DOCUMENT RESUME

ED 433 632 EC 307 377

AUTHOR Willis, J., Ed.; Liberton, C., Ed.; Kutash, K., Ed.; Friedman, R., Ed.

TITLE Symposium: Special Education Services and Interagency Systems of Care in California.

PUB DATE 1998-00-00

NOTE 15p.; In: Chapter 3, "School Based Approaches," of Proceedings of the Annual Research Conference, A System of Care for Children's Mental Health: Expanding the Research Base (11th, Tampa, FL, March 8-11, 1998).

AVAILABLE FROM Web site: <http://rtckids.fmhi.usf.edu>.

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Academic Achievement; Agency Cooperation; *Disability Identification; Elementary Secondary Education; *Emotional Disturbances; *Integrated Services; *Mental Health Programs; Severity (of Disability); *Special Education; *Student Characteristics

IDENTIFIERS California (Santa Barbara County); California (Santa Cruz); California (Sonoma County)

ABSTRACT

Two papers summarize a symposium on special education services and interagency systems of care for children and adolescents with severe emotional disturbance (SED) in California. The first paper, "Opening the Floodgates? The Influence of a System of Care on Referrals to Special Education" (Iris Zanglis, Michael J. Furlong, Michelle Wood, J. Manuel Casas, and Kathleen Blake), discusses the impact of implementing a system of care on the numbers and characteristics of youth referred to special education. This study evaluated the rate of identification of children (n=41) with severe emotional disturbance (SED) in a community (Santa Barbara County, California) operating a system of care. Findings indicated an increase of over 44 percent in SED identifications after program implementation. The second paper, "Academic Achievement and Mental Health Functioning: An Illusory or Realistic Relationship?" (Jennifer A. Rosenblatt, Abram Rosenblatt), provides data on the characteristics of 143 children and adolescents enrolled in collaborative mental health and educational programs in Sonoma and Santa Cruz counties. Data included demographic characteristics, clinical and functional status, educational achievement, and relationship between academic performance and functional behaviors. Although students performed below expected grade level and showed evidence of severe emotional and behavioral problems at program entry, academic achievement as measured by standardized tests did not relate significantly to their mental health functional status. (Contains 36 references.) (DB)

Symposium: Special Education Services and Interagency Systems of Care in California

Symposium Introduction

This symposium features empirical results deriving from the collaborations between integrated systems of care and special education services from a set of California counties that are striving to create innovative systems of care for youth with severe emotional disturbance. Working with the education system to provide services to youth who have mental health and special educational needs is a core goal of these, and many other, integrated systems of care. However, relatively little empirical literature addresses the impacts of integrated systems of care on the referral and treatment of youth requiring special education services.

The two papers included in this summary of the symposium are focused on the referral process. The first paper discusses the impact of implementing a system of care on the numbers and characteristics of youth referred to special education. The second paper provides data on the characteristics of youth enrolled in collaborative mental health and educational programs. Together, these reports provide information regarding the impact of creating an integrated system of care on referral patterns to special education and on the characteristics of the children who ultimately enter special education programs nested within broader systems of care. A special emphasis of the second paper is on the relationships between measures of clinical status and measures of educational achievement. The papers raise questions regarding the impact of a system of care on identification rates and on how youth within these systems are referred into special education programs.

Symposium Chair
Abram Rosenblatt, Ph.D.
Associate Professor
Department of Psychiatry
University of California, San Francisco
44 Montgomery St., Suite 1450,
San Francisco, CA 94104;
415/502-6174 Fax: 415/502-6177
E-mail: abram@itsa.ucsf.edu

Symposium Discussant
Lucille Eber, Ed.D.
Statewide Coordinator,
Illinois State Board of Education (ISBE)
EBD Network
La Grange Area Department
of Special Education (LADSE)
1301 W. Cossitt Avenue
La Grange, IL 60525
708/354-5730 Fax: 708/482-2665
E-mail: lewrapil@aol.com

Authors, Opening the Floodgates
Iris Zanglis, M.A.
Graduate Researcher
izanglis@education.ucsb.edu
Michael J. Furlong, Ph.D.
Professor
mfurlong@education.ucsb.edu
Michelle Wood, Ph.D.
MISC Evaluation Director
J. Manuel Casas, Ph.D.
Professor
Kathleen Blake
Santa Barbara County SELPA Director

Graduate School of Education
University of California
Santa Barbara, CA 93106
805/ 893-3383; Fax: 805/ 893-7521

Opening the Floodgates? The Influence of a System of Care on Referrals to Special Education

Iris Zanglis, Michael J. Furlong, Michelle Wood, J. Manuel Casas, & Kathleen Blake

Author Note. *This study was completed as part of the evaluation of Santa Barbara County's Multiagency Integrated System of Care (MISC). MISC is funded by a grant (No. 6 HS5 SM51592-01) from the Center for Mental Health Services, a principal operating component of the Substance Abuse Mental Health Services Administration, within the U.S. Department of Health and Human Services. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Center for Mental Health Services or Santa Barbara County.*

Authors, Academic Achievement & Mental Health Functioning
Jennifer A. Rosenblatt, Ph.D.
Post Doctoral Fellow,
Department of Psychiatry
University of California, San Francisco.
44 Montgomery St., Suite 1450
San Francisco, CA 94104
415/502-6176; Fax: 415/502-6177
E-mail: jennyr@itsa.ucsf.edu

& Abram Rosenblatt, Ph.D.

Introduction

Identification rates of students with serious emotional disturbances (SED) differ dramatically across states, ranging from a high of 2.08% to a low of .04% (52:1 difference) with a national average rate of just 1% of total student enrollment (U.S. Department of Education, 1994). According to Forness, Kavale, and Lopez (1993), this national rate represents less than half of the estimated youths with emotional disorders who could benefit from special education and related services. They suggested that at least 2 to 3% of school-age children and adolescents should be served under the SED category. The wide disparity between national estimates of SED incidence and actual identification rates leads to questions about its cause. Some researchers suggest that the disparate rates are due to states' unique reporting practices and service provisions (Coutinho & Denny, 1996); some propose that the problem rests with an ambiguous and overly strict SED definition originally articulated in federal legislation (Forness & Knitzer, 1992). It may also be suggested that schools might be reluctant to identify youths with SED due to their potentially high educational placement costs.

These factors have undoubtedly influenced SED identification since the implementation of Public Law 94-142 (1975), but recent developments have sparked renewed interest in the identification of youths for special education due to emotional disturbance. Among these developments has been research aimed at understanding the difference between state's identification and placement rates of youths with SED (Oswald &

Coutinho, 1995), changes in the Individuals with Disabilities Education Act (IDEA, PL 102-119), and the increasing implementation of collaborative systems of care that use more liberal, mental health-based definitions of emotional and behavioral disorders. Thus, it is quite timely to examine issues related to special education SED, particularly in communities engaged in cross-agency service delivery.

Early federal and state guidelines established to identify children and adolescents as SED are vague and lack clear descriptive qualities. Although PL 102-119 has eliminated the term "serious" from the SED category, it has retained the core elements of the original definition set forth in IDEA. Schools may place youths in special education programs unless their difficulties are found to be caused solely by social maladjustment (SM). Due to the vagueness of the terminology within the SED federal definition, professionals have debated its utility and integrity. The SM exclusionary clause is particularly problematic for researchers and school personnel due to its subjective and arbitrary nature (Forness et al., 1993; Rosenblatt & Furlong, 1997). This "loophole" within the law is not adequately defined and causes much confusion in practice when school personnel and mental health practitioners must differentiate SM from SED in order to legally and ethically deliver special education services.

Collaboration between schools and mental health services has been regarded as one way to facilitate the early and accurate identification of youths with SED. However, schools are obligated to provide appropriate education to all youths, and concerns that systems of care may unduly overwhelm the special education system with a flood of new referrals without appropriate support are understandable. Although the principles and guiding philosophy of collaborative systems are laudable, it is important to consider how their implementation impacts all community partners.

The purpose of this paper is to examine the rates of SED identification in one community operating a system of care to determine the service system's influence on special education referrals. The historical pattern of SED identification in the community, child and family risk factors of children served, and behavioral and emotional indicators are examined to address the growing concerns of local school districts regarding service delivery and shared accountability to SED students and their families.

Method

Setting. This study was conducted in Santa Barbara County, a coastal community of 390,000 that includes both urban and rural populations. Approximately 86,000 children live in the county and are identified as 52% Caucasian, 40% Latino (specifically Mexican and Central American), 5% Asian/Pacific Islander, and 3% African-American (Damery, Furlong, Casas, & Corral, 1997).

Santa Barbara County was one of 30 sites nationwide to receive a federal grant from the Center for Mental Health Services to develop and evaluate a Multiagency Integrated System of Care (MISC) serving youths with SED and their families. MISC coordinates services among family members, County Mental Health, Probation, Child Protective Services, Public Health, non-profit organizations, and public schools to provide a research-driven, family-focused, comprehensive continuum of community-based services.

Participants. The participants in this study were 41 children and adolescents identified as SED in accordance with state and federal special education definitions. All participants were receiving services from the Multiagency Integrated System of Care (MISC) in Santa Barbara County and were enrolled in public or private schools in the state. The students participated in part-time or full-time special education classrooms or were included in regular education classes.

The students were organized into three naturally occurring groups based on the timing of their SED identification and their enrollment into MISC: (1) *Post-MISC Direct-Influence (n = 11)*: youths identified as SED after at least three months of participation in MISC; (2) *Post-MISC Indirect-Influence* (*n* = 20): youths identified as SED at least three months prior to MISC participation but after system of care was implemented in the community; and (3) *Pre-MISC No Influence* (*n* = 10): youths identified as SED prior to the implementation of the system of care and presumably representing those traditionally served by special education programs without collaborative influences.

Data Collection. Descriptive data including demographics, risk factors and behavioral consequences were gathered by trained social workers, probation officers, public health nurses, and mental health personnel within the context of a comprehensive assessment for each MISC participant. The standardized instrument used to measure clinical outcomes for the present study is presented below.

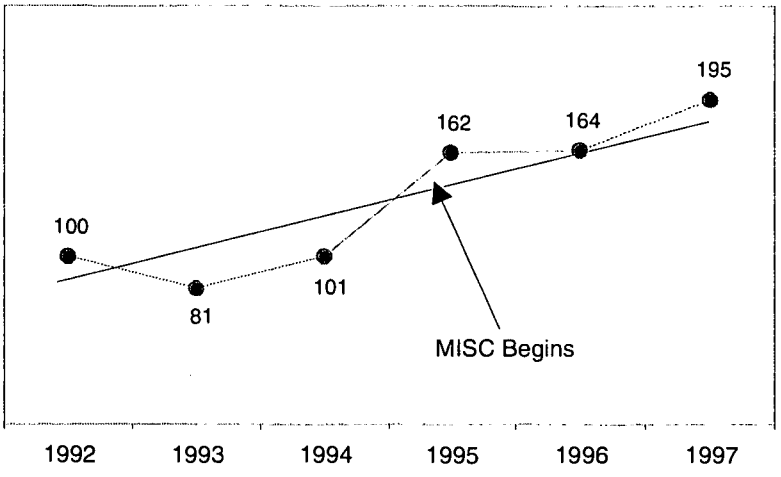
Child Behavior Checklist (CBCL). A general index of recent problem behaviors as perceived by the youth's caregiver was obtained using the *Child Behavior Checklist* (Achenbach, 1991). The CBCL is comprised of eight syndrome scales and three summary scale scores. The *Internalizing* index is a summary score derived from the *Withdrawn, Somatic Complaints,* and *Anxious/Depressed* scales; the *Externalizing* index is derived from the *Delinquent Behavior* and *Aggressive Behavior* scales; and the *Total Problem Scale* index is derived from a summary of all of the syndrome scales.

Results

Seeking to understand the context in which SED identification in Santa Barbara County may have been influenced by system of care implementation, SED placement rates were examined in a sample of California counties. A review of 23 counties showed an overall increase in SED identification rates from 1992 to 1996, but these increases were slight and relatively stable. The few exceptions involved: (a) counties involved in system of care programs (e.g., Napa, Butte, and Sonoma); (b) one county which was committed to system of care service delivery and subsequently awarded a federal grant (San Diego); and (c) one rural county well-known for its disproportionate number of residential programs (Shasta). The overall change in the rate of SED identification in Santa Barbara was 0.8 per 1000, which was among the largest increases among California's total 58 counties.

In the three years prior to MISC implementation (1992 to 1994), 100, 81, and 101 youths, respectively, were found eligible for special education services due to SED in Santa Barbara County (see Figure 1). In 1992, this represented just 0.18% of the total school population. In the three years after MISC (1995 to 1997), the number of children identified as SED increased to 195

Figure1
Number of School Identified Youths with SED in Santa Barbara County



(Damery et al., 1997) representing 0.26% of the total student population or a 44.4% increase.

To investigate differences among the three referral groups, child and family risk factors and behavioral and emotional indicators were examined (see Table 2). What was most striking in these data was that there were clear differences among the groups across descriptive and risk factors. The *Post-MISC Indirect-Influence* group was significantly younger than either of the other two groups, but they had general profiles similar to the *Pre-MISC No Influence* group. In this sense, the schools appear to have been fairly consistent in whom they served and identified for special education. In contrast, the *Post-MISC-Direct Influence* group had a distinct profile. These youths were the oldest, suggesting that their need for special education services had gone unrecognized or were addressed by other programs. They had the highest number of child and family risk factors, a pattern suggestive of extensive and multiple needs. The most striking finding is that 46% of these youths had a prior history of suicide attempts compared to none of the youths in the *Pre-MISC No Influence* group.

Youths' presenting behaviors and emotions as viewed by their caregivers were also examined. As shown in Table 3, only the CBCL *Somatic Complaints* scale showed a significant difference. Mean *Total Problem T*-scores were within the clinical range for all three groups; therefore, caregivers believed that all of these youths had serious service delivery needs at intake.

Table 1
Number per 100 of Students Eligible Education Under SED Category by Selected California Countries, 1992-1996

Country	1992	1993	1994	1995	1996	D
Alameda	3.3	3.3	3.6	3.7	3.4	0.1
Butte	1.2	1.5	2.1	2.2	2.2	*1.0*
Contra Costa	3.7	3.9	4.0	4.0	3.9	0.2
Fresno	0.6	0.6	0.7	0.7	0.9	0.3
Kern	0.6	0.6	0.7	0.7	0.7	0.1
Los Angeles	3.7	4.0	4.0	4.3	4.4	0.7
Marin	7.9	6.6	7.6	7.5	7.9	0.0
Mendocino	3.1	4.1	6.4	10.1	9.1	0.6
Monterey	1.4	1.8	1.4	1.5	1.4	0.0
Napa	4.4	3.3	3.6	5.2	7.7	*3.3*
Orange	1.0	1.0	1.0	1.1	1.2	0.2
Riverside	3.1	3.4	3.6	3.8	3.4	0.3
Sacramento	5.0	5.6	5.3	5.8	5.7	0.7
Sam Bernardina	2.1	2.2	2.2	2.2	2.2	0.1
San Diego	3.7	4.0	4.2	4.6	4.7	*1.0*
San Luis Obispo	3.1	3.0	4.1	4.2	3.8	0.7
San Mateo	3.4	3.7	3.4	3.6	3.6	0.2
Santa Barbara	**1.8**	**1.4**	**1.7**	**2.7**	**2.6**	**0.8**
Santa Clara	2.1	2.1	2.1	2.1	2.3	0.2
Santa Cruz	1.7	1.8	1.9	2.1	1.8	0.1
Sonoma	3.5	4.3	4.3	4.9	4.7	*1.2*
Shasta	2.6	3.0	3.3	3.9	3.9	*1.3*
Ventura	3.9	3.6	3.4	4.4	4.4	0.5

Note: D is the change from 1991 to 1996 (1991 minus 1996).

Discussion

Nationwide, systems of care that coordinate community social services, juvenile justice, and educational programs have been supported through federal and state initiatives, yet these endeavors often must confront the sometimes polemic views local educators and mental health professionals have about who should receive SED services. For example, youths who present with externalizing behaviors such as drug abuse or juvenile justice involvement may be referred by mental health practitioners but deemed ineligible for special education by school administrators due to social maladjustment. How systems of care can share accountability and coordinate services for students with emotional and behavioral disorders and their families with the cooperation of local schools is often a challenge to effective service delivery.

Educators in Santa Barbara County were astonished to find that the number of SED identifications rose over 44% after the implementation of MISC. Other factors they proposed to explain the rise in SED identification included: the emergence of several group homes in the community; the Probation Department returning students from out-of-county placements because of the broader continuum of services available; and increased parent advocacy in the identification process. Furthermore, MISC may have identified previously underserved students because of the program's emphasis on cultural competence and comprehensive care.

This study may be limited by the fact that participants were drawn from one county in California, a state with one of the lowest SED identification rates— about 0.3% of the school-aged population (U.S. Department of Education, 1994). However, Santa Barbara provides exceptional services for youths with SED and their families through the MISC program, and it may serve as an example of the challenges and benefits of implementing a system of care program within local communities.

Table 2
Psychosocial History Variables by Relationship Between SED Eligibility Decision and Initial Opening Into MISC System of Care Program

Variable	Post MISC Direct Influence (n = 11)	Post MISC Indirect Influence (n = 20)	Pre MISC No Influence (n = 10)
Age[a]	15.1(1.8)	11.4(3.08)	14.4(2.1)*
Male	82%	70%	90%*ns*
Race/Ethnicity			
White	55%	50%	60%*ns*
African American	09%	10%	10%
Hispanic	36%	40%	30%*ns*
Child Risk Factors	03.4(2.1)	01.3(1.2)	00.9(1.1)*
Psychiatric hospital	64%	05%	11%
Physical abuse	64%	28%	30%
Sexual abuse	20%	33%	00%
Runaway	64%	25%	38%
Suicide attempt	46%	25%	00%
Drug abuse	73%	17%	29%
Sexual abusive	10%	06%	11%
Family Risk Factors	03.4(2.2)	02.3(1.8)	02.3(2.1) *ns*
Psychiatric hospital	29%	21%	14%
Felony conviction	56%	44%	14%
Sibling institution	36%	10%	14%
Sibling foster	40%	25%	13%
Family illness	80%	47%	56%
Family violence	60%	33%	67%
Family abuse	80%	60%	80%

[a]The overall multivariate test had an alpha of p=.076.
*Univariate tests had an alpha of p<.05. The values for these variables are means and standard deviations (in parentheses)
Note. All other values are percentages, as indicated.

References

Achenbach, T. (1991). *Child Behavior Checklist Manual, 1991.* Burlington, VT: University of Vermont.

Coutinho, M. J., & Denny, R. K. (1996). National leadership of children and youth with serious emotional disturbance: Progress and prospects. *Journal of Child and Family Studies, 5,* 207-227.

Damery, H., Furlong, M., Casas, J. M., & Corral, C. (1997). *Fourth annual Santa Barbara children's scorecard.* Santa Barbara, CA: KIDS Network.

Forness, S. R., Kavale, K. A., & Lopez, M. (1993). Conduct disorders in school: Special education eligibility and co-morbidity. *Journal of Emotional and Behavioral Disorders, 1,* 101-108.

Forness S. R., & Knitzer, J. (1992). A new proposed definition and terminology to replace "Serious Emotional Disturbance" in the Individuals with Disabilities Education Act. *School Psychology Review, 21,* 12-20.

Oswald, D. P., & Coutino, M. J. (1995). Identification and placement of students with serious emotional disturbance. Part I: Correlates of state child-count data. *Journal of emotional and behavioral disorders, 3,* 224-229.

Rosenblatt, J. A., & Furlong, M. J. (1997). Serious emotional disturbance and social maladjustment: A critical examination of four schools of thought. *California School Psychologist, 2,* 5-30.

U.S. Department of Education. (1994). To assure the free appropriate education all children with disabilities: *Sixteenth annual report to Congress on the implementation of the Individuals with Disabilities Education Act.* Washington, DC: Author.

Table 3
CBCL Scales by Relationship Between SED Eligibility Decision and Initial Opening Into MISC System of Care Program

Variable	Post MISC Direct Influence ($n = 11$)		Post MISC Indirect Influence ($n = 20$)		Pre MISC No Influence ($n = 10$)	
	M	*SD*	*M*	*SD*	*M*	*SD*
CBCL Total Problems	66.5	(10.4)	66.5	(09.4)	64.9	(07.1)
CBCL Internalizing	59.6	(10.6)	63.7	(08.6)	59.1	(14.5)
CBCL Externalizing	66.2	(10.9)	64.6	(10.2)	64.8	(05.7)
Withdrawal	56.4	(07.4)	62.8	(07.6)	59.3	(12.0)
Somatic Complaint	51.2	(02.9)	59.9	(10.0)	57.2	(06.4)*
Anxiety-Depression	66.0	(08.8)	62.1	(10.1)	63.4	(11.4)
Social Problems	64.9	(11.2)	68.2	(11.6)	62.8	(06.1)
Thought Problems	64.0	(11.2)	61.1	(11.9)	59.1	(08.0)
Attention	67.2	(11.7)	67.8	(11.1)	63.2	(06.8)
Delinquency	66.2	(08.9)	65.3	(08.6)	62.2	(06.8)
Aggression	65.7	(12.5)	64.5	(11.2)	63.8	(07.8)

* This univariate test had an alpha of $p < .05$. All other subscale comparisons were nonsignificant. The values for these variables are mean *T*-scores and standard deviations (in parentheses).

Academic Achievement and Mental Health Functioning: An Illusory or Realistic Relationship?

Jennifer A. Rosenblatt & Abram Rosenblatt

Preparation of this manuscript was supported by grants from the National Institute of Mental Health (3P50MH43694, T32MH1826), and a contract with the California Department of Mental Health funded by the Center for Mental Health Services (96-7299).

Success in school provides the foundation for a productive future for children and adolescents. Emotional and behavioral disorders can undermine the capacity of children to succeed in school, handicapping their chances for stable employment, higher education, and a range of life opportunities (Wagner, 1995). Perhaps fewer than one half of children with emotional or behavioral disorders are being identified and served in special education (Forness, Kavale, & Lopez, 1993). Those youths who are provided with educational support tend to receive inadequate or inappropriate services (Knitzer, Steinberg, & Fleisch, 1990) that frequently are disconnected from their mental health services (Knitzer, 1996). Promoting better working relationships between the schools and the significant sectors of care that provide vital services for youths suffering from emotional disturbance is an integral component of recent efforts to create systems of care (Stroul & Friedman, 1996).

There is relatively little empirical information regarding programs within interagency systems of care that are designed to serve youths whose emotional and behavioral problems require intensive collaboration between mental health and education. Limited data on the emotional and behavioral functioning of youths enrolled in interagency systems of care are available (e.g., Epstein, Cullinan, Quinn, & Cumblad, 1995; Rosenblatt, Robertson, Bates, Wood, Furlong, & Sosna, 1998). Empirical information, however, regarding those children who receive services specifically from education/mental health programs is sparse. Results from the National Adolescent and Child Treatment Study (NACTS) found that youths served in mental health and education systems had serious academic, emotional, and behavioral problems at entry into, and completion of, the study (Greenbaum, Dedrick, Friedman, & Kutash, 1996). In California, children and adolescents enrolled in collaborative mental health and education programs were, on average, one to two grade levels behind expected grade level upon entering collaborative education/mental health programs (Rosenblatt & Attkisson, 1997). A growing literature base indicates that a vast majority of youths identified by the educational system as having emotional and behavioral disorders have academic problems (e.g., Epstein, Kinder, & Bursuck, 1989; Sabornie, Cullinan, & Epstein, 1993).

Two key questions were addressed regarding the educational and clinical status of youths served by specialized collaborative programs nested within two systems of care: (1) What are the demographic, clinical, and educational characteristics of these youths; and (2) What are the relationships between clinical status and educational status for these youths.

Methods

Design. Youths were administered a set of instruments assessing educational and clinical status upon entry into the education/mental health specialty programs in Sonoma and Santa Cruz county. County mental health data were accessed to obtain demographic information collected by the mental health clinician. Participants consisted of all youths entered into a education/mental health specialty program in Sonoma between January 1997 and July 1997; and in Santa Cruz between September 1994 and April 1997.

The standardized test of educational achievement used was based on existing practice of test administration in special education in a given county, specifically the Wide Range Achievement Test3 (WRAT3; Wilkinson, 1993) and the Woodcock-Johnson Revised Test of Achievement (Woodcock & Johnson, 1989).

There were three sources of information regarding the clinical and functional status of the participants in the study: The Child Behavior Checklist (CBCL; Achenbach, 1991); the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges & Wong, 1996); and a DSM-IIIR diagnosis (American Psychiatric Association, 1987).

Results

Demographic Characteristics. Participants from Sonoma county were 61 (52 males, 9 females) children and adolescents. Santa Cruz participants were 82 (69 males, 13 females) youths. The mean age of the youths at the time of the first testing was 11.8 for Sonoma and 11.6 for Santa Cruz with approximately 50% of participants in both counties in the 6 to 11 age range. The majority of youths in each county were Anglo-American (84%). Youths were primarily male in both counties (85% in Sonoma and 84% in Santa Cruz). Table 1 presents the demographic characteristics for youths in Sonoma and Santa Cruz counties.

Clinical and Functional Status. Table 2 depicts CBCL Broad Scale and CAFAS Total Scale scores for youths in both counties. In regard to clinical functioning, youths were rated in the clinical range on the Internalizing, Externalizing, and Total Problem Scales of the CBCL. Clinicians rated the children and adolescents, on average, in the clinical range on the CAFAS Total Scale. Youths in Sonoma county scored higher on all scales than those youths in Santa Cruz.

Educational Achievement. Table 3 shows achievement scores for youths in Sonoma and Santa Cruz. In Sonoma, WRAT3 scores indicated that youths were performing well below same-aged peers, particularly on the Spelling subtest. Spelling and math scores were approximately one standard deviation below average ($M = 100$, $SD = 15$ for the WRAT3). Relative to the other subtests, youths scored higher on the Reading subtest. These scores were within one standard deviation of the WRAT3 specified mean. Youths in Santa Cruz scored similarly on the Woodcock-Johnson, with the Written Language subtest relatively lower and the Reading subtest higher. Children and adolescents in Santa Cruz were performing at approximately two grade levels behind their peers in Written Language and in Math. Youths' performance scores on the Reading subtest were one-half a year behind their peers.

Table 1
Demographics of Youths and DSM Diagnosis in Sonoma and Santa Cruz Counties

	County			
	Sonoma n=61		Santa Cruz n=82	
	N	%	*N*	%
Age				
0 to 5	0	0.0	3	3.7
6 to 11	32	52.5	43	52.4
2 to 18	29	47.5	36	43.9
Gender				
Male	52	85.2	69	84.1
Female	9	14.8	13	15.9
Ethnicity				
Anglo-American	51	83.6	69	84.1
Latino-American	9	14.8	1	1.2
African-American	1	1.6	9	11.0
Other	0	0.0	3	3.7

Relationship Between Academic Performance and Functional Indicators. In order to assess the relationships between educational achievement and indicators of functional status, a correlation matrix was created. The sub-scales of the WRAT3 or Woodcock-Johnson were correlated with the CBCL Internalizing, Externalizing, and Total Problem Scales and the CAFAS subscales and Total Scale. The correlation matrix revealed no significant relationships between the WRAT3 or the Woodcock-Johnson with the CBCL Broad Scales and the CAFAS subscales and Total Scale. Chi-square tests revealed no significant associations between the WRAT3 and DSM III-R diagnoses (all p's > .35) or the Woodcock-Johnson and DSM III-R diagnoses (all p's > .20). As no associations were found between the measures of educational and functional status, we did not proceed with multivariate analyses.

Discussion

In summary, children and adolescents served in education/mental health programs in Santa Cruz and Sonoma counties were achieving below expected grade level and showed evidence of severe emotional and behavioral problems at entry to these programs. However, the academic achievement of these children as measured on the standardized tests did not relate significantly to their mental health functional status.

The results obtained in this study can be compared with findings from other special education programs that serve children with severe emotional disturbance. The demographic characteristics of the youth served in our sample are similar to those found in other studies (e.g., Mattison & Felix, 1997; Sabornie et al., 1993; Silver et al., 1992). The low academic achievement of youths in Santa Cruz and Sonoma counties also parallels findings from other studies of youths with EBD/SED (e.g., Duchnowski, Johnson, Hall, Kutash, & Friedman, 1993; Greenbaum et al., 1998; Rosenblatt & Attkisson, 1997).

The picture with regard to DSM III-R diagnoses is more complex. In Sonoma county, a majority of youths received a primary diagnosis of an internalizing disorder whereas youths in Santa Cruz were more frequently diagnosed with externalizing disorders. These mixed findings match the variety of diagnoses obtained in other studies with similar populations. Studies of special education programs have indicated a higher incidence of primary diagnoses of externalizing disorders for youths with SED (Mattison & Felix, 1997; McGinnis & Forness, 1988), whereas youths in other special day class programs have been more frequently diagnosed with internalizing disorders (Duncan, Forness, & Hartsough, 1995).

Table 2
Functional Status of Youths in Sonoma and Santa Cruz Counties

Instrument	County	
	Sonoma (n=61)	Santa Cruz (n=82)
	M (SD)	*M (SD)*
CBCL Scale		
Internalizing	68.4 (11.9)	63.5 (12.2)
Externalizing	72.3 (10.0)	65.6 (11.0)
Total Problem	73.5 (10.5)	67.2 (11.2)
CAFAS Scale		
Total Scale	78.4 (19.3)	74.9 (26.6)
DSM Diagnosis	*N*(%)	*N*(%)
Mood/Affective	24 (39.3)	13 (15.9)
Anxiety	9 (14.8)	8 (9.8)
Disruptive	12 (19.7)	21 (25.6)
ADHD	7 (11.5)	25 (30.5)
Other	9 (14.7)	15 (18.2)

The variation across locales and populations in the primary diagnosis assigned to youths may be due to the co-morbid nature of many childhood disorders. Many children and adolescents in treatment have both internalizing and externalizing disorders. The National Adolescent and Child Treatment Study (NACTS), for example, examined the diagnoses of youths with SED and found that approximately 60% of the youths had an internalizing disorder and 78% had an externalizing diagnosis (Greenbaum et al., 1998).

With respect to clinical and functional status, the youths in our study have similar or higher levels of impairment indicated by the CBCL as youths receiving services from other mental health care systems such as the Fort Bragg demonstration (Bickman et al., 1995) and the IMPACT program in Kentucky (Illback, Nelson, & Sanders, 1998). The CAFAS scores of youths in both Sonoma and Santa Cruz are similar to those of youths in other studies (Duchnowski et al., 1993; Bickman et al., 1995; Wood et al., 1997).

This study had limitations due to the nature of interagency collaboration and evaluation. Studies conducted within the context of community programs are often restricted by a lack of control over many aspects of the research design (Atkkisson & Rosenblatt, 1993). School districts were able to continue their current practice of academic achievement testing, including how they scored the tests. As a result, Santa Cruz collected grade scores from the Woodcock Johnson and Sonoma collected standard scores from the WRAT3. This mixing and matching of instrumentation makes inter-county comparisons especially problematic.

The results did not indicate a relationship between academic achievement and functional status. The sample size, however, may have been too small to detect statistical differences. Assessing whether this finding generalizes to a larger sample of youths in education/mental health programs is warranted. In addition, evaluating the presence or absence of a relationship between functional status and academic achievement for youths in the overall system of care remains a topic for further study.

Table 3
Academic Achievement at Intake of Youths in Specialized Education Programs

Instrument	Sonoma	
	Wide Range Achievement Test Standard Scores	
	M	*SD*
Reading	92.6	20.3
Math	83.6	16.7
Spelling	84.1	14.6
Instrument	**Santa Cruz**	
	Woodcock-Johnson Grade Level Scores	
	M	*SD*
Reading	5.6	4.3
Mean grade level behind	0.5	3.0
Math	4.3	2.8
Mean grade level behind	1.8	2.2
Written Language	4.2	3.6
Mean grade level behind	1.9	2.7

This study has policy implications. Our findings suggest that measures of functional status should not be used as a proxy for evaluation of educational achievement. As exemplified by our study, where measures of academic performance were unrelated to measures of clinical and functional status, academic performance and clinical status may be separate, or partially related, constructs. Consequently, a comprehensive evaluation of youths requires the use of both functional and academic assessment instruments.

This study provides evidence that youths served in education/mental health programs have multi-system needs that warrant multi-agency collaboration and services. These children and adolescents are not achieving at their expected grade level academically and have significant levels of clinical symptomatology. More research detailing the problems and needs of youths in education programs within integrated care systems can help practitioners and researchers understand the scope and breadth of the challenges faced by these children and families.

References

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

American Psychiatric Association. (1987). *DSM III-R: Diagnostic and statistical manual of mental disorders (3rd ed. revised).* Washington, DC: Author.

Attkisson, C. C., & Rosenblatt, A. (1993). Enhancing School Performance of youth with severe emotional disorder: Initial results from system of care research in three California Counties. *School Psychology Quarterly, 8,* 277-290.

Bickman, L., Guthrie, P., Foster, E. M., Lambert, E, W., Summerfelt, W. T., Breda, C., & Heflinger, C. A. (1995). *Evaluating managed mental health care: The Fort Bragg experiment.* New York: Plenum Publishing.

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.

Duncan, B., Forness, S., & Hartsough, C. (1995). Students identified as seriously emotionally disturbed in school-based day treatment: Cognitive, psychiatric, and special education characteristics. *Behavioral Disorders, 20*(4), 238-252.

Epstein, M. H., Cullinan, D., Quinn, K., & Cumblad, C. (1995). Personal, family, and service utilization characteristics of young people served by an interagency community-based system of care. *Journal of Emotional and Behavioral Disorders, 3,* 55-64.

Epstein, M. H., Kinder, D., & Bursuck, B. (1989). The academic status of adolescents with behavior disorders. *Behavioral Disorders, 14,* 157-165.

Forness, S. R., Kavale, K. A., & Lopez, M. (1993). Conduct disorders in school: Special education eligibility and comorbidity. *Journal of Emotional and Behavioral Disorders, 1*(2), 101-108.

Greenbaum, P. E., Dedrick, R. F., Friedman, R., & Kutash, K. (1996). National adolescent and child treatment study (NACTS): Outcomes for children with serious emotional and behavioral disturbance. *Journal of Emotional and Behavioral Disorders, 4,* 130-146.

Greenbaum, P. E., Dedrick, R. F., Friedman, R. M, Kutash, K., Brown, E. C., Lardieri, S. P., & Pugh, A. M. (1998). National adolescent and child treatment study (NACTS): Outcomes for children with serious emotional and behavioral disturbance. In M.H. Epstein, K. Kutash, & A. Duchnowski (Eds.), *Outcomes for children and youth with behavioral and emotional disorders and their families: Programs & evaluation best practices* (pp. 21-54). Austin, TX: Pro-ed.

Hodges, K., & Wong, M. M. (1996). Psychometric characteristics of a multidimensional measure to assess impairment: The Child and Adolescent Functional Assessment Scale. *Journal of Child and Family Studies, 5,* 445-467.

Illback, R. J., Nelson, C. M., & Sanders, D. (1998). Community-based services in Kentucky: Description and 5-year evaluation of Kentucky IMPACT. In M.H. Epstein, K. Kutash, & A. Duchnowski (Eds.), *Outcomes for children and youth with behavioral and emotional disorders and their families: Programs & evaluation best practices* (pp. 141-172). Austin, TX: Pro-ed.

Knitzer, J. (1996). The role of education in systems of care. In B. A. Stroul & R. M. Friedman (Eds.), *Systems of care for children's mental health.* Baltimore, MD: Brookes.

Knitzer, J., Steinberg, Z., & Fleisch, B. (1990). *At the schoolhouse door: An examination of programs and policies for children with behavioral and emotional problems.* New York: Bank Street College of Education.

Mattison, R. E., & Felix, B. C. (1997). The course of elementary and secondary school students with SED through their special education experience. *Journal of Emotional and Behavioral Disorders, 5,* 107-117.

McGinnis, E., & Forness, S. R. (1988). Psychiatric diagnosis: A further test of the special education eligibility hypothesis. In R. B. Rutherford, Jr. & J. W. Maag (Eds.), *Severe Behavior Disorders of Children and Youth* (Vol. 11, 3-10). Reston, VA: Council for Children with Behavioral Disorders.

Rosenblatt, A., & Attkisson, C.C. (1992) Integrating systems of care in California for youth with severe emotional disturbance I: A descriptive overview of the California AB377 Evaluation Project. *Journal of Child and Family Studies, 1,* 93-113.

Rosenblatt, A. & Attkisson, C.C. (1997). Integrating systems of care in California for youth with severe emotional disturbance IV: Educational attendance and achievement. *Journal of Child and Family Studies, 6,* 11-127.

Rosenblatt, J. A., Robertson, L. M., Bates, M. P., Wood, M., Furlong, M. J., & Sosna, T. (1998). Troubled or troubling? Characteristics of youths referred to a system of care without system-level referral constraints. *Journal of Emotional and Behavioral Disorders, 6,* 42-54.

Sabornie, E. J., Cullinan, D., & Epstein, M. H. (1993). Patterns and correlates of learning, behavior, and emotional problems of adolescents with and without serious emotional disturbances. *Journal of Child and Family Studies, 2,* 159-172.

Silver, S. E., Duchnowski, A., J., Kutash, K., Friedman, R. M., Eisen, M., Prange, M. E., Brandenberg, N. 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. M. (1996). The system of care concept and philosophy. In B. A. Stroul & R. M. Friedman (Eds.), *Systems of care for children's mental health.* Baltimore, MD: Brookes.

U.S. Department of Education (1994). *Sixteenth annual report to Congress on the implementation of Individuals with Disabilities Education Act.* Washington, DC: U.S. Government Printing Office.

Wagner, M.M. (1995). Outcomes of care for youths with serious emotional disturbance in secondary school and early adulthood. *The future of Children: Critical issues for children and youths, 5,* 90-112.

Wilkinson, G. S. (1993). *The Wide Range Achievement Test3.* Delaware: Wide Range.

Wood, M., Furlong, M. J., Rosenblatt, J. A., Robertson, L. M., Scozzari, F., & Sosna, T. (1997). Understanding the psychosocial characteristics of gang-involved youths in a system of care: Individual, family, and system correlates. *Education and Treatment of Children, 20,* 281-294.

Woodcock, R. W., & Johnson, M. B. (1989). *Woodcock-Johnson Tests of Achievement.* IL: Riverside Publishing.

Symposium Discussion

There are two key findings that emerge from these papers. First, a system of care may increase the rate of identification of special education needs of children and adolescents. Second, the children identified as requiring joint education and mental health services within two systems of care have significant mental health problems and deficits in educational achievement. Although the authors of the papers note the limitations of their findings, they do present evidence that systems of care may be having appropriate impacts on the identification and referral of youth to special education services.

In California, where relatively few youth are identified as needing special education services, an increase in identification rates probably means that youth who need these services are being identified for the first time. Certainly, given the data presented in the second paper, it appears that the children and adolescents served in specialized county programs have the kinds of multi-system needs that call for collaborative interventions. Of course, a great deal remains to be learned regarding the effectiveness of these programs and the adequacy of current identification rates for special education services. Nonetheless, taken together, these papers illustrate the need to more fully understand the relationships between the education system and other care sectors– especially when the education system is a core component of a broader system of care approach.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

REPRODUCTION BASIS

☐ This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☑ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").