

*Process of Care
& Fidelity of Intervention*



Chapter 6

Chapter 6: Process of Care & Fidelity of Intervention

Therapeutic Alliance: Significance in Non-Psychotherapy Settings

Introduction

In theory therapeutic alliance transcends all systems of psychotherapy, serving as a therapeutic element that must be present to produce client change independent of client disorder or problem (Bordin, 1979). The construct of alliance emerged in part because client, therapist, and technique variables were accounting for so little variance in studies attempting to predict client outcome (Hartley & Strupp, 1983). The therapeutic alliance, also known as the working alliance (Horvath, 1994b), or the helping alliance, is to date the most widely researched transtheoretical factor.

Numerous studies of therapeutic alliance have found a relationship between alliance and a range of clinical outcomes (Gaston, 1990; Horvath & Symonds, 1991; Klee, Abeles, & Muller, 1990; Luborsky & Auerbach, 1985; Sexton & Whitson, 1994). In a meta-analysis of 20 therapeutic alliance studies, Horvath and Symonds (1991) found that alliance predicted outcomes when it was measured early in treatment (1-5 sessions) as well as later in therapy or at termination.

Despite the growing "...consensus among child therapists that a positive bond between child and therapist is essential for effective therapy" (Shirk & Saiz, 1992; p. 716), and the extensive literature on therapeutic alliance with adult, adolescent psychotherapy research has not focused substantially on the therapeutic relationship (Shirk & Saiz, 1992). The studies that do exist in the adolescent research literature to date support the importance of further investigation of therapeutic alliance in child and adolescent psychotherapy (e.g., Eltz, Shirk, & Sarlin, 1995).

However, there has been very little work done on therapeutic alliance with children and adolescents (e.g., Adolescent Working Alliance Inventory [AWAI]: Linscott, DiGiuseppe, & Jilton, 1993; Therapeutic Alliance Scales for Children: Shirk & Saiz, 1992). Existing instruments have generally used adult literature constructs and applied them to children and adolescents. We believe that alliance measurement domains should be created specifically for children and adolescents.

Method

This paper presented a preliminary report for development of context-specific therapeutic alliance measures. Data was collected from two different mental health settings, the Pressley Ridge PRYDE (Pressley Ridge Youth Development Extension) program for therapeutic foster care and the Pressley Ridge School at Ohiopyle therapeutic wilderness camp, to develop therapeutic alliance measures specifically applicable to different mental

Jeffrey J. Sapyta, B.Sc.
Research Associate
Department of Psychology
E-mail: jeff.sapyta@vanderbilt.edu

Marc S. Karver, M.S.
Research Associate
Department of Psychology
E-mail:
karver@uansv5.vanderbilt.edu

Leonard Bickman, Ph.D.
Director, Center for Mental
Health Policy
Professor of Psychology,
Psychiatry, and Public Policy
E-mail: bickman@attglobal.net

Center for Mental Health Policy
Vanderbilt University
1207 18th Ave. South
Nashville, TN 37212
615/343-1658 Fax: 615/322-7049

Correspondence concerning these conference proceedings should be addressed to Jeff Sapyta, Center for Mental Health Policy, Vanderbilt University, 1207 18th Ave. South, Nashville, Tennessee 37212 or e-mail at jeff.sapyta@vanderbilt.edu.

health settings. The following study attempted to take a broader look at therapeutic alliance by including domains not typically theorized but seemed relevant to mental health treatment with children and adolescents; both were non-psychotherapeutic sites.

One hundred fourteen therapeutic alliance items were generated from exploration of the child mental health services literature, the therapeutic alliance literature, discussion with experts, and clinical experience. The preliminary alliance items were developed to cover ten domains presumed to be potentially important for a good helper-adolescent therapeutic alliance (see Table 1).

Phase 1 and 2

In Phase 1, both non-psychotherapy therapeutic sites were given forms to rate the domains and

individual items on their clarity and relevancy. Ten foster care parents/supervisors from PRYDE and thirty-five counselors/supervisors/administrators from the Ohiopyle wilderness camp completed stakeholder questionnaires to rate the alliance domains/items on their applicability to their program. Implementing stakeholder questionnaires, it was necessary to provide endorsed domains and items content validity.

In Phase 2, ratings and feedback from the stakeholder interviews were implemented at the Ohiopyle site to administer an alliance instrument to the population of adolescents at the Ohiopyle wilderness camp. From the original 114 item pool, 74 were selected verbatim, edited, or added to comply with the ratings/suggestions that were found in Phase 1. Data from Phase 2 were used to determine

Table 1
List of Potentially Relevant Therapeutic Alliance
Domains for Adolescent-Helper Relationships

Domain	Description
Openness/truthfulness	The degree to which the child feels safe enough in the helping relationship to reveal thoughts, feelings, past behaviors, and so forth
Supportive caring	The degree to which the child perceives the helper as providing or being willing to provide the help that is needed
Security, stability, and continuity	The degree to which the child feels that the helping setting is a safe place with reliable expectations
Nonjudgmental attitude	The child’s perceptions about the helper’s positive and negative attitudes or behaviors by discerning what the helper says or does in the helper-child interactions
Bond	Degree to which mutual attachment, trust, respect, liking, commitment, and acceptance are felt in the relationship
Clarity of helper	Degree to which the child feels the helper is understandable
Goals	Degree to which the helper and child agree on what the child needs to accomplish in the setting
Perceptiveness of the helper	The child’s perception of how well the helper is able to detect and/or identify the child’s thoughts and emotions
Rules	The child’s perception of the helper’s use of rules and punishment
Conflict	The child’s perception of negative interactions with the helper

preliminary reliability and validity ratings of the 74 remaining alliance items. We also administered the AWAI to the adolescents in order to determine construct and convergent validity.

Results

In both the therapeutic foster care and wilderness camp setting, most proposed domains were rated highly by the stakeholders in Phase 1. Eight of the domains were rated as very relevant on a 5 point scale and the remaining two were rated as somewhat relevant. The domains of openness/truthfulness and supportive caring were deemed the most important in the therapeutic foster parent-child relationship while agreement on goals and clarity were seen as least relevant. In the Ohiopyle wilderness setting, all domains were rated as very relevant or somewhat relevant except for the Conflict domain. The original item pool was pruned to 74 and all the conflict items were dropped.

In Phase 2, reduced item pool was further reduced based on item analysis from the Ohiopyle adolescent data. Criteria for dropping items from the pool were significantly lower item-total correlation based on the respective item's domain or if the reliability of the domain (i.e., Cronbach's alpha) would significantly improve if an item was dropped. The final pool of

items by domain and their respective reliabilities are provided in Table 2. Most domains, with the exception of nonjudgmental attitude, had acceptable internal consistency (Nunnally, 1978). The final pool of items was also compared to ratings on the AWAI (see Table 2). All domains were moderately correlated with the AWAI with the exception of nonjudgmental attitude. The findings are not surprising since the measures should be related—but not too related—since the AWAI was originally constructed for adolescents in traditional psychotherapy.

Implications

Described are the beginning steps for developing robust context-specific therapeutic alliance measures for adolescents in non-psychotherapy settings. The initial instrument for wilderness camps is promising. A next step will be to further refine these instruments so they will be acceptable measures for the respective settings. Another interesting finding for future alliance research is the differences in domain importance rated by stakeholders in the two therapeutic settings. Most research to date on alliance has centered on the common factors of alliance that are applicable to all psychotherapies (e.g., Horvath, 1994a). However, Bordin (1979) actually postulated that different types of therapy “can be differentiated

Table 2
Phase 2: Final Pool Item Totals, Domain Reliabilities, and
AWAI Correlations Based on Ohiopyle Wilderness Camp Adolescent Data

Domain	Number of Items	Cronbach's Alpha	AWAI correlation
Perceptiveness	5	.87	.36
Bond	5	.87	.35
Supportive caring	9	.86	.36
Clarity	5	.83	.38
Openness/truthfulness	4	.82	.29
Security, stability, and continuity	3	.82	.33
Goals	6	.79	.59
Rules	3	.74	.35
Nonjudgmental attitude	3	.63	.19
Final Pool Total	43	.96	.46

Note: Adolescent Working Alliance Inventory (AWAI; Linscott, DiGiuseppe, & Jilton, 1993)

most meaningfully in terms of the kind of working alliance each requires." (Bordin, 1979, p. 253). Perhaps the nature of therapeutic alliance could vary based on the type of therapeutic intervention implemented.

References

- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy, 16*, 252-260.
- Eltz, M. J., Shirk, S. R., & Sarlin, N. (1995). Alliance formation and treatment outcome among maltreated adolescents. *Child Abuse and Neglect, 19*, 419-431
- Gaston, L. (1990). The concept of the alliance and its role in psychotherapy: Theoretical and empirical considerations. *Psychotherapy, 27*, 143-153.
- Hartley, D. E., & Strupp, H. H. (1983). The therapeutic alliance: Its relationship to outcome in brief psychotherapy. In J. Masling (Ed.), *Empirical studies of psychoanalytical theories* (pp. 1-37). Hillsdale, NJ: The Analytic Press.
- Horvath, A. O. (1994a). Empirical validation of Bordin's pantheoretical model of the alliance: The working alliance inventory perspective. In A.O. Horvath, & L.S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp.259-286). New York: John Wiley & Sons, Inc.
- Horvath, A. O. (1994b). Research on the alliance. In A.O. Horvath, & L.S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp.259-286). New York: John Wiley & Sons, Inc.
- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology, 38*, 139-149.
- Klee, M. R., Abeles, N., & Muller, R. T. (1990). Therapeutic alliance: Early indicators, course, and outcome. *Psychotherapy, 27*, 166-174.
- Linscott, J., DiGiuseppe, R., & Jilton, R. (1993, August). *A measure of therapeutic alliance in adolescent psychotherapy*. Poster session at the 101st annual convention of the American Psychological Association, Toronto, Ontario, Canada.
- Luborsky, L., & Auerbach, A. (1985). The therapeutic relationship in psychodynamic psychotherapy: The research evidence and its meaning for practice. In R. Hales & A. Frances (Eds.), *Psychiatry Update*. American Psychiatric Association Annual Review, Vol. 4. Washington, D.C.: American Psychiatric Association
- Nunnally, J.C. (1978). *Psychometric theory* (2nd edition). New York: McGraw-Hill.
- Sexton, T.L. & Whitson, S.C. (1994). The status of the counseling relationship: An empirical review, theoretical implications, and research directions. *Counseling Psychologist, 22*, 6-78.
- Shirk, S.R. & Saiz, C.C. (1992). Clinical, empirical, and developmental perspectives on the therapeutic relationship in child psychotherapy. *Development and Psychopathology, 4*, 713-728.

Mechanisms of Change in Multisystemic Therapy with Delinquent Youth

Introduction

Therapist and contextual mechanisms through which Multisystemic Therapy (MST; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998) achieves reductions in delinquent behavior were examined. Using multiple informants and partial least squares estimation procedures, the causal links between MST adherence and functional outcomes in delinquent youth receiving treatment were evaluated.

Method

Procedures and Participants

Participants were 57 violent and chronic juvenile offenders who had participated in a randomized trial of MST (Henggeler, Melton, Brondino, Scherer, & Hanley, 1997), and represented a subsample of those assigned to the MST condition. The youth were predominantly male (83%), with an average age of 14.6 years. Seventy-seven percent were African American and 23% Caucasian.

Measures

Assessment was completed at pre- and post-treatment. Adherence to MST was assessed via caretaker, youth, and therapist ratings on the 26-item MST Adherence Measure (Henggeler & Borduin, 1992). Quality of family functioning was evaluated using parent and adolescent reports on the Family Assessment Measure (FAM-III; Skinner, Steinhauer, & Santa-Barbara, 1983). Parent monitoring behavior was assessed using parent and youth reports on the Monitoring Index (Brown, Dishion, & Kavanagh, 1991). Affiliation with delinquent peers was assessed using three peer-relevant items ($\alpha = .70$) from caregiver ratings on the Revised Behavior Problem Checklist (RBPC; Quay & Peterson, 1987). Finally, the frequency and severity of delinquent behavior was derived from adolescent self-report on the General Delinquency subscale of the Self-Report Delinquency Scale (SRD; Elliott, Ageton, Huizinga, Knowles, & Canter, 1983; Elliott & Huizinga, 1983), and selected items from caretaker report on the RBPC ($\alpha = .82$).

Data Analytic Strategy

Latent Variable Path Analysis with Partial Least Squares estimation procedures (LVPLS; Falk & Miller, 1991; Lohmoeller & Wold, 1984; Wold, 1975) was used to analyze the model. The root mean square covariance (RMS COV) was used as an overall index of model fit (Falk & Miller, 1992). An RMS COV coefficient above .20 represents a model with inadequate fit, whereas a coefficient of zero represents a perfect fit.

Stanley J. Huey, Jr., Ph.D.

Research Assistant Professor
843/876-1868 Fax: 843/876-1808
E-mail: hueysj@musc.edu

Scott W. Henggeler, Ph.D.

Professor
843/876-1800 Fax: 843/876-1845

Michael J. Brondino, Ph.D.

Assistant Professor
843/876-1800 Fax: 843/876-1845

Family Services Research Center
Medical University of South Carolina
67 President St., P.O. Box 258861
Charleston, SC 29425

Because LVPLS makes no assumptions about the distributional characteristics of the variables or sample size, evaluation of paths using traditional tests of significance is considered inappropriate. Thus, paths are deemed “substantial” when the predictor variable contributes at least 1.5 percent of the variance of a predicted variable, according to Falk and Miller (1992).

Results

Caregiver Ratings of Adherence

Figures 1 and 2 present the model outcomes for caregiver ratings of therapist adherence. Paths from adherence to each of the post-treatment constructs represent the effects of therapist adherence on changes in the outcome variables. Similarly, the paths among post-treatment outcome variables reflect how changes in one outcome variable are associated with changes in another. Figure 1 indicates that, in addition to its direct effect, adherence contributed indirectly to reductions in delinquent behavior through its direct effect on family functioning and indirect effect on peer affiliation. This model yielded an RMS COV value of .05, indicating an adequate fit between the model and the data. Figure 2 indicates that MST adherence was directly associated with improvement in parent monitoring and reductions in delinquent behavior over time. In addition, adherence had an indirect effect on delinquent behavior through its direct effect on parent monitoring and indirect effect on peer affiliation. The RMS COV value of .07 suggested an adequate fit to the data.

Youth and Therapist Ratings of Adherence

Table 1 shows the structural coefficients of the paths of theoretical importance for models utilizing youth and therapist ratings of adherence. These models reveal that three of the four paths from adherence to the family/parenting domains were substantial and in the expected direction¹. In addition, for each of the models, adherence appeared to contribute indirectly to reductions in delinquent behavior through its effects on family/

parent functioning and peer affiliation. The model fit was adequate for each model.

Thus, when youth and therapist reports of adherence were examined in conjunction with caregiver ratings, general support was found for the role of adherence in improving family, peer, and youth functioning — directly and indirectly.

Discussion

Our data supports the assertion that when family relations (i.e., quality of family functioning and parent monitoring) and quality of peer affiliation improve, delinquent behavior decreases. The data provides significant evidence for a core assumption among family systems theorists and researchers: that improvement in the parental subsystem contributes to reductions in problem behavior among disturbed youth (Henggeler & Borduin, 1990; Mann, Borduin, Henggeler, & Blaske, 1990; Miller & Prinz, 1990). However, our study is fairly unique in that it incorporated another important mediating domain not typically addressed in individual- or family-based treatment models; i.e., peer relations. Finally, our results indicated that adherence to MST was pivotal in achieving these outcomes. This study should be considered an initial step towards the goal of discerning the complex mechanisms through which MST contributes to behavior change.

References

- Brown, G., Dishion, T., & Kavanagh, K. (1991). *Monitoring Technical Report (102)*. Eugene, Oregon: Oregon Social Learning Center.
- Elliott, D. S., Ageton, S. S., Huizinga, D., Knowles, B. A., & Canter, R. J. (1983). *The prevalence and incidence of delinquent behavior: 1976-1980 (26)*. Boulder, Colorado: Behavioral Research Institute.
- Elliott, D. S., & Huizinga, D. (1983). Social class and delinquent behavior in a National Youth Panel. *Criminology*, 21(2), 149-177.
- Falk, R. F., & Miller, N. B. (1991). A soft models approach to family transitions. In P. A. Cowan & M. Hetherington (Eds.), *Family Transitions* (pp. 273-301). Hillsdale, NJ: Lawrence Erlbaum.
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. Akron, OH: University of Akron Press.

¹ Evaluation of the single indicator for the therapist-rated adherence latent variable in the Monitoring Model suggests that this construct appears to represent a *failure to adhere* to MST. Thus, the negative path from adherence to parent monitoring is consistent with our hypothesis.

Mechanisms of Change in Multisystemic Therapy

Figure 1
Impact of MST adherence (caretaker report) on delinquent behavior: Direct and indirect effects through family functioning and delinquent peer affiliation

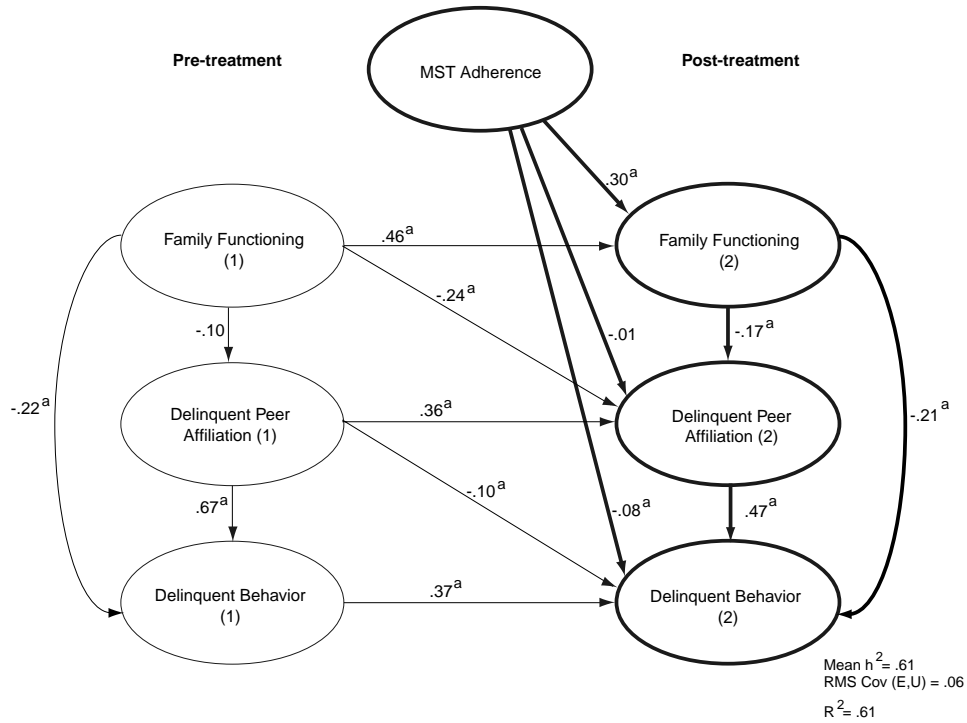
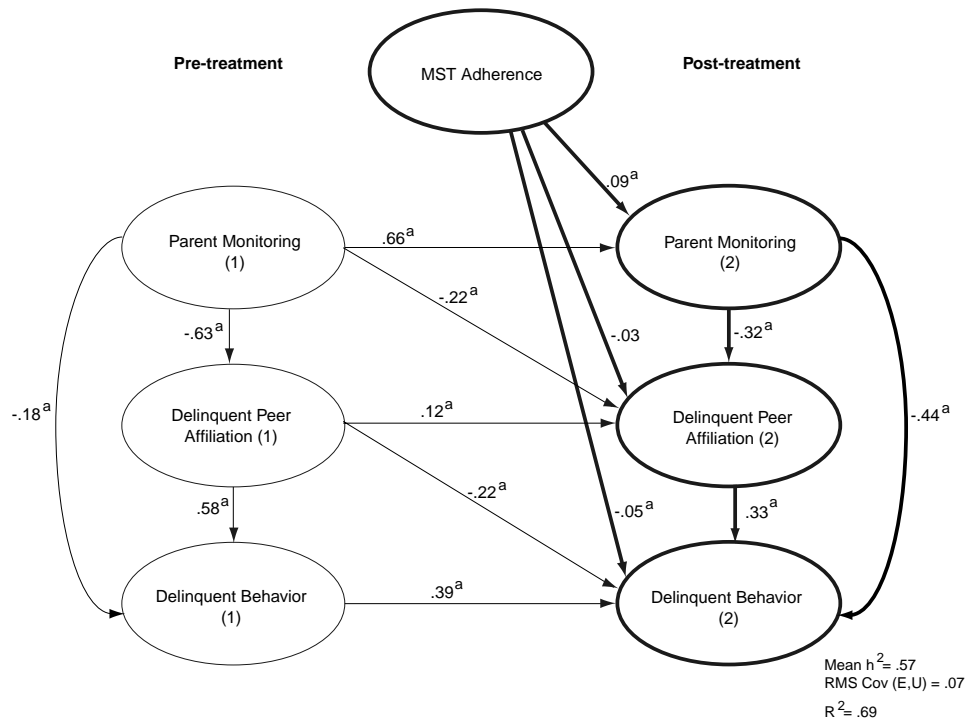


Figure 2
Impact of MST adherence (caretaker report) on delinquent behavior: Direct and indirect effects through parent monitoring and delinquent peer affiliation



Thick lines represent paths of central importance in the model—direct and indirect effects of MST process on delinquent behavior. “a” indicates a predicted path that accounted for substantial variance (1.5%) based on Falk & Miller’s (1992) recommendations.

Henggeler, S. W., & Borduin, C. M. (1990) *Family therapy and beyond: A multisystemic approach to treating the behavior problems of children and adolescents*. Pacific Grove, CA: Brooks/Cole Publishing.

Henggeler, S. W., & Borduin, C. M. (1992). *Multisystemic therapy adherence measure*. Unpublished instrument, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina.

Henggeler, S. W., Melton, G. B., Brondino, M. J., Scherer, D. G., & Hanley, J. H. (1997). Multisystemic Therapy with violent and chronic juvenile offenders and their families: The role of treatment fidelity in successful dissemination. *Journal of Consulting and Clinical Psychology, 65*(5), 821-833.

Henggeler, S. W., Schoenwald, S. K., Borduin, C. M., Rowland, M. D., & Cunningham, P. B. (1998). *Multisystemic Treatment of antisocial behavior in children and adolescents*. New York: Guilford Press.

Lohmoeller, J.-B., & Wold, H. (1984). Introduction to PLS estimation of path models with latent variables, including some recent developments on mixed scales variables. In G. Melischek, K. E. Rosengren, & J. Stappers (Eds.), *Cultural indicators: An international symposium* (pp. 501-519). Vienna: Sonderdruck.

Mann, B. J., Borduin, C. M., Henggeler, S. W., & Blaske, D. M. (1990). An investigation of systemic conceptualizations of parent-child coalitions and symptom change. *Journal of Consulting and Clinical Psychology, 58*(3), 336-344.

Miller, G. E., & Prinz, R. J. (1990). Enhancement of social learning family interventions for childhood conduct disorder. *Psychological Bulletin, 108*(2), 291-307.

Quay, H. C., & Peterson, D. R. (1987). *Manual for the Revised Behavior Problem Checklist*. Coral Gables, FL: University of Miami.

Skinner, H. A., Steinhauer, P. D., & Santa-Barbara, J. (1983). The Family Assessment Measure. *Canadian Journal of Community Mental Health, 2*(2), 91-105.

Wold, H. (1975). Path Models with Latent Variables: The NIPALS Approach. In H. Blalock (Ed.), *Quantitative sociology: International perspectives on mathematics and statistical model building* (pp. 307-357). New York: Academic Press.

Table 1
Structural Coefficients and Summary Indices for Models Utilizing Youth and Therapist Reports of MST Adherence

Paths	Family Functioning		Monitoring	
	Youth (n = 48)	Therapist (n = 57)	Youth (n = 48)	Therapist (n = 57)
Structural Coefficients				
Adherence to Family/Monitoring	-.06	.27 ^a	.14 ^a	-.27 ^{ab}
Adherence to Peers	-.29 ^a	-.07	-.28 ^a	.11
Adherence to Delinquency	.08	.00	.11 ^{ac}	-.14
Family/Monitoring to Peers	-.18 ^a	-.15 ^a	-.22 ^a	-.26 ^a
Family/Monitoring to Delinquency	-.21 ^a	-.25 ^a	-.42 ^a	-.51 ^a
Peers to Delinquency	.46 ^a	.46 ^a	.34 ^a	.35 ^a
Summary Indices				
RMS COV (E, U)	.05	.06	.06	.06
Mean h ²	.66	.63	.67	.60
R ²	.65	.61	.72	.70

^aindicates a predicted path that accounted for substantial variance (1.5%), based on Falk & Millers (1992) recommendations.

^bindicates that the Adherence construct in this model was represented by a single, negative indicator -- nonproductive sessions.

^cindicates the relationship was in a direction counter to prediction.

Dose Effect in Child Psychotherapy: Outcomes Associated with Negligible Treatment

Introduction

This study compares mental health outcomes of children who received negligible amounts of outpatient treatment to children receiving more treatment. The present study asks whether having substantial amounts of outpatient treatment produces better outcomes than negligible amounts. If treatment is effective, treated cases should have better outcomes. "Dose effect" has appeal as a way to evaluate the effectiveness of treatment in ordinary community settings where treatment most often occurs. In medicine, "dose effect" studies look at the effect of an active ingredient upon a disease organism. In child psychotherapy, it is unknown why treatment works; it is unknown what the active agent or mechanism of action is. In fact, progress in the basic measurement of mental health services and global assessment of service use has been made possible only in the past decade. This study tests the assumption that services are effective by measuring dose in terms of outpatient sessions and mental health costs. The dose effect analogy addressed the question of whether more services produce better outcomes.

Method

This study uses data collected for the Fort Bragg Evaluation Project (FBEP). The FBEP project has been described in detail elsewhere (Bickman et al., 1995; Lambert & Guthrie, 1996; Hamner, Lambert & Bickman, 1997). The present study concerns children whose most restrictive level of care was outpatient treatment ($N=592$), who had non-missing utilization data (0.5%), and who were no longer in treatment 30 days after the 12 month interview (4%). These exclusions left an outpatient sample of 568 children and adolescents, age 5-17, average age of 11 years (hereafter called children). The majority were male (62%), white (71%), from middle income (54%) two-parent families (80%) in which at least one parent had some higher education (87%); 54% were treated in the demonstration. Mental health status was compiled at intake, 6 months, and 12 months.

Four measures of children's mental health status were used: (a) Child Behavior Checklist (CBCL; Achenbach, 1991a); (b) Youth Self-Report (YSR; Achenbach & Edelbrock, 1991b); (c) Child and Adolescent Functioning Assessment Schedule, (CAFAS; Hodges & Gust, 1995; Hodges & Wong, 1997); (d) Standard 0-100 level of functioning scale, Global Level of Functioning (GLOF; Bickman et al., 1995, p. 25).

To estimate the dose effect, this study used a longitudinal random coefficient model (LRCM; Littell, Milliken, Stroup, & Wolfinger, 1996). Using the LRCM, this study examined the dose effect within and between the two groups of clients, estimating individual change as a slope for each

Ana Regina Andrade, Ph.D.
Postdoctoral Fellow
615/343-2716 Fax: 615/322-7049
E-mail:
ana.andrade@Vanderbilt.edu

E. Warren Lambert, Ph.D.
Research Associate
615/343-1895 Fax: 615/322-7049
E-mail:
warren.lambert@vanderbilt.edu

Leonard Bickman, Ph.D.
Director
615/343-3044 Fax: 615/322-7049
E-mail: bickman@ibm.net
Center for Mental Health Policy

Vanderbilt University
1207 18th Avenue South
Nashville, TN 37212

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subject (change in points per year). This individualized estimate is important in psychiatric research, where some clients may respond in ways quite different from the average response (Gibbons, Hedeker & Davis 1987; Gibbons, Hedeker, & Davis, 1993). The LRCM was applied to the four outcomes measured at three times (intake, 6 month, 12 months). Using this model “Outcome” is as a function of time, amount of treatment, severity, the interaction of amount of treatment by time (the dose effect), and the interaction of severity by time (the severity effect). Because multiple testing increases the probability of declaring false significance (Heyse & Rom, 1988; Hochberg, 1988; Westfall & Young, 1989), we adjust the p -values using the Benjamini & Hochberg (1995) method. This procedure controls for the “false discovery rate,” using a more powerful method than the Bonferroni procedure.

There is not a unique right way to define “negligible,” therefore, we used multiple definitions of “negligible treatment.” The less restrictive definition is based on Howard’s effective treatment exposure (1986). According to this definition, patients receiving fewer than eight psychotherapy sessions were not exposed effectively to treatment. By this criterion 254 of the 568 outpatients had negligible treatment. The more-than-negligible $N=314$ outpatients received an average of 22 outpatient sessions per year. “Sessions” refer to outpatient encounters with a therapist, not the number of days on which one or more sessions occurred. “Negligible treatment” was also defined as: (1) having 1 therapy session; (2) spending less than \$530 per year in mental health services; (3) having no outpatient treatment.

Results

Figure 1 shows the LRCM results when negligible treatment is defined as having less than 8 psychotherapy sessions. Figure 1 shows that:

- Outcome scores decrease over time (participants get better with time);
- At intake, the mental health status of children receiving treatment and those receiving negligible treatment was the same ($p > .05$ after controlling for global severity); and
- The slopes of improvements of the CBCL, YSR, CAFAS, and GLOF were about the same (ad-

justed $p > .05$) for more- and less-treated children. For the GLOF (Figure 1D), after controlling for initial severity, the univariate p -value was significant ($p = .03$), but after correcting for multiple testing, this difference was not significant.

To correct for multiple testing, we estimate the adjusted p -values using the Benjamini and Hochberg (1995) method. Altogether, the adjusted p -values do not show evidence of a statistically significant dose effect (all $p > .05$). The size of the nonsignificant dose effect has an average effect size of 0.04 SDs , small under Cohen’s (1988) criterion. Overall, the longitudinal analysis of four outcomes using four dose definitions showed nonsignificant dose effects and a small average effect size.

Discussion

The present study of treated children did not find a significant dose effect. This result is quite different from the dramatic probit curves of Howard, Kopta, Drause & Orlinsky. (1986), in which a difference of 8 sessions makes an obvious difference in the adult client’s probability of improvement. However, the present study utilized different methodologies; besides using a longitudinal growth curve approach, this study also controlled for children’s severity at intake. A dramatic dose effect in children’s mental health could guide clinicians because it would suggest that treatment is effective and that maximum benefit could be measured in dose effect studies in field conditions. Such evidence could ultimately lead to powerful reforms in managed care in which session limits were based on patient benefit rather than profit.

As client data becomes increasingly computerized, quasi-experimental dose effect studies in behavioral health environments will become increasingly convenient and inexpensive. If further field studies find little evidence of dose effects, such results, combined with the absence of research evidence that mental health treatment is effective in field conditions, may potentiate already powerful forces pressing for cost containment and the restriction of services. Payers could use negative evidence to justify ever more restrictive session limits along with further substitution of paraprofessionals for licensed providers. Such trends may be constrained only by lawsuits based on evidence.

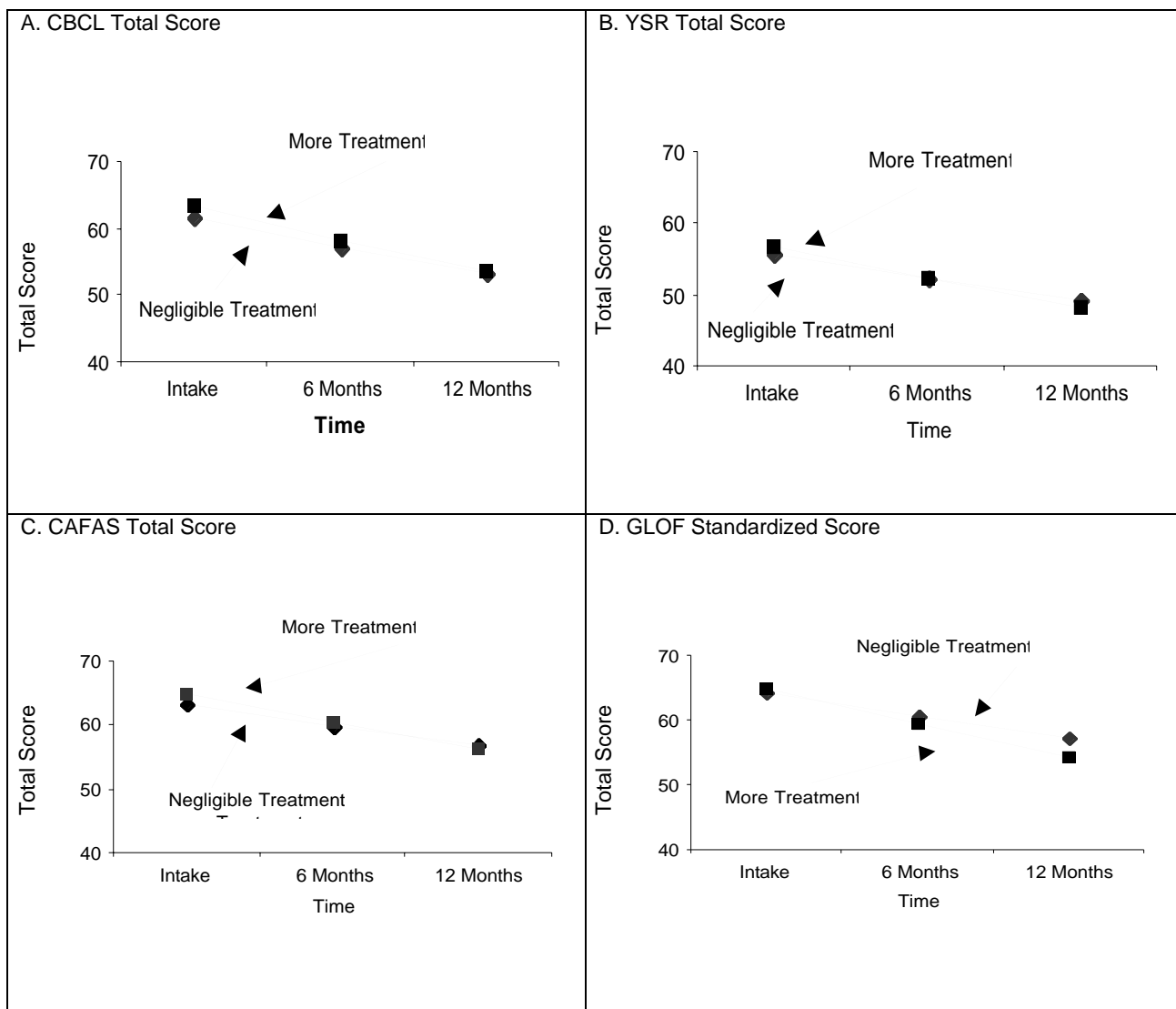
Dose Effect in Child Psychotherapy

This would not be a pleasant picture for mental health professionals.

The most optimistic scenario would be demonstrations that services-as-usual produce cost-effective results. Without evidence of effectiveness, clinicians and managers of mental health services should consider adopting specific manualized treatments of proven efficacy or, more broadly, continuous quality improvement (CQI) activities that have the potential for improving client outcomes (Bickman & Noser, in press). Either of

these efforts would be significant changes in clinical practice. However, expecting long-term financial support for services of unproven effectiveness is not an alternative.

Figure 1
LRCM Model-based Outcomes Scores by Time



References

- Achenbach, T. M. (1991a), *Manual for the Child Behavior Checklist: 4-18 and 1991 Profile*. Burlington: University of Vermont, Department of Psychiatry
- Achenbach, T. M., & Edelbrock, C. (1991b), *Manual for the Youth Self-Report and 1991 Profile*. Burlington: University of Vermont, Department of Psychiatry
- Benjamini, Y., & Hochberg, Y. (1995), Controlling the false discovery rate: A practical and powerful approach to multiple testing. *J R Stat Soc* 57, 289-300
- Bickman, L., Guthrie, P. R., Foster, E. M., Lambert, E. W., Summerfelt, W. T., Breda, C., & Heflinger C. (1995), *Evaluating managed mental health services: The Fort Bragg experiment*. New York: Plenum
- Bickman, L., & Noser, K. (in press). Meeting the challenges in the delivery of child and adolescent mental health services in the next millennium: The continuous quality improvement approach. *Applied Preventive Psychology*
- Cohen, J. (1988), *Statistical power analysis for the behavioral sciences*. Hillsdale, N.J: Erlbaum Associates
- Gibbons, R. D., Hedeker, D., & Davis J. M. (1987), Regression toward the mean: More on the price of beer and the salaries of priests. *Psychoneuroendocrinology* 12, 185-192
- Gibbons, R. D., Hedeker, D. R., & Davis J. M. (1993), Estimation of effect size from a series of experiments involving paired comparisons. *Journal of Educational Statistics* 18, 271-279
- Hamner, K. M., Lambert, E. W., & Bickman, L. (1997), Children's mental health in a continuum of care: Clinical outcomes at 18 months for the Fort Bragg demonstration. *Journal of Mental Health Administration* 24, 465-71
- Heyse, J., & Rom, D. (1988), Adjusting for multiplicity of statistical tests in the analysis of carcinogenicity studies. *Biometrika* 30, 883-896
- Hochberg, Y. (1988), A sharper Bonferroni procedure for multiple significance testing. *Biometrika* 75, 800-803
- Hodges, K., & Gust, J. (1995), Measures of impairment for children and adolescents. *Journal of Mental Health Administration* 22, 403-413
- Hodges, K., & Wong, M. M. (1997), Use of the Child and Adolescent Functional Assessment Scale to predict service utilization and cost. *Journal of Mental Health Administration* 24, 278-290
- Howard, K. I., Kopta, S. M., Krause, M. S., & Orlinsky, D. E. (1986), The dose-effect relationship in psychotherapy. Special Issue: Psychotherapy research. *American Psychology*, 41, 159-164
- Lambert, E. W., & Guthrie, P. R. (1996), Clinical outcomes of a children's mental health managed care demonstration. *Journal of Mental Health Administration* 23, 51-68
- Littell, R. C., Milliken, G. A., Stroup, W. W., & Wolfinger, R. D. (1996), *SAS system for mixed models*. Cary, NC: SAS Institute
- Westfall, P. H., & Young, S. S. (1989), P-value adjustments for multiple tests in multivariate binomial models. *Journal of the American Statistical Association* 84, 780-786

Improving Service Delivery Through Evaluation-Based Training

Introduction

Evaluation findings from the Annie E. Casey Mental Health Initiative for Urban Children's Family Experience Study on quality of service delivery were used to develop a targeted training and technical assistance program. Ultimately, this training program was translated into innovative practice and partnership strategies involving natural helpers and professional service providers at the Abriendo Puertas Family Center in East Little Havana, Miami, Florida.

Method

The Family Experience Study was based on the Child and Adolescent Service System Program (CASSP) principles of a system of care (Stroul & Friedman, 1986). These principles were used as standards of quality against which practice was compared. Twelve case studies combining record review, and interviews with family and both formal and informal service providers were conducted by a trained group of reviewers. Strengths and weaknesses of the service delivery system that could be addressed through the combined efforts of national technical assistance consultants and local stakeholders were identified.

From this study, the EQUIPO/TEAM bilingual (Spanish/English) training curriculum was developed for the EQUIPO Familiar del Barrio, a community-based program of the Abriendo Puertas Family Center. Development of the curriculum was based upon work from front-line practitioners, families, advocates, researchers, the Principles for Family Support (1996), and the Abriendo Puertas Mental Health Initiative for Urban Children. The curriculum was designed to give family service providers and natural helpers in the community hands-on tools for building teamwork, and for building strong natural helper/professional partnerships. It was also designed to address findings from the Family Experience Study conducted in East Little Havana as part of the overall evaluation of the initiative's implementation. The intent of the training was to assist in the process of developing partnerships between natural helpers and professional service providers.

Results and Discussion

Findings from the Family Experience Study identified many strengths in the East Little Havana community. One of those strengths was an established group of natural helpers, known as Madras and Padrinos from the Abriendo Puertas Family Center. The study found that these natural helpers often worked in isolation, and yet they had a wealth of informal services to offer the community. However, professionals providing services at the Abriendo Puertas Family Center often did not know how to use these natural helpers to support and enhance their work with families.

Marcela Gutierrez-Mayka, Ph.D.
Project Evaluator
Department of Child and Family Studies
Louis de la Parte Florida Mental Health Institute
University of South Florida
13301 Bruce B. Downs Blvd.
Tampa, FL 33612
813/974-0079 Fax: 813/974-
E-mail: gutierre@fmhi.usf.edu

Katherine Lazear, M.A.
EQUIPO Training Coordinator
Department of Child and Family Studies
Louis de la Parte Florida Mental Health Institute
University of South Florida
13301 Bruce B. Downs Blvd.
13/974-6135 Fax: 813/974-7376
E-mail: lazear@fmhi.usf.edu

Myriam Monsalve-Serna, M.Ed.
Clinical Director
Abriendo Puertas Family Center
1401 SW 1st Street
Miami, FL 33135
305/649-6449 Fax: 305/649-1459

Norma Ruiz Glass
Family Services Coordinator
Abriendo Puertas Family Center
1401 SW 1st Street
Miami, FL 33135
305/541-3962 Fax: 305/649-1459

Maria Silva
Madrina
Abriendo Puertas Family Center
1401 SW 1st Street
Miami, FL 33135
305/649-6449 Fax: 305/649-6449

In response to this problem, the EQUIPO/TEAM training curriculum was developed using a variety of training methods. Methods included the use of storytelling to practice skills and approaches, interactive exercises, training as team-building, and same day evaluations to adjust curriculum content and presentation. The training was implemented in five phases: 1) planning and engagement of participants, 2) preparation of natural helpers and providers, 3) training and implementation, 4) debriefing, and 5) training for facilitators. The program trained and encouraged — both natural helpers and professional service providers — to respect and utilize the strengths that each group could bring to the community.

The Madrinas and Padrinos already related easily to the families in their community. The training helped guide them to act as informal caseworkers, making the initial assessment of concerns and needs. A strength of the Madrinas and Padrinos is that they can encourage families to seek supports and services offered at the Abriendo Puertas Family Center. For example, one Madrina changed the life of one mother who told her that she had no way of providing for her family, and had considered taking her own life and that of her children. The Madrina quickly stepped in. Through her own connections, she found a job for the mother and encouraged her to become involved with different programs at the Abriendo Puertas Family Center. Professionals at the Center assisted by finding the mother a home, helping to enroll her children in school, and by addressing her immigration status.

Implications

As formal service delivery systems move from institution-based to community-based, provider-focused to family-focused, individual to family-centered approaches, from deficit-based to strength-based models, and from clinical approaches to a social support model, training and ongoing support are required to make the shift from professional control to partnerships with families a desirable and necessary practice. In order to work in partnership with families, service providers and natural helpers need to have substantive opportunities to learn to work as a team and to initiate a team building process that can multiply and sustain partnership in the future. The work at the Abriendo Puertas Family Center and EQUIPO/TEAM training process creates such an opportunity.

The Madrinas and Padrinos have become an integral part of the service delivery strategy in East Little Havana. The innovative training program holds promise, and may provide a model for community services that is cost effective, culturally competent, and family centered.

References

Stroul, B.A. & Friedman, R. M. (1986). *A system of care for children and youth with severe emotional disturbances*. (Revised edition). Washington, DC; Georgetown University Child Development Center, CASSP Technical Assistance Center.

Family Resource Coalition: Guidelines for family support. (1996). Author.

What Maintains Fidelity in a Wraparound Approach? How Can it be Measured?

Introduction

Research and evaluation of the wraparound approach to collaborative family-centered practice has primarily focused upon outcomes, service arrays, and costs. For such studies to be more informative, we must also examine what actually occurs in the planning and interventions between families and providers. Who is involved, as well as what information is used and how treatment planning and implementation decisions are made, are all too often ignored elements that influence fidelity in implementation of the wraparound model.

These elements were examined in several studies in the states of Florida, Illinois, and Kansas. Though the studies occurred at approximately the same time, they were not conducted in tandem. However, the results complement one another and suggest a different direction toward developing curriculum, supports, and measures that will better ensure wraparound fidelity. This discussion explores the methods and lessons learned in each site's studies as related to fidelity.

The Illinois model as described below has been grafted with lessons learned from other studies described in this paper and suggests three theory-based constructs on which to anchor wraparound's value-laden philosophy for increased fidelity in implementation.

Summary of Studies: Hillsborough County, Florida and Illinois

Methods

Exploratory research conducted in a Tampa, Florida mental health and elementary school system joint venture (Malysiak, 1996, 1997, 1998) identified a theory and paradigm base for the wraparound philosophy. The results suggested two theory-based constructs as a beginning basis for measuring wraparound fidelity. The constructs were: 1) *The family must act as an informed, decision-making participant on a team*, that 2) *the team must identify and use strengths to meet needs*. These constructs were then used as the basis to examine practice before revising technical assistance at a west suburban Chicago Center for Mental Health Services, Substance Abuse and Mental Health Service Administration (CMHS, SAMHSA) grants site (Malysiak, Sharma, Woodworth, Gawron, 1998). Eighty-nine practitioners were surveyed in a baseline study at this site and 96 participants in 15 randomly sampled cases were interviewed. Each case service plan was also systematically reviewed.

Rosalyn Malysiak Bertram Ph.D.
Governor's State University
Department of Graduate Social Work
University Park IL 60466-0975
708/235-2178, 708/387-2438 Fax: 708/
387-2438
E-mail: rozbertram@aol.com

Barry Bertram Malysiak M.S.W., M.B.A.
Director of Projects
Universal Family Connection
7949 S. Western, Chicago IL 60630
773/925-2222 Fax: 773/925-2287
E-mail: barryrexb@aol.com

Zena H. Rudo Ph.D.
Program for Refining School
Partnerships
Southwest Educational Development
Laboratory
211 E. 7th St. Suite 435
Austin TX 78701
512/476-6861 Fax: 512/476-2286
E-mail: zrudo@sedl.org

Albert J. Duchnowski Ph.D.
Deputy Director
Research & Training Center for
Children's Mental Health
Child & Family Studies Louis de la
Parte Florida Mental Health Institute
13301 Bruce B. Downs Blvd.
University of South Florida
Tampa FL 33612
813/974-4618 Fax: 813/974-6257
E-mail: duchnows@hal.fmhi.usf.edu

Responses to the baseline survey indicated that wraparound philosophy was articulated, but in implementation, many elements of the process appeared to be more like expert, non-ecological models of practice. Care-giving fathers, grandparents and step-parents were not engaged on teams. Service plans developed in the schools focused primarily on the child at school. Service plans developed in mental health or child welfare focused primarily upon the child in the family. The identification and use of strengths was rudimentary, and the manner in which service plans were reviewed and revised did not reinforce collaborative efforts with families and communities.

Results from baseline interviews amplified the second theory-based construct identified in the exploratory Tampa research. Even when plan participants believed the family was engaged as a decision making participant, if strengths were not identified and used in and across more than a single system focus they did not believe the plan was working. In addition, the interviews revealed growing frustration between team members, and that teams were highly dependent upon the wraparound team facilitator. When facilitators changed, teams and plans collapsed. Finally, when crisis occurred, teams and plans also collapsed. A review of Child and Adolescent Functional Assessment Scale (CAFAS: Hodges, 1990) and Child Behavior Checklist (CBCL: Achenbach and Edelbrock, 1980) scores in sampled cases revealed deterioration in child behavior during these transitions. These findings suggested that the structure and operation of wraparound teams required further study and perhaps a different focus in curriculum and supervision.

The Illinois wraparound study results were then compared with the findings of research conducted on team development in the field of developmental disabilities which had identified practical agreements necessary for successful collaborative team efforts. These agreements had been tested through the work of five universities affiliated with the Research and Training Center for Development of Positive Behavioral Supports, and research conducted by Eno-Hieneman (1997). Constructs identified as a theory-base for wraparound fidelity were combined with elements of this emerging model for team development and used as a basis for a focus group in the west suburban Chicago grants site. Thirty-five

people including administrators, clinicians, supervisors, special education staff and parents participated. Most were not employed by the grant funded projects. All worked with or were members of families served through the grants.

This focus group was used to assess participant understanding and belief about the relationship between team construction, assessment, planning, and interventions in a wraparound approach. As in the previous investigations, participants' responses reflected awareness of wraparound philosophy. However, the responses clearly indicated that the implementation of a wraparound approach was solely focused upon the development of each wraparound plan. This suggested why teams collapsed when crisis occurred. It also shed light upon why facilitators were overly central, since teams collapsed when facilitators were changed. There was no respondent awareness that systematic efforts were necessary to create a practical basis for team collaboration and assessment.

Results

From these studies, three constructs necessary to maintain the integrity of the wraparound approach were delineated.

Construct 1. Families must act as informed, decision-making participants.

Construct 2. The teams must be well-composed and well-constructed.

Construct 3. Together, team members must identify and use strengths in the home, school and community to meet needs that are identified across systems and life domains.

Well-composed teams include those who best know the child and family situation, or those who have significant influence over resources the team may need. *Well-constructed teams* create, revise and work within four practical areas of agreement:

1. What they want to accomplish.
2. How they will conduct their business (rules of operation), to include agreements about logistics, information sharing, decision-making when they do not agree, how conflicts will be resolved, and how to respond to crisis situations that might otherwise deter the team from more comprehensive planning.

3. Commitment to synthesis of information about the strengths, needs, and context of the situation under consideration into an agreement about “what they believe is going on.” This is a team’s best guess or hypothesis about the situation.
4. Based upon agreements generated by the above three areas, the team prioritizes needs and weaves identified strengths into strategies that comprise their plan. This plan must include how the team will evaluate and learn from the outcomes of these strategies.

Indications

Malysiak Bertram has developed a curriculum to ground implementation of the wraparound philosophy according to these constructs. It has been applied with over 150 staff in education, child welfare, and mental health services in two states, as well as in graduate social work classes.

Concurrent with the application and revisions to this curriculum—and with the support of Doug Breunlin, Executive Vice-President of the Family Institute at Northwestern University— a series of focus groups were conducted with supervisors affiliated with the west suburban Chicago CMHS-SAHMSA grants. These participants were responsible for staff development in, and supervision of, the wrap-around approach. They were queried to identify a knowledge and skills base in order to create a profile of staff abilities necessary to better support development of a collaborative, team-based model of family-centered practice like wraparound. This profile might also serve as a comparative tool to contextualize results from key measures yet to be developed but which must test for the presence of each of the three constructs defined above.

Measures of Fidelity

Results of these studies suggest a theory-based means for measuring the fidelity of implementation of wraparound’s approaches. Measures must be developed to test for the presence of these three constructs (i.e., family participation; team composition/structure; implementation that utilizes strengths across systems/life domains). Given the central importance of the family acting as decision-making participant (Construct 1), the family’s description of each of the four central team

agreements (as defined above) might serve as a basis for measuring the extent of consensus of team participants.

Key measures would include tests of team structure (Construct 2: the extent to which a team develops and works within four practical agreements). A measure of team composition (Construct 2) may be derived from early family systems theory work. In the early 1980s, family system theorists encouraged therapists to map the extended family and their significant supports. A simple descriptive mapping instrument could be developed and then used to examine correlates of team composition with potency of team interventions.

Finally, a means to measure Construct 3 (strengths must be identified and used in two or more life domains or systems to meet needs identified across life domains and systems) would be a related measure for potency of team interventions. A simple measure could simply be a descriptive tool that documents where strengths are identified and used in strategies to meet needs. In addition, some qualitative data source, most likely observation of the strategy in use or interviews with plan participants, would be necessary to build the basis for a standardized, validated, quantitative measure of this construct. This construct is the fulcrum for the “theory of change” in the wraparound model.

Summary of Studies: Sedgewick County, Kansas

The Family and Children’s Services Unit (FCCS) of COMCARE of Sedgewick County, Kansas was established as part of a state initiative to reduce child populations in psychiatric hospitals through a wraparound approach. FCCS established a service array of case management, attendant care, in-home and in-school therapy, respite care, outpatient therapy, psychiatric services, a small parent advocacy component, and flexible funding. In February 1994, FCCS received a CMHS grant that expanded parent advocacy and added early intervention services.

Measured by its original goal, FCCS demonstrated effectiveness of this approach by reducing the number of children from Sedgewick County in the state hospital from 37 to 8 in six months. At the end of one year that number was reduced to four

and has since dropped to two or less. Significantly, most of these children were returned to a home environment and not simply stepped down into institutional residential placement.

To sustain this success, 137 cases were reviewed to determine which components of service were most effective in maintaining children in their communities. Combined service utilization data for one year were compared with CAFAS scores. Cases were analyzed by a change in score on the CAFAS sub-scales through either two or three waves of data collection. There was no significant correlation between CAFAS score at intake and the subsequent type or amount of services delivered.

These results confused investigators who thought that children with more severe CAFAS scores would consume greater amounts of available resources. Staff members were interviewed to determine how decisions to use specific service arrays were made. These qualitative data revealed that some case managers always referred a case to every possible service, while others elected to make as few referrals as possible. Service planning was based more on the practice preferences of the practitioner than on the needs or severity of behaviors. From these combined qualitative and quantitative data, investigators and administrators inferred that the variance in CAFAS sub-scale scores was related to variance in implementation of the wraparound approach.

Summary of Studies: Pasco County, Florida

During a three-day training conducted by project staff at the University of South Florida (USF), middle school staff and community representatives were provided a model for implementing a School, Family, and Community Team process at Thomas E. Weightman Middle School (TEWMS). An important component of the training activity was to determine the extent to which the concepts taught were implemented in team meetings at the school. It is often assumed that the concepts covered in training are implemented exactly as trained and that there is fidelity to the training model. In order to measure whether the school staff and community representatives trained in the School, Family, and Community Team model practiced these concepts during team meetings, several steps were taken. The steps included developing a descriptive record and a

quantitative, observational measure of implementation; examining the reliability of the observational instrument; and examining the extent to which the School, Family, Community Team concepts were implemented as planned, including exploring changes over time for each subject.

Beginning with the first School, Family, and Community Team meeting in November 1997 and at every subsequent meeting, a USF project staff person was present to observe and record a description of the meeting process. A *School, Family, and Community Team Meeting Observation Form* was designed to describe team composition and attendance, meeting logistics, and the observer's narrative perception of the meeting.

In conjunction with the descriptive record, a quantitative, observational measure of implementation was developed to assess the team's fidelity to the model (the Fidelity Form). Training content, including the model and principles of the team process, were reviewed in order to generate items for the measure. Observations of the behaviors expected to be demonstrated in the field that were addressed in the training as fundamental to the collaborative team process were the basis for selecting items for quantitative measure. USF staff observed the collaborative meetings in order to determine the level of inter-rater agreement on the Fidelity Form. Inter-rater agreement was calculated using the "exact agreement method" (Suen & Lee, 1985). A statistical analysis comparing the multiple observers' data from each team meeting was conducted. The use of a statistical analysis to determine reliability is important to provide documentation of the consistency of behavioral observations of the team meetings but also the accuracy of those observations. Although accuracy of observations is often inferred from inter-rater agreement, accuracy and agreement are not necessarily the same (Kazdin, 1977).

A sum of the ratings in the Fidelity Form completed at each meeting was calculated as a measure of the extent to which the skills and principles taught were being implemented. A percent of criteria endorsed was determined for each question. In addition to the summation of the ratings on the Fidelity Forms, the extent to which the skills and principles taught were implemented was assessed using the two scaled questions. This form is now in final stages of refinement.

References

Eno-Hieneman, M. E. (1997). A descriptive analysis of factors contributing to the effectiveness of community-based behavioral support for children with severe disabilities: Perceptions of informed participants. Unpublished doctoral dissertation, University of South Florida.

Kazdin, A. E. (1977). Artifact, bias, and complexity of assessment: The ABCs of reliability. *Journal of Applied Behavior Analysis, 10*, 141-150.

Malysiak, R. (1996). Deciphering the tower of Babel: Examining the theory and paradigm base for wraparound, an emerging collaborative model. (Doctoral dissertation, University of South Florida, 1966). *Dissertation Abstracts International, 57* (7A), 967038.

Malysiak, R. (1997). Exploring the theory and paradigm base for wraparound. *Journal of Child and Family Studies, 6*, 399-408.

Malysiak, R. (1998). Deciphering the tower of Babel: Examining the theory base for wraparound fidelity. *Journal of Child and Family Studies, 7*, 11-26.

Malysiak, R., Sharma, J., Woodworth, K., & Gawron, T. (1998). Don't follow leaders, watch your parking meters: Theory-based, data-driven technical assistance to ensure wraparound fidelity. In C. Liberton, K. Kutash, & R. Friedman (Eds.), *The 10th Annual Research Conference Proceedings, A System of Care for Children's Mental Health: Expanding the Research Base* (February 23 to February 26, 1997) (pp. 199-206). Tampa, FL: University of South Florida, The Louis de la Parte Florida Mental Health Institute, Research and Training Center for Children's Mental Health.

Suen, H. K., & Lee, P. S. C. (1985). Effects of the use of percentage agreement on behavioral observation reliabilities: A reassessment. *Journal of Psychopathology and Behavioral Assessment, 7*, 221-234.

