

Theory and Research: Chapter 3.2

The Evidence Base and Wraparound

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Over the past 20 years, the wraparound process has become a compelling and highly visible method for working with youth and families with intensive needs. As described in the articles in this *Resource Guide*, wraparound provides a method through which teams come together to create and implement plans to meet needs, achieve outcomes, and improve lives. At the same time, wraparound provides an “on the ground” mechanism for ensuring that core system of care values will guide planning and produce individualized, family-driven and youth-guided support that is community based and culturally competent (Stroul & Friedman, 1996).

Wraparound’s alignment with system of care values and the aims of the family movement have made it extremely popular with states and communities. A 2007 update to the 1998 State Wraparound Survey shows that 42 of 46 U.S. states (91%) that returned a survey have some type of wraparound initiative in the state, with 62% implementing some type of statewide initiative. Over 100,000 youth nationally are estimated to be engaged in a well-defined wraparound process (Sather, Bruns, and Stambaugh, 2008). Compared to other prominent approaches to serving youth with serious and complex needs, wraparound is implemented through more programs and for more youth. Estimates show, for example, that Multisystemic Therapy (MST; Henggeler & Schoenwald, 2002) is received by about 16,000 youths annually, and that Multidimensional Therapeutic Foster Care (MTFC; Chamberlain, 2002) is received by about 1,000 youths (Evidence-Based Associates, 2007).

That wraparound should be such a frequently deployed service delivery model is not surprising. There is broad con-

sensus that the paradigm reflected in wraparound is an improvement over more traditional service delivery methods that are perceived as uncoordinated, inflexible, professional driven, and deficit based. In addition, the President's *New Freedom Commission Report on Mental Health* (US DHHS, 2003) recently concluded that all families with a child experiencing serious emotional disturbance should have an individualized plan of care. This statement further reinforces the need for approaches like wraparound.

In the current era of emphasizing "evidence-based practices," however, all service delivery decisions are legitimately open to scrutiny, regardless of how well they conform to current values of care. After all, there are many competing paradigms that could be used with youth and families who are experiencing intensive needs. These include traditional case management, uncoordinated "services as usual" (in which families negotiate services and supports themselves or with help of a more specialized provider such as a pediatrician or therapist), residential treatment, or inpatient hospitalization.

The picture is becoming increasingly complicated because wraparound is being used in more and more contexts and for more and more purposes. In juvenile justice, wraparound is being used as a means of diverting youth from detention and to help youth successfully transition to the community from secure placement. In child welfare, some state systems, such as Oklahoma, are experimenting with supporting child welfare care workers to use the wraparound model to achieve permanency, stability, and safety outcomes for children, youth and families (Rast & Vetter, 2007). States and localities are also deploying the wraparound process to help adult prisoners re-enter society (see Chapter 1.4), to improve outcomes for high-risk pregnant women (Calleaux & Dechief, 2006), and to meet the needs of many other populations. All these relatively new deployments of the basic wraparound model are alternatives to more traditional (or at least different) approaches to supporting the target population. As such, each of these examples raises the question: Does wraparound work?

Fifteen to 20 years after "wraparound" became common parlance, this is still not a simple question, because wraparound is not a simple

phenomenon. The question is complex for several reasons. First, as noted above, wraparound has been deployed for many different populations. As such, the question "Does wraparound work?" needs to be answered for many different types of populations and proposed outcomes. This makes wraparound different from most treatments or interventions, which were designed to address a specific type of concern, such as, for example, adolescent depression, acting out by young children, or adult panic disorder. Thus, any synthesis of the wraparound evidence base has to ask both about the impact for specific populations as well as its impact overall, across these multiple purposes.

Second, wraparound has been, and continues to be, an evolving phenomenon. Its development lies in "grassroots" movements to care for individuals in the context of their families and communities. No single developer owns wraparound, which means it typically is implemented differently from one site to another. This makes it more difficult to assess the evidence base, because until recently there was little consensus on the specific activities that make up the wraparound process. When a researcher finds no positive impact of wraparound, we must ask "What kind of wraparound was implemented?" and "Was it implemented well?" In addition, since no one "owns" wraparound, the model does not have the same systematic development and testing history as other evidence-based practices, which are often guided through developmental stages by researchers with a significant stake in finding the model to be effective. In contrast, wraparound has been created by family members and provid-

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ers whose first priority is not to oversee rigorous research projects but to do whatever it takes to help families in their community.

Third, wraparound is multi-faceted and individualized. It is typically deployed for families (or adults) with complex and multiple needs, whereas many programs have achieved “evidence-based” status by virtue of their focus on a single problem area or diagnostic category. Focusing on broad populations with complex and overlapping needs makes it harder to find positive impact for several reasons. First, the target population is challenging and implementation is difficult. Second, wraparound projects are often “system-level” initiatives, required to enroll a wide range of children and families, as opposed to those with a specific complaint or concern. This means that target outcomes will be different for each participant, making it harder to find impact, especially when only one or two outcome measures are used (e.g., a standardized behavioral or functional scale).

Wraparound often is conceived as both an individual-level intervention (a defined team-based planning process) and as a “system level” intervention (requiring communities to collectively oversee implementation, agencies to collaborate, the service array to be comprehensive, and so on). As such, it is generally difficult to assess what types of outcomes are appropriate and how to interpret findings. For example, in a very interesting paper, Stambaugh et al. (2007) assessed trajectories of behavioral and functional improvement for N=320 in a system of care for youth with serious emotional and behavioral concerns, the majority of which (n=213) received the wraparound process while a small subgroup (n=54) received multisystemic therapy (MST; Henggeler & Schoenwald, 2002), a specified evidence-based intervention for youths. The authors found similar improvements in functioning for the two groups but somewhat better improvement in behavior for the MST group and concluded that MST was overall more effective.

At the same time, the authors recognized that MST targets a specific population: older youth with antisocial and offending behaviors who are in families that are intact and fully engageable in the intervention. Thus the MST group likely met criteria specific to MST while wraparound was made broadly available youth of all ages with any type of emotional or behavioral disorder. Cast in this

light, the fact that youth in the wraparound group demonstrated quite impressive improvements (despite their heterogeneity and questions about the quality of specific services received) only slightly less positive than the MST group may be viewed as significant support for deploying wraparound as a method for addressing the needs of diverse youth in a large system of care. Regardless of one’s conclusions, the study demonstrates the complexity of interpreting research on wraparound.

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In sum, because there are so many variations of “wraparound,” because it has been a grassroots and evolving phenomenon, and because it is a complex approach that impacts systems as well as individuals, the question “Does wraparound work?” has been difficult to answer. Instead of considering the evidence base on wraparound, it may be more appropriate to frame the issue as the evidence base *and* wraparound. Other articles in this section of the *Resource Guide* are also geared toward this topic, including a review of the theory of change for wraparound (Chapter 3.1), a discussion of fidelity measurement (Chapter 5e.1), and a review of relevant current outcomes studies (Chapter 3.3). In the remainder of this article, we present some of the major themes from the story about the evidence base and wraparound.

1. Current thinking in children’s mental health emphasizes the importance of joining evidence-based practices to family-driven and individualized service processes like wraparound.

Like “wraparound,” the “science-to-service gap” in children’s mental health is a topic that is receiving increased attention among researchers and service providers. Research finds significant impact of treatments for children and youth under controlled conditions, such as laboratory studies where clinicians have low caseloads and intensive supervision and the children or youth have a single problem. But then, when these treatments are administered in actual community settings, they often don’t produce the same positive outcomes. Thus there is a “gap” between what *can* work under ideal conditions, and what *does* work in community settings.

There have been many hypotheses about why this is so often the case. One prominent theory is that clinical services in “real world” communities are not delivered in a way that can achieve positive clinical outcomes. Once transported to a real clinic in a real community, larger case loads, lack of training, limited availability and quality of supervision, staff turnover, and restricted resources all conspire against a treatment that has been found to work under more ideal conditions.

However, research also suggests other problems. First, families tend not to be well engaged with their helping professionals. Second, care is often not well tailored to fit the full range of families’ complex real-world needs. Researchers point to such lack of full engagement, individualization, and comprehensiveness to explain why families often feel the care they receive is not relevant or helpful.

Our interpretation of this broad set of findings is that the science-to-service gap is at least partly due to systems failing to support full engagement of families in the treatments they receive. For families with intensive needs or children with serious emotional and behavioral problems, such full engagement will usually require the creation of highly individualized and creative plans of care that address all the major issues and stresses the family is dealing with. What’s more, such plans will need to respond meaningfully to the needs *as expressed by the family*. A well-implemented wraparound process provides for procedures to accomplish this for families with these most intensive needs. Thus, it is important that research on overcoming the science-to-service gap considers the potential of the wraparound process to improve outcomes in real-world community settings.

At the same time, researchers, advocates, and practitioners must realize that families participating in a wraparound *process* should also have available specific *treatments* (including evidence-based treatments) that might be part of their individualized plan of care. The two are highly compatible; after all, the intent of the wraparound process is to plan and implement the set of services and supports that is most likely to achieve positive outcomes for a family. At the individual youth and family level, this may include one or more empirically supported treatments.

At the organizational and system level, this means developing capacity to make available treatments that will be most beneficial to the target population, and in some cases integrating evidence-based techniques into wraparound itself. For example, a wraparound project in King County, Washington, is training wraparound facilitators in Motivational Interviewing to help address youths’ substance abuse issues. In Maryland, a wraparound project for transition-age youth is making Sup-



ported Employment, an evidence-based practice, available as needed. And, as described by Lucille Eber in this *Resource Guide* (Chapter 5e.4), wraparound as implemented in the context of school-wide Positive Behavior Supports often integrates efforts by clinicians to design effective behavior plans.

The bottom line is that more and more children’s mental health researchers are recognizing the importance of joining evidence-based practices to engagement and service coordination strategies such as wraparound (see, for example, Tolan & Dodge, 2005). The next wave of research on wraparound will likely feature studies of the impact of such innovations.

2. The principles of wraparound are supported by evidence from the research base as well as common sense and social justice.

As described above, current thinking in children’s services supports the idea that the wraparound process holds promise for overcoming

commonly-cited barriers to achieving outcomes for children and families. Additionally, there is research that supports the hypothesis that the wraparound process, when carried out in accordance with the principles, contributes to positive outcomes. This is presented in more detail in Janet Walker's description of the theory of change for wraparound, found in this *Resource Guide*. A summary of support for several of the wraparound principles is described below.

Voice and choice. We have already described some of the reasons “voice and choice” may be critical to achieving outcomes. As discussed above, lack of full family engagement has been found to be a major impediment to treatment success. Research has shown that outcomes for children's mental healthcare tend to be better when families are engaged and retained in services (Huey, Henggeler, Brondino, & Pickrel, 2000; Tolan, McKay, Hanish, & Dickey, 2002). In addition, Heflinger et al. (1996) have created methods for better engaging families, and studies examining these approaches have found that family members' overcoming of negative experiences of past treatments received is critical to achieving engagement, and possibly outcomes. And Spoth & Redmond (2000) have found that family members' belief in the effectiveness of treatment influences engagement and outcomes. These findings and others provide support for the principles of prioritizing the family's perceptions of what the family needs to function better.

Team-based, collaborative planning. Meanwhile, the wraparound principles of “team-based” and “collaborative” have clear support from research across disciplines. Research on teamwork has shown greater success when teams set an overall, long-term goal or mission for the team (Cohen, Mohrman, & Mohrman, 1999; West, Borrill, & Unsworth, 1998), and when team members have clearly defined intermediate goals that help reach the long term goal (Latham & Seijts, 1999; Weldon & Yun, 2000). Effective teams also work carefully to choose strategies for reaching the intermediate goals, structure strategy selection deliberately, and consider several different strategies before choosing one (Hirokawa, 1990; West, Borrill, & Unsworth, 1998). These are all features of a well-implemented wraparound team process.

In the child services research field, Stone and Stone (1983) found that positive child outcomes were more likely to result when foster parents viewed themselves as part of a team with a goal of positive outcomes. Meanwhile, evaluations such as that conducted by Burns & Santos (1995) have found that team-based care for adults with serious mental illness (SMI) was found to be superior to “brokered” case management models. Assertive Community Treatment (ACT; Bond et al., 2001), which uses a team-based approach to aid adults with SMI, has long been a standard for delivering quality care to this population.

Community-based care. One of the signature principles of both wraparound and systems of care philosophy is that care is community based. Though honoring families' desire to obtain support while keeping their children at home is a principle based in social justice and the family movement, delivering care in the natural environment in which a child and family functions is also grounded in theory and research. Bronfenbrenner's (1979) and Bandura's (1977) models stress that to be generalizable, behaviors must be taught in the environment in which they will be practiced. These models underpin many evidence-based approaches to treatment (e.g., behavioral therapies and MST) that are intended to help youth and their families learn the skills they need to adapt more successfully to their everyday environments.

The rationale for insisting on *community-based* treatment models wherever possible does not stop at theory. Many studies (e.g., Pfeiffer et al, 1990) have found that the best predictor of future out-of-home placements is whether out-of-home placement has been used in the past. Other studies show that both placement stability and youth perception of placement stability are significant predictors of

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future outcomes (Dubovitz et al., 1993; James et al., 2006). Thus, assuming that we hope to ensure that young people will eventually live effectively in their home communities, we must strive to prevent unnecessary out-of-home placements. This becomes especially important when we consider that, historically, we have spent a disproportionate amount of our child behavioral service dollars on residential and inpatient care, despite the fact that this treatment approach has the most poorly developed research base of all major child and adolescent treatment options (Burns, Hoagwood, & Maultsby, 1998).

Individualized care. Finally, theory and research both support the importance of *individualized* care for individuals with complex needs. This may explain why individualization is a cornerstone of the wraparound process and systems of care, and also why it is prominent among recommendations of the *New Freedom* report. Several influential psychosocial theories of child development, particularly social-ecological (Bronfenbrenner, 1979) and systems (Munger, 1998) theories, stresses the importance of understanding the unique relationships between the child and various environmental systems (e.g., family, school, community). Effective intervention thus begins from an understanding of the child's unique social, cultural, and interpersonal systems environment, and requires the tailoring of services and supports to this unique set of relationships. Meanwhile, literature on case management for adults with serious mental illnesses has been consistent in its support of more intensive and early tailoring of community supports to client needs (e.g., Ryan, Sherman, & Bogart, 1997). Studies of case management have also found that a greater variety of community-based supports leads to greater client satisfaction and retention in services (Burns et al, 1996).

3. Despite support for the wraparound philosophy, research also has demonstrated a "fidelity problem" in wraparound that is important to overcome.

As described above, both theory and research support the principles of the wraparound process and its potential for impact. In the classic framework for developing a treatment model, theory

and past research are prerequisites for moving forward with model development and tests of effectiveness. However, in the case of wraparound, such empirical testing has been challenged by the very grassroots evolution and individualized nature that has made the model so compelling. Though wraparound is included as a "promising practice" in the Surgeon General's Reports on Mental Health (USPHS, 1999) and Youth Violence (USPHS, 2001), its inclusion was based on its widespread use and testimonials about its importance within service systems. Typically, references to wraparound come with statements about its lack of specification and thin evidence for effectiveness. For example, in their review of treatments for youth with SED, Farmer, Dorsey, & Mustillo (2004) described the wraparound evidence base as being "on the weak side of positive."

Perhaps even more problematic, wraparound's history of being "value based" rather than explicitly described (Malysiak, 1998) has caused a "fidelity problem" that results in confusion for providers and families, and potentially poorer outcomes for children and youth. Even early on, there were warnings about defining the process and maintaining its integrity. As Clark & Clarke stated in 1996:

The push to rapidly implement wraparound approaches has resulted in a plethora of service models that vary widely in their implementation, processes, structures, and theories. While this push has been an important part of... the shift to less restrictive, more integrated community-based service alternatives, it has also resulted in an unsystematic application of the wraparound process (p.2).

Research eventually supported these early concerns. In observing over 70 wraparound meetings in 11 programs nationally, Walker and colleagues (2003) found that less than one-third of teams maintained a plan with team goals. Only about 20% of teams considered more than one way to meet a family's stated need. Only 12% of interventions reviewed were individualized or created just for that family. Finally, only about half the teams included a team member in the role of natural or peer support for the family (another 32% had only one such support). Meanwhile,

studies with our Wraparound Fidelity Index (WFI; Bruns et al, 2004) have found similar results about the “fidelity problem.”

The issue of defining, maintaining, and measuring fidelity in wraparound is discussed in another chapter of this *Resource Guide* (Chapter 5e.1). The point is that, despite the widespread promotion of wraparound principles such as being team based, individualized, outcome based, and relying on natural supports, our research suggests these principles are much more difficult to do in real-world practice than they are to embrace in principle. Programs and communities need help to move



from values to high-quality practice if we are to overcome the fidelity problem in wraparound. The pathway to accomplishing this includes ensuring that the wraparound process being implemented is well understood by both core and partner agency staff, and that adequate support is provided to families, teams, and providers to make sure that such a process can occur. The topic of how best to provide such support is also discussed later in this *Resource Guide* (Chapter 5a.1).

4. When high-fidelity wraparound is delivered, there is a greater potential for positive impact for families.

Research documenting the fidelity problem in wraparound begs the question: How important is it to achieve the wraparound principles when working with families? This question is only now being addressed, but results from some preliminary studies suggest that it may be quite impor-

tant. Bruns et al. (2004) have found that families with higher WFI scores in the first six months of service achieved better outcomes in areas such as child behavior, residential restrictiveness, and parent satisfaction at both six months and down the line at 12 months after entry to service. Similar results were achieved in a study by Hagen, Noble, and Schick (2003), who studied the impact of different levels of wraparound fidelity on child negative and positive behaviors. Rast and Peterson (2004; described in Bruns et al., 2006) found that facilitators who were more adherent to the wraparound model had youth and families who experienced better outcomes.

5. Achieving high-fidelity wraparound is a big challenge, requiring significant effort and resources.

The findings reported in the previous section provide evidence that communities that wish to achieve positive outcomes for families via the wraparound process must fully support “high-fidelity” wraparound. However, this is more easily said than done. Once a model for wraparound is well understood, with policies and procedures incorporated that reflect it, families, teams, and providers must be well supported to implement it. High quality training and staff support is necessary, as is the overall level of support to wraparound teams provided within the policy and funding context, often known as “the system.” This issue is discussed in a separate article in this *Resource Guide*, and in an influential monograph by Walker, Koroloff, & Schutte (2003; see Appendix 6f). In this monograph, the authors describe the major types of supports required by wraparound teams, all of which need to be present in different ways at the team, organization, and system levels. After further research, these supports were summarized in six major areas, including:

1. **Community Partnership.** Collective community ownership of and responsibility for wraparound is built through collaborations among key stakeholder groups.
2. **Collaborative Action.** Stakeholders involved in the wraparound effort take concrete steps to translate the wraparound philosophy into concrete policies, practices and achievements.

3. **Fiscal Policies and Sustainability.** The community has developed fiscal strategies to meet the needs of children participating in wraparound and methods to collect and use data on expenditures for wraparound-eligible children.
4. **Access to Needed Supports & Services.** The community has developed mechanisms for ensuring access to the wraparound process and the services and supports that wraparound teams need to fully implement their plans.
5. **Human Resource Development & Support.** The policy and funding context supports wraparound staff and partner agency staff to work in a manner that allows full implementation of the wraparound model.
6. **Accountability.** The community has implemented mechanisms to monitor wraparound fidelity, service quality, and outcomes, and to assess the quality and development of the overall wraparound effort.



ity activity being undertaken in hundreds of communities nationally (Sather, Bruns, & Stambaugh, 2008). In addition, providers and family members alike endorse the effectiveness of the wraparound process. One major survey of 615 providers working within the CMHS-funded systems of care communities demonstrated that 77% of all providers (18% of whom implemented wraparound personally) believed wraparound resulted in positive outcomes for youth and families. Interestingly, this percentile was higher than for several prominent treatment types with evidence for effectiveness, including

MST (68%) Treatment Foster Care (67%) and Functional Family Therapy (49%) (Walrath, Sheehan, & Holden, 2004).

Unfortunately, we have learned that it is much easier to embrace the wraparound principles in theory than to actually do them in practice. Nonetheless, when model-adherent wraparound is achieved, it may well pay off in the form of better outcomes for families. To achieve such high fidelity, we need to:

- Have a good understanding of what faithfully implemented wraparound is,
- Provide adequate training and support to providers and partner agencies to do it, and
- Work with our organizations and systems to support it by setting up a hospitable policy and funding context.

Though embracing and supporting the model is a challenge for many, the enthusiasm for wraparound continues to be fueled by success stories from communities, evaluation studies, and individual families. The formal research base, described in detail in another article in this *Resource Guide* (Chapter 3.3), is small but growing. Such research findings are further supported by lessons that have been learned by local communities. In Milwaukee, for example, Wraparound Milwaukee has served over 700 youths via wraparound. As a result, the county's expenditures for out-of-

Research is beginning to show the importance of achieving these types of supports in communities that wish to use the wraparound process. In one study, Bruns, Suter, Leverentz-Brady, & Burchard (2006) administered a survey to officials in ten communities that were implementing wraparound programs. These communities were also using the WFI to monitor wraparound fidelity. Results showed that higher wraparound fidelity was achieved in communities with more system and program supports.

6. What we have learned about wraparound so far is highly encouraging, and tells us we are on the right track.

We have learned much in recent years about wraparound from both experience and research. We have learned that administering individualized, team-based care planning and management to families with intensive needs is a high-prior-

home placements have been drastically reduced (Kamradt, 2001). Similar community-level results found in Ventura County (and later, 3 additional California counties) in the late 1980s and early 1990s (Rosenblatt & Attkison, 1992) were attributed to the implementation of a systems of care approach to integrating services, and a wraparound-style care management model. Other prominent examples abound, including the Dawn Project in Indianapolis. These evaluations have found that youth served by the wraparound program show better improvements in clinical functioning and less likelihood of re-entry to public systems such as juvenile court or probation, at lower overall expenditures, compared to youth served by traditional means (Indiana Consortium for Mental Health Services Research, 2003).

Finally, success stories from families and providers alike abound. Some are captured in monographs (e.g., Burchard, Burchard, Sewell, & VanDenBerg, 1993; Burns & Goldman, 1999; Kendziora, Bruns, Osher, & Mejia, 2001), but many more are found in the stories told by family members and their advocates in communities across the country. Though research on the wraparound process has been challenging and slow to develop, there is a clear alignment between research and the evidence base. Though we will continue to refine the formal research base on wraparound, the enthusiasm for this important service approach, perhaps more than any other evidence, comes from these families' stories.

References

- Angold, A., Messer, S.C., Stangl, D., Farmer, E.M.Z., Costello, E.J., & Burns, B.J. (1998). Perceived parental burden and service use for child and adolescent psychiatric disorders. *American Journal of Public Health, 88*, 75-80.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bickman, L., Lambert, E.W., Andrade, A. R., Penaloza, R. V. (2000). The Fort Bragg continuum of care for children and adolescents: Mental health outcomes over 5 years. *Journal of Consulting & Clinical Psychology, 68*, 710-716.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Bruno, E.J., Burchard, J.D., Suter, J.C., Force, M.D., & Leverentz-Brady, K. (2004). Assessing fidelity to a community-based treatment for youth: the Wraparound Fidelity Index. *Journal of Emotional and Behavioral Disorders, 12*, 69-79
- Bruno, E.J., Suter, J.C., Burchard, J.D., Leverentz-Brady, K., & Force, M.D. (in press). Fidelity to the wraparound process and its association with child and family outcomes. *Journal of Child and Family Studies*.
- Bruno, E.J. (2004). *The importance of authentic wraparound to achieving outcomes for children and families*. Keynote research address at the Circle Around Families Evaluation Conference, Merrillville, IN.
- Bruno, E.J., Suter, J.D., Leverentz-Brady, K., & Burchard, J.D. (2004). A national portrait of wraparound implementation. In C. Newman, C. Liberton, K. Kutash, & R.M. Friedman (Eds.), *The 16th Annual Research Conference Proceedings: A System of Care for Children's Mental Health*. Tampa: University of South Florida, Florida Mental Health Institute Research and training Center for Children's Mental Health.
- Burchard, J.D., Bruno, E. J., & Burchard, S.N. (2002). The wraparound process. In B. Burns, & K. Hoagwood, *Community treatment for youth: Evidence-based treatment for severe emotional and behavioral disorders*. New York: Oxford University Press.
- Burchard, J.D., Burchard, S.N., Sewell, R., & VanDenBerg, J. (1993). *One kid at a time: Evaluative case studies and descriptions of the Alaska Youth Initiative Demonstration Project*. Washington, DC: SAMHSA Center for Mental Health Services.
- Burns, B.J., & Goldman, S.K. (1999). Promising practices in wraparound for children with serious emotional disturbance and their families. *Systems of care: Systems of care: Promising practices in children's mental health, 1998 series, Vol. IV: Promising practices in wraparound for children with severe emotional disorders and their families*. Washington D.C.:

- Center for Effective Collaboration and Practice, American Institutes for Research.
- Burns, B.J., Hoagwood, K., & Maultsby, L. T. (1998). Improving outcomes for children and adolescents with serious emotional and behavioral disorders: Current and future directions. In M.H.Epstein, K. Kutash, & A. Duchnowski (Eds.), *Outcomes for children and youth with behavioral and emotional disorders and their families*. Austin, TX: Pro-Ed.
- Burns, B.J. & Santos, A.B. (1995). Assertive Community Treatment: An Update of Randomized Trials, *Psychiatric Services*, 46, 669-675.
- Burns, B.J., Farmer, E.M.Z., Angold, A., Costello, E.J., Behar, L. (1996). A randomized trial of case management for youths with serious emotional disturbance. *Journal of Clinical Child Psychology*, 25, 476-486.
- Burns, B.J., Hoagwood, K., & Maultsby, L.T. (1998). Improving outcomes for children and adolescents with serious emotional and behavioral disorders: Current and future directions. In M.H.Epstein, K. Kutash, & A. Duchnowski (Eds.), *Outcomes for children and youth with behavioral and emotional disorders and their families*. Austin, TX: Pro-Ed.
- Clarke, H.B., Prange, M., Lee, B., Stewart, E.S., McDonald, B.A., & Boyd, L.A. (1998). An individualized wraparound process for children in foster care with emotional/behavioral disturbances: Follow-up findings and implications from a controlled study. In M.Epstein, K. Kutash, & A. Duchnowski (Eds.), *Outcomes for children and youth with emotional and behavioral disorders and their families* (pp. 513-542). Austin, TX: PRO-ED.
- Evans, M.E., Armstrong, M.I., & Kupperinger, A.D. (1996). Family-centered intensive case management: a step toward understanding individualized care. *Journal of Child and Family Studies*, 5, 55-65.
- Faw, L. (1999). The state wraparound survey. In B.J. Burns & S.K. Goldman (Eds.), *Systems of care: Promising practices in children's mental health, 1998 series, Vol. IV: Promising practices in wraparound for children with severe emotional disorders and their families* (pp. 27-32). Washington DC: Center for Effective Collaboration and Practice, American Institutes for Research.
- Greenbaum, P.E., Dedrick, R.F., Friedman, R. M., Kutash, K., Brown, E.C., Lardieri, S. P., & Pugh, A. M. (1996). National Adolescent and Child Treatment Study (NACTS): Outcomes for children with serious emotional and behavioral disturbance. *Journal of Emotional and Behavioral Disorders*, 4, 130
- Hagan, D., Noble, K.J., & Schick, C. (2003). An examination of wraparound fidelity and impact on behavioral outcomes. In C. Newman, C. Liberton, K. Kutash, & R.M. Friedman (Eds.), *The 16th Annual Research Conference Proceedings: A System of Care for Children's Mental Health*. Tampa: University of South Florida, Florida Mental Health Institute Research and training Center for Children's Mental Health.
- Heflinger, C.A., Bickman, L., Northrup, D. & Sonnichsen, S. (1997). A theory-driven intervention and evaluation to explore family caregiver empowerment. *Journal of Emotional and Behavioral Disorders*, 5, 184-191.
- Henggeler, S.W., Schoenwald, S.K., Borduin, C.M., Rowland, M.D., & Cunningham, P.B. (1998). *Multisystemic treatment for antisocial behavior in children and adolescents*. New York: Guilford Press.
- Huey, S.J., Henggeler, S.W, Brondino, M.J & Pickrel, S.G. (2000). Mechanisms of change in multisystemic therapy: Reducing delinquent behavior through therapist adherence and improved family and peer functioning. *Journal of Consulting & Clinical Psychology*, 68, 451-467.
- Indiana Consortium for Mental Health Services Research. (2003). *Fifth annual evaluation report*. Downloaded September 2004 from www.kidwrap.org.
- James, S, Leslie, LK, Hurlburt, MS, et al. (2006). Children in Out-of-Home Care: Entry Into Intensive or Restrictive Mental Health and Residential Care Placements. *Journal of Emotional and Behavioral Disorders*, 14, 196-208.
- Jensen, P.S. (2004). *Implications of the Multimodal Treatment of ADHD Study*. Colloquium

- presented to the University of Maryland School of Medicine, Baltimore, MD.
- Kamradt, B. (2001). Wraparound Milwaukee: Aiding youth with mental health needs. *Juvenile Justice*, 7, 14-23.
- Kazdin, A. E. (2000). *Psychotherapy for children and adolescents: Directions for research and practice*. New York: Oxford University Press.
- Kendziora, K., Bruns, E.J., Osher, D., Pacchiano, D., & Mejia, B. (2001). *Wraparound: Stories from the field. Systems of care: Promising practices in children's mental health, 2001 series, Vol. I*. Washington, DC: Center for Effective Collaboration and Practice, American Institutes for Research.
- Malysiak, R (1998). Deciphering the Tower of Babel: Examining the theory base for wraparound fidelity. *Journal of Child and Family Studies*, 7, 11-25
- Mesch, J., Fahr, J.L., & Podsakoff, P. M. (1994). Effects of feedback sign on group goal setting, strategies, and performance. *Group and Organization Management*, 19, 309-333.
- Munger, R. L. (1998). *The ecology of troubled children*. Cambridge, MA: Brookline Books.
- Owens, P.L., Hoagwood, K., Horwitz, S.M., Leaf, P.J., Poduska, J.M., Kellam, S.G., & Ialongo, N.S. (2002). Barriers to children's mental health services. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41, 731-8.
- Pfeiffer S.I. & Strzelecki, S.C. (1990). Inpatient psychiatric treatment of children and adolescents: A review of outcome studies. *Journal of the American Academy of Child and Adolescent Psychiatry*, 6, 847-53.
- Rast, J., Peterson, C., Earnest, L., & Mears, S. (2003). *Treatment effectiveness: Comparing service process between wraparound and traditional mental health services*. In C. Newman, C. Liberton, K. Kutash, & R.M. Friedman (Eds.), *The 16th Annual Research Conference Proceedings: A System of Care for Children's Mental Health*. Tampa: University of South Florida, Florida Mental Health Institute Research and training Center for Children's Mental Health.
- Rosenblatt, A., Attkisson, C.C., & Fernandez, A. J. (1992). Integrating systems of care in California for youth with severe emotional disturbance: II. Initial group home expenditure and utilization findings from the California AB377 Evaluation Project. *Journal of Child and Family Studies*, 1, 263-286.
- Ryan, C.S., Sherman, P.S., & Bogart, L.M. (1997). Patterns of services and consumer outcome in an intensive case management program. *Journal of Consulting and Clinical Psychology*, 65, 485-493.
- Spoth, R., & Redmond, C. (2000). Research on family engagement in preventive interventions: Toward improved use of scientific findings in primary prevention practice. *Journal of Primary Prevention*, 21, 267-284.
- Stone, N.M., & Stone, S. F. (1983). The prediction of successful foster placement. *Journal of Contemporary Social Work*, 1, 11-17.
- Stroul, B. (2002). *Issue Brief: Systems of Care - A Framework for System Reform in Children's Mental Health*. Washington, DC: National TA Center for Children's Mental Health.
- U.S. Department of Health and Human Services (2003). *New Freedom Initiative on Mental Health*. Downloaded January 22, 2004 from www.mentalhealthcommission.gov/reports/FinalReport.
- U.S. Public Health Service (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- U.S. Public Health Service (2001). *Youth violence: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- Walker, J.S. & Bruns, E.J. (Eds.) (2003). Quality and fidelity in wraparound. *Focal Point: A national journal on family support and children's mental health*, 17.
- Walker, J.W. & Schutte, K. (in press). Practice and process in wraparound teamwork. *Journal of*

Emotional and Behavioral Disorders.

Walker, J.S., Koroloff, N., & Schutte, K. (2003). *Implementing high-quality collaborative individualized service/support planning: Necessary conditions.* Portland, OR: Research and Training Center on Family Support and Children's Mental Health.

Walrath, C.M., Sheehan, A., & Holden, E.W. (2004). *Evidence-based practice: Provider knowledge, training, and practice.* Atlanta: ORC Macro, Inc.

Walrath, C. (2001). *Evaluation resources and needs assessment.* Unpublished report to ORC Macro, Inc.

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