

Chapter Eleven

**Outcomes and
Processes of
Residential and
Intensive Services**

Clinical Outcomes of Youth Who Receive Restrictive Services in Systems of Care

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Introduction

One of the guiding principles of systems of care is that “children with emotional disturbances should receive services within the least restrictive, most normative environment that is clinically appropriate” (Stroul & Friedman, 1986, p. 18). Given this principle, the number of youth who receive restrictive services in systems of care constitutes a relatively small percentage of children served (Center for Mental Health Services, 2003). However, because at times clinical or situational factors may warrant the use of restrictive services (e.g., severe depression or psychosis, threat of harm to self or others, unsafe living conditions, etc.) it is important to understand the characteristics of youth who receive restrictive services in systems of care and the predictors of their clinical outcomes.

Previous research on demographic characteristics of children who receive restrictive services has indicated that presenting problems such as delinquency, emotional problems, and poor school functioning are prevalent. (Lyons, Libman-Mintzer, Kisiel and Shallcross, 1998; Sheppard & Benjamin-Coleman, 2001). In addition, higher percentages of children who receive restrictive services have a history of physical and sexual abuse than those who do not (Hussey & Guo, 2002).

Connor, Miller, Cunningham, Melloni, (2002) summarized many of the previous findings related to predicting clinical outcomes of children in residential treatment. For example, higher rates of anxiety and depression, lower rates of conduct problems, younger age, and being female were all associated with positive outcomes following residential treatment (Hooper, Murphy, Devaney, & Hultman, 2000; Joshi & Rosenberg, 1997). Conversely, comorbid substance use disorder, history of physical or sexual abuse, and early conduct problems and delinquency were associated with negative outcomes following residential treatment (Embry, Vander Stoep, Evens, Ryan & Pollock, 2000; Gilliland-Mallo & Judd, 1986; Crowley, Mikulich, MacDonald, Young & Zerbe, 1998).

The purpose of this study is to describe the clinical and demographic characteristics at intake of youth between 11 and 18 years of age who received restrictive services in systems of care between intake and six months, compare these characteristics to youth between 11 and 18 years of age who did not receive restrictive services between intake and six months, and finally, determine which factors predict clinical outcomes for those youth who received restrictive services in systems of care.

Methods

Participants. Data were obtained from grant communities participating in the national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program in 1997, 1998, 1999, and 2000. The program, supported by the Center for Mental Health Services (CMHS) at the Substance Abuse Mental Health Services Administration (SAMHSA), has awarded grants for the establishment of systems of care for mental health services in 92 communities throughout the United States and its territories, and represents the largest federal investment ever to develop community-based mental health services for children and their families (Manteuffel, Stephens, & Santiago, 2002).

The sample used to compare the intake clinical and demographic characteristics of youth who received restrictive services between intake and six months to those who did not included 1,988 participants. This sample included data from youth in the national evaluation who were between the ages of 11 and 18 and whose caregiver reported the use of either restrictive or non-restrictive services between intake and 6 months. Of these youth, a subsample of the youth who received at least one day of restrictive service between intake and six months was used to model clinical outcomes. This subsample included only youth who had complete data on the predictor variables ($n = 298$).

Measures. Data used in the analyses below were gathered from several instruments developed for use in the national evaluation. These included the Descriptive Information Questionnaire, which collects basic demographic information such as age, race and sex, as well as information on risk factors; the Educational Questionnaire, which collects information on youth's education status and experience in school; the Delinquency Survey, which collects information on youth's delinquent behaviors; the Administrative Record which collects administrative data as well as diagnostic information; and the Multi-Sector Service Contact Questionnaire (MSSC), which collects information on the types and amounts of services that youth and families receive.

Data from two standardized instruments used in the national evaluation were also included in the analyses. These instruments included the Child Behavior Checklist (Achenbach, 1991; CBCL), which measures children's competencies and emotional and behavioral problems, and the Child and Adolescent Functional Assessment Scale (Hodges, 1997; CAFAS), which provides a broad assessment of how children function in eight different life domains. With the exception of the (MSSC) each instrument was administered to participants at intake and every 6 months thereafter for 36 months. The MSSC was first administered at 6 months, then again every 6 months for 36 months.

Analyses. In order to examine the relationship between individual factors and clinical change over time for children who received restrictive services between intake and six months, a two-level hierarchical linear model (Bryk & Raudenbush, 1992) was conducted using HLM 5.0 (Raudenbush, Bryk, Cheong & Congdon, 2000). HLM is a multi-level, regression-based analysis method that can be used to model change in outcomes for each child in the sample. In addition, the significance of relationships between groups can be examined and tested by modeling how covariates at the individual level (Level 2) predict variability in clinical change over time (Level 1). The Total Score on the CAFAS was used as the clinical outcome measure at Level 1. Level 2 predictor variables examined in the current analysis included age, sex, race, comorbidity, history of physical abuse, history of sexual abuse, school problems in the past six months (e.g., suspensions, detentions, expulsions), history of arrest, and intake T-scores on the CBCL Anxious/Depressed narrowband syndrome scale.

Results

Demographic and clinical characteristics at intake. As noted above, 561 children and youth received restrictive services between intake into systems of care and six months. The demographic and clinical characteristics of these children and youth were compared to those who did not receive restrictive services during the same time period ($n = 1,427$). There were significantly more females in the restrictive services group (39.2%) compared to the non-restrictive services group (33.8%, $\chi^2 = 5.077$, $df = 1$, $p = .024$); however, both groups had an average age of 13.8 years and no significant differences were observed in the distribution of race between the two groups.

As shown in Table 1, however, there were significant differences between the two groups on several clinical characteristics at intake. Youth who received restrictive services between intake into systems-of-care services and six months had significantly higher CBCL Anxious/Depressed T-scores and CAFAS Total scores at intake than youth who did not receive restrictive services during the same time period, although it should be noted that while these results are statistically significant they are perhaps not clinically meaningful. Also, a significantly greater percentage of youth who received restrictive services between intake and six months had comorbid disorders and histories of physical abuse or sexual abuse. Also, as seen in Table 2, a greater percentage of youth who received restrictive services had a history of arrest prior to intake.

Table 1
Clinical Characteristics at Intake

| <i>Service Use Between Intake and 6 Mos.</i> | <i>No Restrictive Services</i> | <i>Restrictive Services</i> |
|---------------------------------------------------|--------------------------------|-----------------------------|
| Average CBCL Anxious/Depressed T-Score at Intake* | (n = 1,370) 66.9 | (n = 536) 68.0 |
| Average CAFAS Total Score** | (n = 1,366) 110.9 | (n = 526) 127.5 |
| Comorbid Disorders*** | (n = 1,182) 55.2% | (n = 484) 64.9% |
| History of Physical Abuse**** | (n = 1,381) 27.7% | (n = 537) 37.1% |
| History of Sexual Abuse***** | (n = 1,339) 23.0% | (n = 516) 33.1% |

* $t = -1.969, df = 1,904, p = .049$

** $t = -7.206, df = 1,890, p < .001$

*** $\chi^2 = 13.304, df = 1, p < .001$

**** $\chi^2 = 16.168, df = 1, p < .001$

***** $\chi^2 = 19.983, df = 1, p < .001$

Table 2
School Problems and Delinquency at Intake

| <i>Service Use Between Intake and 6 Mos.</i> | <i>No Restrictive Services</i> | <i>Restrictive Services</i> |
|----------------------------------------------|--------------------------------|-----------------------------|
| Sent to Detention in Past 6 Months* | (n = 1,306) 38.9% | (n = 488) 41.1% |
| Suspended in Past 6 Months | (n = 1,327) 48.8% | (n = 498) 50.8% |
| Expelled in Past 6 Months | (n = 1,326) 9.1% | (n = 498) 10.0% |
| Arrested Prior to Intake* | (n = 1,253) 40.0% | (n = 467) 51.2% |

* $\chi^2 = 17.389, df = 1, p < .001$

Predicting clinical outcomes. As noted above, data from a subsample of 298 youth who received restrictive services between intake and six months were used to examine the relationship between individual factors and clinical change over time for youth using HLM. Results from this analysis appear in Table 3.

As seen in Table 3, the intercept of the intercept model indicated that youth who received restrictive services between intake and six months entered into system-of-care services with an average CAFAS Total Score of 129.68. This score indicates *marked impairment* in functioning. Furthermore, school suspension within the past six months, history of arrest, and initial CBCL Anxious/Depressed T-scores Several significantly predicted youth's initial CAFAS Total Scores. These results suggested that youth who were suspended from school within the past six months, were arrested by the police prior to intake, or had higher initial CBCL Anxious/Depressed T-scores also tended to have higher CAFAS Total Scores at intake.

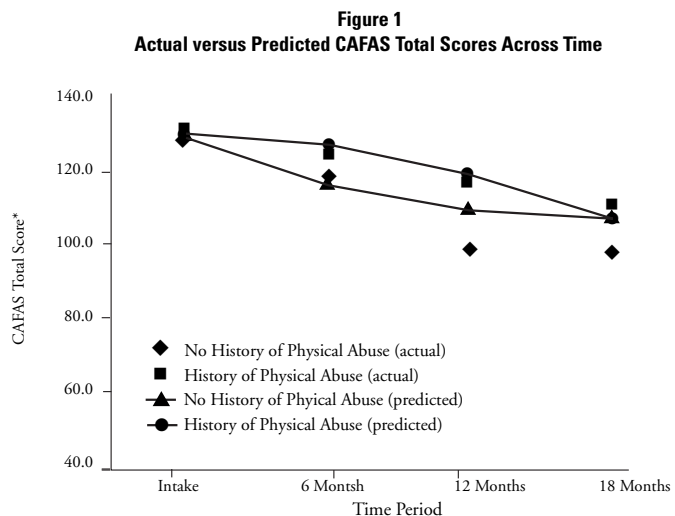
Table 3
Summary Table from HLM

| | Intercept | | | Linear Slope | | | Quadratic Slope | | |
|---------------------------------------|---------------|-------------------|------------------|---------------|-------------------|-------------|-----------------|--------------|----------|
| | b | <i>t(df)</i> | <i>p</i> | b | <i>t(df)</i> | <i>p</i> | b | <i>t(df)</i> | <i>p</i> |
| Intercept | 129.68 | 55.68(286) | < .001 | -25.32 | -3.53(286) | .001 | 4.26 | 0.84(286) | .400 |
| Gender | -4.08 | -0.75(286) | .453 | 22.53 | 1.46(286) | .144 | -11.79 | -1.11(286) | .268 |
| Age | 0.49 | 0.10(286) | .921 | -8.90 | -0.58(286) | .559 | 3.09 | 0.28(286) | .777 |
| Race | 5.48 | 1.09(286) | .276 | -8.57 | -0.57(286) | .572 | -1.98 | -0.19(286) | .848 |
| Comorbid Disorders | 5.56 | 1.16(286) | .246 | -19.14 | -1.24(286) | .215 | 14.53 | 1.35(286) | .178 |
| History of Physical Abuse | -0.13 | -0.02(286) | .981 | 33.51 | 2.01(286) | .044 | -20.51 | -1.87(286) | .061 |
| History of Sexual Abuse | 1.96 | 0.31(286) | .756 | -24.02 | -1.33(286) | .184 | 20.29 | 1.65(286) | .099 |
| History of Arrest | 14.42 | 2.84(286) | .005 | -3.62 | -0.23(286) | .816 | -8.56 | -0.79(286) | .432 |
| Suspended in Past 6 Month | 20.63 | 4.10(286) | < .001 | -13.94 | -0.92(286) | .361 | -7.96 | -0.76(286) | .449 |
| Sent to Detention in Past 6 Months | 2.08 | 0.43(286) | .669 | -20.07 | -1.35(286) | .178 | 10.57 | 1.05(286) | .295 |
| Expelled in Past 6 Months | 2.20 | 0.33(286) | .740 | 7.12 | 0.313(286) | .754 | -4.06 | -0.26(286) | .793 |
| CBCL Anxious/Depressed T-Score | 1.35 | 6.23(286) | < .001 | -0.06 | -0.097(286) | .923 | -0.12 | -0.28(286) | .783 |

Note: scores in bold are significant at $p < .05$ level.

The intercept of the linear slope model indicated that overall, youth's CAFAS Total Score improved at an average rate of 25.32 points per year. Among the covariates included in the current model, only history of physical abuse significantly predicted change in CAFAS Total Scores over time. These results suggested that youth with a history of physical abuse tended to improve at a slower rate compared to youth with no abuse history. History of abuse also impacted the overall rate of change, increasing the rate of improvement; however, the effect only approached significance.

The predicted CAFAS Total Scores were plotted against the actual CAFAS Total Scores in Figure 1. Since history of physical abuse predicted both linear and quadratic change over time, the scores and predicted values are plotted for two groups: children with a history of physical abuse and children without a history of physical abuse. The predicted CAFAS Total Scores model the actual data quite well for all time periods for children with a history of physical abuse; however, the predicted values for children with no history of physical abuse were most accurate at intake and six months.



Discussion

Examination of the intake characteristics of youth who received restrictive services suggests that there is a relatively small subgroup of youth that enter systems of care with greater than average emotional problems, functional impairment, and risk factors. New strategies for screening for these youth should be developed and implemented. In addition, when developing individualized treatment plans for these youth, the possible use of restrictive services may be considered.

One limitation of the current study was that outcomes were examined over 18 months, while service utilization was examined for only the first six months. Thus, it is uncertain what portion of these youth continued to receive services in a restrictive setting. Outcomes over 18 months are likely different for those youth who do not continue in restrictive settings than those who do.

History of physical abuse emerged as the only predictor of clinical change over time among the covariates included in the model. Embry et al. (2000) reported that history of physical abuse was associated with poor outcomes for children treated in a residential setting. The current results support this conclusion. Interestingly, children in this sample showed significant change over time unlike the group from Hussey and Guo, (2002). Also, other factors associated with clinical outcomes in previous studies (e.g., anxiety/depression, age, sex, etc.) did not emerge as significant predictors in this analysis. Clearly, more research needs to be conducted regarding the relationship between child characteristics, clinical change, and service setting.

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Strengths and Outcomes for Youth Receiving Acute Care Inpatient Mental Health Services

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Introduction

Resilient children who are otherwise at risk have been found to possess strengths across individual, family, and social support factors (e.g., Blum, 1998; Garmezy, 1991). For example, family dysfunction and parental health problems are significant risk factors for behavioral and emotional disorders in adolescents, whereas being a good student and having a confidant are protective factors (Rae-Grant, Thomas, Offord, & Boyle, 1989). In the same study, only family functioning was significantly related to psychiatric disorder for children 4 to 11 years of age, whereas interpersonal skills, being a good student, and involvement in two or more activities were seen as protective. Thus, not only is it important to consider resiliency or strength as a multidimensional construct, it appears that strengths can vary as a function of developmental stage or age (Masten et al., 1999).

Current models of residential or inpatient psychiatric care are typically reserved for children and adolescents with the most severe, acute, and complex needs (Bloom, 2000), which place these youth at risk. However, there are few published studies describing risk and protective factors (i.e., strengths) for children and adolescents receiving residential or inpatient mental health services. Using the Child and Adolescent Strengths Assessment measure, Lyons, Uziel-Miller, Reyes, and Sokol (2000) described the prevalence of strengths for children and adolescents in residential placements and investigated the relationship between strengths, psychopathology and discharge placement. The most common strengths identified for these youth were sense of humor, ability to enjoy positive experiences, and a strong sibling relationship. The least common strengths included involvement with religious or community groups and having a career goal. The presence of strengths was associated with less severe psychopathology, improvement in level of risk during residential placement, and positive discharge placement (i.e., with parent or relative, adoptive home, or independent living). The authors called for the development of integrated treatment approaches that help to reduce risk behaviors and symptoms while simultaneously identifying and using strengths in service delivery and developing areas of potential strength.

This study was part of a comprehensive outcome evaluation of psychiatric and mental health inpatient services at the Children's Hospital of Eastern Ontario (CHEO). The aims of the current study are to identify the prevalence of systematically defined strengths and investigate the relationship between strengths and clinical outcome in a previously unstudied group of children and adolescents receiving acute care inpatient psychiatric and mental health services. Using the Child and Adolescent Needs and Strengths – Mental Health measure (CANS-MH; Lyons, 1999), profiles of strengths were derived and compared for children and adolescents separately. Previous research has demonstrated that risk and protective factors vary depending on age (Rae-Grant et al., 1989). Furthermore, it was important to describe strengths separately by age group in anticipation of a new regional configuration of inpatient services at CHEO. The relationship between individual, family, and social support strengths and clinical outcome at discharge was also investigated.

Method

Participants included 22 children (mean age = 10.4 years, $SD = 2.0$, range 6 to 12 years) and 110 adolescents (mean age = 15.2 years, $SD = 1.3$, range 13 to 17 years) admitted for crisis stabilization and/or assessment to an inpatient unit at a tertiary-care pediatric teaching hospital. Youth were eligible for inclusion in the study if they were admitted between July 2002 and September 2003 and had CANS-MH data available. Youth and/or their parent/guardian gave informed consent for the use of their clinical

information for research purposes. Only one admission per youth over the study period was included. There were no differences between children and adolescents in gender distribution, length of stay, or purpose for admission (i.e., crisis vs. planned admission).

As part of routine patient care, a member of the unit staff completed the CANS-MH and Childhood Acuity of Psychiatric Illness scale (CAPI; Lyons, 1998) for each youth at admission. The CAPI was completed again at discharge and served as the primary outcome measure.

Results

The most common strength reported for children and adolescents was relationship stability (77% and 66%, respectively). Talents or interests (62%) and interpersonal skills (56%) were the next most common strengths for adolescents. For children, talents or interests and strengths related to the school system (both 46%) were the next most common. The least common strength for children and adolescents was well-being or coping (14% and 11%, respectively), which was identified instead as the most common area of *potential* strength.

Correlational analyses were conducted separately for children and adolescents for items on the CANS-MH that measure strengths and items that measure problem presentation or symptoms. For children, results indicated that strengths were independent of symptoms of depression, anxiety and psychosis. In contrast, the presence of individual strengths (i.e., interpersonal skills, well-being, and talents or interests) and school-related strengths was moderately associated (r s between .46 and .69, $ps < .05$) with less severe symptoms of inattention, impulsivity, and oppositional and antisocial behavior. Family strengths and relationship stability were moderately to highly associated (r s between .54 and .81, $ps < .01$) with better attachment and adjustment to trauma (or fewer traumatic experiences). Similar correlations were observed for adolescents, in that strengths were independent of symptoms of depression, anxiety and psychosis. The presence of strengths across all areas was moderately associated (r s between .21 and .48, $ps < .05$) with less severe symptoms of the following: inattention, impulsivity, oppositional and antisocial behavior, substance abuse, adjustment and attachment difficulties.

With respect to outcome, strengths ratings were largely independent of the amount of change in acuity of risk over the course of admission, although the presence of strengths in interpersonal skills was moderately associated ($r = -.33$, $p < .05$) with greater reduction in total acuity, once the level of acuity at admission was controlled.

Discussion

Children and adolescents admitted to hospital for crisis stabilization and/or assessment presented with severe, acute, and complex needs. The CANS-MH was a useful tool for identifying these needs as well as the wide range of strengths and potential strengths of these youth. Subtle differences were observed between children and adolescents that were developmentally appropriate. For example, interpersonal skills were more developed as strengths for adolescents compared to children. With the exception of interpersonal skills, level of strengths was independent of improvement in acuity of risk during hospitalization. The finding that youth with greater interpersonal skill showed greater reduction in level of risk suggests directions for exploring skill-building interventions as a component of acute care services. Overall, the results speak to the importance of developing a strengths-based individualized approach to service delivery that takes into account a developmental perspective.

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The Role of Therapeutic Alliance in Therapy Outcomes for Youth in Residential Care

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Introduction

Therapy is often effective in ameliorating emotional and behavioral problems of children and adolescents (Weisz, Weiss, Han, Granger, & Morton, 1995; Weiss & Weisz, 1995). Therapeutic alliance (TA), or the quality of the relationship and collaboration between therapist and client, has been proposed as an important mechanism for client improvement. Extant research for adults has demonstrated a modest, but consistent, relationship between TA and therapy outcomes (Horvath & Symonds, 1991). However, the role of TA in child therapy remains less clear. A recent meta-analysis (Shirk & Karver, 2003) indicated an average correlation between TA and therapy outcome to be .26. This is similar to correlations between TA and outcome found for adults. However, most studies analyzed by Shirk & Karver (2003) did not utilize standardized ratings of TA, used therapist rated measures of improvement, and generally did not collect TA over multiple time points. This study presents outcomes from the first year of an ongoing project at Father Flanagan's Boys Home to evaluate the impact of TA on therapy outcomes for youth in residential care.

Method

During a nine-month period, 79 youth who resided in a large residential care facility in the Midwest received adjunctive therapeutic services for behavioral and emotional problems (which represents approximately 20% of all youth residing at the facility during that time period). Mean age of the youths was 15.7; 53% were male, 54% Caucasian. Mean length of stay at the facility until the time of referral for therapeutic services was 273 days. Referral problems most often were for externalizing behavior problems, affective problems, socialization concerns, school problems, sexual issues, and clinical exotica (e.g., tics, etc.). Clinicians were 7 predoctoral interns (5 school psychology interns; 2 clinical psychology interns) from APA accredited programs (5 Ph.D.; 2 Psy.D.). Five of the clinicians were self-identified as having a cognitive-behavioral orientation, one as behavioral, and one as psychodynamic orientation. Therapy approach could be classified as occurring on a continuum of "therapy as usual" to empirically supported. In the overwhelming majority of cases, type of therapy was not specified by the supervisors, though elements of therapy were specifically mandated. Although no attempt was made to analyze the type of therapy occurring between youth and clinician, supervisors reported that therapy ranged from highly manualized to nonspecific. All clinicians received weekly supervision with a Ph.D. psychologist, weekly supervision with a Licensed Mental Health Practitioner, and twice weekly group supervision.

Measures. We used three primary measures: two outcome measures and one TA measure. The Daily Incident Report (DIR) is a measure of critical behavioral incidents completed for all youth at the residential facility. Each morning, direct-care staff reported to clinical supervisors any significant behavioral concerns that occurred during the previous 24-hour period. This narrative is entered into a database and coded. Adequate levels of reliability and validity have been reported for this measure (Jewell, Handwerk, Almquist, & Lucas, 2004). Determined by factor analysis and clinical judgment, the DIR consists of 5 scales: high-risk behavior, aggression, sexual behavior, lethality, problem behaviors, and school problems. Additional outcome measures included the Symptom Screener (SS; Doucette & Bickman, 2000a) completed on a weekly basis by the youth and their therapist and monthly by a program clinical supervisor. The measure used for TA was Doucette & Bickman's (2000b) Working Relationship Scale (WRS). This was completed on a weekly basis by the youth and their therapist. The WRS has three subscales: Working/Collaboration, Liking/Acceptance, and Resistance.

Results

Most youth (53%) attended 10 or fewer therapy sessions, though a few (23%) had over 20 sessions. The results of the study suggest that youth in therapy improved over the course of treatment, but improvement varied based on informant and outcome measure. Based on information provided by the youths on the SS, statistically significant and clinically meaningful improvement occurred on pre-post analyses. Qualitative analyses of the data indicated most change occurred primarily during the first 5 sessions. Clinicians' reports of youths' improvement were also statistically significant based on first-to-last session pre-post analyses, though the clinical relevance of this change was not readily apparent. On the clinician-rated change, means on SS dropped (i.e., less symptomology) by approximately 6 points over the course of therapy (compared to 20 points for youth rated changes on the SS). Similar results were found for program supervisors and direct care staffs' ratings.

On the DIR, statistically significant and clinically meaningful improvement was noted on all scales (i.e., total incidents, high-risk behavior, aggression, sexual behavior, lethality, problem behaviors, and school problems). Specifically, at the onset of therapy, rates of problem behaviors in each of the domains was from 2-5 times higher for youth referred for therapy than for residential youth not referred for therapy. By the end of therapy, youth in therapy had approached or surpassed the average rate for these behaviors for all other youth in facility, which was a statistically significant change. However, gains were generally not maintained at a two-month follow-up.

Data from the WRS (i.e., TA) indicated relatively invariant mean ratings of the three dimensions of TA. This was true of both youth and clinician ratings on the WRS. Correlations between youth and clinicians on the three indices of the TA were low to moderate. At the first session, correlation coefficients were .14 for Resistance, .40 for Liking/Acceptance, and .29 for Working/Collaboration. These correlations were relatively stable over the course of therapy.

Associations between TA and outcome were generally small and nonsignificant (see Tables 1 & 2). Only DIR Total Incidents were used for these analyses. For youth-rated TA (examining just the first and last session ratings on the WRS), only one of the 3 WRS subscales were significantly correlated to either youth SS change scores or DIR change scores (i.e., Last Session WRS-Youth Resistance and DIR change score, $r = .26$). For clinician-rated TA, no correlations between TA and change scores on the SS or the DIR were significant.

Table 1
Correlations between TA & Outcome for
Youth-rated TA

| | DIR Change Score | Youth SS Change Score |
|------------------------|---------------------|--------------------------|
| Youth TA | | |
| Total – First Session | -0.12 | -0.08 |
| Youth TA | | |
| Total – Last Session | -0.03 | 0.02 |
| Youth TA | | |
| W/C – First Session | -0.07 | 0.05 |
| Youth TA | | |
| W/C – Last Session | -0.19 | -0.03 |
| Youth TA | | |
| Resist – First Session | 0.01 | -0.13 |
| Youth TA | | |
| Resist – Last Session | 0.26* | 0.15 |
| Youth TA | | |
| Liking – First Session | -0.13 | -0.09 |
| Youth TA | | |
| Liking – Last Session | -0.18 | -0.10 |

Note: W/C = Working Collaboration; Resist=Resistance * $p < .05$

Table 2
Correlations between TA & Outcome for
Therapist-rated TA

| | DIR Change Score | Youth SS Change Score |
|------------------------|---------------------|--------------------------|
| Therapist TA | | |
| W/C – First Session | -0.03 | -0.05 |
| Therapist TA | | |
| W/C – Last Session | -0.05 | 0.09 |
| Therapist TA | | |
| Resist – First Session | -0.03 | -0.07 |
| Therapist TA | | |
| Resist – Last Session | 0.04 | 0.03 |
| Therapist TA | | |
| Liking – First Session | -0.02 | -0.06 |
| Therapist TA | | |
| Liking – Last Session | -0.02 | 0.04 |
| Therapist TA | | |
| Total – First Session | -0.04 | -0.11 |
| Therapist TA | | |
| Total – Last Session | -0.03 | 0.08 |

Note: W/C = Working Collaboration; Resist=Resistance. No correlations were significant at the .05 level.

Discussion

To summarize, the answer to the question of whether therapy was effective depended on informant, measure, and time assessed. Youths rated themselves as significantly improved. Adults rated the youths as improved, but the clinical significance of the improvement was untenable. Outcomes based on rates of in-program behavior indicated improvements in all domains, but gains were generally not maintained at follow-up. In general, mean ratings of TA were relatively stable. Similar to findings from the adult literature, there was only modest to poor agreement on TA between clinicians and youths. Unlike previous reports with children and adolescents, TA was generally not significantly correlated with outcome for this sample.

These results have implications for clinical practice and future research. Therapy can be an effective form of adjunctive therapy for youth in residential care. This is consistent with previous findings (Weiss & Weisz, 1995). However, on an objective measure of behavior (i.e., the DIR), gains were not maintained at two-month follow-up. This suggests that although therapy was effective for these youth, skills learned in therapy did not generalize to the broader milieu. One interpretation of these results for clinical practice is that therapists need to integrate both the conceptual and pragmatic elements of their work in therapy with the day-to-day functioning of the milieu to promote greater generalization. Coordination of treatment elements, sharing conceptualization, and providing more ecologically valid forms of therapy (e.g., more involvement of the residential care-takers in the therapy process) may be ways to accomplish this goal.

It is fairly well established that outcomes of clinical interventions can vary dramatically based on the informant and outcome measure utilized (Weisz et al; 1995 Eddy, Dishion, & Stoolmiller, 1998). The results of this study suggest that youths can be relatively accurate informants of their own outcome. Youths were the only informants on the SS that indicated clinically meaningful changes, and this corresponded to measures of actual, in-program behavior.

Although research has indicated TA to be a modest but consistent predictor of outcome for children and adolescents (Shirk & Karver, 2003), data from this sample did not support this. It is important to note that therapy sessions are not the primary mode of intervention for youth at this residential care facility. Primary intervention occurs within a family-style environment, where trained professionals implement a rather well articulated, monitored, and supervised model of treatment. In this setting, youth have many potentially significant adults in their lives, including direct-care staff (i.e., the highly trained married house parents, called Family-Teachers; coaches; teachers; clinical supervisors; and mentors). Thus, the TA that occurs between youth in this program and the adults that spend the most time with them may be a more important contributor to intervention outcomes than the TA between the youth and their therapist. While not trivializing the role of TA in a therapeutic setting, these results suggest that other factors may be as relevant and salient in producing change in child and adolescent therapy (Weisz et al., 1995).

There are other limitations of this study that restrict generality and speak to future research. Therapy was not standardized, nor was any attempt made to measure the therapy processes. Therapy was conducted by graduate students completing an internship. Whether these results would generalize to more skilled or experienced therapists is a question for future research.

The general finding of a lack of relationship between TA and outcome lead to several areas for future investigation. First, we intend to re-analyze our data using more sophisticated analyses (e.g., HLM) in order to better capture the longitudinal nature of the database, increase power, handle the nested nature of the data (i.e., youth nested within therapist), and detect potentially subtle relationships between TA and outcome. We also intend to have the youth complete measures of TA less frequently. Anecdotal and informal analyses suggested that weekly administration of the TA measure was associated with disinterest, poor attitude, and potentially biased reporting on the measure of TA.

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Acute Mental Health Care Services for Children in Pinellas County Florida

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Introduction

In this study we used quantitative and qualitative methods to learn about acute mental healthcare for children, with an emphasis on short-term, involuntary (Baker Act) psychiatric examinations. The study included collection of qualitative data to develop a description of services for children as they relate to acute mental healthcare, archival database analyses, and case studies. The focus was on children with Baker Act examinations in Pinellas County, Florida, and/or with a residence in Pinellas County, except for some statewide archival database analyses.

Method

Statewide data for Fiscal Years 1999 through 2001 (3 years) were used for statewide and Pinellas County specific data capturing Medicaid service utilization claims, Florida Department of Children and Families Integrated Data System service utilization data, and Baker Act data (short term, involuntary psychiatric examination). Additional data specific to Pinellas County were obtained from Child Welfare and Emergency Management Services.

Results and Discussion

There were 26,014 children statewide who experienced a Baker Act examination over the three-year period. Six percent of these children ($n = 1,559$) were examined in Pinellas County Baker Act Receiving Facilities or were residents of Pinellas County at the time of their examination. Following are seven key findings drawn from the data for these children.

System Findings. Multiple programs were accessed by children at Pinellas Emergency Mental Health Services (PEMHS). The type and timing of the services were based on factors such as whether children are in the dependency system, their legal status (voluntary vs. involuntary), their needed level and type of care, and availability of services. Interaction of staff from PEMHS and from the Family Continuity Program (FCP) is key to the access and continuity of care for some children.

Certificate and Evidence Type. The Baker Act examinations of children were more likely to be initiated by law enforcement officials and to be based on evidence of harm than examinations for adults, suggesting that a focus on factors related to law enforcement initiated Baker Act examinations would help us to better understand the initiation of involuntary care for children.

Seasonality. There were fewer Baker Act examinations for children in the summer, both statewide and for Pinellas County. Although cause and effect cannot be determined from this correlational finding, they suggest some seasonality in Baker Act examinations for children and may suggest that the relationship between school and the Baker Act requires further exploration.

Repeated Examinations. Thirty-three percent of the children with a Baker Act examination over a three-year period in Pinellas County experienced more than one examination during this time period. Focused attention on this subset of children with multiple involuntary examinations is warranted, given that the purpose of crisis stabilization units is to offer emergency care – not the longer term care that may be needed by many of these children. Multiple examinations may suggest discontinuity of

care. Additional focus on this subpopulation could yield information about the causes of repeated examinations and ways to intervene to reduce or prevent them.

History of Trauma. The finding that 40% of the children from the case studies had experienced sexual, physical and/or emotional abuse suggests that trauma is an important factor to address when planning and implementing care for some children who receive acute mental health care.

Therapeutic Foster Care. The 41 children who experienced at least one Baker Act examination over a three-year period in Pinellas County who also had Medicaid reimbursed therapeutic foster care accounted for 6% of the children with Medicaid reimbursed services, but their reimbursed therapeutic foster care of over \$1.5 million accounted for almost 19% of the cost of Medicaid reimbursed services. Almost 5% of children statewide with at least one Baker Act examination over a three-year period had Medicaid reimbursed therapeutic foster care services, at a cost of over \$22 million representing almost 11% of Medicaid reimbursed services. The high cost of these services for a relatively small number of children, particularly in Pinellas County compared to statewide, suggests that a focus on healthcare needs for children in this group may be warranted. This may be particularly important within the current context of privatization of foster care across Florida and the focus on integration of the foster care and behavioral health care systems.

Intensive Case Management. The use of case management and intensive case management as indicated by the IDS data may be lower than we expected for the population of children who had contact with the involuntary, acute-care system, especially in Pinellas County. Levels of targeted case management as reported in the Medicaid data were higher, in contrast to the findings from the IDS data. An exploration of the reasons for these differences could help us to learn more about case management for these children.

The findings of this study are helpful not only for their substantive content, but because of their heuristic value towards conducting additional, larger scale studies on acute mental health care and children. These findings are descriptive, so do not give us information about the causes and possible solutions for what has been described. Studies designed, implemented and interpreted with involvement of key stakeholders—such as providers like PEMHS and the Florida Department of Children and Families—are essential to furthering the initial knowledge this study has provided.

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