility					.001
TANF	2107	42.0	3900	46.2	
SSI	2200	43.9	3395	40.2	
Unknown/Other	705	14.1	1152	13.6	
School Status:					NA
In school	4377	91.1	NA	NA	
Not in school	430	8.9	NA	NA	
Age					.001
Mean	12.54		12.94		
SD	3.85		4.05		
Range	6-21		6-21		

¹Description of specific procedures used for this mailing are available from first author.

Comparison of Respondents and Non-respondents

To provide insight on possible mail survey response bias, the characteristics of the children whose caregivers completed and returned the questionnaire were compared to those of the children whose caregivers did not respond. This comparison was possible because the Florida Medicaid eligibility file, from which this sample was selected, contained selected demographic information (*i.e.*, date of birth, race/ethnicity, gender) on each recipient and therefore this information was also available on non-respondents. Significant differences were found among respondents and non-respondents with respect to the children's age $t(13936.95) = 5.77, p < .001$ and race/ethnicity $\chi^2(2, N = 13458) = 109.83, p < .001$. The average age of the children among survey respondents was slightly younger compared to non-respondents ($M = 12.54$ years old, $SD = 3.85$ years versus $M = 12.95, SD = 4.05$, respectively). Respondents under represented Black and African American children in the original sample (39.5% versus 45.2%, respectively) and over-represented Caucasian children (38.4% versus 34.0%, respectively). Responses from caregivers of children from other cultural and ethnic groups were similar to those in the original sample. No significant difference was found in the gender of the children between respondents (57.2% male) and non-respondents (56.0% male) in the sample.

Reliability

Cronbach's alpha was calculated for the 35-item measure to assess the internal consistency of caregivers' responses to the PSC. Overall consistency was high as the alpha was .944. Separated internal consistency estimates were calculated for caregivers of boys and girls within the TANF and SSI subgroups. These reliability estimates are summarized in Table 2. The four alphas ranged between .93 and .94, indicating high levels of internal consistency among children in each subgroup.

The stability of caregivers' PSC assessments of their children over time was also examined. There were 1,893 caregivers who completed the PSC on their child at two points in time separated by an average of approximately 302 days. Although this is a much longer period of time than one would ordinarily use to examine the test/retest reliability of a measure, it does provide an opportunity to assess the PSC's stability. The Pearson Product-Moment correlation between the first and second administrations and the Kappa associated with the classification of children as either above or below the criterion score are summarized in Table 3. PSC scores from the two administrations were significantly correlated $r = .802$, suggestion that the PSC has good stability even over such a long timeframe. The stability was examined separately for both the TANF and SSI subgroups and both had good stability ($r = .810$ and $r = .794$, respectively). The PSC was equally reliable for both boys and girls ($r = .801$ and $r = .803$, respectively). The Cohen's Kappas calculated to examine the consistency of the categorization of children as either above or below the criterion score on the PSC were generally in the .575 to .696 range suggesting the PSC agreement in classifying these children was in the fair to good range (Juurink & Detsky, 2005).

Table 2
Internal Consistency Reliability Estimates by Subgroup

	TANF	SSI	Overall
Boys	.940	.932	.944
Girls	.931	.937	.940
Overall	.936	.934	.944

Table 3
Test/Retest Reliability Estimates and Kappas by Subgroup¹

	TANF	SSI	Overall
Boys	.842/.696	.769/.489	.801/.627
Girls	.782/.606	.829/.650	.803/.575
Overall	.810/.649	.794/.558	.802/.600

¹ Correlation/Kappa

Norms

Percentile ranks were calculated separately for boys and girls within the TANF and SSI subgroups. These results are summarized in Table 4. As noted in this table PSC scores for boys in both the TANF and SSI subgroups are consistently higher at each percentile compared to the PSC scores for girls. As would be expected, PSC scores for both girls and boys in the SSI subgroups are consistently higher at each percentile compared to the TANF subgroups.

Table 4
Normative Data for the PSC by Subgroup

Percentile	TANF		SSI	
	Boys (<i>N</i> = 975)	Girls (<i>N</i> = 1,106)	Boys (<i>N</i> = 1,441)	Girls (<i>N</i> = 718)
5 th	3	3	11	10
10 th	6	5	15	13
15 th	9	8	19	16
20 th	11	9	21	18
25 th	13	11	23	20
30 th	15	13	26	21
35 th	16	14	27	23
40 th	18	16	29	25
45 th	20	17	31	27
50 th	21	19	32	28
55 th	24	20	34	30
60 th	25	22	36	32
65 th	27	24	38	34
70 th	30	25	40	35
75 th	31	27	42	37
80 th	34	29	44	39
85 th	37	33	47	44
90 th	41	37	51	47
95 th	48	42	56	54
100 th	68	67	69	67
Mean	22.89	20.05	32.79	29.23
<i>SD</i>	13.26	11.98	13.41	13.00

Validity of the PSC

Several sources of evidence were found supporting the validity of the PSC for use in screening children for mental health problems. First, the mean score of children living in families receiving TANF was compared to the mean scores of children who were receiving SSI. It was hypothesized that poor children who had disabilities would on average, have higher scores on the PSC (i.e., exhibit more mental health symptoms) compared to children who were only poor. It was further hypothesized that children receiving SSI for emotional behavioral problems would have significantly higher scores on the PSC compared to children receiving SSI for physical health reasons. The results of a one-way analysis of variance were significant, supporting the discriminant validity of the PSC $F(2, 2104) = 386.77, p < .001$. Children receiving SSI for mental health reasons had a significantly higher average score on the PSC ($M = 36.82, SD = 12.75, p < .001$) compared to children who were receiving SSI for physical health reasons ($M = 28.82, SD = 12.50$) who in turn had a significantly higher average PSC score ($p < .001$) compared to children living in families receiving TANF ($M = 19.97, SD = 12.48$). This perfect ordering effect supports the excellent discriminate validity of the PSC.

The validity was also examined by assessing the relationship between caregivers' responses on a separate survey question about their perception of their children's need for mental health services with whether their children scored above or below the PSC criterion score of 28. The result of this chi-square

analysis was significant $\chi^2 (1, N = 4,003) = 814.83, p < .001$. Nearly 76% of the caregivers of children scoring above the criterion score on the PSC reported their children needed mental health services during the previous six months compared to 27.2% of caregivers whose children scored below the criterion score. Caregivers of children above the criterion scores on the PSC were 8.3 times more likely to report their children needed mental health services compared to caregivers of children below the criterion score.

Conclusions

This analysis of the psychometric properties of the PSC suggests it has both good internal consistency and stability over time. The PSC demonstrated excellent discriminate validity in terms of its ability to differentiate among children who had no disabilities compared to children having either a physical health or mental health disabilities. Its continued use for assessing the psychosocial needs of children enrolled in Medicaid was supported.

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Revising the Restrictiveness of Living Environment Scale (ROLES): Re-Conceptualizing the Restrictiveness of Living Environments

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Ann Doucette
Kirk O'Brien**

Introduction

The Restrictiveness of Living Environment Scale (ROLES; Hawkins, Almeida, Fabry, & Reitz, 1992) has served for many years as the primary way of conceptualizing the restrictiveness of a child's living situation. The ROLES, or some form of it, has been used in several Substance Abuse and Mental Health Services Administration (SAMHSA) national studies of child outcomes and it is often included in agency clinical information systems. The ROLES was created by a group of practitioner-researchers working at Pressley Ridge in the early 1990s (Hawkins, et al, 1992), and the intent of the ROLES was to describe settings along a continuum of restrictiveness. With the changes in health care policy and financing as well as the continued maturation of systems of care, there is a pressing need to revise the ROLES because new programs have been created and environmental restrictiveness has become a critical outcome in determining effectiveness of care. In response, three groups of practitioner-researchers from Casey Family Programs, Girls and Boys Town, and Pressley Ridge are collaborating to re-conceptualize and revise the ROLES. The intent of the revised ROLES is that it remain a practical measure of youth movement, thereby keeping the simplicity of the original ROLES, while providing greater discrimination between programs and settings through the addition of secondary scales.

Goals of the ROLES Revision Project

A problem with the current ROLES scale is that the list of placements is neither mutually exclusive nor exhaustive (Thomlison & Krysik, 1992). The lack of mutual exclusivity creates a measure that does not always function as a continuum, as there are variations in the degree of restrictiveness within each placement. For example, there are wide variations of restrictiveness between foster homes (e.g., some foster children are treated as full family members while others aren't allowed into many parts of the home). Not being exhaustive creates a problem in that the scale is not as flexible as it needs to be. Adding new programs (e.g., military service¹, specialized treatment foster care), each with distinctive ranges of restrictiveness, is not easy. Many providers, based on unique needs, have idiosyncratically added programs to the scale, further complicating the issue of measuring restrictiveness.

Disregard for individual variation within treatment settings can potentially obscure outcomes of restrictiveness in research (Handwerk, 2002). The level of restrictiveness for any type of treatment setting is going to vary widely from program to program. In other words, program types have overlapping distributions of restrictiveness.

For example, some youth in foster care have more freedom than they had at home, or some youth may live at home but be electronically monitored to restrict them from leaving designated areas during certain times of day (e.g. home detention for youth offenders). For this reason, at times, the continuum seems arbitrary (Scott Fields, personal communication, July 18, 2005). The revision of the ROLES is intended to add greater precision to the measurement of restrictiveness of living environment. It is anticipated that this effort will benefit the research and outcome tracking of the wide range of organizations that use the current ROLES scale.

¹ The least restrictive setting on the ROLES is Independent living. Youth from some programs are encouraged to consider military service when they reach adulthood, as previous research has shown that youth who serve in the military after departure often have superior long-term outcomes (Elder, 1986). Because the restrictions and structure inherent in military service are substantively different than independent living, some agencies have added Military service to organization specific ROLES measures.

Strategy for a Revised ROLES

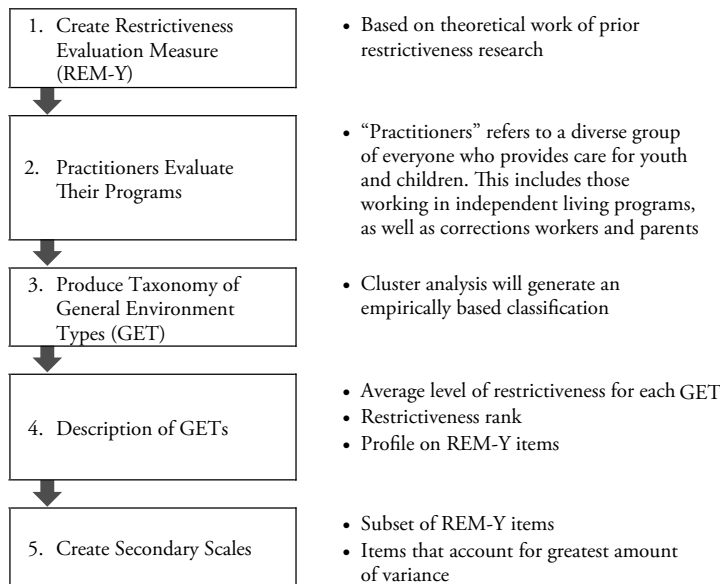
The conceptual definition of restrictiveness used in this project is: *Restrictiveness reflects the ways in which adults in a child's or youth's life have anticipated the limits that need to be made for the child's safety, developmental, and therapeutic needs.* Rather than focus on rankings of program types (e.g., with parents, foster care, residential treatment centers), we started by developing a theoretically derived Restrictiveness Evaluation Measure (REM-Y). Our plan is to then have service providers rank their programs on these scales. Statistical analysis will be used to identify a short list of General Environment Types (GET). These general environment types will fall along a continuum from most restrictive to least restrictive just as did the initial ROLES list of program types, but the categories will hopefully be more reliable and based on aggregate ratings of actual programs. The GET approach will also allow for new program types to be added in the future.

While the average level of restrictiveness for the GET based on empirically derived and actual practice based data will be useful, the average alone still doesn't overcome the overlapping distributions of restrictiveness problem. Because of this, we also propose that the REM-Y items that account for the greatest amount of variance in the original analysis be used by researchers and practitioners to rate actual programs and settings. The set of restrictiveness domains might include items such as "limits the frequency, variety and quality of interpersonal family relationships" and "limits personal choices," and would be based on the research on environmental restrictiveness. For example, the REM-Y items will allow us to differentiate the level of restrictiveness between different foster care programs. Similarly, this approach would be used to distinguish levels of restrictiveness within family settings (e.g., electronic detention and enforced curfews to conventional levels of youth autonomy), or jail settings (e.g., incarceration versus diversion programs). The average level of restrictiveness for each general environment description combined with the secondary measures will provide a far more comprehensive and accurate measure of the restrictiveness of the youth's environment.

We envision that the revised ROLES can be used in three important ways:

1. Youth movement from one level of restrictiveness to another can be tracked using GET values and rankings.
2. Restrictiveness Evaluation Measure (REM-Y) will provide greater discrimination between specific programs and settings.
3. The combination of the GET and REM-Y can be used to create a new and flexible taxonomy of program restrictiveness.

The first use for the revised ROLES will be as the current scale is widely used, which is to track youths' movement to more or less restrictive settings. This use reflects the common treatment goal of preparing youth for placement in a less restrictive environment. The empirically derived GET, because it is based on actual practice, will allow for greater accuracy in assessing major changes in restrictiveness when using restrictiveness of placement as an outcome. The second use comes through being able to accurately access a specific program's level of restrictiveness through the use of the REM-Y. This information can be used to compare the restrictiveness of a specific program to the average of the GET in which it falls, or to compare the level of restrictiveness for different programs within or between GET categories. This information can also be used to examine the relationship between restrictiveness and other important outcomes. The third use will be the ability to place new treatment approaches and living environments within a restrictiveness taxonomy through the use of the full REM-Y scale. Basically, this will entail taking the REM-Y profile for the new program and matching it to the closest cluster profile. Figure I shows the basic steps for the ROLES revision project. It outlines the temporal sequence of the project and how each step of the project builds upon the previous work.

Figure 1
Steps

Discussion

Participants provided feedback on the conceptual framework, the strategy, and the REM-Y. One identified concern was that individuals might view the less-restrictive response options for each REM-Y item as more socially desirable and therefore not approach the REM-Y as a purely descriptive instrument. In response to this we added a paragraph in the instructions stating that, in the REM-Y, there is no correct answer for any item and that programs should determine the appropriate level of restrictiveness based on policy and best practice standards. The participants also identified some additional areas for inclusion in the REM-Y such as distance from home/community and the degree to which time is structured. How age is considered in determining restriction and how restrictiveness changes over time were additional considerations raised by the participants. Individuals working in community based settings expressed the concern that the variety of home situations may make it difficult for community based workers to describe a “typical” home. Based on this issue, we have modified the REM-Y instructions to have respondents think about a specific youth in a typical family, and respond to the items as they relate to that particular individual. Based on these issues, we added a cognitive interviewing study of the REM-Y to the ROLES revision project plan. The goal of the cognitive interviewing study was to have approximately 20 practitioners from various treatment milieus complete the REM-Y and interview them on how they understood the items, used the response options, and if they felt any important issues had been omitted. In the next phase of the project, we will conduct a pilot study of the revised REM-Y and a preliminary analysis of the data.

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Measuring Relationship Quality in Systems of Care

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Introduction

Walker, Koroloff, & Schutte (2003) identified effective, collaborative relationships at the team, organizational and system levels as necessary conditions for high quality collaborative individualized service/support planning. Additionally, Pires (2002) emphasized the importance of relationships and effective collaboration in building systems of care. Understanding the quality of the relationships that exist among multiple systems, providers, family members, and community representatives is therefore critical to the success of local systems of care. The purpose of this paper is to describe the development and implementation of a survey process to measure relationship quality within the system of care in Marion County (Indianapolis), Indiana.

The Dawn Project was formed in 1997 to serve children with serious emotional disorders and their families. Since its inception, the Dawn Project has served nearly 1000 children and families by blending state and local funds and successfully implementing a Comprehensive Community Mental Health Services for Children and their Families Program grant from the Center for Mental Health Services (CMHS) that was awarded in 1999. Choices Inc., which is the care management organization that administers the Dawn Project, depends on its relationships with four local mental health centers, major child-serving agencies (e.g., child welfare, juvenile justice, education), and over 100 providers, staff, and family members to sustain the services provided through the Dawn Project.

Given the importance of the relationships that Choices and the Dawn Project have with partners, providers, and families, the Dawn Project identified a need to more fully understand and assess the quality of these relationships. Specifically, Dawn Project leaders believed that in order to continue to improve and to promote sustainability, they needed to understand which relationships they were managing effectively and which relationships needed further development. Thus, in 2002, Choices Inc. contracted with the Kensington Group, Inc. to develop a survey process to measure relationship quality.

The Kensington Group is a marketing research company that specializes in customer relationships. The president of the Kensington Group worked closely with Choices to create a model that captures relationship quality variables at both macro and micro system levels and links these variables to relationship decisions. As conceptualized in this model, relationship quality is related to individual-level satisfaction with the services received from and the interactions they have with the Dawn Project. Specifically, it is theorized that individuals who are more satisfied with their relationship(s) with the Dawn Project will rate the quality of those relationships more highly. The focus of the model and the survey process is on assessing those relationships that are essential to the overall administration of the system of care, rather than just on the clinical aspects of the system.

Method

Survey Development

Between May and August 2003, the Kensington Group conducted eleven individual qualitative interviews and two group interviews with key representatives of the system of care (i.e., individuals representing mental health, child welfare, juvenile justice, families, Dawn Project management and staff, and providers). These interviews were designed to identify the specific variables that contributed to the quality of relationships between the Dawn Project and its many system-level and service-delivery level partners.

Information obtained from the qualitative interviews was used to construct a survey that addressed both macro issues (i.e., issues that were common across system of care components) and micro issues

(i.e., issues that were specific to the relationship between one aspect of the system and the Dawn Project) as defined in the model. The Dawn Project management team reviewed the survey to validate its overall structure and the macro and micro variables identified. Survey items used a 5-point Likert-type scale with strongly agree/strongly disagree, excellent/poor, and other anchors as appropriate for each question.

Implementation

The survey was programmed for administration via the Internet by Marketing Research Technologies. The Internet programming allowed the specific survey items viewed by each respondent to be customized to his/her level of involvement with specific components of the Dawn Project. The survey's Internet link was sent via email by the Choices CEO to 164 people in October, 2005. Respondents were given 14 days to complete the survey and received one email reminder after 7 days.

Data Analysis

The Kensington Group analyzed the survey data using Quantum (SPSS, Inc., 2004). Quantum is a survey tabulation tool used to summarize, analyze and present survey data. *T*-tests were conducted to examine differences in the percent of respondents responding with the top two response categories (e.g., strongly agree/agree, excellent/very good, extremely likely/very likely) of each item and the difference in mean items scores between respondent categories.

Results

A total of 75 completed surveys (out of 164 invitations) were received for a response rate of 45.7%. The majority of responses (56%) came from internal respondents (i.e., Dawn Project service coordinators, supervisors, management and Choices staff). Responses from external respondents (i.e., referral agencies, Dawn Project partners, consortium members, and the local family support organization) represented 44% of the responses received.

To illustrate the type of data available from the survey, responses given to the loyalty, image and success items are summarized in this paper. Responses to survey items that asked respondents to rate the quality of the processes (e.g., training, child and family team meetings, team meeting minutes, consortium meetings, and communications) and people (e.g., Dawn management team, supervisors, service coordinators, and providers) that make up the Dawn Project have revealed several strengths and areas for improvement for the Dawn Project and have been presented to Dawn Project partners (Sprague Effland, 2006).

One of the key components of the relationship quality model is the amount of loyalty respondents have to the Dawn Project. As illustrated in Table 1, respondents indicated that they were very likely or likely to recommend (84.9%), continue to support (93.2%) and increase support of (84.5%) the Dawn Project. The survey also asked respondents to rate items related to the overall image and success of the Dawn Project. The results suggest that the Dawn Project has an overall good image (see the image items listed in Table 1) and that the Dawn Project is successful overall and, specifically, in enhancing the quality of life for clients and for their families (see the success items in Table 1).

Table 1
Summary of Survey Responses on Loyalty, Image and Success Items

	<i>Survey Item</i>	<i>N</i>	<i>%*</i>
Loyalty Items	Likely to recommend the Dawn Project	62	84.9
	Likely to continue to support the Dawn Project	69	93.2
	Likely to increase Support of the Dawn Project	60	84.5
Image Items	Dawn is well funded	53	70.7
	Dawn is a strength-based project	69	93.2
	Dawn is innovative	66	88.0
	Dawn is a team-oriented project	71	94.7
	Dawn has knowledgeable people associated with the project	70	93.3
	Dawn understands client needs	61	82.4
	Dawn holds clients responsible	41	54.7
	Dawn is trustworthy	60	80.0
	Dawn recognizes the contribution of all team members	62	82.7
	Dawn is a good value for those who fund the program	62	82.7
	Dawn empowers all team members to act on the clients' behalf	56	74.7
	Everyone at the Dawn Project cares about the clients	56	75.7
	Dawn is a cost-effective project	59	79.7
Success Items	Enhancing quality of life for clients	55	78.6
	Enhancing quality of life for families	57	81.4
	Supporting clients in becoming self-sufficient	39	56.5
	Supporting families in becoming self-sufficient	41	59.4
	Making efficient use of resources	41	59.4
	Overall success of the Dawn Project	54	76.1

*The data in these columns represent the percent of respondents who responded with one of the top two response categories for that item (i.e., extremely likely or very likely for the loyalty items; strongly agreed or agreed for the image items and excellent or very good for the people and process items).

Conclusion

The ability to assess the quality of the relationships that are central to the success of local systems of care is important to effectively managing a large, community-wide collaborative process. The survey process discussed in this paper has provided the Dawn Project with a wealth of data to inform internal quality improvements, training, contracting with providers, relationship management, communication strategies and other activities. Lessons learned from the development and implementation of the relationship quality survey can be used by other communities as they work to build and sustain their local systems of care.

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Measuring the Quality of the Relationship Between Youth and Treatment Parents in Therapeutic Foster Care: Understanding the Role of the Therapeutic Relationship in Community-Based Services

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Introduction

Therapeutic Foster Care (TFC), a community based mental health treatment intervention for children with severe emotional and behavioral disorders, is emerging as an important and widely disseminated evidence-based practice (Chamberlain, 2002). A key feature of TFC is specially trained foster parents, called treatment parents, who provide care and treatment for troubled youth in their home on a 24/7 basis (Farmer, Burns, Dubs, & Thompson, 2002). The treatment parent in TFC fulfills dual roles: (1) the parent role of nurturing and taking care of the child's basic needs; and (2) the treatment role, directly implementing treatment interventions with the youth (Wells, Farmer, Richards, & Burns, 2004).

The therapeutic relationship is increasingly recognized as important to understanding how process variables in child treatments contribute to treatment outcomes. Recent empirical evidence demonstrates that the relationship between youth and their treatment providers predict treatment outcomes. Shirk and Karver (2003), in a meta-analysis of 23 studies, show that the association between relationship variables and treatment outcomes are "robust and consistent." An underlying assumption of TFC is that the relationship between the treatment parent and child is a therapeutic one. Given the distinct role of the treatment parent in TFC, the therapeutic relationship is a critical process factor in this treatment setting that needs closer examination.

Little of the research on the therapeutic relationship, however, is based on community treatments, such as Therapeutic Foster Care. Likewise, the literature on parent-child relationships, which has clearly demonstrated the importance of a quality relationship to positive emotional, psychosocial and academic functioning, does not address the therapeutic role of the relationship between treatment parent and troubled youth.

The research presented here provides a unique perspective on the relationship between children in Therapeutic Foster Care (TFC) and their treatment parents and begins to bridge work on parent-child relationships and therapeutic alliance. We present research on findings from a promising measure of the therapeutic relationship in community based settings, called the Trusting Relationship Questionnaire, which was used in a large, randomized controlled trial of Therapeutic Foster Care. We report on the association of the quality of the parent-child relationship as measured by the TRQ with child outcome measures in a Therapeutic Foster Care setting.

Methods

Instrument

The Trusting Relationship Questionnaire (TRQ) consists of 18 items on the adult version and 16 items on the child version that assesses the quality of the relationship between the youth and the professionals or paraprofessionals involved in their care. Respondents indicate on a 5-point continuum (1 = *never* to 5 = *very frequently*) how each item characterizes their relationship with the target individual. Previous psychometric analysis of the TRQ, reported elsewhere (Mustillo, Dorsey, & Farmer, 2005) is briefly summarized here.

Reliability was gauged by internal consistency (e.g. Cronbach's alpha) and inter-rater agreement. Construct validity was assessed by the degree of association between TRQ and Conflict Behavior Questionnaire (CBQ) scores. The short form of the (CBQ) was administered to assess communication and conflict behavior; adequate internal consistency and discriminate validity for the CBQ has been

reported (Robin & Weiss, 1980). Concurrent validity was assessed by the degree of association between adult reported TRQ scores and child functioning, as measured by the BERS (see description below). Tests of reliability suggest that the TRQ possess acceptable levels of internal consistency and inter-rater reliability. Construct and concurrent validity was demonstrated with significant correlations. Factor analysis identified two factors within the adult-administered TRQ, which is used in the study reported here. The first factor measures the parent's perception of the child's feelings about their relationship, and the second factor measures the parent's own perception of or feelings about the relationship.

Sample

Data are from an NIMH-funded study of Therapeutic Foster Care (TFC) in North Carolina (Farmer, Wagner, Burns, & Richards, 2003). The sample for testing the association between the TRQ and child functioning was drawn from youth with psychiatric disorders and aggressive behavior who resided in TFC from June 1999 through May 2001 ($N = 184$). In-person interviews were completed with youth and TFC parents at study entry and near the time of discharge from placement.

Measures

Child functioning, the outcome variable reported here, was measured with the Behavioral and Emotional Rating Scale (BERS). The BERS is a structured instrument that measures child and adolescent emotional and behavioral strengths, through parent or caregiver report (Epstein, Mooney, Ryser, & Pierce, 2004). The BERS consists of 53 items and includes five subscales: interpersonal strengths, family involvement, intrapersonal strengths, school functioning, and affective strengths. Higher scores on the BERS represented better functioning. Research has shown the reliability and validity of the BERS to be sound (Epstein, et al, 2004).

Measures of both child and adult demographic characteristics and child pre-treatment characteristics are included. Child demographic measures were race (Black or White) and age. The only treatment parent demographic measured was race (Black or White). Additionally, we controlled for child mental health status at intake, child length of time in TFC, and whether the parents see themselves more as a parent or a treatment professional in their relationship with the child.

Analyses. Association between the therapeutic relationship and child functioning as measured by the BERS was assessed with a multivariate regression model, controlling for child and treatment parent characteristics, and other related variables. Because the BERS was a continuous variable with an approximately normal distribution, we used OLS regression for these analyses.

Findings

Descriptive statistics of study variables are provided in Table 1. Forty percent of the entire youth sample was Black and over three-quarters were male. About half the TFC parents were Black. Ages of the entire youth sample ranged from 4 to 19, with the majority of children in the 13-15 and 16-19 age groups. The mean time spent in TFC at the time of the interview was 546 days or about 18 months. The mean pre-treatment Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1988) score was 66. The majority of treatment parents viewed their role as closer to that of a parent rather than a professional.

Results of the regression analysis are shown in Table 2. None of the child and parent demographics was significant. The treatment parents' perception of their role significantly predicted child functioning outcomes. Children in TFC families where the treatment parents viewed their role as predominantly parenting-oriented, as opposed to viewing themselves as predominantly treatment providers, had higher BERS scores. Finally, the first factor of the relationship scale (i.e., the parent's perception of the child's feelings about their relationship) predicted improved child functioning. Children who were viewed as having a more positive relationship with their treatment parent had significantly better BERS scores.

Table 1
Descriptive Statistics of Study Variables

<i>Client Pre-Treatment Characteristics</i>	<i>% or m</i>
Black	40.98
Male	74.32
Age	
4-12	23.50
13-15	39.34
16-19	37.16
Time in TFC (days)	545.69 (557.36)
Proxy BPRS	66.27 (17.67)
<i>Parent Characteristics</i>	
Parent race = Black	51.10
Previous TFC experience	26.52
Any training	93.92
Mtgs with supervisor	75.56
Satisfaction with supervisor	
<i>Not at all Satisfied</i> 0	2.79
1	5.03
2	4.47
3	20.11
<i>Very Satisfied</i> 4	67.60
Perception of Role	
<i>Primarily Professional Role</i> 1	5.36
2	8.33
3	36.90
4	26.79
<i>Primarily Parent Role</i> 5	22.62
<i>Parent-Child Relationship</i>	
TRQ - F1	3.47 (0.77)
TRQ - F2	3.84 (0.62)

Table 2
Association of Study Variables with Child Functioning

<i>Client Characteristics</i>	<i>b</i>	<i>se</i>
Black	4.48	4.96
Male	-2.15	3.77
Age		
13-15	-1.40	4.18
16-19	3.78	4.30
Time in TFC	0.001	0.003
BPRS	-0.104	0.97
<i>Parent Characteristics</i>		
Parent race - black	3.93	4.93
Training/Adherence		
Previous TFC experience	0.51	3.58
Any training	-5.81	4.01
Mtgs with supervisor	0.42	6.73
Satisfaction w/ supervision	3.03	1.63
<i>Relationship</i>		
Parent or professional	4.30	1.52*
TRQ - F1	17.05	3.09**
TRQ - F2	-0.23	4.14

* = $\leq .01$ ** = $\leq .001$

Conclusions

The TRQ appears to be a psychometrically sound measure of the quality of the therapeutic relationship between youth with behavioral and emotional disorders and their community-based care providers. The TRQ appears to capture the quality of the relationship between treatment parents and youth in their care, and is at least moderately associated with child treatment outcomes, thus providing an important measure to bridge the gap in the literature on the role of the therapeutic relationship in TFC.

Further research is needed to ascertain if there are other mediating factors that explain the effect of the relationship processes on the outcomes. Also, this study needs to be replicated with a larger sample that provides longitudinal data on the effect of the relationship on outcomes over time.

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Use of a Strengths-Based Measure of Parenting Skills to Promote Collaborative Treatment Planning

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Introduction

The Caregiver Wish List is a self-report, strength-based measure that was designed to help caregivers assess their skills across six domains of parenting functioning: providing direction and following up, encouraging desirable behavior, discouraging undesirable behavior, monitoring activities, connecting positively with the child, and problem solving. The purpose is to foster a therapeutic alliance between the caregiver and practitioner, facilitate clarification of treatment goals, and frame treatment as coaching by a knowledgeable mentor. Data from families who were referred to child protection services are presented.

Background

Impairment in the youth's caregiving environment was found to be a significant predictor of poor outcome with treatment-as-usual for youths with behavioral problems who were served in Michigan's public mental health system (Xue, Hodges, & Wotring, 2004). Another significant predictor was cross-setting behavioral problems (e.g., in the home and at school) (Xue et al., 2004). Additionally, approximately 54% of the Michigan's youths with serious emotional disturbance could be described as having behavioral problems (Hodges, Xue, & Wotring, 2004). The rates of successful outcomes for these youths ranged from 38% to 59%, depending on the outcome indicator used, despite an average 11 months of services (Hodges et al., 2004).

These findings are consistent with the literature, in which it has been shown that cross-setting behavioral problems predict continued antisocial behavior and that serious behavioral problems are fairly stable from childhood to adolescence (Dishion, 2000; Loeber & Dishion 1984). Furthermore, studies on the efficacy of parent management training 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).

Although changing parenting skills is known to be paramount to reducing behavioral impairment in youths, there is a paucity of measures to assess parents' skills at managing difficult behavior in youths. In this paper, the Caregiver Wish List (Hodges, 2002; Hull, 2005), a recently developed measure for assessing parenting skills, is described and preliminary data are presented.

The Caregiver Wish List is a strengths-based measure that asks the parent to report on skills identified as critical to changing the behavior of youths with serious emotional disturbance. The intent is to encourage parents to regard themselves as the main agents of change for their child and to view parenting skills as behaviors that can be learned from a knowledgeable coach.

Furthermore, the procedures for administering the measure and sharing the results with parents are intended to promote a collaborative relationship between parent and practitioner. The aim is to empower parents while maximizing their genuine "buy in" for addressing the treatment goals identified.

Method

Subjects

Data were collected from 36 families participating in treatment as a part of reunification services after their children were returned following court-ordered out-of-home placement due to neglect or abuse. All subjects were recruited through KVC Behavioral Health, a non-profit agency serving 22 counties in Kansas. KVC provides all of the foster care/reintegration services to families that require immediate out-

of-home placement for their children due to child abuse or neglect. Part of the reunification process was participation in a home-based treatment program where parent management training was a focus.

The ethnic makeup of the sample was as follows: 47.2% Caucasian, 38.9% African American, 8.3% Hispanic, and 5.6% Multi-Racial. Caregivers were predominantly mother-figures (80.6%) and over half of the families consisted of a single parent (61.1%). Twenty-one of the caregivers had a high school diploma or GED and 18 of the caregivers had a history of out-of-home placement as youths.

Measures

The Caregiver Wish List (Hodges, 2002; 2005) is comprised of two sections: The Wish List for Your Child, and The Wish List for You. The Wish List for Your Child includes 14 items inquiring about the child's behavior and the Wish List for You has 53 items, inquiring about parenting behaviors. In the analysis in this study, a higher score on the measure for the child indicated more problems, and for the measure of parenting, a higher score indicated more skillful parenting.

The Caregiver Wish List is designed so that caregivers can see how their answers "map" onto the parenting skills. The parents' answers transfer onto an "answer key," which specifies the skill that was assessed by each question, enabling the parent to see exactly which of the behaviors they reported are considered areas of strength versus which need improvement.

In addition, after answering all of the items on the Caregiver Wish List, the caregivers are asked to identify their three "top wishes or goals." This provides the caregivers an opportunity to determine the skills they are most interested in improving or acquiring.

Procedures

Caregivers in each family completed the Caregiver Wish List at the outset of services. Practitioners read the questions to caregivers, who marked their responses on their copy of the form. In addition to scores on the Caregiver Wish List, data on specific risk factors were collected. Risk factors included: the number of out-of-home placements for the child, parental history of out-of-home placement, unstable parental employment history, and parental education.

Results

To examine internal consistency, Chronbach's Alpha was computed for both the Wish List for You ($\alpha = .914$) and the Wish List for Your Child ($\alpha = .833$). There was a significant correlation between the Wish List for You and the Wish List for Your Child, with more skillful caregivers reporting fewer problems with their children ($r = -.516, p < .001, n = 36$).

No significant relationships were found between the Wish List and demographic factors including caregiver gender, age, or ethnicity. Significantly poorer parenting skills were reported by parents who had more out-of-home placements as children ($r = -.48, p < .005, n = 33$); had an unstable employment history ($r = -.49, p < .005, n = 33$); or had lower educational attainment (i.e., did not complete high school diploma or GED; $r = .42, p < .025, n = 28$). On the Skill Wish List for Your Child, parents reported more behavioral problems for children who experienced more out-of-home placements ($r = .45, p < .005, n = 36$).

On the Wish List for Your Child, parents reported noncompliance to parental commands and poor response to correction as the most common behavioral challenges that they experience with their children (see Figure 1). On the Skill Wish List for You, parents reported the most difficulty with discouraging undesirable behavior, while they believed they were most successful in connecting with their kids (see Figure 2).

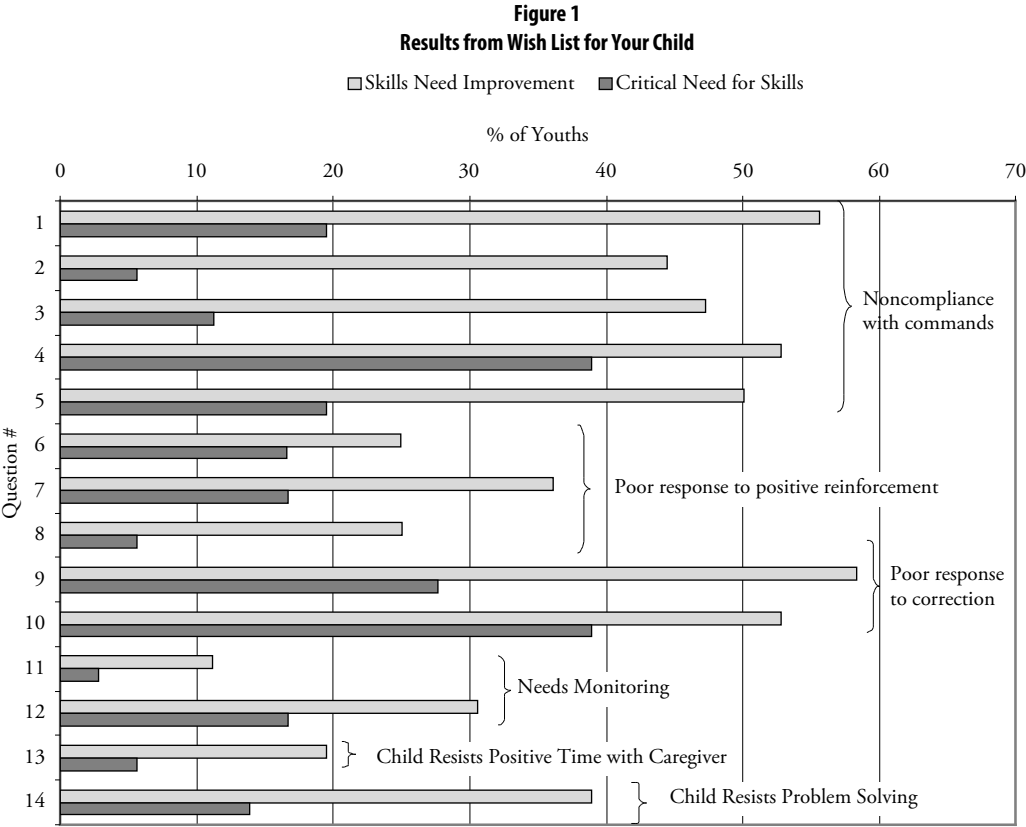
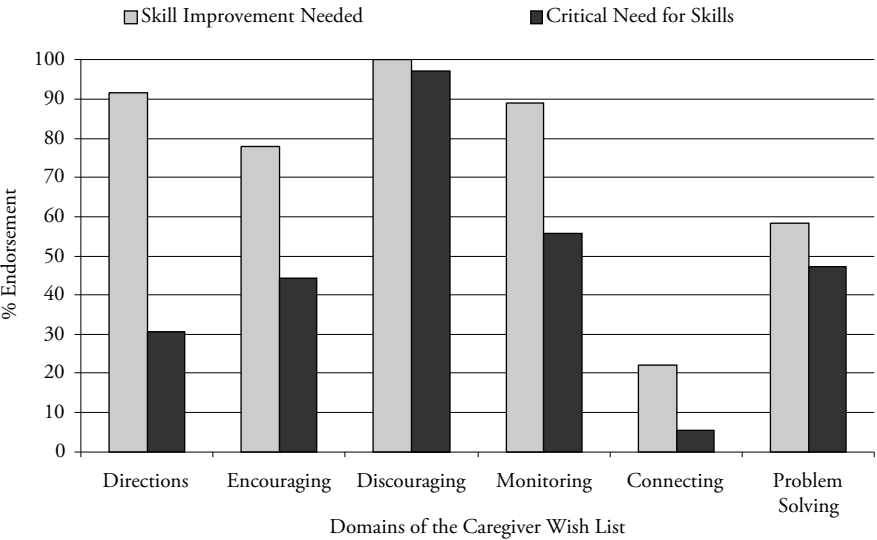


Figure 2
Results from Wish List For You

Percent of Caregivers Endorsing One or More Items at the Midpoint or Below (i.e., Skill Improvement Needed) and Below the Midpoint (i.e., Critical Need for Skills) for the Caregiver Wish List Domains



Discussion

The caregivers in this study reported on their perception of their parenting strengths and deficits as well as on problems they were having with their children. It is encouraging that the parents reported a high level of problems and need for skill improvement, given that assuming a defensive posture would have been understandable given their circumstances. These parents likely need to be mentored by a highly skilled practitioner who is able to teach them “advanced child management skills” (Hodges, 2004), given the challenges presented by the children and the harsh contexts in which many of them live. In the hands of skillful and strengths-based practitioners, the Caregivers Wish List may have been helpful in reframing their view of therapy as a mentor-apprentice relationship.

The Caregiver Wish List empowers parents by providing a mechanism for parents to identify treatment goals and to give direction to practitioners regarding their needs for coaching and mentoring. Improving their skills in managing their children’s difficult behavior enables parents to keep their children in their own home while not sacrificing the quality of life of other family members. It can also help practitioners to focus on strengths in the context of a working partnership with parents.

The results presented here should be interpreted within the context of the study’s limitations, particularly the small sample size. Given the encouraging results of this pilot study, study with a broader range of both clinical and non-clinical subjects is warranted.

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The Service Process Adherence to Needs and Strengths (SPANS): Extending the CANS

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Acknowledgements: This research was supported in part by Agency for Healthcare Administration M0505.

Introduction

The Service Process Adherence to Needs and Strengths (SPANS) was designed to be used in conjunction with the Child and Adolescent Needs and Strengths (CANS; Lyons, Sokol, & Lee, 1999) to determine the degree to which needs and strengths identified in the CANS were being addressed or used in service planning and delivery. This paper describes the development of the SPANS in Alaska, a pilot study conducted in Pennsylvania, and its application in Florida. Recommendations for further development of the instrument and discussion of future applications are also addressed.

The CANS is a tool that can be used prospectively for planning and retrospectively to review treatment decisions. The CANS assesses child and family needs and strengths across life domains. Used alone, the CANS can be administered at admission and periodically thereafter to determine if needs are decreasing and strengths are increasing.

While the CANS is designed to monitor the progress of children and families, it does not provide insight into *why* a child and family are not making progress. A measure was needed to examine the fidelity of service delivery to the assessment and planning processes. Like the CANS, the SPANS can be used to monitor the services of an individual child and family or can be aggregated at the agency or system levels for quality improvement. Thus, SPANS findings could be used to design training programs for individual service providers, to help programs and agencies prioritize budget allocations for services, and for communities working to identify priority areas for building infrastructure and implementing a philosophy of care.

Method

Two groups in Alaska and Pennsylvania, who were already using the CANS, worked to develop a tool that could reliably guide treatment, monitor service quality, and assess the development of their systems of care. To fill this gap, the two communities decided that an enhancement to the CANS was needed to better understand why children and their families were not making the progress anticipated. The question of interest was whether and how the CANS could be modified or extended to measure the fidelity of service delivery to assessment and planning. The drive to answer this question resulted in the development of the Service Process Adherence to Needs and Strengths (SPANS). The SPANS was subsequently refined and used in an evaluation of behavioral health overlay services provided to youth in child welfare group homes and moderate level juvenile justice facilities.

Instrument Description – Service Process Adherence to Needs and Strengths

The items in the CANS needs domains are scored from 0 = *No intervention necessary*, to 3 = *Immediate or intensive intervention is needed*. Items in the strengths domains are also rated on a scale of zero to three but are scored in the opposite direction with “0” indicating *The presence of a strength that can be used at the center of a service or treatment plan* to 3 = *The absence of a strength* in this area. The item scores from the CANS are then recorded on the SPANS. All “2”s and “3”s in the needs domains and all “0”s and “1”s in the strengths domains are considered the “target domains” that should be addressed in plans and in service delivery. Records are reviewed to see how these target need areas are being addressed or how strengths are being used in services. At the conclusion of the record review, the rater assigns a score of 1-5 with 1 = *reflecting low levels of implementation* and 5 = *reflecting high levels of implementation*. An outcome score is assigned to each item reflecting whether the child and family had made progress

in that area while receiving services. This outcome summary uses a three point scale scored 0 = *Services rarely/never contributed to positive outcomes*, 1 = *Services partially contributed to positive outcomes*, or 2 = *Services mostly/fully contributed to positive outcomes*.

Results

Pilot results

Once the instrument's design was determined, the SPANS was used to review the files of children and families enrolled in the Alaska Youth Initiative. Two raters reviewed seven cases. Reliability was examined using the Cohen's kappa and *memoing*, a qualitative technique, to describe the process of arriving at a SPANS score. Throughout the pilot, the SPANS was adapted, reflecting input from raters and group discussion. It was simplified in content and a common language was formed that was clearly demonstrated through the resolution process at the end of each case where both raters exchanged their reasons for choices. In all but a few occasions the raters agreed on a common outcome for each answer. Staff were able to attain reliable ratings of 0.8 after review of three to four cases (Slieffert, 2001). This study, though limited in scope, took a solid step towards the creation of a useful, effective SPANS tool.

The refined SPANS was then used in Pennsylvania as part of a records audit. Audit results showed that the array of services available to children and families was not adequate to address their identified needs. These data were shared with the local managed care company to advocate for expansion of the service array and greater access. Results also indicated that, while identified, strengths were not being used consistently in implementing service plans.

The SPANS was next applied to a larger sample in a statewide evaluation of behavioral health services for children and youth in child welfare group homes and juvenile correctional facilities in Florida. As part of this evaluation (Dollard, Dailey, & Dhont, 2004), 198 case record reviews were conducted. The purpose of the review was to determine the amount and types of services youth received, who was providing these services, appropriateness of these services, consistency of services with the youth's treatment plan, and outcomes for youth served.

The large amount of information gathered for these youth necessitated summary ratings for each of the needs and strengths domains to reflect whether services could be described as *mostly or fully implemented*; *partially implemented*; or *low or not implemented* for an individual youth and family.

Select Findings – Substance Abuse Complications

Chi square analyses were used to investigate the relationship between the presence of youth strengths, as identified through the CANS administered at baseline, and the degree to which these strengths were addressed in service plans and case documentation, measured in the SPANS. Significant differences between youth served in child welfare and juvenile justice were observed for all items in the CANS Substance Abuse Complications Subscale (see Table 1). Summary scores were then calculated for the subscale. This summary score was then used in chi square analyses to assess whether substance abuse problems identified in the admission CANS were addressed in treatment plans and other case documentation. Significant differences ($\chi^2 = 27.07$; $p < .001$) were observed in how well identified substance abuse needs were addressed in treatment (see Table 2). Youth in juvenile justice with identified substance abuse issues ($n = 73$) were more likely to have their issues addressed in treatment with moderate to high degrees (56.2%, $n = 41$) than their counterparts in child welfare (6.3%, $n = 2$). Confirming findings in the Pennsylvania pilot, findings from these analyses also suggest that lower levels of implementation appear to be associated with lower degrees of progress towards treatment goal attainment ($\chi^2 = 88.26$; $p < .0001$) in the Substance Abuse Complications Domain (see Table 3).

Table 1
Substance Abuse Complications—Percent of Youth with CANS Scores of Moderate or Severe Need

	<i>JJ</i> (<i>n</i> = 101)	<i>CW</i> (<i>n</i> = 97)	<i>Significance</i>
Severity of Abuse	57%	10%	$\chi^2 = 75.8; p < .01$
Duration of Abuse	50%	7%	$\chi^2 = 103.5; p < .01$
Stage of Recovery	55%	10%	$\chi^2 = 32.9; p < .01$
Peer Involvement in Substance Use	50%	9%	$\chi^2 = 50.7; p < .01$
Parental Involvement in Substance Use	53%	41%	$\chi^2 = 8.0; p < .05$

Table 2
Substance Abuse Complications Fidelity

	<i>CW</i> (<i>n</i> =32)		<i>JJ</i> (<i>n</i> =73)	
	<i>N</i>	%	<i>N</i>	%
No fidelity	19	59.4%	13	17.8%
Low fidelity	3	9.4%	6	8.2%
Partial fidelity	8	25.0%	13	17.8%
Moderate fidelity	0	0	18	24.7%
High fidelity	2	6.3%	23	31.5%

$\chi^2 = 27.07; p < .001$

Table 3
Relationship of Outcomes and Fidelity in the Substance Abuse Domain (*n* = 103)

<i>Outcome</i>	<i>Substance Abuse Treatment Fidelity</i>				
	<i>None</i>	<i>Low</i>	<i>Partial</i>	<i>Moderate</i>	<i>High</i>
Services rarely contributed to positive outcomes	28 (27.2%)	4 (3.9%)	5 (4.9%)	1 (1.0%)	0
Services partially contributed to positive outcomes	4 (3.9%)	5 (4.9%)	11 (10.7%)	6 (5.8%)	2 (1.9%)
Services mostly contributed to positive outcomes	0	0	5 (4.9%)	11 (10.7%)	21 (22.3%)

$\chi^2 = 83.3; p < .001$

Conclusion

Based on the experience in Florida, there are possibilities for enhancing the SPANS. The addition of SPANS measures for caregivers in the areas of parental mental illness and substance abuse, particularly for child welfare populations, is suggested. As observed both in Pennsylvania and Florida, youth appeared to be making progress, but unaddressed issues among their caregivers likely mitigated against the youth's ability to make maximum progress, and for children involved with child welfare, their ability to return to their caregivers.

A second suggestion is to add implementation codes to determine whether services were provided with the recommended frequency and intensity and, where services were discontinued prior to discharge, the reasons why services were discontinued. Information could also be recorded to identify whether discontinuation was due to family factors such as caregiver request, agency factors such as staff

turnover, or system factors like changes in funding. This addition is recommended so that barriers to implementation can be systematically captured and reported to either an individual staff member, so that their work with families might improve, at the agency level so that staff development efforts can be tailored to the specific needs and strengths of personnel, or to system managers who need to be aware of when needed services are not in sufficient supply.

Further work is planned to investigate the relationship between outcomes and fidelity by using more rigorous outcome measures than those used in the Florida study. Next steps include using the CANS, the SPANS and the Child Behavior Checklist (Achenbach & Rescorla, 2001) in a future study of residential treatment options in Florida. Further work is also planned to identify empirically derived cutoff scores for low, partial, and high levels of implementation using the SPANS.

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Multilevel Analysis of Interagency Collaboration of Children's Mental Health Agencies

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Acknowledgements: This research was supported by Grant H133B90004 from the National Institute on Disability and Rehabilitation Research of the U. S. Department of Education and the Center for Mental Health Services, SAMHSA. The opinions contained in this manuscript are those of the grantee and do not necessarily reflect those of either the U. S. Department of Education or the Center for Mental Health Services. We would like to thank the Expert Review Panel and the agencies and their members who participated in the study. We also would like to acknowledge the assistance of Lodi Lipien, Eric Brown, Debra Mowery and Victor Trinidad.

Introduction

Recent reforms in mental health service delivery have emphasized interagency collaboration as an important element in providing services to children with serious emotional disturbance. In the past two decades, the call for collaboration among organizations has increased as recognition has grown that many important problems associated with children being served by multiple agencies (e.g., service fragmentation, gaps, barriers) cannot be resolved effectively by a single entity working alone (Salmon, 2004).

One approach to the study of interagency collaboration has been to operationally define this construct using organizational practices and activities as indicators of interagency collaboration. With this approach, several issues related to research design emerge. These include how researchers should collect data about these activities and how these data should be analyzed. A common strategy has been to survey multiple informants within an organization to obtain information about what the organization is doing.

Data collected using this strategy frequently has been analyzed using two different methods. The first method focuses on the individual and ignores clustering of individuals within the organization. The second method assumes that there is sufficient intersubjective agreement among individuals within the organization to aggregate individuals' responses to provide a descriptive measure of the organization.

Each method is problematic. The first method ignores the nesting of individuals within organizations, thus violating the statistical assumption of independence. This violation leads to underestimated standard errors and inflated type I errors (i.e., concluding that there are statistical effects that in fact do not exist). The second method also is problematic because it ignores the potential variability that may exist within organizations. If this within-organization variability is systematically related to characteristics of individuals within the organization and is not taken into account, estimates of relationships between organizational characteristics will be biased.

With recent advances in statistical theory and computational algorithms, these problems can be overcome using statistical techniques referred to as multilevel modeling. Multilevel modeling used in this study provides a methodology for investigating two or more levels of analysis, and partitioning the total variability of scores into within- and between-unit components.

Method

Sample of Agencies and Respondents

Thirty-two child-serving mental health agencies, recruited at a national conference and through personal contacts, agreed to participate in the study, with 23 from California, 6 from Michigan, and 3 from Ohio. Once agencies were selected, employees of the agencies were recruited with the assistance of a site coordinator, who received instructions for delivering, administering, collecting, and returning the surveys.

Three hundred and seventy eight adult professionals agreed to participate. The 104 administrators, 201 service providers, and 73 case managers were primarily female (74%) and White (60%; Hispanic, 27%, African American, 5%; Asian American, 4%; Native American, 1%, Mixed, 1%; Other, 3%), with a mean age of 41.18 years ($SD = 11.13$). The mean length of employment was 65.74 months ($SD = 70.94$).

The sample consisted of 4% with less than a bachelor's degree, 14% with a bachelor's degree, 74% with a master's degree, and 8% with a post-master's degree (e.g., doctorate). The distribution of participants at the various agencies ranged from 1 to 53, with the mean number by agency equal to 11.81.

Instruments

Interagency Collaboration Activities Scale (IACAS; Greenbaum, Lipien, & Dedrick, 2004).

Interagency collaborative activities in the areas of Financial and Physical Resources, Program Development and Evaluation, Client Services, and Collaborative Policies were measured with 17 items. All items were measured on a five-point scale ranging from *Not at all*, 1, to *Very much*, 5. Attitudes Toward Interagency Collaboration were measured with five items. Items were scaled from *Strongly disagree*, 1, to *Strongly agree*, 5. Items covered the perceived benefits and barriers to collaboration and were averaged to form an overall attitude score.

System of Care Practice Review-Self-Report Form (SOCPR-SR). Based on Hernandez et al. (2001), the System of Care Practice Review-Self-Report Form (SOCPR-SR), consisting of 11 items, measured an organization's adherence to the core principles of systems of care at the level of practice. All items were measured on a five-point scale ranging from *Strongly disagree*, 1, to *Strongly agree*, 5.

Characteristics of the agency. Four agency characteristics were examined. The first characteristic was the agency's attitude toward collaboration. This organizational climate variable was created by averaging individuals' personal attitudes toward interagency collaboration into an agency-level variable. The next two characteristics were similarly constructed organizational measures of the extent to which the agency's practices were: (a) child-centered, family-focused and community-based, and (b) culturally competent. These variables were created by averaging the scores from the SOCPR-SR for individuals within each agency. The fourth agency level variable was the state where the agency was located.

Multilevel Analyses of Interagency Collaboration Activities. All multilevel analyses were conducted using HLM 6 software (Raudenbush, Bryk, Cheong, & Congdon, 2004). These analyses were done in stages. In the first stage, an unconditional model was specified in which no predictors were used. From these analyses, the intraclass coefficient (ICC) was computed by examining the variability *between agencies* relative to the total variability. In the next stage, characteristics of the individual respondents were entered into the model as level-1 predictors. In the final analysis stage, level-2 predictors were added to the existing models.

Results

Research Question 1: Within-Agency Variability in Interagency Collaborative Activities and Individual Characteristics

Results from the unconditional multilevel models were used to obtain the estimates of the intraclass correlation coefficients (ICC) for each activity scale. Higher ICC values indicate greater dependence or agency clustering of responses (maximum ICC = 1.0). Clustering effects were greatest for Collaborative Policies (ICC = .204), followed by Financial and Physical Resources (.196), Program Development and Evaluation (.106), and Client Services (.083). These ICC values indicated that there was substantial variability in participants' responses within agencies and also significant ($ps < .05$) variability among agencies.

Within-agency variability was examined using a level-1 model for each of the interagency collaboration activity scales and included the following individual-level predictor variables: (a) age, (b) length of time in the organization, (c) job role (administrator, case manager, and service provider), (d) gender, and (e) educational level.

Multilevel analyses at level-1 were done in two stages. First, each predictor was entered by itself as a level-1 predictor. Subsequently, a final model that included all level-1 predictors was examined.

Results of the series of single predictor models indicated that older respondents reported significantly lower levels of Financial and Physical Resources and Program Development and Evaluation, and those with more education reported less Program Development and Evaluation. The results of Model 1 that included all level-1 predictors indicated that when the other level-1 variables were statistically controlled, age and education were no longer significantly related. These results illustrate that as with traditional multiple regression techniques, effects of predictor variables may change as a result of what variables are in the model and are statistically controlled.

Research Question 2: Between-Agency Variability in Interagency Collaborative Activities and Agency Characteristics

To address this question, the level-2 predictors were added to the models that also included the level-1 predictors. Results of Model 2 indicated that agencies that had positive attitudes toward interagency collaboration had significantly higher levels of interagency collaboration in all four areas of collaboration. For the two system of care variables, Child-Family-Community was significantly related only to Program Development and Evaluation and Cultural Competence was not significantly related to any of the activities.

Discussion

Results from the multilevel analyses revealed substantial within-agency variability in employees' reports of the interagency collaborative activities within their agencies. Participants' age and educational level accounted for significant amounts of the within-agency variability. Notwithstanding these significant relationships, there still remained substantial unexplained within-agency variance. Future research will need to consider other employee variables that may account for this variance.

Results of the level-2 analyses indicated significant variability across agencies, with some activities exhibiting greater between-agency variability (Collaborative Policies and Financial and Physical Resources) than others (Program Development and Client Services). A key explanatory variable was the agency's attitude toward interagency collaboration. Agencies that had more positive attitudes were more actively involved in collaborative activities. While the system of care variable Child-Family-Community was positively related to all four types of collaboration and Cultural Competence was positively related to all except Collaborative Policies, greater adherence to these practices was significantly related to only one type of activity—Program Development and Evaluation.

The results of the present study need to be viewed as preliminary given limitations in the study design. One limitation was that neither agencies nor employees were randomly selected. Therefore, generalizability of the results will need to be viewed with caution. Finally, the multilevel approach used in this study can be expanded to incorporate outcome measures. This approach would connect process and outcomes and provide the evidence-base to inform interagency collaborative practices and policies.

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