

*Focus on
Research Methodology and
Information Systems*

Chapter 10

Focus on Research Methodology and Information Systems

Parental Agreement on Ratings of Child Behavior: Measures of Agreement and Related Factors

Introduction

The purpose of the present study was twofold. The first objective was to compare three common measures of agreement in describing child behavior problems. Pearson correlations, Cohen's kappa, and percent agreement calculated from the data were compared in order to examine characteristics of each measure in describing interinformant agreement for ratings of child behavior. Researchers have calculated agreement differently thus complicating comparison across studies. Some of the putative measures of agreement suffer from flaws that are not recognized or acknowledged (e.g., Bartko & Carpenter, 1976), and researchers often make assumptions about the appropriateness of measures with little rationale (e.g., Berry & Mielke, 1988). The blind use of an analytical tool without acknowledgment of its shortcomings and appropriateness for measuring the construct of agreement in a specific situation may produce results that are misleading as to the actual degree of agreement between informants.

Typically, agreement has been expressed using product-moment correlations of standardized summary scores across pairs of informants (Achenbach, McConaughy, & Howell, 1987; Eisenstadt, McElreath, Eyeberg, & McNeil, 1994) or correlations across items for pairs of informants (Achenbach, 1991; Fischer, Barkley, Fletcher, & Smallish, 1993). Although correlations reflect relative association between informants, they are not appropriate indices of interinformant agreement (Bird, Gould, & Staghezza, 1992). Correlations reflect only the association between groups of items and not absolute agreement between raters. It is possible to obtain a high degree of association (correlation) yet little agreement within the pair (Jensen, Traylor, Xenakis, & Davis, 1988). The pattern of responses within a pair of informants may be almost identical yet be anchored at different points on a scale.

An alternative index of agreement is kappa, first proposed by Cohen (1960), which assesses the proportion of agreement after removing the effects attributable to chance. It too has been criticized. Not only is the statistic tedious to compute, its values

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vary with factors other than agreement, specifically sensitivity, specificity, and the prevalence or base rate of the target illness or behavior. Several researchers have acknowledged some of these problems (Brennan & Hays, 1992; Feingold, 1992; Hutchinson, 1993; Maclure & Willett, 1987) including Spitznagel and Helzer (1985) who noted that the problems caused difficulty in comparing kappa values across studies. Even so, researchers have not adequately recognized and addressed the impact of varying base rates on kappa within studies.

Finally, an expression of interinformant agreement that avoids the problems that plague kappa and correlation is percent agreement. Percent agreement is relatively easy to calculate, and researchers and practitioners alike comprehend its meaning. Recently, more researchers investigating interinformant agreement of child behavior ratings have utilized percent agreement as the descriptor of choice (Kaslow, Warner, John, & Brown, 1992; Kolko & Kazdin, 1993; Renouf & Kovacs, 1994). Although the statistic does not account for chance agreement, the argument is made here that when considering agreement between experts' ratings, chance agreement is inconsequential. The rationale needs to be presented for making deductions rather than vice versa.

The second objective of this study was to examine several child, parent, and dyadic-level variables for significant correlations with mother/father agreement about their child's behavior. Particular emphasis was placed on looking at dyadic-level variables that have received scant attention in the literature relative to individual-level variables such as gender and child age.

Method

Participants were children and their families who were referred to a pediatric clinic for assessment of common behavioral concerns and for whom Child Behavior Checklist (CBCL; Achenbach,

1991) data were available from both parents. Sixty children, 46 males and 14 females, ranging in age from 4 to 12 years ($M = 6.7$, $SD = 2.05$), comprised the sample. Ninety percent of the sample was Caucasian. All lived with two parents, 80% with both biological parents while the remaining children's parents were divorced and remarried. Finally, participants represented a wide range of socioeconomic levels. In addition to the CBCL, parents completed a variety of measures including the Duncan Socioeconomic Index (Duncan, 1961), the Mental Health Inventory (MHI; Veit & Ware, 1983), the Dyadic Adjustment Scale (DAS; Spanier, 1976), and the Life Experiences Survey (SLES; Sarason, Johnson, & Siegal, 1978).

Results

Measures of Agreement

Figure 1 demonstrates that, given the same number of disagreements, kappa values, and to a lesser extent correlations, decreased with higher mother/father pair base rates, or more agreement that the behaviors did not describe their child. For children who exhibit few problem behaviors, parents are more likely to have relatively more response combinations in one cell (0,0 for the CBCL). Because of kappa's calculation and definition of chance, when parents agreed that a substantial number of items did not characterize the behavior of their child, a larger deduction in the pair's kappa value was made to account for chance, thereby reducing the observed kappa value. Thus, over pairs, there is greater variance in the measure resulting from factors not related to agreement. When used as a dependent measure, the increase within measure variance of kappa and correlations due to marginal symmetry and higher base rates make them far less sensitive to the independent variables. In addition to Figure 1, this fact also is demonstrated in the tables by fewer

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significant findings when using kappa or correlations as a measure of agreement.

We recommend using percent agreement as a measure of agreement between respondents when they are providing judgments about which they can be considered an expert, and particularly when one response category might be more frequently used. Percent agreement is easier to calculate and understand conceptually than are other measures of agreement. As mentioned above, it also can be more powerful if other measures suffer from large within-measure variance.

One criticism of percent agreement as a measure of agreement is that it does not account for

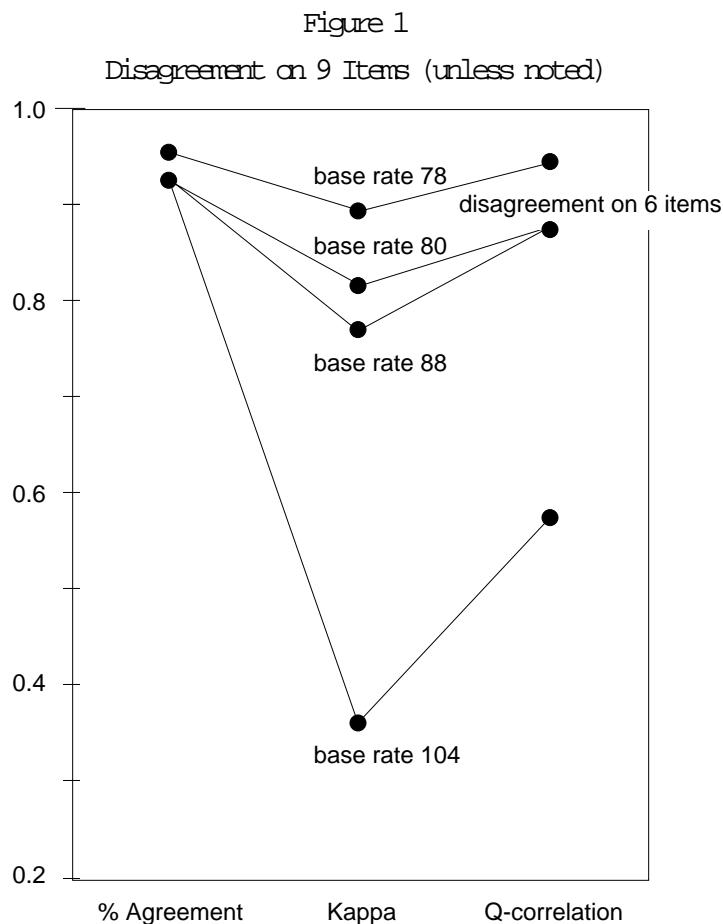
agreement due to chance. However, we assert that chance has very little impact in observed agreement when respondents are asked to make judgments about which they can be considered *experts*. Parents make *expert* judgments about their children's behavior over time. Thus, the similarity between informants' responses results almost solely from similar perceptions rather than from chance.

Factors Related to Mother/Father Agreement

Average agreement between mothers and fathers was high, 73.5% ($SD = .10$, range 40.7% - 94.8%). Percent agreement correlated with several child and parent

characteristics including mothers' and fathers' levels of psychological distress, general well-being, and reported recent positive life events. Agreement also was negatively related to fathers' reported negative life events and positively related to mothers' reported SES.

Dyadic psychological distress and general well-being were significantly correlated with agreement. Couples with more distress showed less agreement, and couples with higher well-being scores showed more agreement. Mother/father agreement on their children's behavior was negatively correlated with discrepancy scores for marital satisfaction, affection, consensus, and negative life events. Our findings emphasize the need to look at dyadic- and family-level variables in addition to individual characteristics. Please refer to Tables 1 and 2 for significant correlations between agreement and individual and dyadic-level variables. (Although percent agreement is supported here as the index of



choice, results using kappa and correlations are retained for illustrative purposes as well as to compare to other studies.)

Implications

On average, we found a high degree of agreement between parents when reporting on their children's behavior. This finding is important in

relation to screening. Because of the similarity in mothers' and fathers' reports, screening can be undertaken using the report of only one parent. However, once a child is identified or when a more in-depth assessment is made, information should be collected from both parents to provide a more complete picture of the child and family context. Additionally, our findings emphasize the need to look at dyadic- and family-level variables in addition to individual characteristics.

In the future, more research should investigate the outcomes of agreement. For example, do children whose parents exhibit higher agreement demonstrate better outcomes? Is higher mother/father agreement related to treatment compliance or remaining in treatment? An interesting finding of this study was that the number of disagreements about the presence/absence of a behavior was more than twice the number of disagreements about the frequency of a behavior. Future research

Table 1
Significant Correlations between Child and Parent Characteristics & Alternative Dependent Measures

	Percent Agreement	Kappa	Correlation
Child age (n=60)			
SES-mother (n=55)	.23*	.27**	.29**
SES-father (n=53)			
Mothers' DAS (n=56)			
satisfaction	.26*		
cohesion			
consensus			
affection			
Fathers' DAS (n=53)			
satisfaction			
cohesion			
consensus			
affection			
Mothers' MHI (n=57)			
distress	-.40***		
well-being	.33**	.23*	
Fathers' MHI (n=57)			
distress	-.28**		
well-being	.33**	.23*	
Mothers' SLES (n=57)			
negative			
positive	.27**		
Fathers' SLES (n=52)			
negative	-.36***		
positive	.24*		

Note. * p<.10. ** p<.05. *** p<.01.

Table 2
Significant Correlations between Dyadic-level Variables and Alternative Dependent Measures

	Percent Agreement	Kappa	Correlation
Combined scores (mother's + father's)			
MHI (n=56)			
dyadic distress	-.41***		
dyadic well-being	.39***	.27**	
Difference scores (abs of mother's - father's)			
DAS (n=51)			
satisfaction	-.26*	-.29**	-.28**
cohesion			
consensus	-.24*	-.24*	.30**
affection	-.31**	-.24*	
SLES (n=48)			
negative	-.25*		
positive			

Note. * p<.10. ** p<.05. *** p<.01.

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should investigate the hypothesis that better outcomes would be exhibited by children whose parents disagreed more about the frequency of behaviors than about the presence/absence of behaviors.

References

- Achenbach, T. M. (1991). *Integrative guide for the 1991 CBCL/4-18, YSR, & TRF profiles*. Newbury Park, CA: Sage Publications.
- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin, 101*, 213-232.
- Bartko, J. J., & Carpenter, W. T. (1976). On the methods and theory of reliability. *The Journal of Nervous and Mental Disease, 163*, 307-317.
- Berry, K. J., & Mielke, P. W. (1988). A generalization of Cohen's kappa agreement measure to interval measurement and multiple raters. *Educational and Psychological Measurement, 48*, 921-933.
- Bird, H. R., Gould, M. S., & Staghezza, B. (1992). Aggregating data from multiple informants in child psychiatry epidemiological research. *Journal of the American Academy of Child and Adolescent Psychiatry, 31*, 78-85.
- Brennan, R. L., & Hays (1992). The kappa statistic for establishing interrater reliability in the secondary analysis of qualitative clinical data. *Research in Nursing & Health, 15*, 153-158.
- Brennan, R. L., & Prediger, D. J. (1981). Coefficient kappa: Some uses, misuses, and alternatives. *Educational and Psychological Measurement, 41*, 687-699.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20*, 37-46.
- Eisenstadt, T. H., McElreath, L. H., Eyeberg, S. M., & McNeil, C. B. (1994). Interparent agreement on the Eyeberg Child Behavior Inventory. *Child and Family Behavior Therapy, 16*, 219-231.
- Feingold, M. (1992). The equivalence of Cohen's kappa and Pearson's chi-square statistics in the 2 x 2 table. *Educational and Psychological Measurement, 52*, 57-61.
- Fischer, M., Barkley, R. A., Fletcher, K. E., & Smallish, L. (1993). The stability of dimensions of behavior in ADHD and normal children over an 8-year followup. *Journal of Abnormal Child Psychology, 21*, 315-337.
- Hutchinson, T. P. (1993). Kappa muddles together two sources of disagreement: Tetrachoric correlation is preferable. *Research in Nursing and Health, 16*, 313-316.
- Jensen, P. S., Traylor, J., Xenakis, S. N., & Davis, H. (1988). Child psychopathology rating scales and interrater agreement: I. Parents' gender and psychiatric symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry, 27*, 442-450.
- Kaslow, N., Warner, V., John, K., & Brown, R. (1992). Intrainformant agreement and family functioning in depressed and nondepressed parents and their children. *The American Journal of Family Therapy, 20*, 204-217.
- Kolko, D. J., & Kazdin, A. E. (1993). Emotional/behavioral problems in clinic and nonclinic children: Correspondence among child, parent and teacher reports. *Journal of Child Psychology and Psychiatry, 34*, 991-1006.

- Maclure, M., & Willett, W. C. (1987). Misinterpretation and misuse of the kappa statistic. *American Journal of Epidemiology*, *126*, 161-169.
- Renouf, A. G., & Kovacs, M. (1994). Concordance between mothers' reports and children's self-reports of depressive symptoms: A longitudinal study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *33*, 208-209.
- Sarason, I. G., Johnson, J. H., & Siegal, J. M. (1978). Assessing the impact of life changes: Development of the Life Experiences Survey. *Journal of Consulting and Clinical Psychology*, *46*, 932-946.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and Family*, *38*, 15-28.
- Spitznagel, E. L., & Helzer, J. E. (1985). A proposed solution to the base rate problem in the kappa statistic. *Archives of General Psychiatry*, *42*, 725-728.
- Veit, C. T., & Ware, J. E. (1983). The structure of psychological distress and well-being in general populations. *Journal of Consulting and Clinical Psychology*, *51*, 730-742.

CAFAS as a Measure of Child and Family Functioning Among Children and Families Enrolled in Intensive Case Management in New York State

Introduction & Method

Intensive Case Management (ICM) for children is New York State's most intensive, home-based service option within its community based system of care. Intensive case managers are available to children and families at all times and serve a small caseload of ten children and families. They perform a comprehensive assessment of family and child needs and link families to needed services. Work with children and families is done in settings outside of the office and providers are expected to actively advocate for enhanced service delivery for children and families and system change. In addition, flexible service dollars are available for the purchase of services otherwise unavailable.

In evaluating outcomes for children enrolled in ICM, researchers at the Bureau of Evaluation and Services Research of the New York State Office of Mental Health conducted a longitudinal study of a sample of 199 children enrolled in the program. On average, children in the sample were 11 years of age, white, non-Hispanic, mostly male, primarily lived in single parent households, were in the custody of a biological parent, and went to school in a special education setting. The most common diagnosis among these children was disruptive behavior disorder. They were out of home (either hospitalized or in out-of-home placement) an average of two times prior to enrollment, were functionally impaired in an average of 2.5 out of 5 areas, and displayed an average of 5.5 problem behaviors or symptoms (out of 25).

The study included a number of measures to describe the status of children and families enrolled in the program. To measure functioning status of both children and families, the Child and Adolescent Functional Assessment Scales (CAFAS; Hodges, 1990) was administered at enrollment and at three years or discharge. In

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addition to CAFAS scales, child status was also measured using a *yes/no* checklist of five areas of functional impairment, a *yes/no* checklist of presence of 25 behaviors and symptoms, and from the parent perspective, the Child Behavior Checklist (Achenbach, 1991). Additional measures of family status were an assessment of family problem conditions, evidence of abuse in the family's history, and six selected scales from the Child Well-Being Scales (Magura & Moses, 1986). The availability of this set of child and family functioning measures allowed for an examination of the validity of the CAFAS measure for this population of children with serious emotional disturbances and their families.

A factor analysis of the CAFAS scales produced two discrete factors. The CAFAS subscales fell cleanly into a Child Functioning factor (Child CAFAS) made up of the Role Performance, Behavior Towards Self and Others, Moods and Emotions, and Thinking subscales and a Caregiver Resources Factor (Caregiver CAFAS) made up of the two caregiver resources subscales. The Substance Abuse subscale did not load on either factor and was omitted from this investigation. These factors along with the Total CAFAS Score (omitting substance abuse) comprised the key measures that are examined by the analyses that follow.

Results

Family History of Abuse

Figure 1 displays the ability of CAFAS scales to discriminate between families that were reported as having evidence of various types of abuse and those that were not. For all types of abuse or neglect, the Caregiver CAFAS and Total CAFAS mean scores were significantly different for groups of families where such abuse and neglect was present, versus those that had no such evidence. In the case of sexual abuse, the Child CAFAS score was able to discriminate, as well.

Family Functioning

On measures of family problems, caregiver capacity for childcare, primary caregiver/spouse relationship, continuity of caregiving, caregiver's ability to recognize the child's problem condition and caregiver's cooperation with service provision, the Caregiver CAFAS scale significantly discriminated between groups of families that were clustered by high and low levels on each measure. The Total CAFAS significantly discriminated between groups of families that were identified with high and low levels of family problems, caregiver capacity for childcare, continuity of caregiving, and caregiver cooperation.

Areas of Functional Impairment

A *yes/no* checklist assessing functional impairment in five areas was administered to intensive case managers when children were enrolled in the program. The Child CAFAS and Total CAFAS scores significantly discriminated (at various levels of significance) between children identified as being impaired in the areas of self-care, cognitive functioning, and self-direction (see Figure 2). The two areas where no significant discrimination was observed have heavily skewed distributions. Almost all children were identified as impaired in the area of social relationship functioning and very few were impaired in the area of motor functioning.

In general, CAFAS measures did not discriminate for the presence or absence of symptoms/behaviors for this population, adding to evidence that measures of functioning and symptomatology may be independent. Only in the area of psychotic symptomatology was the Child CAFAS scale able to discriminate among children who displayed these symptoms from those who did not.

The Child CAFAS scale was able to discriminate between children who scored in the clinical range on the parent completed CBCL Total Problem, Internalizing, Externalizing scales. The

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Total CAFAS only discriminated on the Total Problem Score (see Figure 3).

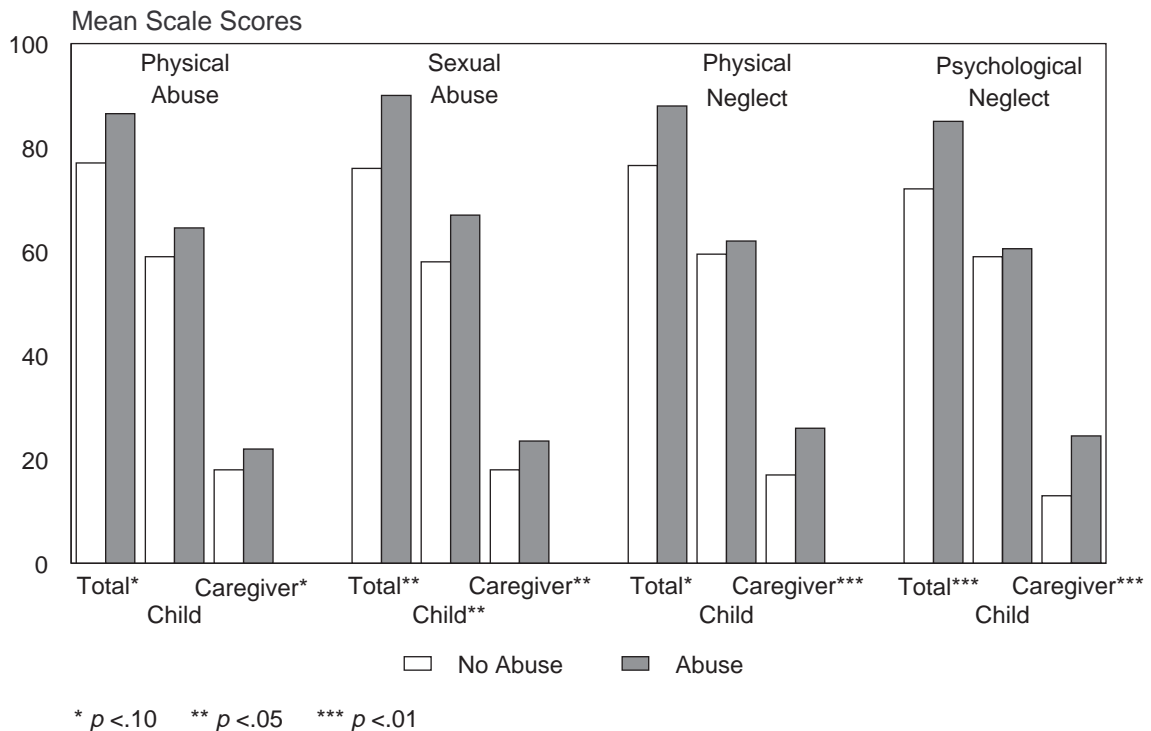
CAFAS and ICM Outcomes

A logistic regression analytic model was used to examine the ability of CAFAS scales to discriminate between children who were hospitalized after enrollment in the program and those who remained in the community. This model successfully classified hospitalization outcomes for 87.3% of children (see Table 1). Male children with high average total CAFAS scores (20 to 30), who were referred from mental health programs, lived in non-family settings at enrollment, and had recent contact with the mental health service system, had a 72% probability of being hospitalized after enrollment in ICM. This model identified the presence of these

conditions as corresponding with the greatest likelihood of hospitalization.

Shifting each measure in the model to an opposite or less severe condition, while leaving the others unchanged, decreased the probability of hospitalization and tested the strength of each measure's contribution to the prediction of a hospitalization outcome. Change in the CAFAS measure made the greatest impact on the prediction of hospitalization. A child with a low average CAFAS score (0 to 10) had a 32% probability of hospitalization when all the other measures were unchanged, a decrease in probability of 41% from a high CAFAS score. Shifting from a High CAFAS to a Medium CAFAS (10 to 20) reduced the probability only by 8%.

Figure 1
CAFAS Subscales and Family History of Abuse



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Figure 2
CAFAS Subscales and
Areas of Functional Impairment

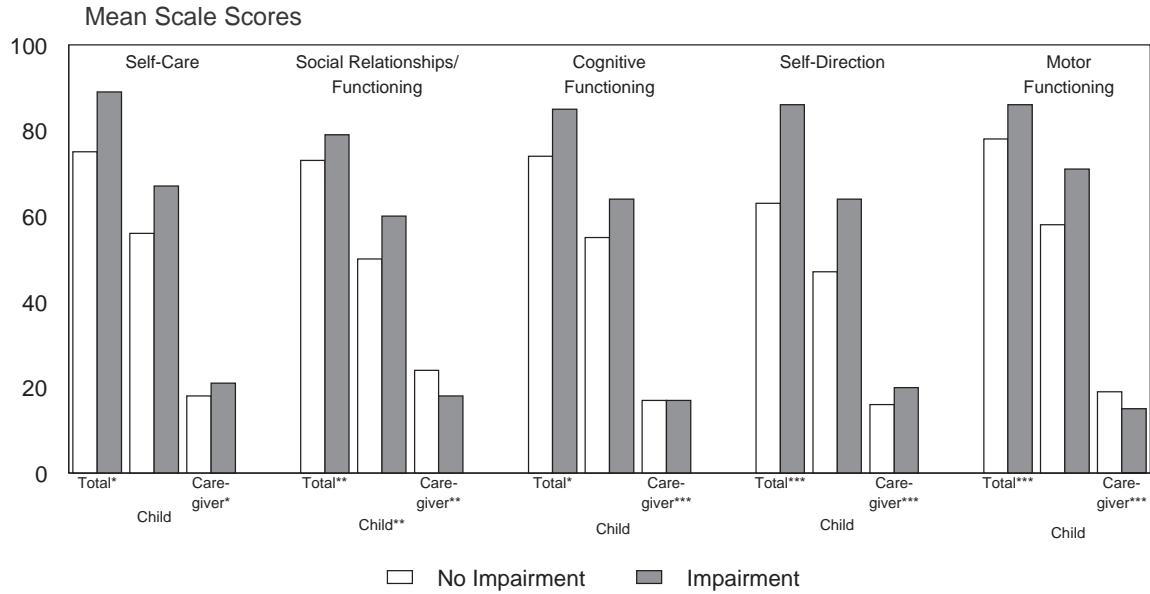
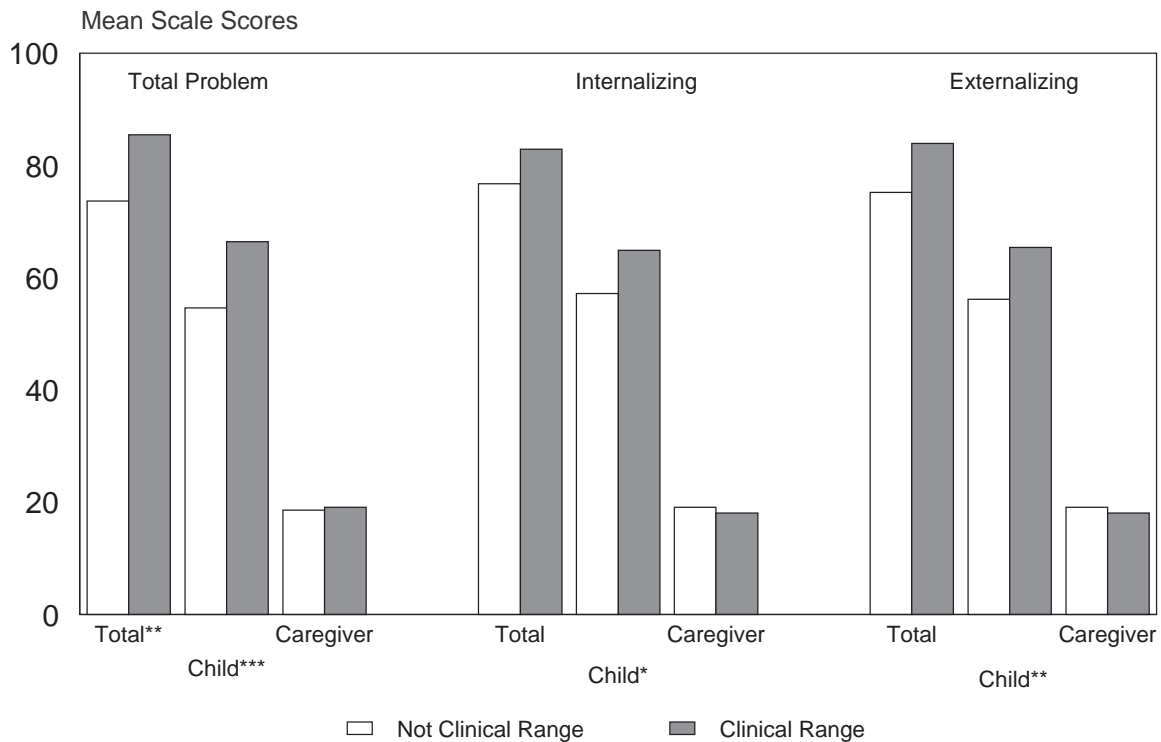


Figure 3
Child Behavior Checklist Scales
CAFAS Subscales



* $p < .10$ ** $p < .05$ *** $p < .01$

CAFAS as a Measure of Child and Family Functioning

Conclusion

From the perspective of the evaluation of ICM, the correlation between the CAFAS measures and CBCL scores suggest a shared sense of children's problem severity among parents and providers. More generally, the data presented here contribute to the body of evidence that the CAFAS measure is a psychometrically valid measure of child and family functioning. Its attractiveness as a measure is further strengthened by the ease with which the scales can be successfully administered to providers and the resultant high response rate.

References

- Achenbach, T.M. (1991). *Manual for the child behavior checklist and 1991 profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Hodges, K., (1990). *Child and adolescent functional assessment scales*. Nashville TN: Vanderbilt Child Mental Health Services Evaluation Project.
- Magura, S. & Moses, B. S. (1986). *Outcome measures for child welfare services*. Washington, D.C. , Child Welfare League of America

Table 1
Post-Intensive Case Management Enrollment Hospitalization
Logistic Regression Model
(N =199)

Measure	Probability of Hospitalization	Difference	Maximum Model Probability of Hospitalization
High Total CAFAS Score *	0.3178 (Low CAFAS)	0.4061	0.7239 (High CAFAS)
Mental Health Referral *	0.3461 (No)	0.3779	0.7239 (Yes)
Living Arrangement at Enrollment *	0.3805 (Family Setting)	0.3434	0.7239 (Not Family Setting)
Gender *	0.4525 (Female)	0.2715	0.7239 (Male)
Recent Mental Health Contact *	0.4750 (No Previous Mental Health Contact)	0.2489	0.7239 (Recent Mental Health Contact)
Medium Total CAFAS Score *	0.6433 (Low CAFAS)	0.0807	0.7239 (High CAFAS)

* $p < .05$ Model Successfully Classifies 87.3% Cases

The CAFAS as an Outcome Measure in the Alternatives to Residential Treatment Study

Introduction

Psychiatric nomenclature advances a multi-axial approach to psychiatric assessment emphasizing measurement of five dimensions: psychiatric symptoms, personality disorders, physical health problems, type and severity of life stressors, and global assessment of functioning. This last dimension has evaded sophisticated measurement; however, development of tools to measure global functioning is increasingly important as funding agencies include functional impairment in definitions of youths' serious emotional disturbance, and third party payers rely on severity of impairment in order to qualify persons for intensive services (Hodges & Gust, in press). Over the past several years, Kay Hodges has been developing and refining the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990; Hodges, Bickman, & Kurtz, 1991; Hodges & Gust, in press). The 1990 version of the CAFAS was designed to measure impairments in youths' performance of expected roles within the family, school, and community. The purpose of the present study was to evaluate internal consistency and validity of the 1990 CAFAS as well as its sensitivity to change over time.

Method

Procedure

The Alternatives to Residential Treatment Study (ARTS) was designed to describe five exemplary community-based alternatives to residential treatment programs¹ (detail in Duchnowski, Johnson, Hall, Kutash, & Friedman, 1993). All youth entering selected programs were eligible for study recruitment if they were between 6 and 18 years of age, it was their first entry into the program, and they and their caregivers consented within one month of entry.

¹ providing services through a community-based system of care emphasizing multi-system coordination, parent-professional partnership, and individualized tailored services (Day & Roberts, 1991; Duchnowski & Kutash, 1993; Stroul & Friedman, 1986).

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Demographic information, history of services received, multi-dimensional psychosocial functioning, and emotional/behavioral problems were assessed. Entry into the study included baseline, 6 month, and 1 year follow-up assessments. One hundred sixty- three youth participated in the first assessment. Youth who had complete data for baseline and 12-month follow up were included in the present study (130 youth; sample attrition from initial assessment to 1 year follow-up 20.2%). There were no differences on age, race, sex, or symptom severity between those with complete longitudinal data and those without complete data.

Participants

Youth averaged 14.1 years (*SD* = 3.1 years). Sixty-six percent were male, 64.6% Caucasian, 12.3% African American, 12.3% Native American/Alaskan, 10.0% Latino, and one youth was Asian. At the point of entry into the programs, these youth presented emotional, behavioral, and social problems that were severe, long term, and complex (Cascardi, Kutash, & Duchnowski, 1994). Youth had received prior residential mental health services an average of 4 times, 61% of the sample had prior involvement with law enforcement and juvenile justice systems, and nearly 80% percent had received Special Education services prior to program entry. Sixty-three percent entered the programs from an out-of-home residential setting.

Measures

Baseline and 1-year follow-up data from the CAFAS, Child Behavior Checklist (CBCL; Achenbach, 1991), and Rosenberg’s (1989) brief 10-item Self-Esteem Scale, and type of services used over 1 year were analyzed. The CBCL is a widely-used measure utilizing parent report of presence and severity of a variety of emotional and behavioral problems of childhood and adolescence. It yields total, internalizing, and externalizing behavior problem scores. The Self-Esteem Scale is a youth report of general self worth. The 1990 CAFAS is a brief, multi-dimensional measure of impairment in functioning, with 5 subscales each utilizing four rating categories.

Results & Discussion

Reliability analysis revealed the first 5 subscales of the CAFAS were internally consistent, with a Chronbach’s alpha of .7122. Table 1 presents information on validity of the CAFAS. The bivariate

Table 1
Time 1 Correlations with Other Scales
(N = 130)

Time 1 Correlations with Other Scales	CBCL Total	CBCL-EXT	CBCL-INT	Self Esteem
CAFAS Total	.560 *	.362 *	.494 *	-.035
Subscales:				
Role Performance	.443 *	.481 *	.206 **	.076
Thinking	.367 *	.212	.270	-.124
Behavior Self/Others	.396 *	.341 *	.307 *	-.011
Emotional Health	.408 *	.319 *	.318 *	-.134
Substance Use	.114	.248	.073	-.057

* *p* < .05

** *r* to *z* transformation, *p* < .05

Note: CBCL-EXT and CBCL-INT are CBCL Subscales Externalizing and Internalizing, respectively.

The CAFAS as an Outcome Measure

association of CAFAS total and subscales scores, CBCL, and Self-Esteem were evaluated with Pearson product-moment correlations.

The CAFAS total score and subscales were significantly associated with CBCL scores. Deficits in youths' ability to conform their behavior to appropriate social roles was more significantly associated with externalizing than internalizing behavior problems ($z = 2.51, p < .05$). The magnitude of the correlations between the CAFAS and CBCL are moderate, suggesting each measures a different construct. Unexpectedly, the CAFAS and Self-Esteem measure were not significantly correlated. Sensitivity to change was measured using repeated measures analysis of variance and matched pair t -tests. There was an overall time effect for CAFAS subscales, Wilk's lambda ($5,125$) = 7.94, $p < .001$. Means, standard deviations, and significance tests are presented in Table 2.

The CAFAS Total, Role Performance, Thinking, Emotional Health, and Behavior toward Self/Others all showed statistically significant improvement from youths' entry into the program to one year post-entry. Youth in this sample also showed statistically significant improvement on the CBCL, $t(126) = 4.03, p < .001$, baseline = 71.80 ($SD = 8.18$), one year follow-up = 68.32 ($SD = 10.40$). Although statistically significant decreases were found on the CBCL, youth, on average, did not demonstrate clinically significant change on this scale. Importantly, the change in mean scores on the CAFAS suggests that youth demonstrated clinically meaningful change, moving from moderate toward mild impairment. Scores on Substance Use subscales did not show significant change. This was due most likely to the limited impairment in this area for the current sample.

While mean change over time suggests promise for the CAFAS's sensitivity, mean scores do not identify youth who may have shown deterioration or

lack of change in functioning over time. The scaling of the CAFAS lends itself to categorical analysis so that youth showing improvement, no change, or deterioration can be identified. Such analysis indicated that 62% of youth moved to a "less impaired" category of impairment, 11% showed no improvement, and 27% further deteriorated over time. Percent improvement provides additional support for the sensitivity of the CAFAS to change over time for both improvement and deterioration of functioning.

Table 2
Average Mean and SD Scores for Youth Measures
($N = 130$)

Scale	Baseline	1-Year Follow-up	$t(129)$
CAFAS Total	14.35 6.73	10.83 7.16	28.12 *
Subscales			
Role Performance	20.31 11.34	14.92 10.73	4.79 *
Thinking	11.54 10.45	8.23 9.52	3.20 *
Emotional	16.92 9.47	12.00 9.27	4.67 *
BehaviorSelf/Others	19.54 10.26	15.15 10.28	4.12 *
Substance Use	3.46 7.34	3.92 8.55	-.60

* $p < .01$

What factors account for change in CAFAS scores? It is possible that the observed change was due to regression to the mean, maturation, or effective provision of service. Since ARTS is not a contrasted group design, it is difficult to rule out maturational and regression to the mean effects. However, one can evaluate whether change (improvement versus deterioration) bears any statistical relationship to service utilization.

Caregivers were asked whether any of 50 services, from the major service sectors as well as paraprofessional support, were received at any time in the first year of treatment. These 50 services variables were collapsed into broad-ranging categories and dummy coded as: received—yes or no. Point biserial bivariate correlations were computed between CAFAS at follow-up and service domain, partialling out baseline CAFAS score. There was a significant association between improvement in Substance Use and probation services ($r = -.21, p < .05$) and juvenile justice residential services ($r = -.24, p < .05$). This association likely is due to restricted opportunity for these youth to use illicit substances while under close supervision. A significant association also was found between deterioration in overall functioning and receipt traditional mental health residential services (including residential treatment centers, group homes, psychiatric hospital; $r = .28, p < .05$).

One might interpret this association several ways. It is possible that mental health residential services were not effective. Alternatively, the most severely impaired youth may have been offered these services making change more difficult to achieve.

Findings from this study suggest that the CAFAS shows promise as a sensitive outcome measure in a sample of youth with serious emotional disturbance. While it is difficult to isolate the reason for change on the CAFAS in the present study because no comparison groups were

used, these findings support continued evaluation of this instrument. The statistically and clinically meaningful change observed in this sample is especially encouraging in light of studies that have shown that youth with serious emotional disturbance have relatively poor outcomes (Silver et al., 1992; Wagner, D'Amico, Marder, Newman, & Blackorby, 1991).

References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 Profile*. Burlington: University of Vermont, Department of Psychiatry.
- Cascardi, M., Kutash, K., & Duchnowski, A. J. (1994, October). Service utilization patterns in community based programs for children and their families. *Paper presented at the 122nd annual convention of the American Public Health Association, Washington, DC.*
- Day, C., & Roberts, M. (1991). Activities of the Child and Adolescent Service System Program for improving mental health services for children and families. *Journal of Clinical Child Psychology, 20*, 340-350.
- Duchnowski, A. J., Johnson, M. K., Hall, K. S., Kutash, K., & Friedman, R. M. (1993). The alternatives to residential treatment study: Initial Findings. *Journal of Emotional and Behavioral Disorders, 1*, 17-26.
- Duchnowski, A. J., & Kutash, K. (1993, September). Developing comprehensive systems for troubled youth: Issues in mental health. *Paper presented at Shakertown symposium II: Developing comprehensive systems for troubled youth, Shakertown, KY.*

The CAFAS as an Outcome Measure

- Hodges, K. (1990). *Manual for the Child and Adolescent Functional Assessment Scale*. Unpublished manuscript.
- Hodges, K., Bickman, L., & Kurtz, S. (1991). A multidimensional measure of level of functioning for children and adolescents. In A. Algarin & R. M. Friedman (Eds.), *Proceedings of the Fourth Annual Research Conference, A System of Care for Children's Mental Health: Expanding the Research Base* (pp. 149-154). Tampa: University of South Florida, Florida Mental Health Institute.
- Hodges, K., & Gust, J. (in press). Measures of impairment for children and adolescents. *Journal of Mental Health Administration*.
- Rosenberg, M. (1989). *Society and the adolescent self-image* (rev. ed.). Middleton, CT: Wesleyan University Press.
- Silver, S. E., Duchnowski, A. J., Kutash, K., Friedman, R. M., Eisen, M., Prange, M. E., Brandenburg, M.A., & Greenbaum, P. E. (1992). A comparison of children with serious emotional disturbance served in residential and school settings. *Journal of Child and Family Studies, 1*, 43-59.
- Stroul, B. A., & Friedman, R. (1986). *A system of care for severely emotionally disturbed children and youth*. Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center.
- Wagner, M., D'Amico, R., Marder, C., Newman, L., & Blackorby, J. (1991). What happens next? Trends in postschool outcomes of youth with disabilities. *The second comprehensive report from the National Transitional Longitudinal Study of Special Education Students*. Menlo Park, CA: SRI International.

An Innovative Methodology for Assessing Children's Mental Health Services Need

Introduction

The aims of this summary are as follows:

- to describe an innovative methodology for assessing children's mental health services need; and
- to describe how this methodology can be applied in documenting the extent and determinants of unmet mental health services need of a sample of children receiving services in five major service systems.
- To document *extent* and *determinants* of unmet need for mental health services in a sample of children in five major service systems as well as in the community.

A large proportion of children with serious emotional disorder do not receive treatment. There is a dearth of data regarding the mental health services needs of these children (Silver, 1990). This hinders efficient, efficacious, and equitable mental health services provision.

These factors were crucial in providing part of the rationale for the *SED Study*. A unique feature of this study is the study of children with serious emotional disturbance across five service settings as well as in a community probability sample. Selected aspects of the study methodology that are relevant for the assessment of mental health services need are provided below.

Method

Sample

A stratified random sample of children aged 9 to 17 years and their parent or caregiver was selected. The total sample size was 1,260; of these, 510 were drawn from a community probability sample and 750 from five service systems (juvenile justice, child

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welfare, special education, substance use, and mental health).

Measures

The Diagnostic Interview Schedule for Children (DISC 2.3) Service Use and Risk Factors (SURF), was used to document aspects of the following domains:

- demographics
- functional impairment
- medical history
- scholastic information
- family environment
- family management practices
- family history of psychiatric disorder
- pubertal status
- verbal ability
- instrumental competence
- social competence
- self-perceived competence
- parental discord
- service utilization and barriers (including attitudes to mental health use)

Before there can be progress in documenting the extent and determinants of mental health services need of this population, it is necessary to have a *methodology* for describing mental health services need.

The “Traditional” Approach

The “traditional” approach in attempting to operationalize or quantify the need for psychiatric services in a service area starts with estimating the prevalence of specific disorders and associated impairment from epidemiological studies based on samples of children drawn from the general population. These prevalence rates are then

extrapolated to produce estimates of the number of children in a service area that would be expected to meet diagnostic criteria for specific disorders.

Disadvantages of The “Traditional” Approach

Using this approach, it is not possible to relate the clinical and contextual characteristics of the child and family to the frequency, intensity, and types of services needed. It is thus not possible to

- assess the extent to which psychiatric need is met through non-psychiatric systems (this is particularly relevant for the SED study since any mental health services received by the subjects are received in five different service systems);
- apply the findings to various geographical areas since services may not be organized in a uniform manner;
- design new types of service delivery in an efficient manner (Brewin, Wing, Mangen, Brugha, & MacCarthy, 1987);
- link the assessment procedure with a framework for knowing what action should be taken when a particular problem is present (Brewin et al., 1987); and
- systematically assess the degree to which individual and aggregate service needs are met.

The Proposed Solution

The proposed solution to the above problems in terms of assessing psychiatric need builds on the work of the Medical Research Council (UK; Brewin et al., 1987) and the New York State Office of Mental Health (Grosser, 1991). The central feature of this solution is to describe mental health services in terms of the *types of intervention* needed (Bebbington, 1990).

Types of intervention refers to service elements that are generalizable and comprehensible across different organizational units and systems of care. Examples of possible types of intervention are as provided in Table 1.

Assessing Children's Mental Health Services Needs

Table 1
Examples of types of intervention

Biological interventions

- neuroleptics
- antidepressants
- mood stabilizers (e.g. lithium)
- stimulants
- benzodiazepines
- electroconvulsive therapy

Placement interventions

- acute crisis admission
- partial hospitalization
- residential services
- home-based visits

Educational interventions

- placement in a special school
- psychoeducational services
- parent training
- vocational services
- support services for family (e.g. advocacy groups, support groups)

Psychological interventions

- long term individual psychotherapy
- family psychotherapy
- group psychotherapy
- crisis intervention
- supportive psychotherapy
- brief, focused individual psychotherapy (e.g. cognitive-behavioral, interpersonal, or brief psychodynamic psychotherapy)
- alcohol and substance abuse counseling

type of intervention by two service providers. Each of these service providers will rate these 30 subjects one month later to establish test-retest reliability. The reliabilities will be reported as Kappa coefficients.

Assessments of psychiatric need will be made for each child by psychiatric clinicians using data obtained from the SED study.

The clinicians will make their assessments on the basis of their clinical experience, published studies regarding the efficacy of particular treatment modalities, and practice parameters developed by the American Academy of Child and Adolescent Psychiatry (Coppans, Jaffe, & Grimes, 1994).

Prior to the assessment of the whole sample, the inter-rater reliability and test-retest reliability of the clinicians' use of the instrument will be established and reported as Kappa coefficients. This will be done by having two clinicians make judgments on 100 subjects and having one clinician make repeat judgments approximately one month apart on 30 subjects.

The types of intervention received by each child will be reported by the service providers (using the instrument described above).

The extent of unmet need will be calculated.

This will be done by ascertaining which of the needs as assessed by the psychiatric clinicians are not being provided by the relevant service system.

The determinants of unmet need level will be ascertained using logistic regression.

The dependent variable will be whether a specific service was provided and the independent variables would comprise the individual, family, and service system characteristics.

Application to the SED Study

A list of types of intervention and their definitions will be compiled.

A list will be derived from the clinical experience of the authors, discussions with colleagues, and literature reviews. To estimate inter-rater reliability, 30 subjects in each system will each be rated in terms of their need for each

Conclusions

In this summary, we described a novel approach to the challenge of describing unmet mental health services need in children and we indicated how this approach would be applied in the analysis of an ongoing project. The data produced will be of greater use to mental health service planners than that available from existing methodologies.

References

- Bebbington P. E. (1990) Population surveys of psychiatric disorder and the need for treatment. *Social Psychiatry and Psychiatric Epidemiology*, 25 33-40.
- Brewin C. R., Wing J. K., Mangen S. P. , Brugha T. S., & MacCarthy B. (1987) Principles and practice of measuring needs in the long-term mentally ill: the MRC Needs for Care Assessment. *Psychological Medicine*, 17 971-981.
- Coppans S. A., Jaffe S. L. , & Grimes K. E. (1994) Developing and using clinical guidelines in child psychiatry: algorithms and practice parameters. Symposium presented at the 41st Annual Meeting of the American Academy of Child and Adolescent Psychiatry, New York, NY, October 25-30, 1994.
- Grosser R. (1991) *Children and Youth Need Methodology. Population Criteria and Need Estimates. 1995 Capacity*. Albany, NY: Office of Mental Health, State of New York.
- Silver S. E. (1990) The epidemiology of childhood psychiatric disorders: prevalence findings from recent studies. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29: 76-83.

Developing An Effective, Standardized Client Information System For Child Mental Health Treatment Centers

Introduction

Treatment centers face new challenges in providing services for children with severe emotional disturbances (SED). Given limited dollars for human services and the advent of managed care initiatives, they must carefully track the services each child receives, and be accountable for the quality and effectiveness of treatment. Too often there are gaps in essential information about children, interventions and outcomes. Moreover, children with SED access a variety of providers, both public and private. Each center has its own system for documenting care goals and services, but systematic communication between centers, and even within centers, is often inadequate.

Although technology is available to help with client information needs, implementation and use of client information systems within human service organizations has not proven easy (see Bronson, Pelz & Trzcinski, 1988; Cross, Gardner & Friedman, 1993; Hallfors, Cross & Roan, 1993). Hastily designed systems or “canned” software packages do not necessarily provide the information agencies require and are often not readily adaptable to their particular information needs. Data gathering requirements imposed from higher administrative levels can alienate busy staff, especially if the information appears irrelevant to practice or redundant. Client Information Systems (CISs) are often implemented without adequate staff instruction in maintaining and using data. Lack of standardization impedes the flow of information and makes it impossible to track children across agencies for more powerful analyses of outcomes.

This summary describes the first phases of development of a simple, flexible computerized Client Information Systems (CIS) for agencies who provide services to children with SED. The CIS will enable individual agencies to initiate a carefully developed core data system that they could further refine to meet their individual

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specification. It will also allow public agencies to collect standardized data about children across multiple systems and limit redundancy by involving the many users of data in choosing key elements. Providers can access information across organizational and professional boundaries to improve treatment. We envision a consortium of centers across the Northeast participating in large evaluation studies of treatment outcome and cost-effectiveness to improve service delivery.

Our primary objective has been to create a Common Data Set structure suitable for use by any center providing day treatment or residential services to children. The database structure will consist of a set of tables, a data dictionary describing relationships among the tables, and written documentation on operation. We are developing this core structure in a one year project, along with a plan for field testing and refinement in the following year.

Developing a CIS that can be used by many different organizations requires overcoming a number of obstacles. Hardware and software incompatibilities are often present, and some agencies have a strong commitment to a particular operating system (e.g. DOS, Macintosh, Windows). Developing software for one operating system is time consuming, and making that software available on a number of systems significantly increases the complexity of the process. Second, agencies differ considerably in how data flows from one part of the organization to another, and what types of data are important for a client database. Considerable discussion needs to take place to discover what data users need and to establish consensus about what core data should be standard. The Brandeis' staff's experiences with a national demonstration project highlight some of the problems involved in implementing a common CIS software package among several organizations

(see Cross, Gardner & Friedman, 1993; Hallfors, Cross, & Roan, 1993).

We are suggesting a minimalist approach to the problem outlined above. Our job is to ease the transition from a paper-based system to an electronic CIS for participating organizations. By providing a comprehensive, core Common Data Set (CDS) structure, we will save time and money for those agencies attempting to develop their own systems, and improve their chances of success. A standardized CIS will allow easy access to evaluation data across agencies, yet each organization will have maximum flexibility in using the hardware and software of its own choice.

In addition, researchers and the consultant are working with key personnel in the public sector, who have responsibility for servicing children with SED. Leaders from Massachusetts government departments such as public education, child welfare, children's mental health, and Medicaid have been invited to share their information needs and perceived trends in reporting requirements.

Initial Steps

Data from Phase I of the project were drawn from five eastern Massachusetts residential treatment centers who serve latency age and adolescent children. All of the agencies utilize some form of computerized client record system representing a variety of hardware and software platforms. The information systems are *home grown* and have been through several iterations. Most were created in the late 1980's. The organizations are medium sized with annual budgets ranging from 4.5 to 12 million dollars.

Phase I of the project focused on determining which of the hundreds of data elements used by residential treatment centers (RTCs) participating in the project should be candidates for inclusion in

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the common data set. We began by collecting and analyzing all the relevant computerized data elements that were tracked by the different programs.

It proved somewhat more difficult than expected to gather the data elements from each of these busy agencies. Each differed in their understanding of the project and in their ability to produce the requested information. With perseverance, a reasonably comprehensive picture of the elements being tracked at the various agencies was developed.

To this picture, data elements from the Adoption and Foster Care Analysis and Reporting Systems (AFCARS) published in Federal Register (Vol. 58 No. 244) were added. AFCARS identifies data elements that states will be required to report to the federal government in an initiative to produce national information on foster care and adoption. These elements were added to determine the extent which the final common data set would be AFCARS compliant. However, the addition was not as useful as originally hoped, given that the AFCARS elements represent primarily derived data or the results of initial data analysis. In addition, a core dataset identified by the American Association for Partial Hospitalization (AAPH) Outcomes Measurement Protocol has been entered into the application. The core data set represents a collection of instruments including outcome measures. At the time of this report, these data elements have not been analyzed.

The elements provided by treatment centers were entered into a comparison application. Elements were given a common element name which captured its intended function (see Table 1). Elements were later reviewed and grouped into three categories: core data set, administrative, and other.

To be included in the core data set, elements needed to address the following key questions: What kind of children are served? What kind of services do they receive? When do they enter and leave the program? Who pays for their care? How do they do after they leave?

As shown in Table 1, only a few elements currently collected can answer these questions. Most of the elements respond to administrative or management requirements. We plan to share these elements with RTCs for their consideration, but would not recommend them for a core data set. For the CDS, we pulled what we could from the list in Table 1, and then considered additional variables that could answer our questions.

Table 2 displays all of the elements being considered for the CDS. Two items deserve special attention. For example, we are developing a unique identifier that, while protecting children's confidentiality in analysis and reporting, will allow them to be tracked throughout their stay, as well tracking returns to this RTC or any other. Ideally, we will develop the ability to track children throughout the health and welfare service system. The identifier may include markers that would allow family members to be recognized in some way. Services to siblings or other family members then could be analyzed without divulging confidentiality. Social security numbers are currently used to validate the right record for the right child. Social security numbers mask a child's identity to some degree, but require additional security to protect confidentiality.

We are also paying special attention to the outcomes variables. The ones listed in this paper have caused us to ask additional questions. For example, how will the outcome variables be used? Will RTCs be compared for their outcomes? Will attention to outcomes make RTCs avoid the most

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Table 1
Common Data Set Elements

Data Element	RTC 01	RTC 02	RTC 03	RTC 04	RTC 05	AFCARS	Data Element	RTC 01	RTC 02	RTC 03	RTC 04	RTC 05	AFCARS
Client Number	X		X	X	X		Contact Last Name	X	X	X	X		
Client Last Name	X	X	X	X	X		Contact First Name	X	X	X	X		
Client First Name	X	X	X	X	X		Contact MI	X	X	X	X		
Client MI	X	X	X	X	X		Organization Name	X	X	X	X		
Alternate Name		X	X				Contact Street	X	X	X	X		
Client SS Number	X	X	X				Contact City	X	X	X	X		
Client Street Address		X	X	X	X		Contact State	X	X	X	X		
Client City		X	X	X			Contact Zip Code	X	X	X	X		
Client State		X	X	X	X		Contact Work Phone	X	X	X	X		
Client Zip Code		X	X	X	X		Local Education Authority	X	X	X			
Client Phone Number		X	X	X			School Last Attended	X	X				
Date Interviewed	X	X					Entry Grade Level	X	X	X			
Date of Birth	X	X	X	X	X	X	Current Grade Level		X	X			
Date of Admission	X	X	X	X			SPED Prototype	X	X	X			
Date of Discharge	X	X	X	X			Date Most Recent Core		X	X			
Client Program	X	X	X	X	X		Next IEP Review	X	X	X			
Program Site	X	X	X	X	X		Diagnosis		X	X	X	X	
Case Manager	X	X	X				Client Physician	X	X				
Birth Place	X	X					Health Carrier	X	X				
Citizenship	X	X					Health Plan Number	X	X	X	X		
Client Current Address	X	X	X				Physician Work Phone		X				
Primary Language	X	X	X				Physician Home Phone	X	X				
Previous Placement	X	X					Medications	X	X				
Height	X	X					Medication Dosage	X		X			
Weight	X	X					Allergies	X	X	X			
Hair Color	X	X					Immunization Date	X	X				
Eye Color	X	X					Immunization Type	X	X				
Gender		X	X	X	X		Self Preservation Ability	X	X				
Race	X	X	X	X	X		Medical History	X	X				
Number of Siblings	X	X	X				Funding Source Code	X	X	X			
Referral Source	X	X	X	X			Rate Amount	X	X				
Referral Region	X	X					Percent of Cost	X	X	X	X		
Identifying Marks	X	X					Billing Frequency	X	X				
Services Requested		X	X				Funding Agency	X	X	X	X	X	
Client Status		X	X				Funding Contact Name	X	X	X			
Relationship Code	X	X	X				Funding Contact Street	X	X	X			
Legal Guardian	X	X					Funding Contact City	X	X	X			
Family Last Name	X	X	X				Funding Contact State	X	X	X			
Family First Name	X	X	X				Funding Contact Zip	X	X	X			
Family Street	X	X	X				Funding Contact Phone	X	X	X			
Family City	X	X	X				Funding Contact Fax	X	X				
Family State	X	X	X				Funding Start Date	X	X	X			
Family Zip Code	X	X	X				Funding End Date	X	X	X			
Family Home Phone	X	X	X				Funding Notes	X	X				
Family Work Phone	X	X	X				Incident Date	X	X				
Restrictions on Visiting	X	X					Incident Time	X	X				
Family Date of Birth		X	X				Incident Location	X	X				
Contact Type	X		X	X			Incident Type	X	X				

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Table 2
Elements for Common Data Set

Domain	Element	Domain	Element
Client demographic information	Client number	Funding information	Funding source code
	Client social security number		Rate amount
	Client zip code		Percent of cost
	Date of birth	Service history	Treatment programs immediately prior to admission
	Gender		Services requested
	Race		Services delivered during treatment
	Services being delivered by another agency		
Program information	Date of admission	Services recommended at discharge	
	Referral source	Behavioral events	Incident date
	Presenting problems		Incident type
	Date of discharge	Outcomes	Living environment (restrictiveness, stability)
	Reason for discharge		Attendance at school or work
	Placement at discharge		Academic progress
	Living environment restrictiveness code at discharge		Life satisfaction
	Substance abuse		
	Substantiated reports of child abuse & neglect		
Living situation and history	Living environment at intake (code)	Arrests	
	Living environment restrictiveness code at intake	Violent behaviors (including sex offenses)	
	Location of environment (zip code)	Sexually transmitted diseases	
Family information	Family zip code	Pregnancy/parenthood out of wedlock	
	Relationship code		
Education information	Current Grade Level		
	SPED prototype		
	Date most recent core		
Medical Information	Diagnosis		
	Health carrier		
	Medications		
	Date Medication Prescribed		
	Who Prescribed (code)		

problematic children? Measuring outcomes has become quite fashionable, but each outcome indicator must be considered carefully for the conclusions it implies.

The Next Steps

During the next phase of the project, we will develop an advisory committee to review all data elements and make recommendations for further changes in the core data elements. The advisory committee will consist of representatives from the RTCs, state agencies, consumers and researchers. All elements will be subject to discussion and debate over inclusion in the CDS. Those variables that finally are included will then be defined and operationalized for programming in a relational data base. The data base will be piloted in six RTCs and further refined by the advisory committee as needed. We envision this to take place over a two-year period, at which point we will make the data set available for a much wider circle of RTCs.

References

- Bronson, D., Pelz, D., & Trzcinski, E. (1988). *Computerizing your agency's information system*. Newbury Park, CA: Sage Publications.
- Cross, T. P., Gardner, J. K., & Friedman, C. (1993). Implementation of a clinical management information system for children's mental health care: Lessons from a national demonstration. *Research and Evaluation in Group Care*, 3, 10-13.
- Hallfors, D., Cross, T. P., & Roan, C. (1993). Case Data (MIS). *Section Three in the Evaluation of the Mental Health Services Program for Youth: Interim Report to the Robert Wood Johnson Foundation*. Boston, MA: Brandeis University, Heller School, Family and Children's Policy Center.

Enhancing the Methodology of Social Validation: A Survey of Child and Family Service Issues

Introduction/Purpose

Social validity relates to the idea that behavioral interventions and outcomes must be validated by individuals and communities being served. Social validation research, and the related, but more public policy oriented, Community Concerns Report Method represent a simple, direct methodology for asking customers what their needs are and how satisfied they are with current services (Schriner & Fawcett, 1988). This approach evolves from a body of behavioral research on social validation that first made the case for subjective measurement of behavioral interventions (Kazdin, 1977; Wolf, 1978).

As the scope of social validation research broadens to include public policy issues, questions remain regarding reliability and validity (Fawcett, 1991; Storey, 1992; Storey & Horner, 1991). The Southern Consortium for Children (SCC) *Survey of Child and Family Service Issues* builds upon the work of the Pennsylvania Project Social Validation Survey (VanDenBerg, Beck, & Howarth, 1992), by adapting a previously used survey instrument for field testing in Appalachian Ohio.

The purpose of the study was to apply appropriate psychometric tests to data already collected by the Pennsylvania Survey, to alter items where indicated, and to pilot the resulting instrument in four Ohio counties in an attempt to evaluate reliability and validity. The resulting instrument is available for use elsewhere, encouraging more uniform methodology in further social validation research. The study was carried out in two distinct phases.

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Methodology and Findings, Phase One

Overview of Pennsylvania Project Data

The Pennsylvania Survey was designed to obtain some measure of the opinions of stakeholders in Pennsylvania's children's services system. Specifically, this survey asked stakeholders to rank the level of importance of selected children's issues and their satisfaction with how these issues were addressed. The goal was to identify issues of both high importance and low satisfaction, and to target those issues for the development of program outcome measures.

Seven hundred Pennsylvania stakeholders were asked a series of questions regarding the importance and satisfaction levels associated with various children's issues. Children's issues were categorized into the following life domain areas: educational, vocational, safety, living arrangements, family life, emotional and psychological, medical and psychiatric, social and recreational, cultural, spiritual, and legal issues. Respondents chose from among values on a Likert type scale for both importance and satisfaction levels on 49 questions, effectively yielding 98 separate survey items. For all questions, the choices were 1, 2, 3, 4, and 5, with 1 being the least important or least satisfied and 5 being the most important or most satisfied.

Ten specific groups of individuals were identified as stakeholders of children's services. The ten identified groups were: children age 12 or older, parents of children younger than 12, parents of children age 12 or older, community agency workers, board members of agencies, school board members, juvenile court judges, local legislators, informal community leaders, and poverty-level representatives.

Phase One Procedures

In phase one of the study, data collected in the Pennsylvania Survey were secured so that an item analysis could be performed in an attempt to obtain a meaningful measure of instrument reliability. Specifically, internal consistency was measured using Cronbach's (1951) coefficient alpha, which is a commonly accepted formula for assessing the reliability of a measurement scale with multi-point items. Survey items were split into life domain areas and further along the dimensions of importance and satisfaction, yielding 22 separate sets of data. Within each data set, a coefficient alpha value was determined for each set when one item was deleted, one item at a time. This allowed for the identification of items that significantly eroded internal consistency.

Further statistical analysis was carried out to assess the significance of reported variability between child clients and all other respondents, and between groups closest to services and those groups one step removed from services. An independent groups *t*-test (Jaccard & Becker, 1990) was performed comparing the mean ratings for each of the comparison groups described above.

Phase One Findings

Given the fact that the survey instrument is in an early stage of development and there were a small number of items in each life domain data set, alpha values of .6 across the dimension of importance and .7 across the dimension of satisfaction were considered to be adequate indicators of instrument reliability. This was found to be the case in 15 of the 22 data sets, which was considered to be evidence in support of reliability. The instrument was found to be reasonably reliable, in general. Life domain areas that did not meet the standard across both the dimensions of satisfaction and importance were

Social Validation: A Survey of Service Issues

selected for alteration, while those that exceeded the standard were considered to be reliable and were included in the instrument for field testing in Ohio without changes. The Pennsylvania Project staff also suggested two minor changes based on previous experience. In all, at least one item within 8 of the 11 life domain areas was selected for alteration in phase two of the study.

It was intuitively felt that an instrument of reasonable reliability would be able to discriminate between child and non-child respondent groups, and between those closest to services and respondent groups one step removed from services. A positive finding in either or both instances was to be considered evidence in support of construct validity.

When independent groups *t*-tests were performed on both comparison groups, results were significant. Statistically significant differences were discovered in 29 of 44 data sets, overall. The direction of significant differentiation was very consistent between respondent groups across life domain areas. Evidence in support of construct validity was found to be present in phase one of the study.

Methodology and Findings, Phase Two

Phase Two Procedures

Stakeholders of child and family services were selected for participation in phase two of the study in Athens, Jackson, Washington and Lawrence Counties in rural, southeastern Ohio ($N = 192$). Stakeholder groups were the same as the Pennsylvania Project Survey with the exception of the poverty level representatives, who were excluded at the suggestion of Pennsylvania Project research staff.

It was decided that when at least 60 valid responses were received, the statistical analyses described in phase one would be repeated and a

follow-up interview would be conducted with 10 individuals. Interview candidates were nominated by mental health agency workers and represented all stakeholder groups, with the exception of judges. Independent groups *t*-tests were performed only where significant differences between groups were discovered in phase one of the study.

Phase Two Findings

The minimum standards for values for Cronbach's alpha established in phase one of the study were exceeded in all but 2 of 22 life domain data sets in phase two. Values for alpha were increased in 8 of 11 instances across the dimension of satisfaction, and in all instances across the dimension of importance.

Independent groups *t*-tests were performed using pooled variance estimates on nine data sets where child-client ranking of satisfaction levels significantly differed from other groups in phase one. There were significant differences in four of nine data sets.

Independent groups *t*-tests were also performed on the eight data sets where significant differences were discovered in phase one between child clients and all others in their ranking of importance. There were significant differences in two of eight data sets.

Similarly, independent groups *t*-tests were performed on respondent groups closest to services, and groups one step removed from services in ranking of importance and satisfaction where significant differences were present in phase one data. There were no significant differences found in any of the seven areas when ranked for satisfaction. When ranked for importance, a difference was found in only one of five areas examined.

When semi-structured follow-up interviews were conducted among 10 survey respondents, a high degree of satisfaction was reported with the

content, clarity and significance of the questionnaire. When specifically asked about the importance of the life domain areas chosen for study, they were universally endorsed. The follow-up interviews yielded no significant negative comments.

Summary & Conclusions

An increase in values for Cronbach's alpha in 20 of 22 life domain data sets represents compelling evidence in support of enhanced instrument reliability for the altered questionnaire that was field tested in Ohio. However, the performance of independent groups *t*-tests in phase two, failed to convincingly replicate the phase one study. Little new evidence in support of construct validity was yielded in phase two. The follow-up interview suggests a high degree of overall respondent satisfaction with the instrument, and the one specific question regarding the importance of included life domain areas provides an indicator of content validity.

It is expected that enhanced methodology in social validation research will increase its viability and help to more clearly place this approach in the larger context of health and human service policy development. Specifically, it is anticipated that the application of psychometric measures to survey data will help to increase consumer participation in the design of child and family programs in Ohio and beyond.

The SCC is dedicated to an outcome management approach that includes consumer choice and contributes to the overall responsiveness of services. Working closely with families, service providers and community groups, the *Survey* is being used as part of a backdrop for the development of relevant outcome measures across systems and life domain areas.

References

- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- Fawcett, S. B. (1991). Social validity: A note on methodology. *Journal of Applied Behavior Analysis*, 24, 235-239.
- Jaccard, J., & Becker, M. A. (1991). *Statistics for the Behavioral Sciences*. Belmont, CA: Wadsworth.
- Kazdin, A. E. (1977). Assessing the clinical or applied importance of behavior change through social validation. *Behavior Modification*, 1, 427-452.
- Schriner, K. F., & Fawcett, S. B. (1988). Development and validation of a community concerns report method. *Journal of Community Psychology*, 16, 306-316.
- Storey, K. (1992). Reliability and validity issues in social validation research involving persons with developmental disabilities. *Journal of Developmental and Physical Disabilities*, 4, 75-81.
- Storey, K., & Horner, R. H. (1991). An evaluative review of social validation research involving persons with handicaps. *The Journal of Special Education*, 25, 352-401.
- VanDenBerg, J., Beck, S., & Howarth, D. (1992). *Pennsylvania outcome project for children's services. Summary report of the Social Validation Survey*. Pittsburgh: The Pressley Ridge Schools.
- Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis*, 11, 203-214.

Making “Cents” of Outcome Measures in a Partial Hospitalization Setting

Introduction and Purpose

The purpose of this project was to design effective and efficient outcome measures for a youth partial hospitalization (YPH) program. The design was required to utilize information obtained through the existing intake structure, as well as to provide immediate information that could assist in treatment decisions, treatment planning and the design of interventions. The resulting design must also obtain information across several sources and serve as a means for monitoring clients' progress. Additionally, the instrument to be selected required appropriate standardization and must be acceptable for use in the YPH setting. Finally, it needed to be cost effective and easily incorporated into the established role of the therapist. Once the design was developed, a pilot was initiated. This summary presents the design of the outcome measurement process and results of the first six months of data collection.

Method and Procedures

The design described in this summary was developed and implemented in a partial hospitalization program setting which serves youth who experience significant emotional and behavioral difficulties. The YPH setting is part of a larger community mental health system of care in Dayton, OH. Individuals who are referred to this program demonstrate severe symptoms of emotional or behavioral disorders which interfere with successful functioning within the structure of the school, home and/or the community, however they do not require hospitalization. Treatment goals include preparing the youth for return to community settings with behaviors that are manageable and appropriate to the situation. Therapy includes work in groups, in individual sessions, and family sessions. Academic instruction is provided daily through a tutoring model.

The Achenbach Child Behavior Checklist (CBCL) was selected to obtain behavioral data due to its multimodal and multi-informant format. The instrument met design criteria, because it

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can be administered to parents, teachers and youth, yields a cross-informant profile for response comparison, and has been standardized (Achenbach, 1991). The results provide a profile that delineates internalized behavior (e.g., withdrawn, somatic complaints and anxiety/depression) from externalized behavior (e.g., delinquency and aggression). Social problems, thought problems and attention problems can also be identified. The scales are easy to complete, and results can be compiled quickly with the aid of computer scoring. It was felt that it would be feasible to incorporate information provided by the CBCL into treatment planning and intervention design.

Client information from the initial intake and existing client records contributed to the comprehensiveness of the outcome measures. The following variables were considered: gender, ethnicity, age at admission, initial primary diagnosis, initial secondary diagnosis, most frequent medications used, length of stay, global assessment of functioning (GAF), and use of additional services.

Clinically, it was expected that three specific areas would be included in the development of

acceptable outcome measures: level of functioning, severity of symptoms, and client satisfaction. Table 1 describes the resulting evaluation design.

Two data collection points were established. The first occurred at admission and the second during a six month review. The data were analyzed using a paired samples *T*-test to determine whether significant change occurred during the first six month of treatment. Results from the CBCL were compared to determine specific areas of significant change.

Results

The results of the paired samples *T*-Test for the initial and six month data provided insight into the effectiveness of the YPH intervention. The parent or primary caretaker reported a significant reduction in the youths' anxious/depressed behavior, aggressive behavior and externalizing behavior (see Table 2). The teachers working with the child in the treatment milieu reported a decrease in externalizing (acting out) behavior. The most significant finding related to the youth's perception of their own behavior. Youth reported that after six months they experienced less withdrawal, a decrease in social

Table 1
Evaluation Design YPH Outcome Study

Data Required	Person Responsible	Measure to be Used
Level of Functioning	Treatment Provider	Global Assessment Device (GAF)
Severity of Symptoms	Parent Client Sending Teacher On-site Teacher	Child Behavior Checklist (CBCL) Youth Self Report (YSR) Teacher Report Form (TRF)
Client and Parent Satisfaction	Client Parent	Agency Developed Form

Outcome Measures in Youth Partial Hospitalization

Table 2
Problem Profile Comparison of Initial
and Six-Month Data

CBCL	TRF	YSR
Anxious/ Depressed .007	Externalizing .013	Withdrawn .037
Aggressive .045		Social Problems .061
Externalizing .002		Attention Problems .013
Internalizing .020		Externalizing .0009
		Internalizing .051
		Total .0009

problems and a decrease in attending problems. The youth self report total scale indicated significant changes across these measures.

The initial placement profile that resulted from the collection of demographic data is shown in Table 3. The initial profile of the client was considered in concert with the CBCL measures. The CBCL's Internalizing and Externalizing scales helped to identify specific behaviors related to the diagnosis, allowing the treatment plan and intervention selection to be directly related to the symptomatology.

Initially, it was anticipated that Attention Deficit Hyperactive Disorder (ADHD) would be the most common primary diagnosis. The results of the pilot study, however, identified Dysthymia as the most frequent primary diagnosis, and Oppositional Defiant Disorder as the most frequent secondary

Table 3
Demographic Data Resulting in an Initial Placement Profile

Gender	Male Female	53.1% 43.8%
Ethnicity	Caucasian African-American Other	90.6% 6.3% 3.1%
Age at Admission	9-11 12-14 15-17 18	11.8% 34.4% 41.2% 6.2%
Initial Primary Diagnosis	Dysthymic Disorder	
Initial Secondary Diagnosis	Oppositional Defiant Disorder	
Most Frequent Medications Used	Prozac Ritalin	
Length of Stay	180 Calendar Days	
Global Assessment of Functioning	Code 51 Moderate	
Additional Services Used	Case Management School Contact Foster Care	

diagnosis. It appeared that therapeutic intervention for depression might be as important as redirecting the externalizing behavior. Considering the most frequent primary and secondary diagnoses, the most frequent medications used were as expected—Prozac (anti-depressant) and Ritalin, often prescribed to address externalizing behavior. These results suggested that a combination of interventions was necessary to promote positive outcomes, including psychotherapy, behavior change and medication services. Results also supported the utility of a transdisciplinary approach to service provision.

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The 180 day length of stay (LOS) was identified as the baseline measure for program planning. To impact LOS, increased services to support the successful transition of clients to the least restrictive appropriate environment must be developed. Case management and foster care services are utilized in conjunction with YPH program within the system of care model, and can help support these transitions. Collaboration with the schools will also be a critical link to accomplish this goal.

Additionally, the results indicated that the lower the score on the GAF upon intake, the longer the length of stay. This information will help predict the level of financial support required from funding sources for individual clients. In future studies, it is anticipated that examination of these factors will yield an anticipated LOS upon intake.

Discussion

It is likely that comprehensive services for youth who have severe emotionally disturbances support the ultimate goal of preventing future inpatient hospitalization and residential care.

The YPH program will use results of the outcome measures to focus their efforts in making the continuum of care accessible to children and adolescents in need of mental health services. Program standards will be reviewed to ensure that age appropriate and/or developmentally appropriate types of services are made available. Skill groups, for example, could meet the needs of a specific age group (e.g., sex education, anger management, or independent living skills).

The initial results of this study have had a great impact on refining the direction of the YPH program. The information from this study will be used in both treatment planning and program

development, and should garner agency support of the outcome measure process. Ultimately, information obtained from outcome measures will be critical in the justification of managed care dollars and authorization of services for children, adolescents and their families.

References

Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 Profile*. Burlington, VT: University of Vermont Department of Psychiatry.

A Functional Integrator in Systems of Care Research on an Operational Language for Service Planning

Introduction/ Purpose

As systems for care for youth with serious emotional disturbances are designed and implemented, deficiencies of the existing methods of service planning have been identified. Some methods use language that is unfriendly to families—medically oriented categorical diagnoses, for example, create barriers for families, and may not guide appropriate professional intervention. Some are operationally explicit, but do not accommodate or embrace a wide range of clinical approaches. Some methods of service planning do not take into account the purposes of different systems (e.g., child welfare vs. special education). Because of these shortcomings, systems of care, despite efforts to achieve structural integration, often find it is difficult to achieve *functional integration*—that is, operational approaches to service planning that can be used throughout and across a system of care.

This summary presents evaluations of a method of service planning that responds to these problems. This method was designed to be operationally explicit, family-friendly, conducive to the integration of clinical experience and multi-agency competency into service planning, and use of a language of service planning that will “work” across systems.

Focal, factor-based service planning (FFSP) was developed in a hospital setting and has been used in a community-based agency (Harper, 1989; Harper & Cotton, 1991). FFSP assumes that service planning can be explicit and operational, comprehensive and coherent. It’s design is based on the assumption that it is possible and preferable for parents and youth to participate in the development of the service plan. In addition to family participation in planning, FFSP values the use of least restrictive alternatives, and *parsimony*—the definition of modest goals at each stage—doing what needs to be done, not all that could be done.

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FFSP begins with selection, from among many potential problems, of a single *Focal Problem*, which is explicit, actual, and defined in terms that all parties can agree on. A corresponding *Goal* is then defined. *Contributing Factors*, those elements in the life of child, family, community or systems of care felt to contribute to the Focal Problem, are identified, and *Intervenable Factors* chosen. *Corresponding Interventions, Objectives and Target Dates* can then be defined. The Focal Problem and Goal and the Selected Factors must be stated in language that can be shared with the youth and with parents. The overall plan is guided by an explicit *Discharge Picture*. Criteria for Focal Problem, Goal, and Factors are given in Table 1; questions to use to check on the plan are given in Table 2.

The Focal Service Plan does *not* include everything known about the child; it *complements* and does not take the place of clinical diagnoses; and is *not* a complete problem list.

This summary presents results of the evaluation of FFSP in hospital and community settings and suggestions for implementing its use in systems of care.

Method/ Procedures

For this evaluation research, two sites were chosen. One, an inpatient psychiatric service in a teaching children's hospital, had used FFSP (there, called Focal Inpatient Treatment Planning, FITP) for several years (Harper, 1989; Harper & Cotton, 1991). The other, a community-based family service agency, had begun using FFSP in the previous year. The staff and trainees in these two sites represented a wide range of experience and came from multiple disciplines.

The evaluation questions were, (1) What perceived advantages does FFSP have for

Table 1
Focal, Factor-based Service Planning

Criteria for the focal problem

- 1) States symptoms of condition of the child.
 - 2) States the real reason for treatment, including relevant aspects of context, in terms all can agree with, and in language that facilitates alliance formation and parsimonious definition of the goal.
-

Criteria for the goal

- 1) Is the "flip side" of the Focal Problem.
 - 2) States those changes that will remove or decrease the problem requiring services, parsimoniously defined.
-

Criterion for contributing factors

- 1) Those features of the child's life that contribute to or perpetuate the Focal Problem.
-

Criteria for selecting factors

- 1) Can be changed during services.
 - 2) Change in the Factor will produce change in the Focal Problem.
-

Criteria for strengths

- 1) Are those features of the child's life that mitigate the Focal Problem or provide a point of leverage in working on it.
-

clinicians? (2) What is the impact on clients? Is FFSP relevant to long-term outcome? (3) How do experienced and trainee clinicians learn to use FFSP? and (4) How is the method used in multidisciplinary meetings? Data were gathered through observations of team meetings and semi-structured interviews with clinicians by one of the authors (J. Barnes).

An Operational Language for Service Planning

Table 2
Focal, Factor-based Service Planning

Questions to check on Focal Problem
1) Is this what <i>really</i> got the child to services? Where are most children with this problem?
2) Can all parties agree on this definition of the Focal Problem?
3) Has the Focal Problem been stated in jargon-free language, useful for building an alliance?
Questions to check on the Goal
1) Is this Goal the "flip side" of the Focal Problem?
2) Is this a parsimonious statement of what has to change for the child not to require services?
Questions to check on Factors & Strengths
1) Do the Factors capture our best understanding of the child?
2) Are some of the Factors near enough to the child's experience that he/she would recognize them and respond emotionally?
3) Have we identified relevant Strengths?
Questions to check on selection of Factors
1) Does this "short list" capture what needs to change for the child to be able to leave services?
2) Do we really believe that change in these Factors will allow the child to leave services?
3) Are there other changes we expect to occur with services that we have not yet defined?
4) Do the defined interventions correspond to the selected Factors?
Questions to check on Overall Plan
1) At which levels of the plan does consensus exist? Where is there lack of consensus?
2) Have we captured the child's point of view? Can we hear the child's voice in the treatment plan?
3) Is the Discharge Picture explicit?
4) Is the whole plan informed by the Discharge Picture?

Results and Implications

Observations in team meetings and comments in interviews indicated that FFSP was indeed being used, both in home-based and inpatient services. It was experienced as useful in both settings, for example, in identifying the unique aspects of each case, and decreasing the risk of "losing the forest for the trees" in complicated cases. Respondents reported that they appreciated having a language that could be shared among family members and providers from different disciplines.

FFSP was reported to have empowered clients by stating the work to be done in terms that youths and parents could understand and by emphasizing strengths and reachable goals. It stated mental health problems in non-pejorative language that could be shared with other family members. It was felt to facilitate work between clients and clinicians, and to clarify targets for other professionals.

Moving beyond these preliminary, subjective assessments, issues for further research included determining optimum training strategies; finding the best methods for generalizing use of FFSP between settings; assessing clinician satisfaction and advantages for clients in a more systematic way; and evaluating the contribution of FFSP to longer-term implementation of goals. Semi-structured interviews with clinicians differing in experience, discipline, and setting, interviews with children and parents, and observations in teams will help to address these issues.

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In the meantime, the use of FFSP will respond to external incentives. There is community pressure for participation in planning, while accrediting and reimbursing agencies increasingly require evidence of multi-disciplinary treatment planning with explicit goals and objectives. The use of the FFSP methodology should also increase in response to internal incentives—such as care providers' frustration at getting “bogged down” in data-rich cases where a goal is difficult to define, and their desire to pool input from professionals and community members alike.

As to implementation, our observations suggest several necessary conditions. On the institutional level, these include a mandate for explicit, participatory service planning; and the provision of needed resources, in terms of time, training, hardware, and the development of forms suited to this kind of service planning. Among personnel, implementing FFSP requires openness to learning new ways to organize clinical data, perhaps divergent from traditional practice; the capacity at each phase of the work to step back and reflect on the *planning process itself*; and a commitment to consensus development and participatory service planning.

Implementation requires that staff development be thought of as a process, not as a one-time training session; that it emphasize learner-directed, experiential learning; and de-emphasizes paperwork, or “getting the right form” as the solution to the challenges of service planning. Training must address critical knowledge, skills, and attitudes. Staff must learn that categorical diagnoses do not determine the content of treatment; they must learn how to use criteria for defining the problem being treated, the contributing, and the intervenable factors; and they must learn that obfuscation in service planning is not only a problem in documentation, but in

clinical practice as well. They must become skilled in monitoring the planning process, listening at each phase for the degree of consensus, and in defining factors, especially intervenable factors, out of clinical data. They must adopt the values of critical listening, parsimony in planning, and participatory planning.

References

- Harper, G., (1989). Focal Inpatient Treatment Planning. *Journal of the American Academy of Child and Adolescent Psychiatry* 28, 31-37
- Harper, G. P. & Cotton, N. S. (1991). Child and adolescent treatment. In L. I. Sederer (Ed.), *Inpatient Psychiatry*, 3rd ed. Baltimore: Williams and Wilkins.

An Alternative Approach to the Study of the Children's Mental Health Service Systems: Anthropological Models

Introduction and Definition

This summary explores the use of medical anthropology models to explain the relationships between parents of children labeled seriously emotionally disturbed and service providers. Today the values and practices of community service providers are moving away from institutionalization and toward community care and "individualized service models" (Burns & Friedman, 1990:95). This shift includes the recognition that the family of a child with a serious emotional disturbance requires as much support as does the child. Of equal importance, parents are becoming recognized and valued as the experts in their children's problems and needs, and are beginning to participate in service planning for their children.

In the new individualized service model, "the concept of a partnership between parents and professionals expands the more traditional roles of 'patient' and 'client' the parents tend to assume" (Friesen & Koroloff, 1990). As this service model becomes more accepted by all services and providers in the children's mental health service systems, a better understanding must be gained about what is happening in the relationships between the parents and providers.

Medical anthropology has a number of established theoretical models that address the relationship between patients and healers, which are used here to examine this relationship in the children's mental health service systems. Medical anthropology models are *sociocultural models* that recognize that the system's context is necessary in studying the strategies a family uses to seek and obtain care and support for a family member with medical or psychological health problems.

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Method

Medical anthropology models were used to analyze families' strategies for seeking and interacting with the available services, such as the special education schools explored in the case study. Data analyzed were from a qualitative multiple-case study of two families. In depth interviews, conducted in 1992, with young men and mothers explored their interactions with the schools and other service providers. The families were participants in the National Adolescent and Child Treatment Study (NACTS), a research project conducted by the Research and Training Center for Children's Mental Health, Department of Child and Family Studies, Florida Mental Health Institute (FMHI), University of South Florida (USF).

Anthropology of Biomedicine

The Anthropology of Biomedicine model is primarily cognitive. This approach and model "focus on what sickness and health mean to individuals and how, as a consequence of these meanings people act in specific ways regarding treatment" (Lazarus, 1988). Kleinman (1980), had developed an explanation for the anthropology of biomedicine model. He uses the concept of "explanatory models", which are notions held by the patients, families and practitioners about specific episodes of illness (Kleinman, 1988). Explanatory models may include cognitive, affective, moral and social concerns (e.g., specific health beliefs, fears and concerns about health, stigma of SED label, etc.)

For the child with a serious emotional disturbance, the lack of mutual understanding on the part of his/her family and the school personnel can cause miscommunication resulting in long-term consequences for treatment decisions and outcomes. The Anthropology of Biomedicine model is well suited to explain miscommunications

and family noncompliance with the school personnel's treatment recommendations.

EXAMPLE - Case Study A¹: Mother, Dana Mae Dodd; Son, Chuck Dodd; and Special Education Teacher, Ms. M.

Dana Mae Dodd and Ms. M. struggled to understand and work with each other. They each had their own perspective and explanatory model.

Dana Mae expected to have a lot of say and influence in how Chuck was treated at the day treatment facility. She kept in close contact with the teachers and expected to hear about problems on a daily basis, if needed. Dana Mae was assertive, she said "... I got what I wanted because I demanded it. I didn't ask, I demanded it when it came to my young-un...over the years the teachers and I have learned to work together."

Ms. M. explained how irritating Dana Mae's behavior could be when she called constantly and sent notes to school that were not written clearly. Ms. M. acknowledged that Dana Mae had her good points, saying, "She seems genuinely concerned. He [Chuck] does get his medicine when things get serious enough. ... She is better than most of the parents. I see some of the same behaviors in Chuck as I do in Dana Mae."

Dana Mae's belief that she should have daily input into Chuck's treatment often clashed with Ms. M.'s beliefs on how best to teach Chuck. This led to tension between the two women and problems in providing Chuck the best care.

Critical Medical Anthropology

The Critical Medical Anthropology model incorporates "political and economic determinants of society into studies of health and medicine" (Lazarus, 1988:45). The personal experience is seen

¹ all names in case studies are pseudonyms.

Anthropological Models

as taking place in the social context of the society as a whole. Health is defined in this model “as access to and control over the basic material (e.g., transportation, medication) and non-material resources (e.g., education, health information, therapy) that sustain and promote life at a high level of satisfaction” (Baer, Singer, & Johnsen 1986).

The critical medical anthropology model places the family-service provider interactions in the context of the children mental health service systems. The context influences the available services, beliefs about mental illness in children, and the “asymmetrical social relations based on social class and authority”, which all become critical parts of the analysis and model (Lazarus, 1988).

EXAMPLE - Case Study B: Mother, Beth Brennan; and Son, Calvin Brennan

Beth wanted to know what was wrong with Calvin. At one time she had wanted him to have a neurological examination. She said “I wanted the examination of the brain, the head, to see if, where the problem was coming from. If it was something mental, psychological, something I did, something I did when I was pregnant ... or anything. I wanted more help. Medical help or advice which we didn't get.”

She explained why they did not get more help: “Money I guess. ... Nobody ever recommended it. It wasn't paid for through the school and we didn't have the money to do it ourselves. His insurance didn't cover stuff like that.” The asymmetrical social relationship between the school personnel and Beth meant that Beth felt she did not have the right or knowledge to question the actions of the teachers and administrators. Calvin never did get a neurological exam because of economic, communication, and service system barriers.

Summary and Implications

In the children's mental health service system there is growing recognition that there must be a true partnership between the parents and service providers. There is also a conceptual shift towards families of the mentally ill in terms of “a model of stress, coping, and adaptation [that] views familial behaviors as coping strategies,” rather than as interfering with prescribed treatments, or as toxic agents (Lefley, 1989).

Medical anthropology models are well suited to examine what happens within the relationships developed between the families of children with mental health problems and the services providers, e.g. special education schools. Of particular interest was using the models to examine the family and school personnel interactions and their ability to cooperate in the care of the child. The models are also useful in exploring the reasons why the family and child did or did not comply with the treatments and instructions provided by the schools.

References

- Baer, H. A., Singer, M., & Johnsen, J. H. (1986). Toward a critical medical anthropology. *Social Science and Medicine*, 23(2), 95-98.
- Burns, B. J., & Friedman, R. M. (1990). Examining the research base for child mental health services and policy. *The Journal of Mental Health Administration*, 17(1), 87-98.
- Friesen, B. J., & Koroloff, N. M. (1990). Family-centered services: Implications for mental health administrators and research. *The Journal of Mental Health Administration*, 17(1), 13-25.
- Kleinman, A. (1988). *The illness narratives: Suffering, healing and the human condition*. New York: Basic Books.

Hanjian

Kleinman, A. (1980). *Patients and healers in the context of culture: An exploration of the borderland between anthropology, medicine, and psychiatry*. Berkeley: University of California Press.

Lazarus, E. S. (1988). Theoretical consideration for the study of the doctor-patient relationship: Implication of a perinatal study. *Medical Anthropology Quarterly*. 2(1). 34-58.

Lefley, H. P. (1989). Family burden and family stigma in major mental illness. *American Psychologist*. 44(3). 556-560.