

Chapter Three —	- Education		

Symposium

School-wide Systems of Positive Behavioral Support: Promoting the Mental Health of all Students, Including Those with SED

Symposium Introduction

Lucille Eber

A school-wide system of Positive Behavior Interventions and Supports (PBIS) employs data-based decision-making to foster school environments that promote pro-social behavior of students. The papers presented here provide data on a three-tiered PBIS approach to improving mental health functioning of all students in schools,

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including those with SED. These papers provide examples of the connections between a systemic, data-based decision-making approach and the use of effective practices among school personnel. Supported by federal initiatives from both education and mental health, the research findings that follow include data from the ongoing evaluation of primary, secondary, and tertiary school-based systems of prevention and intervention in Illinois and Kentucky.

Building School Capacity to Support All Students through School-wide Positive Behavior Systems

Lucille Eber & Teri Palmer

Introduction

Positive Behavioral Interventions and Supports (PBIS) is a systems approach focused on building the capacity of schools to teach and support positive behavior of all students by developing research-based, school-wide and classroom discipline systems. Rather than a prescribed program, PBIS provides a process for schools to design, implement, and evaluate their own effective school-wide, classroom, and student-specific discipline plans. PBIS includes school-wide procedures and processes intended for: (a) all students, staff, and school settings; (b) non-classroom settings within the school environment; (c) individual classrooms and teachers, and; (d) individual student support for the students who present the most challenging behaviors (Sugai & Horner, 1999; Sugai, Sprague, Horner, Walker, 2000).

Illinois' PBIS Initiative

Building on a history of successful implementation of system of care (SOC) and wraparound approaches (Eber, Rolf, & Schreiber, 1996), Illinois is a demonstration site for the National PBIS Center. Sponsored by the Illinois State Board of Education, the Illinois' Emotional and Behavioral Disturbance (EBD) Network provides leadership and support for wraparound through schools, and has partnered with safe school initiatives in Illinois to implement positive school-wide discipline systems. Staff from over 200 schools have received training in PBIS, and the PBIS approach has been implemented in their schools. In addition, over 75 site-based coaches have been identified and trained, with support from the Office of Special Education Programs' (OSEP) National PBIS Center. These coaches are supporting implementation and evaluation of PBIS in Illinois schools. This PBIS focus is intended to complement and support the existing interagency and school-based wraparound efforts by creating more effective host environments for implementing strength-based interventions around those with or at-risk of EBD while also preventing the development of behavior problems in many students (Eber, Sugai, Smith & Scott, 2002).

This paper describes the evaluation method and results that are specific to the universal (school-wide) level of the PBIS system, including: (a) strategies for establishing research-based practices and

data-based evaluation systems in schools, (b) methodology and initial findings of the effect of school-wide systems, and; (c) implications for enhancing system-of care-approaches for students with EBD and their families.

Methodology

Because educators actively use data to make decisions throughout implementation, evaluation strategies are a critical element of PBIS. School teams and coaches use quarterly checklists to monitor and guide their actions, providing internal and external checks on implementation progress. The School-wide Evaluation (SET) Survey is completed by outside reviewers who observe the status of seven critical features of school-wide PBIS systems in schools. Additionally, schools review and analyze their existing school-based data systems, including office discipline referrals (ODR), in-school suspensions (ISS), out of school suspensions (OSS), attendance, and tardiness. Leadership teams at each school site are instructed in how to use these data to guide decision-making about design and evaluation of research-based behavior strategies aimed at reducing rates of undesirable behaviors. Teams are taught to guide their schools in using effective instructional strategies around replacement behaviors, high levels of reinforcement for competing behaviors, and clear, consistent adult responses to incidents of misbehavior.

Also included in this paper are data from school profiles that provide demographic and student behavior data. The profiles include the numbers and types of interventions implemented school-wide, the estimated level of staff participation and the estimated level of impact by PBIS in the schools. In June 2000, 14 schools voluntarily completed these end-of-year profiles. In June 2001, 35 schools completed profiles, although student behavior data were not available for all schools.

Results/Discussion

Results of the PBIS process include an increase in proactive behavioral strategies among school staff, reductions in office discipline referrals, in-school suspensions, and out of school suspensions. A combination of process and outcome measures provide information to guide sustainability efforts in Illinois schools. For example, two-year SET and checklist data suggest that schools, with active coaching, progress at a slightly higher rate toward implementation of critical features of PBIS at the school-wide level. Additionally, these schools have maintained scores in the sustainability range (80% or higher), while initiating more individualized interventions for students with significant challenges, including those with SED. Data also suggest that lowered rates of suspensions and office discipline referrals were sustained while schools moved forward with building their capacity for specialized interventions with identified students.

Although the results reported by the 35 schools that completed profiles are not necessarily reflective of the total schools participating in the larger project, these schools have demographic data similar to the demographics of the total number of schools implementing PBIS in Illinois. Results provided by the 35 schools show a comparable sample of the range and diversity of participating schools; they include 20 elementary, 6 middle, 4 high school and 5 combined grades (2 elementary/middle, 3 middle/high). Twenty-two schools (63%) were urban, 4 schools (11%) were suburban, and 9 (22%) were rural. Average free and reduced lunch was available for 42% (range 0-87%) of students, and 35% (range 0-80%) of students were members of an ethnic/minority group. All geographic regions of the state were represented in the sample.

As a measure of the use of effective behavior practices, teams were asked to report the number and type of interventions implemented along the continuum of support. A total of 118 interventions were reported across the 35 schools as follows:

- 66% of the schools implemented school-wide strategies, affecting 80-90% of students.
- 20% of schools utilized targeted group strategies, affecting 5-15% of students.

- 11% of schools used targeted individual strategies, affecting 1-15% of students.
- 3% of schools employed intensive-wraparound strategies, affecting 1-5% of students.

These data represent an increase in the number of schools reporting the use of individualized interventions for students with higher behavioral needs, including those with SED.

Teams were asked to estimate the level of staff participation with the different interventions. Across the interventions, staff participation was rated as at least 80% for 66% of the interventions (46% at 90-100%, and 20% at 80-90%). The majority of interventions in which less than half of the school staff participated were for targeted and wraparound-based interventions; this indicates that schools are allocating staff resources appropriately within their continuum. Teams were also asked to estimate the level of impact achieved by the interventions. Ninety-two percent of the interventions were rated as having a Medium to Very High impact; of this figure, 77% of the interventions were for students with significant challenges.

Data from individual schools have been summarized into one-page profiles that describe the interventions designed and evaluated by each school. These school-specific summaries include changes in student behavior data, and strategies adopted by the schools that illustrate how schools are using data to guide decision-making about changing student and staff behavior. The information reported by school PBIS teams suggests these schools are using their existing data to improve their interventions and are developing system approaches for designing proactive interventions for students who require more targeted and intensive interventions. Examples of data and strategies from these individual summaries are described below.

A rural elementary school experienced a 52% reduction in ODRs. When compared to the number of ODRs experienced in their pre-PBIS school year, this school has successfully reduced ODRs by 61% in two years, dropping from 250 to 97. Continuing success at the school-wide level with 80-90% of students encouraged the faculty to introduce a targeted group intervention and several intensive/ school-based wraparound interventions for some students with significant behavioral and emotional challenges

An urban elementary school reported a 42% reduction in ODRs and a 50% reduction in OSSs at the end of its second year as a PBIS school. During Year 2, the school designed two targeted group interventions for students who were continuing to struggle behaviorally. The first intervention was peer mediation, in which fourth and fifth grade students were trained as peer mediators. Faculty report that this targeted intervention has had a High impact on the behavior of 80-90% of the participating students. The second targeted intervention, "Team Superstars," involves a group of students who need extra support, according to behavioral data. On a weekly basis, they meet in groups after-school and engage in fun activities that promote goal-setting, team work, and social interaction skills.¹

Discussion

Strength-based, multiple-life domain interventions are recommended for students with significant EBD. However these types of approaches are time-consuming and difficult for teachers and school staff to implement; this is especially the case if educators are frustrated by behavior problems among high numbers of students in the school. Results in Illinois schools suggest that improving systems that support behavior at the universal level (e.g. school-wide for the 80-90% of students) can lead school teams to establishing systems for effective interventions for students with more intensive and chronic, emotional and behavioral problems. Strategies for sustaining these universal changes in schools are encouraging and can prevent new cases of problem behavior from developing. Also, educators are able to direct more time and resources to students with more significant needs. School staff are learning

¹Individual profiles for participating schools are available in the PBIS section of the Illinois website: www.ebdnetwork-il.org

how to engage families, community agencies, and natural support persons into teams that can design effective behavior change strategies for students. These child/family teams are being guided to use data (i.e. functional assessments, information gained from conversations with families) to design individualized, strength-based interventions across home, school, and community. Data collection around these students and their families are being collected and analyzed to determine the that effect school-wide PBIS approaches can have on students with more intensive needs (e.g., those with EBD) over time. While the data suggest that these schools can be encouraged to use data to guide interventions that improve student behavior, it is important to note that these results are not representative of change across all participating schools.

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A School-Based Wraparound Example: Outcomes and Processes

Debra Pacchiano, Lucille Eber, & Laura Devine-Johnston

Introduction

School-based wraparound is a strengths-based process through which intensive, individualized supports are designed, implemented, and monitored for children, youth, and families with significant emotional and behavioral needs. Facilitated by school-based staff, the process begins by identifying the perspectives and goals of the family and the school, then blending these perspectives to prioritize action planning across life domains. Action plan strategies build on family and school strengths, in combination with function-based positive behavioral interventions. This paper presents outcome data from a school-based wraparound initiated for a youth and family with intensive medical, academic, and behavioral needs. Data were collected at baseline, four, nine, and 12 months.

Background

Schools and school-based clinical staff continue to build their capacity to prevent and meet the emotional and behavioral needs of all students, including those with the most significant challenges. One approach to building school-based capacity with prevention and intervention are school-wide models of behavioral support, specifically Positive Behavioral Interventions and Supports (PBIS; Sugai & Horner, 1999). PBIS creates or restructures three specific systems of behavioral support within school buildings that support staff to implement research-based effective practices with all students. These three systems include the following: the universal school-wide system; the targeted intervention system; and the intensive intervention system. The intensive system is designed to support the approximately 1-7% of the student population in a school building who require the most specialized and individualized social-emotional-behavioral supports.

The Illinois State Board of Education currently funds a statewide PBIS initiative to train and support schools to design and implement PBIS in their buildings. As PBIS schools begin developing their intensive system of behavioral support, training is provided for a school-based wraparound process (Eber, Sugai, Smith & Scott, 2002), along with on-going technical assistance as staff implement the process with children and youth with intensive needs. During the 2000/01 school years, a school district implementing PBIS in Illinois began piloting the process of school-based wraparound as one component of their intensive system of behavioral support. The outcome data for this paper reflects one of their pilot school-based wraparound processes.

A school-based wraparound process was initiated in November, 2000 and continued through the 2001-02 school year with a 13-year-old male freshman and his single mother. The youth has a diagnosed chronic medical condition requiring daily monitoring, decisions about appropriate medical management, and implementation of those decisions. At the time the school-based wraparound was initiated, baseline rates of the youth's attendance, classwork and homework completion, tests/quizzes/grades, medical status across home and school, social connectedness, and aggressive behavior incidents in the home indicated the need for intensive, individualized interventions and supports. In response, school administrators began pursuing a change of the youth's special education placement to a highly restrictive self-contained special education school outside of the youth and family's neighborhood. Family and school relations had deteriorated; interactions and other communications were mostly of an adversarial nature.

Methodology

Baseline and outcome data were collected at four, nine, and twelve months using four evaluation instruments: Educational Information Form, Youth and Family Checklist, Parent and Youth Satisfaction Survey, and the Collaborative Team Planning Form (CTPF). The Educational Information Form organizes teacher input regarding educational placement, classroom functioning, need for academic and behavioral supports, and academic performance. The Youth and Family Checklist organizes family perceptions of youth needs and strengths in the areas of safety/medical/basic needs, social relationships, emotional functioning, behavioral functioning, cultural/spiritual, and at-risk behaviors across home, school, and community. The CTPF organizes action planning and ongoing monitoring of progress toward family and school identified goals. Additional outcome data were collected on the youth's medical management and status.

Results

Outcome data reflect positive changes in the youth and family functioning across life domains from baseline to four months; however, maintenance of these changes was not demonstrated in the outcome data from four months to nine months. However, a new teacher/case manager was assigned to the youth at nine months, and at 12 months improvements were shown in specific areas. Tables 1 and 2 show outcome data from the Educational Information Form and the Youth and Family Checklist, respectively.

The Parent and Youth Satisfaction Survey is a Likert Scale from 1 (*not at all*), to 4 (*a great deal*). The percentage of items rated *a great deal* by the parent was 100% at four months. This figure dropped to 50% at nine months, and increased to 88% at 12 months. The percentage of items rated *a great deal* by the youth were 70% at four months, decreased to 60% at nine months, and reached 80% at 12 months.

Results of the Collaborative Team Planning Form indicated that action planning had "Resolved or attained to satisfaction of family & teacher" 50% of the time at four months, 35% at nine months, and 42% at 12 months. The percentage of action planning items rated as "Progress made but still a need" was 44% at four months, and 55% at nine and twelve months. The percentage of items rated "Unresolved or worse" went from 1% at four months to 10% and 3% at nine and twelve months, respectively.

Table 1
Educational Information Form:
Outcome Data for One youth at Baseline, 4, 9, and 12 Months

Domain	Baseline	4 Months	9 Months*	12 Months	
Teacher's knowledge of student	Moderately well	Very well	Not well	Very well	
Special education service delivery	< 50% of the day	General classroom & special ed consultation	,	General classroom & special ed consultation	
Classroom functioning (Likert-type scale 1- never, 4- always; 4 indicates youth strengths)	15% of items rated a 4	77% of items rated a 4	7% of items rated a 4	62% of items rated a 4	
Extra academic assistance needed	No	No	Yes	Yes	
Extra behavioral interventions needed	Yes	Yes	No	Yes	
Academic performance	Average	Above average	Below average	Average	

^{*} New teacher/case manager assigned

Table 2 Youth and Family Checklist: Percentage of Items Rated High/Somewhat Need or High/Somewhat Strength

Setting	Need or Strength	Baseline	4 Months	9 Months*	12 Months
Home	Need	47%	21%	44%	35%
Home	Strength	53%	79%	46%	75%
School	Need	56%	15%	47%	38%
School	Strength	44%	85%	45%	62%
Community	Need	32%	21%	21%	6%
Community	Strength	68%	76%	79%	94%

^{*} New teacher/case manager assigned

Discussion

This case study illustrates a school's early experiences with the wraparound process for one youth, and the need to consistently and proactively apply the process, not only to achieve positive change, but to sustain change over time. Four months into the wraparound process, the family (i.e. parent and student) indicated high levels of satisfaction, which indicated a significant shift from their reports of previous experiences with school meetings. Initially, the family and school team focused on reaching consensus about a medical management plan, the major source of ongoing disagreement and blame between school and family. As family and school relationships improved, the student's academic and behavioral functioning improved as well. However, when the new school year began four months later, and a new teacher/case manager at school was assigned, the team reconvened immediately but did not emphasize the clarification of roles, responsibilities and tasks among team members. Although behavioral functioning remained stable, academic performance and family satisfaction decreased—in some cases, back down to baseline rates—indicating a need to refocus team consensus for problem-solving on these issues.

At 12 months into the wraparound process, the child and Family team had re-established a consistent meeting schedule and positive rapport between the case manager, youth, and the parent. Family satisfaction levels returned to high levels and the youth's behavioral and academic functioning

improved, from nine month status to only slightly below four month status. Results suggest that the school-based wraparound process can make significant improvements in family and school partnerships and student functioning, both behaviorally and academically. However, the wraparound process must be consistently applied over time. Careful attention must be given to changes in school schedules (i.e., summer vacation followed by new teachers and class schedules) in order to avoid disruption in the youth's progress and to maintain training and support for school-based team members who are new to the process of wraparound.

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Behavior Support Plans for Students with or At-risk of Emotional/Behavioral Challenges

Vestena Robbins, Lucille Eber, & Laura Devine-Johnston

Introduction

Challenging behavior and discipline issues are top concerns among both educators and others who work with students with emotional and behavioral problems. Despite a lack of evidence supporting their effectiveness, educators routinely rely upon punitive approaches to discipline such as seclusion and exclusion, rarely achieving the desired outcome of decreased problem behavior. The need for more effective discipline approaches is apparent. Positive Behavior Interventions and Supports (PBIS) is a systems approach intended to assist schools in organizing effective behavioral practices and data-based decision making around all students (Sugai & Horner, 1999). PBIS establishes three specific levels of behavioral support within school buildings that support staff to implement research-based effective practices with all students. These three systems include the following: the Universal School-Wide System, the Targeted Intervention System, and the Intensive Intervention System.

The development, implementation, and monitoring of positive behavior support plans is a critical feature of a school-wide system of PBIS for students who are at-risk of developing chronic behavior problems. These students (typically 5-15% of the school population) require targeted interventions specific to their behavioral needs. Additionally, students who have chronic and intensive behavioral needs (1-7% of the school population) that are often evident at home, school, and in the community also require behavior support plans in combination with other supports and services. Behavior support plans are often integrated into Individualized Education Plans (IEPs) and/or wraparound plans for these students (Eber, Sugai, Smith & Scott, 2002).

Building capacity within schools for efficient and effective behavior support planning at the first sign of problem behavior is a critical feature of PBIS. Indian Prairie School District in suburban Chicago has had a centralized Behavior Intervention Team (BIT) for the past seven years. This team of four trained behavior specialists has assisted the 28 schools in this district with function-based behavior support plans, mostly around students with chronic and intensive behavior problems, and usually in conjunction with Special Education programming. Illinois' PBIS Initiative has assisted the district in implementing the universal (school-wide) level of PBIS over the past three years. As part of PBIS implementation, the BIT began teaching school-based Action Teams to use function-based behavior support planning for students at-risk (5-15%) rather than waiting for problem behavior to increase in severity before requesting assistance from the BIT. Approximately seven schools have had a full year of experience with developing behavior support plans through building-based Action Teams.

Methodology

A sample of Behavior Support Plans (N = 12) developed by the centralized BIT and building-based Action Teams were systematically reviewed to determine team configuration, referral patterns, and the nature and scope of interventions and supports included in the plans. Plans were examined at an aggregate level to evaluate team performance in the development of plans and to assist with ongoing program improvement, practice refinement, and staff development needs.

Results/Discussion

The average number of team members involved in plan development was six. With respect to team configuration, members included teachers, district BIT members, administrators, paraprofessionals, student support staff (e.g., social workers, school psychologists) and parents. Students and peers may also participate on teams; however, this was not the case for this sample of plans. Students within this sample were referred from the following grade levels: primary (n = 6), intermediate (n = 5), and high school (n = 1). Most students were referred for multiple problems, with the most common being noncompliance (n = 9) and problems controlling anger or modulating emotions (n = 6). These findings may indicate a need to target these areas for district-wide staff development and training, particularly for general educators. For this sample of plans, most skill building strategies focused on students and included such areas as anger control training, prosocial skill development, communication skills, and aggression replacement training (see Figure 1).

Some plans also included skill training for staff (n = 4) in areas such as assistive technology, communication overlay, and de-escalation strategies. In addition to interventions, plans also included educational strategies and supports (n = 7), such as one-on-one instruction, goal setting, and case management. Supports, such as case management or social work, are essential components of plans because they address factors beyond the immediate context in which the behavior of concern occurs.

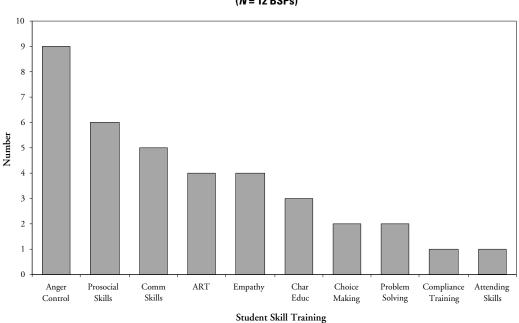


Figure 1
Skill Training/Educational Strategies
(N = 12 BSPs)

Plans identified both positive and reactive consequence strategies. With respect to positive consequence strategies, encouragement/praise was the most commonly used (n = 13). Other positive strategies included the use of a point system/token economy (n = 6), earning free time/breaks (n = 6), the use of reinforcers/rewards (n = 4), allowing students to engage in special activities (n = 3), humor (n = 2), and the use of active problem solving (n = 2). An array of reactive strategies was included in the plans; however, a pattern emerged in that the most intrusive types (e.g., suspension) were used the least, while less intrusive strategies (e.g., redirection) were the most common (see Figure 2).

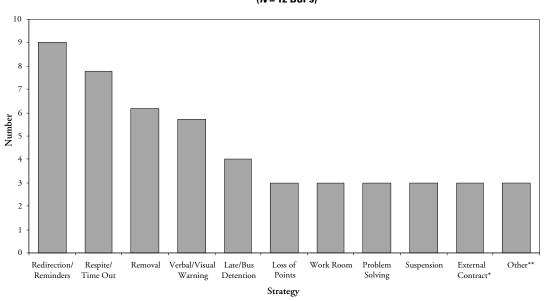


Figure 2
Reactive Consequence Strategies
(N = 12 BSPs)

Each plan also included crisis response strategies. For example, parent (n = 8) and administrative contact (n = 7) were common crisis strategies. While teams relied upon a variety of methods to evaluate and monitor plan progress, the most frequently used method was daily behavior/point sheets (n = 8). Some plans required the use of anecdotal records and incident logs (n = 2), monitoring detentions/referrals (n = 1), and reviewing grades (n = 1). Teams met either monthly or quarterly to review plan progress and implementation.

The reviews of these plans indicate that behavior intervention teams may wish to consider the following additions to their process: (a) the incorporation of a self-assessment process (e.g., checklist) to ensure that essential elements of an effective behavior support plan are included (see, for example, Horner, Sugai, Todd, & Lewis-Palmer, 1999-2000); (b) mechanisms to monitor the fidelity of plan implementation by describing each component of the plan and the person responsible. Monitoring fidelity every three to five days is recommended; and (c) to evaluate the impact of the plan by conducting progress checks at least every two to three days and revise the plan as needed.

^{*}External contact with parent, truent officer, police

^{**}Other includes de-escalation with adult support and letter of apology

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Building Bridges of Support in Eastern Kentucky: Outcomes of Students Receiving School-Based Wraparound

Vestena Robbins & Kari Collins

Introduction

Upon receipt of a Center for Mental Health Services (CMHS) grant in 1998, a school mental health initiative was implemented in 21 schools in the Appalachian Mountains of Kentucky. Termed the Bridges Project, this collaborative model focuses on promoting partnerships among families, educators, and service providers to better meet the needs of students with emotional and behavioral disabilities and their families. The purpose of the project is to build upon and enhance Kentucky's existing system of care in three rural Appalachian mental health regions in eastern Kentucky. This area of the state possesses characteristics that differ dramatically from the rest of the state, such as high rates of poverty, unemployment, and illiteracy. Due to the rural nature of the region, lack of transportation, limited community services and resources, and a shortage of human services professionals serve as barriers to effective service delivery. Despite these barriers, the Bridges Project seeks to provide services in a way that acknowledges and builds upon the strengths of the Appalachian culture.

Adequately addressing the needs of children and youth with emotional and behavioral disabilities often requires the involvement and support of multiple child-serving agencies in collaboration with families. However, a 5-year evaluation of the Kentucky IMPACT Program (Illback, Birkby, & Sanders, 1996) revealed limited coordination and integration between education and other child-serving agencies. Acknowledging schools as a critical partner in system of care efforts and the challenges and opportunities underlying their effective inclusion, the primary feature of the project centers upon developing and evaluating a school mental health service delivery model designed to promote and support the mental health needs of all students in the school through the provision of universal, targeted, and intensive interventions and supports. In this model, school-based student service teams (SSTs), consisting of a service coordinator, family liaison, and an intervention specialist, are employed by community mental health centers but located within schools (N = 21). In addition, a behavior consultant is assigned to each region. In collaboration with school staff, the SST and behavior consultant facilitate the implementation of a continuum of positive behavior supports (Sugai & Horner, 1999).

This paper highlights program features and describes the characteristics and outcomes of children and families (N = 324) participating in a school-based wraparound process. One-year outcome data, service delivery patterns, and satisfaction ratings are presented. Given the school-based nature of the program, particular consideration is given to the examination of educational functioning over time. Policy, program, and practice implications are discussed.

Methodology

As part of the national evaluation process of CMHS-funded grant communities, descriptive, outcome, and intervention-level data are gathered for children and families receiving wraparound

through the Bridges Project. Upon referral and acceptance to the Bridges Project, the caregiver completes an intake process in which demographic information, risk factors, family composition, problem history, and service history are gathered. If consent is obtained, SSTs conduct an intensive structured interview with the caregiver and/or youth at baseline and every six months thereafter. Data from this interview yield information regarding the child's living situation, academic and behavioral functioning, behavioral and emotional strengths, as well as family resources and degree of strain. In addition, service delivery and satisfaction data are gathered. Local evaluation efforts have focused on gathering teacher-reported information on school performance, including both academic and behavioral functioning.

Results

Descriptive Information for Youth and Families (N = 324) Receiving School-Based Wraparound

Consistent with previous literature on the characteristics of youth with serious emotional disabilities, the majority of the sample is comprised of males (72%) with an average age of 12.4 years at entry into the program. Most are White (97%) and almost half (42%) are in the custody of their biological mother only. Over two-thirds live in poverty and 83% receive Medicaid. These youth also experience numerous child and family risk factors. About one in five has been physically abused or has runaway at least once in their lifetime. One in two youth has a parent with a history of mental illness and/or substance abuse, while one in three have witnessed family violence or have a parent who has been convicted of a crime.

Due to the nature of the project, most youth are referred to the program by either the school or mental health agency. Most youth are referred for multiple presenting problems with the most common being noncompliance (55%), hyperactive-impulsive (40%), poor peer interaction (40%), academic problems (38%), and physical aggression (37%). Given their presenting problems, it is not surprising that most carry an Axis I psychiatric diagnosis at intake of either Attention Deficit-Hyperactivity Disorder or a Disruptive Behavior Disorder (73%), and about 20% have a diagnosis of Mood Disorder. In addition to having a diagnosable mental health disorder, 42% also experience chronic physical illness, mostly asthma, allergies, and frequent or severe headaches. While almost half (44%) take medication for their emotional and behavioral symptoms, only 23% are on medication for their physical health problems upon entry into the program.

To date, 12-month follow up data have been collected for 27 cases. On average, caregivers (n = 27) reported receiving an average of six services at one-year follow-up, with the most commonly delivered being traditional in nature. Most (90%) reported receiving individual therapy, 92% received case management services, and 62% received medication monitoring services. Less traditional services, such as flexible funding (46%), family support (47%), and transportation assistance (28%), were received by a smaller number of families. However, the percent of families reporting receipt of innovative services increased between 6- and 12-month follow up, indicating greater reliance on innovative services over time.

Outcomes for Youth and Families (n = 27) Receiving School-Based Wraparound

Within the national evaluation, outcomes are assessed for a variety of life domains at intake into the program and every six months thereafter. In addition, due to the school-based nature of the project, a local evaluation instrument is implemented to assess teacher-report of school functioning at intake and at the end of each school year. At intake, less than half of the students (46%) had an individualized education program (IEP) in the six months prior to intake. Of those, 33% had more than one disability area noted, with the majority being an emotional or behavioral disability and/or a learning disability. Following enrollment in the program, the percent of youth identified and served in special education increased by 11%. At intake, 49% of the youth had a grade average of "C" or better.

90

80

70

60

50

40

At 12-month follow-up, this percent increased to 57%. In addition to improvements in academic performance, youth receiving school-based wraparound experienced fewer suspensions and detentions following entry into the program. Between baseline and one-year follow-up, the percent of students who were suspended decreased from 40% to 15%, and the percent of time spent in detention decreased from 49% to 28%. With respect to teacher-reported classroom behavior and peer relations following participation in the program, the greatest changes were noted in students' ability to cooperate with others, relate appropriately with peers, remain on task, participate in activities with peers, and complete classwork (see Figures 1 and 2). Teachers reported less improvement in following directions, being on time, obeying rules, and having friends.

> Figure 1 Teacher-Reported Classroom Behavior (n = 27)

0 0 Completes Classwork Follows Directions Remains on Task Completes Homework

% Frequently or Almost Always 30 Obeys Rules On Time 20 10 0 Baseline Follow Up Figure 2 Teacher-Reported Peer Relations (n = 27)70 60

Average problem behavior scores on the Child Behavior Checklist (CBCL; Achenbach, 1991) decreased from intake to 12 months on the Total Problem scale (with a mean score of 71 at intake and a mean score of 62, 12 months later; lower scores indicate fewer problems). Despite this decrease, the average score remained in the clinical range at one year follow up, attesting to the chronic and severe nature of the problems these youth experience. Youth functioning was measured using the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990). At intake, the average CAFAS Total Score was 104, while at 12-month follow-up the average decreased to 79. An examination of scores on the Behavioral and Emotional Rating Scale (BERS; Epstein & Sharma, 1997) revealed an increase in the average Strength Quotient between intake (Mean: 108) and one year later (Mean: 113), indicating a slight but insignificant increase in strengths.

Discussion

Given the emerging evidence of the strong relationship between academic underachievement and mental health challenges (see, for example, Hinshaw, 1992), it seems reasonable that schools and mental health agencies should work in partnership to address the needs of this population. It has been only recently, however, that an interest in school-based services has emerged, and schools have begun to serve as the foundation for providing integrated and coordinated services (Pumariega & Vance, 1999). The results presented herein attest to the positive impact of a school-based wraparound process on the mental health *and* school functioning of youth with serious emotional and behavioral problems. Thus, it does appear that genuine partnerships among families, educators, and school-based mental health professionals does show promise as a strategy for addressing psychosocial barriers to learning.

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Discussion: PBIS for All

Marc Atkins

The papers presented in this symposium provide a behind-the-curtain view of how PBIS works to reduce disruptive behavior and increase positive behaviors in schools. The scientific basis of PBIS is illustrated by the emphasis on systemic changes that precede implementation of targeted and intensive behavioral programs, a focus on positive approaches to replace overly-punitive reactive programming, and an emphasis on systematic but practical assessment of implementation and outcomes. Using data as its ambassador, PBIS provides schools with a systematic approach to manage behavior and focus on learning. In addition, in stark contrast to the myriad of manuals and curricular that entice schools to

try one quick fix after the other, PBIS provides a guide but no blueprint, as it is the school teams who must decide and not the consultants or "coaches," to use the PBIS vernacular. This provides an exciting opportunity for mental health consultation to schools, as this flexibility can lead to a solution that may be data-based, but is not necessarily evidence-based, as, for example, the use of individual counseling for 90% of children for targeted and intensive services which is an ineffective strategy for the primary presenting problems of noncompliance and Attention Deficit Hyperactive Disorder (ADHD). The opportunity for mental health consultation is to use PBIS as a framework for effecting real changes in mental health services for students, services that support students' learning and support the key individuals, teachers and parents, who share responsibility for educating children.

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Urban School and Community Study: School Reform and Students with Emotional and Behavioral Disabilities and their Families

Introduction

Krista Kutash Albert J. Duchnowski Nancy Lynn

The Urban School and Community Study is designed to further the understanding of school reform and restructuring activities. Specifically, this study will describe restructuring activities in a sample of urban schools and examine the impact of these activities on children identified as having emotional and behavioral disabilities who are served in special education programs.

The over arching goals of this study are to develop an empirical measure of school reform and to examine the relationships between different levels of school reform activity and student functioning. The study will eventually contain 16 schools (four urban areas with four schools from each area) and will be able to describe approximately 200 students and their families. The purpose of this paper is to present information on the first 99 youth and their families recruited into the study.

Methodology

Measures of School Reform and Restructuring

To measure restructuring activities within the schools, a model was constructed based on the extant literature describing "best practices" or hypothesized critical aspects of school reform and restructuring activities. Six areas of restructuring were identified as being important aspects of school reform and restructuring: (a) governance, (b) accountability, (c) curriculum and instruction, (d) parent involvement, (e) includedness, and (f) pro-social discipline. Structured interviews held with multiple informants at each participating school were transcribed and scored according to the six areas listed above. The scores resulting from rating the interviews from school personnel are referred to as the School Reform and Restructuring Index (SRRI) scores.

Sample

Through a national recruitment effort, four schools in Maryland and four schools in Ohio were nominated and selected to participate in this study. The schools included two high schools, one middle school, one school that serves students in grades K-8, and four elementary schools.

Voluntary consent to participate was obtained from 99 of 118 caregivers of study-eligible students formally identified as having an emotional or behavioral disability by their school and served in a special education program. Participants and non-participants did not differ significantly on gender $\chi^2(1, N=118)=.02$, p=1.0; race $\chi^2(1, N=118)=.002$, p=1.0; age t (116) = -.49, p=.63; nor cost of school meal(s) $\chi^2(1, N=118)=2.67$, p=.12. The 99 participants were being served in eight schools that were nominated and selected to participate in the study by leaders in the local school and included two high schools, one middle school, one school that serves students in grades K-8, and four elementary schools.

Instruments

- Academic Achievement. The Wide Range Achievement Test-III (WRAT-III; Wilkinson, 1993) was used to measure youth's academic achievement levels in reading and math. Intelligence Quotients were obtained from the students' school records.
- *Demographics and History of Emotional and Behavioral Problems.* Parents/caregivers were administered a 51-item structured interview describing the youth's and family's demographic background. In addition, a history of emotional and behavioral problems was obtained.

- Emotional and Behavioral Problems. The Child Behavior Checklist (CBCL; Achenbach, 1991) is a
 widely used instrument designed to measure behavioral and emotional problems for youth ages 4
 to 18 years.
- *Emotional and Behavioral Functioning*. The Columbia Impairment Scale (CIS) provides a global assessment of functional impairment across four major functional areas: interpersonal relations, certain broad areas of psychopathology, functioning at school, and use of leisure time (Bird et al. 1993; Bird et al., 1996).
- Service Utilization. The parent version of the Service Assessment for Children and Adolescents (SACA; Stiffman et al., 2000), which was modified for use in this study, is designed to assess the utilization of mental health services by children and adolescents.
- Teacher Reports. Information was also reported by teachers on any related services the student's
 may have received from either school personnel or agency personnel who provided services to the
 students during the school day at the school. These services included individual or group
 counseling, case management, medication management, or other services designed to help the
 student with their behavioral or emotional functioning.

Results

Demographic Information

Most of the 99 participants were male (83%), black (83%), and received free or reduced price school meals (71%). The average age of the participants was 13.0 years of age. Sixty percent of students lived in a single-parent household and 64% of households were above the poverty level with an average annual income of \$25,855.

History of Behaviors

According to reports from parents/caregivers, their child's emotional and/or behavioral problems were first noticed by caregivers or relatives at an average age of 5.9 years (SD = 2.5). The first service for these problems was received at an average age of 7.3 years (SD = 2.6). On average, the youth spent 63% of their entire school career enrolled in a special education setting.

Cognitive, Academic, and School Functioning

The students' average IQ score was 78.1 (SD = 11.8). The average WRAT score on the reading subtest was 78.4 (SD = 16.6) and 74.5 (SD = 12.0) on the math subtest. On average, students in the study were absent from school about 20.5 days during the current school year. Twenty-seven percent of students received an in-school suspension (ISS) for an average of 1.2 days (SD = 2.5) and 51% of students received out-of-school suspensions (OSS) for an average of 5.9 days (SD = 13.3) during the current school year. In the current school, 95% of their time had been enrolled in special education.

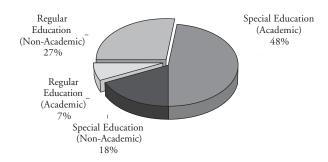
In the current school, 66% of the youths' time was spent in a classroom restricted to special education students and the majority of this time was spent on academic activities (see Figure 1). The students spent more time in a special education setting when compared to national averages, with 73% of the current sample spending over 61% of their day in a special education classroom compared to 41% nationally.

Emotional and Behavioral Problems and Functional Impairment

Scores on the CBCL are standardized to T-scores (M = 50, SD = 10) with higher scores indicating greater behavior problems. A T score above 63 is considered in the *clinical range* and a score between 60 and 63 is considered as *borderline*. The average Total Problems Scale score (M = 66.2, SD = 9.1) placed 76% of the participants in the borderline or clinical ranges.

The CIS yields a total impairment score that can range from 0 to 52. A score of 16 or above is considered to be in the clinical range of impairment. The average CIS score was 18.7 (SD = 9.7), placing the majority of students (61%) in the clinical range of functional impairment (see Table 1).

Figure 1
Proportion of Time per Week Students Spent in a Special Education Environment¹ for Both Academic² and Not-academic³ Activities and in a Regular Education Environment (N = 99)



Total % of week in regular education = 34% Total % of week in special education = 66%

Table 1
Means, Standard Deviations, and Range of Scores on the Child Behavior Checklist (CBCL), and the Child Impairment Scale (CIS) (N = 99)

Scale	$\%^{I}$	Mean	SD	Range
CBCL ²				
Total Problem Score		66.2	9.1	39-84
Clinical (> 63)	60			
Borderline (60-63)	16			
Normal (< 60)	24			
Externalizing Score		67.0	9.1	37-91
Clinical (> 63)	66			
Borderline (60-63)	13			
Normal (< 60)	21			
Internalizing Score		60.8	12.1	33-90
Clinical (> 63)	40			
Borderline (60-63)	19			
Normal (< 60)	40			
CIS Total Score 3		18.7	9.7	3-43.3
Clinical Range (≥ 16)	61			
Non-Clinical (< 16)	39			

¹Percent may not equal 100 due to rounding

¹A special education environment is any classroom that is restricted to only students enrolled in special education programs.

²Academic activities include Language Arts (English), Math, Reading, Science, Social Science, and other Languages (Spanish, etc.).

³Non-academic activities include Music, Art, Physical Education, Homeroom, passing time between classes, Economics, Speech or Language Therapy, Vocational, Beaks/Recess, Social Skills, Computers, Work-Study, Transitions, Library/Media, Study Hall, Lunch, or home.

² The Child Behavior Checklist is standardized to a mean of 50 and standard deviation of 10. Scores greater than 63 are in the clinical range, 60-63 are in the borderline range, less than 60 are in the normal range.

³The Columbia Impairment Scale total score can range from 0 to 52 with a score of 16 or above considered to be in the clinical range of impairment.

Past and Current Service Utilization

School personnel provided the majority of services with 69% of students receiving services during the current school year. The most common school services were individual counseling (61% of students) with an average of 5.5 contacts per month, and group counseling (58% of students) with an average of 6.3 contacts per month.

Nearly half (42%) of the students had used an inpatient service during their lifetime with an average of 4.2 admissions beginning at 8.6 years of age. Additionally, 19% of the students used an inpatient service in the past year with an average of 1.6 different service types being used during the past year.

With respect to outpatient services, 88% of students had received these services during their lifetime and 62% of these students had used an outpatient service in the past year. The average age of first use was eight years and they had used an average of 2.6 different service types.

Parent Satisfaction

On a scale of 1 to 4, with 4 being *most satisfied*, parent ratings indicated satisfaction with both educational and related services delivered in their child's school (M = 2.8, SD = .9 and M = 2.9, SD = .8, respectively). In addition, parents indicated that the involvement of all parents was moderately low and that they were somewhat involved with their child's education (M = 2.5, SD = 1.2 and M = 3.2, SD = .8, respectively).

Discussion

The majority of students were black males within the average to low-average range of intelligence. They have elevated scores on the CBCL indicating a high level of symptomatology that is interfering with functioning as measured by the CIS. As in other studies, these students are primarily from single parent families and behind their non-handicapped peers in reading and math skills. It is noteworthy that the average age of onset of symptoms (5.9 years) and the average age at which the first service was received (7.3 years) were almost identical to findings in other studies of this population (Duchnowski, Hall, Kutash, & Friedman, 1998; Greenbaum et al., 1998). Clearly, these children have a long history of emotional and behavioral problems, and at the time of this study they continued to exhibit emotional and behavioral disabilities at a severe level. While there are multiple models of mental health service delivery operating in these schools, it is school personnel who are delivering the majority of mental health services.

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Characteristics and Funding of School Mental Health Services: A National Survey

Judith L. Teich Mary Rollefson

Introduction

In order to address the widely-perceived need for current information on the status of school mental health services, the Centerfor Mental Health Services (CMHS) of the Substance Abuse and Mental Health Services Administration (SAMHSA) has contracted with Abt Associates, Inc., of Washington, DC and Cambridge, MA, to conduct a national survey that will provide a baseline of mental health services delivered in public elementary, middle, and secondary schools across the U.S. The survey will:

- Identify and describe models and arrangements for the delivery of mental health services within
 public elementary, middle, and secondary schools, and document which models and arrangements
 are most prevalent;
- Identify and describe the numbers and types of professional mental health staff available in public elementary, middle, and secondary schools, amounts of time they are typically available, their qualifications, and ways in which they generally allocate their time;
- Document the types of mental health problems/diagnoses most frequently encountered in the school setting, and the nature and amount of mental health services delivered in public schools;
- Identify and categorize the ways in which school mental health services are currently funded, and explore the ways in which various funding mechanisms may affect the delivery of services.

Method

The project began in August, 2001, and is scheduled for completion in August 2003. The first few months were devoted to conducting a comprehensive review of the literature, developing a conceptual framework for the study, and refining the research questions. An expert advisory panel—consisting of representatives from the school, mental health researchers, mental health providers, and education communities—was convened in December 2001. The panel will continue to provide guidance on the overall design and conduct of the survey.

Two draft survey instruments have been developed. The first instrument gathers data on numbers and types of mental health personnel, their activities, and the types of mental health services delivered within a specific school. The second instrument is for completion by personnel at the district level, and gathers information related to administrative arrangements and funding sources. Several site visits have been conducted for the purpose of pilot testing these survey instruments. At the time of this presentation, approval for the survey design and the draft instruments was being sought from the U.S. Office of Management and Budget.

The survey instruments are intended to address the following research questions:

- What are the basic systems for delivery of mental health services in the nation's schools in terms of sponsorship, staffing, array of services, school versus district control, and linkages with the community?
- What is the size and composition of the staff providing mental health services in schools? What types of professionals and para-professionals provide services? How are various staff configured in schools? What are the qualifications of the various staff?
- What types of mental health problems are presented or encountered in the nation's schools? What is the nature and range of mental health services that are provided to students in the schools?
- What are the various sources of funding for school mental health services? Which are the most common? What are the issues schools face in using various sources of funding, particularly related to funding mandates and restrictions? How do these issues affect delivery and coordination of mental health services within schools and between schools and communities?

Response Universe and Sampling Method

The universe for this survey consists of all regular publics chools (dementary, middle, secondary and combined schools), with any of grades 1-12, in the United States. The selection of regular schools denotes the exclusion of special education, charter, vocational technical, and alternative schools. The selection of schools with any of grades 1 through 12 does not preclude schools with kindergartens, but indoes prevent selection of schools that have kindergarten as the only grade.

The sampling unit for this survey is schools, as opposed to school districts. Therefore, schools will be sampled first, and then the school districts corresponding to the sampled schools will be included in the survey to answer questions about the funding of mental health services. Districts are not the unit of analysis in this survey, and are included only because they are the best source of information on funding. The data from each district will be attached to the corresponding school or schools, assigned the school sampling weight, and reported at the school level. Sampling schools first is the most efficient sampling design to generate estimates of characteristics of schools nationally. The project goal for response rates is 80% for both school and district surveys.

The strata for the selection of the sample schools are created by the cross-classification of the different categories of two variables, school level and school size. School level is categorized as elementary, middle, secondary, and combined; and school size as small (from 1 to 250 students), medium (251 to 500 students), large (501 to 1000 students), and very large (1001 and more students).

We will draw a sample of 2,000 schools and, with an 80% response, will have 1,600 completed schools urveys. Theoverall sample of 2,000 schools (1,600 completes urveys) are allocated to each size group in proportion to the square root of the total number of students in each size group. We considered several allocations. If we allocate the overall number of schools in the sample to each size group in proportion to the number of schools, we get a very large number of small schools in the sample and note nough large schools. Similarly, if we allocate the sample of schools in proportion to the number of students in each size group, we get a small number of schools in the first size group. As a compromise we adopted the square root allocation, which gives a moderate sample size from each size group. The sample in each size group was then allocated to each school level in proportion to the number of schools in the population belonging to that level.

Discussion

This survey is a first attempt to gather comprehensive, national-level data on the mental health services provided in publics chools; these data have never before been available. Since it is an initial effort, we have had to make a number of difficult decisions in order to simplify the process and, hopefully, enhance the probability of its success.

First, we have intentionally defined "mental health services" in a narrow way. Specifically, we have included traditional mental health services that are delivered to students who have been identified as having problems with emotional, behavioral, and/or social functioning. This means that, for purposes of the current survey, prevention activities (such as Drug Abuse Resistant Education; DARE), which are targeted to all students in a school, or all students in a particular grade or classroom, are *not* included.

Second, consistent with this definition, we are collecting information on the activities of only those personnel who we have specified, using a traditional definition of mental health staff: psychologists, social workers, psychiatrists, nurses, and counselors. Classroom teachers—even those who provide specialized instruction to students with emotional and behavioral problems—would not be included as mental health personnel under this definition.

We recognize that, as the issue of behavioral health in schools has gained increasing prominence in the past several years, schools across the country have implemented many innovative and creative programs to address the emotional and behavioral health needs of their students. However, for the reasons outlined above, many of those programs are beyond the scope of the present survey. By setting realistic limits on the information that we collect in this initial effort, we hope to capture and disseminate meaningful data that will provide a solid foundation for future surveys on other aspects of this important topic.

It is anticipated that the survey instruments will be mailed to schools and districts in November, 2002, and that data collection, including telephone follow up, will be completed by February, 2003. The final report, consisting of an analysis of survey results, findings, and implications, will be available in Fall 2003.

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Using Educational Test Scores to Evaluate Children's Services

Introduction

John A. Pandiani Monica M. Simon Steven M. Banks

Standardized educational test scores are becoming an increasingly important part of the children's services data infrastructure. The recently reauthorized Elementary and Secondary Education Act (also known as the No Child Left Behind Act, 2001) requires statewide reading and mathematics tests each year for children in grades three through eight by 2005-06. This legislation follows efforts in many states to use standardized testing to introduce higher levels of accountability in education. The Vermont Department of Education implemented a statewide, standardized testing program, the New Standards Reference Exams, in 1998. Since that time, public school students throughout the state have been tested on an annual basis in mathematics and English/language at the fourth, eighth, and tenth grade levels. Vermont's standardized tests are not used to determine student advancement, but are used as a core measure of school performance.

This proliferation of standardized testing is occurring at a time when children's mental health programs and service systems are being increasingly called upon to demonstrate their favorable impact on school participation and performance (National Association of State Mental Health Programs Directors, 1998; Rosenblatt, 1998). Within this context, the Vermont Mental Health Performance Indicator Project (PIP) is exploring the relevance and utility of standardized test scores for evaluating community mental health programs. This paper reports on the results of a preliminary analysis of standardized test scores from Vermont's first four years of statewide testing.

Method

Data

The findings reported here are based exclusively on analysis of anonymous extracts from four existing databases. The anonymous, person-level extracts from the Department of Education's *Mathematics Skills Assessment*, and the *English Language Reading: Basic Understanding*, databases for 4th, 8th, and 10th grade students during 1998 through 2001 provided our measures of school participation and performance. The number of young people represented in these education data sets averaged 20,743 per year.

Third, anonymous, person-level extracts from the Vermont Mental Health Division's Monthly Service Report database provided basic information on all young people who received community mental health services during 1998 through 2000. The number of young people in the relevant age groups who were served by community mental health programs averaged 2,279 per year.

Fourth, anonymous event level extracts from the Vermont District Court database provided basic information on all individuals who were charged with a crime in Vermont during 1998 through 2001. The number of young people in the relevant age groups who were charged with a crime set averaged 1,599 per year.

Analysis

School participation is demonstrated by completing the standardized test(s) on grade level or one year later. Operationally, school participation rates for mental health clients are the overlap between the mental health and the school test data set. School participation rates for all young people were obtained by comparing the total number of young people tested to the total population of the state. Our measure of school performance is the proportion of students who score at or above the "standard" for the test. Operationally, school performance rates for mental health clients are the overlap between the mental health data set and a data set of "high" test scorers.

The relationship between these school-based measures and other outcomes was measured by comparing participation/performance rates to rates of being charged with a crime for 16 year old students who scored at or above standard, who scored below standard, and who were not tested (on grade level).

Because the data sets used in this analysis do not share unique person identifiers, Probabilistic Population Estimation was used to determine the number of people who appeared in combinations of data sets. Probabilistic Population Estimation is a statistical procedure that provides valid and reliable measures of the size and overlap of data sets that do not include unique person identifiers (Banks & Pandiani, 2001). These estimates are based on comparisons of the distribution of dates of birth in the data sets to the known distribution of dates of birth in the general population.

Findings

Recipients of community mental health services were less likely to take part in Vermont's statewide school testing than other students. Statewide, only 41% of the mental health service recipients participated in the Mathematics Skills Assessment, compared to 67% of all students. Female service recipients were more likely to participate in school testing than were male service recipients in the 4th and 8th grade, but this difference disappeared in the 10th grade. These patterns were evident for both mathematics and English tests. There were also significant differences among Vermont's regional community mental health programs in relative test participation (controlling for general population participation rates).

Recipients of community mental health services were less likely than other students to score at or above standard on Vermont's standardized school tests. Only 42% of the mental health service recipients scored at or above standard on the mathematics test, compared to 64% of other students, and 49% of service recipients scored at or above standard on the English test compared to 65% of other students. There were no statistically significant differences between age or gender groups in mathematics test performance among service recipients or in the general population. Service recipients' performance on the standardized tests in some regions of the state, however, was similar to the performance of other students.

When change in performance is examined, results for service recipients and other students are similar. There were, however, substantial differences in the rate and direction of change for boys and girls who received mental health services (see Figure 1). On the mathematics test, the performance of boys increased (from 27% to 39% at or above standard) while the performance of girls decreased (from 55% to 43%). The cumulative effect of these changes, however, resulted in similar 10th grade performance on the mathematics test for boys and girls who had received services. Performance on the English test decreased between 8th and 10th grade for both boys and girls in the treatment group, but the decrease for boys (from 48% to 27%) was much greater than the decrease for girls (from 67% to 56%). There were substantial differences among regions of the state in the amount and direction of change in school performance.

Finally, there were statistically significant differences in the likelihood of criminal justice involvement for each of the three groups under examination. During the year after the test, 13% of the young people who did not participate were charged with a crime, compared with less than 4% of the young people who scored at or above the standard on the test. Boys were more likely than girls to be charged with a crime in all three groups, and the difference in rates of criminal justice involvement between groups was greater for boys than for girls.

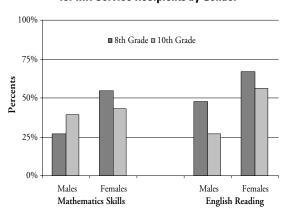


Figure 1 Change in School Performance Between 8th and 10th Grade for MH Service Recipients by Gender

Discussion

We believe this pilot study has demonstrated the value of educational test scores for understanding and evaluating systems of care for children and adolescents. This rich new source of data can provide valid and reliable information on levels of school participation and school performance for recipients of mental health and other children's services programs. This pilot project has highlighted two substantive findings that deserve special attention. First, the fact that gender differences in the school performance of mental health service recipients are different than those for other students suggests the need for careful attention to the impact of gender on the relationship between treatment variables and outcomes.

The use of educational test scores demonstrated here could easily be applied to other service sectors and geographical areas. Other service sectors could include child protection, juvenile justice, and special education programs. Other geographical areas should include urban areas and regions with race/ethnically diverse student populations. Future research would also benefit from consideration of the impact of both community characteristics (socio-economic, population density and diversity, etc.) and individual student characteristics (both clinical and demographic) on levels of school participation and performance for recipients of mental health services and others.

Finally, future research should consider the impact of treatment modalities and service system characteristics on levels of school participation and performance. Differences between emerging evidence-based practice and other modalities should be explored. The impact of medication on school participation and performance is a particularly important area for investigation. Finally, the impact of service system characteristics such as caseload integration and service coordination on school participation and performance of service recipients should be the focus of large-scale cross-region research.

Fortunately, the proliferation of electronic databases in conjunction with statistical technologies such as Probabilistic Population Estimation provide the opportunity for economical and effective research in all of the areas discussed above. This combination of data and methodology provides for the exploration of relationships between treatment variables and a variety of important treatment outcomes while protecting the confidentiality of medical records and the personal privacy of individuals (Pandiani, Banks & Schacht, 1998). This methodology is particularly valuable for examining longer-term outcomes and for research that goes beyond the more traditional focus on negative outcomes such as hospitalization and incarceration to include positive indicators such as employment and participation in post secondary education.

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Teachers' Attitudes Toward Children With Serious Emotional Disturbance

Introduction

Children considered to have Serious Emotional Disturbance (SED) are those with a diagnosable mental disorder who also have significant functional impairment and several difficulties that may require the involvement of multiple agencies. Epidemiological research in the United States suggests approximately 20% of children

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have a diagnosable mental disorder and that approximately 5% of children have SED (Costello, et al., 1996; Stroul & Friedman, 1986).

Although a number of different approaches have been utilized to treat children with SED, the treatment of choice today is a system of care (SOC) approach (Stroul & Friedman, 1986). SOCs create community-based programs that provide services that wrap around the child by providing close linkages between formal support systems (e.g., schools, child welfare agencies, juvenile justice, mental health) and informal support systems (e.g., service clubs, churches, volunteer networks, parent organizations; VanDenBerg & Grealish, 1996). The impetus for the SOC model resulted when traditional approaches toward treating children with SED were found to be costly and not successful (Stroul & Friedman, 1986).

Although a number of rating scales exist to measure teachers' and parents' perceptions of the behaviors of children with emotional or behavioral problems, there are very few instruments that measure attitudes toward these children (Minor, 2001). Thus, one purpose of this study was to provide preliminary data regarding a new measure of attitudes toward children who have SED.

Schools, and in particular, teachers, are key players in the SOC treatment approach for children with SED. With the exception of mental health agencies, teachers make more referrals for SOC treatment than any other professional group. Further, teachers are often involved in treatment since many children with SED also have educational/learning problems. In spite of this, little is known about teachers' attitudes toward children with SED. Thus, a second purpose of this research was to examine teachers' attitudes and beliefs about children with SED. This is an important concern, because teachers' attitudes may influence referral patterns and treatment options for these children. For example, a teacher who minimizes the difficulties that children with SED might have in school would be less likely to identify a need for services and may thus refer fewer children for services.

Method

Elementary or high school teachers in Western North Carolina (*n* = 103) completed the Attitudes Towards Children with Serious Emotional Disturbance Scale (ATCSED; Minor, 2001). The ATCSED consists of 29 statements about children with SED that are answered on a 5-point Likert-type scale (from *strongly agree* to *strongly disagree*). The ATCSED was conceptualized to contain three major factors: (a) Ecological variables, (b) Parent/Family variables, and (c) Treatment variables.

Results

To test the validity of the ATCSED, both exploratory and confirmatory factor analyses were employed. The exploratory analysis suggested a hierarchical structure comprised of eight first-order factors, three second-order factors, and an overall factor. In order to assist clinical interpretation, items were then parceled among the eight first-order factors. Each item was assigned to the factor accounting for the largest amount of respective item variance. Items with loadings below .35 were dropped from the scale and omitted from subsequent analysis.

Following the exploratory analysis, a modification of the original scale was done which resulted in 23 items. The modified scale was found to be internally consistent with Cronbach's Alpha of .70. The confirmatory factor analysis was performed on this new modified scale. For the confirmatory analysis, the factor structure was restricted a priori according to guidelines offered by the theoretical model used to develop the ATCSED. The obtained data were then compared with the restricted, theoretical model. The results of the confirmatory analysis suggested four major factors: (a) Ecology, (b) Family, (c) Parental Involvement, and (d) Total Score. The structural model for the ATCSED can be seen in Figure 1. The rectangles represent the eight observed subscale scores. The four factors are represented by ellipses. The arrows in the figure represent the unconstrained factor loadings, or standardized regression weights, from the latent variables to the observed parceled items. The goodness of fit indices offered in Figure 1 indicates that the structural model provides an excellent representation of the constructs measured by the ATCSED. The Tucker-Lewis Index (TLI) and the Normative Fit Index (NFI) both exceed .90. Similarly, the χ^2 of 23.6 (18), with an accompanying p-value of .17, indicate that the model cannot be rejected. The RMSEA statistic for the model is .03, indicating the theoretical structure does an excellent job of accounting for the variance in test score loadings from the factors to the observed scales range from moderately low (.21) to high (.76). Fourteen items on the modified ATCSED loaded on Ecology; seven loaded on Family, and two items loaded on Parent Involvement.

Confirmatory Factor Analysis of the ATCSED

Ecology

1

Ecology

24

2

Total Score

7

Family
Factors

7

Family
Factors

7

Parental

A7

8

Figure 1

Chi square = 23.65, df = 18, p = .17, TLI = 1.00, NFI = 1.00 RMSEA = .03

Involvement

Discussion

As a result of the factor analysis of the original ATCSED, a new scale was developed which contained 23 of the 29 original items and was found to meet the minimum requirements for reliability (.70) and internal validity (TLI = 1.00 and NFI = 1.00; Messick, 1995). The external validity, or clinical usefulness, of the new ATCSED remains to be demonstrated. In this study of teachers' attitudes toward children with SED, four scales were found for the ATCSED: (a) Ecology, (b) Family, (c) Parental Involvement, and (d) Total Score. Future research is planned to add additional items to the three main scales of the ATCSED and to test for their contributions to the reliability and internal and external validity of the scale. To do this, we plan to assess larger groups of teachers, parents and mental health professionals to assist with this basic validity work. Further, we hope to determine whether the ATCSED may be useful in demonstrating how attitudes toward children with SED may

be modified or changed. For example, in one study we plan to pretest participants before an educational intervention, consisting of basic information about children with SED, and SOC, and then do a posttest for comparison to see if attitudes have been modified or changed.

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Can We Foster Resilience? An Evaluation of a Prevention Program for Preschoolers

Paul A. LeBuffe

Introduction

Increasing attention is being paid to the social and emotional development of young children as evidenced by the recent "Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda" (U.S. Public Health Service, 2000), and the publication, "From Neurons to Neighborhoods: The Science of Early Childhood Development" (Shonkoff & Phillips, 2000). A core concept in children's mental health discussed in both of these reports is resilience, the ability of children to attain normal or better than normal developmental outcomes despite being exposed to risk. A critical question in the resilience literature concerns the extent to which resilience can be fostered in young children.

This study investigates whether or not within-child protective factors, which are a contributing factor to resilience, can be strengthened in young children. This study also serves as an initial evaluation of the Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999) Program, a preschool primary prevention program designed to foster social and emotional well-being.

Based on resilience theory, the DECA Program is a comprehensive, strength-based, primary prevention program designed to foster social and emotional well-being in all preschool children ages two through five. The DECA Program focuses on the development of within-child protective factors, including personality characteristics and behavioral traits of the child that moderate or buffer the negative effects of stress and adversity. The DECA Program operates within a naturalistic and ecological framework. The within-child protective factors are strengthened by enhancing both the quality of childcare programs and the skills of parents. The DECA Program utilizes developmentally appropriate practices and focuses on five program areas: the environment, the daily program, activities and experiences, supportive interactions with children, and partnerships with families. The curriculum includes strategies at both the classroom (universal) and the individual child (targeted) level. Individual child strategies are implemented by both the early care and education professional and the parent(s).

Method

A quasi-experimental, pretest-posttest control group design was used. Target sites included 133 children. The treatment-as-usual control group consisted of 209 children. Sites in both groups were Head Start programs. Different program sites were used for the target and the control conditions to avoid unintentional dissemination of the DECA Program to the control-condition teachers.

The primary dependent measure was the Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999), a recently published, nationally normed behavior rating scale assessing within-child protective factors. The DECA provides four protective factor scales: Initiative, Self-Control, Attachment and Total Protective Factors as well as a Behavioral Concerns Screener.

All children in both groups were assessed by both their teacher and a parent with the DECA in the fall of 2000 and spring of 2001. Children in the target group participated in the DECA program between the two administrations whereas children in the control group did not. In the target group, DECA results were used to guide the selection of universal and targeted strategies designed to strengthen the within-child protective factors.

Results

In this study, all results are reported in T-scores, which have a mean of 50 and a standard deviation of 10. Due to space limitations, these results will focus only on the Total Protective Factor Scale and

the Behavioral Concerns Scale. Because the Total Protective Factor Scale assesses children's strengths, high scores are desirable. In contrast, high scores on the Behavioral Concerns Scale indicate considerable behavioral difficulties and, therefore, low scores are desirable.

Baseline Data

The DECA scores provided by both parent and teacher raters for both target and control children at baseline (pretest) were analyzed for similarities and differences between all children. The means for parent raters were 47 and 48 for the target and control groups respectively. For teacher raters, the means for both conditions were 49. These values are very close to the national mean of 50, and indicate that the children participating in this study did not differ markedly from most preschool children. There were no significant differences on the Total Protective Factor scores between the target and control groups at baseline.

For the Behavioral Concerns Scale, teacher ratings for the target (x = 47) and control (x = 46) did not differ. However, the mean score for parent ratings of the target group (x = 60) was significantly higher than the mean parent rating of the control group (x = 56) t = 2.38, df = 300, p < .05.

Posttest Data

In order to analyze the changes between pre- and posttests, only children who had a complete set of Time 1 and Time 2 DECA ratings completed by either a parent or teacher were included in the sample. The final sample size was 113 target and 182 control children rated by teachers, and 82 target and 171 control children rated by parents. Paired sample *t*-tests and repeated measures ANOVAs were used to analyze the results. The results are presented in Tables 1 and 2.

Protective Factor Results. Table 1 presents the results for Total Protective Factors as rated by teachers and parents. For teacher raters, children in both the target and the control groups showed significant increases in their Total Protective Factor scale scores. However, children in the target group showed greater increases than children in the control group as indicated by a significant interaction effect ($F = 8.15 \ df = 1,293, p < .005$). For parent raters, however, only the target group showed an increase in Total Protective Factor scale scores (t = -2.43, df = 81, p < .05). Although there were significant increases in Total Protective Factors for target condition children as rated by both parents and teachers, the magnitude of these increases (i.e., effect size) was small for parents (d = .22) and moderate for teachers (d = .66).

Behavioral Concerns Results. Table 2 presents the results for the Behavioral Concerns Scale as rated by teachers and parents. The teacher ratings of Behavioral Concerns show a significant decrease for the target group (t = 2.84, df = 112, p < .005) and a significant *increase* for the control group (t = 3.39, df = 181, p < .001). The ANOVA revealed a significant interaction effect (F = 18.23, df = 1,293, p < .000).

Table 1
Total Protective Factor Scale T-Scores

Table 2 Behavioral Concerns Scale T-Scores

	Pretest		Posttest			P	Pretest		Posttest	
	X	(SD)	X	(SD)		X	(SD)	X	(SD)	
Teachers					Teachers					
Target	49	(7.6)	54	(6.8)	Target	47	(8.2)	45	(9.2)	
Control	49	(10.7)	52	(11.5)	Control	46	(8.7)	48	(10.8)	
Parents					Parents					
Target	47	(11.5)	49	(10.6)	Target	60	(13.8)	59	(12.0)	
Control	48	(10.9)	48	(12.1)	Control	56	(11.1)	60	(13.2)	

The effect sizes for both groups were small (d = .22 and .20 for target and control groups respectively). For parent raters, there was no significant decrease for the target group. However, there was a significant *increase* in behavioral concerns for the control group (t = -3.52, df = 170, p < .001). Again, the ANOVA revealed a significant interaction effect (F = 8.08, df = 1, 251, p < .005). This effect size for this increase was also small (d = .29)

Discussion

This study provides consistent evidence for the effectiveness of the DECA Program in both increasing children's protective factors and decreasing their behavioral concerns. For the target group, as rated by both parents and teachers, protective factors increased significantly over the course of the year. Although parents did not report an increase in Protective Factors for the children in the control group, teachers did. This finding might be due to pretest sensitization or "compensatory control group effects"—the tendency of control group teachers to second-guess and self-administer the intervention so as not to look "bad" in comparison to the target group (Kazdin, 1998).

For both parent and teacher raters, behavioral concerns increased significantly for the control group. A decrease in behavioral concerns in the target group was reported only by the teachers.

Although the results were consistent with the experimental hypotheses, and statistically significant, the effect sizes reported in this study tended to be small to moderate (ranging from .20 to .66 of a standard deviation). However this is not surprising, in that this program was implemented under naturalistic conditions. That is, teachers in the target group were trained, but were not closely supervised in their implementation of the DECA program. Therefore, these results are probably representative of what a typical program, without benefit of extensive training, supervision or consultation, could expect.

Most importantly, these data indicate that children's protective factors can be increased through a teacher-implemented, classroom-based program. The long-term effects of these changes on children's success in school and life in general are being investigated in ongoing longitudinal studies.

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Symposium

Evaluating Program Effectiveness in the Safe Schools Healthy Students Initiative

Symposium Introduction

Oliver T. Massey

The Safe Schools/Healthy Students Initiative (SS/HSI) is a federal grant to school districts intended to promote health and safety in schools and communities. The Initiative is an ambitious attempt to address the increased recognition of violence and threats to the safety and welfare of students in our nation's schools. The Initiative was designed to confront school violence, safety and mental health needs through the provision of a broad array of prevention and intervention

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Oliver T. Massey
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services. While partly predicated by the tragedies of Columbine and other violent school incidents, the far more common and perhaps mundane concerns of bullying, teasing, and respect for authority also drove major programmatic elements of the grant.

The programs that emerged from this grant initiative incorporated unique local solutions to vexing problems confronting schools. Service elements included prevention, direct interventions, and educational efforts. Services were to be provided by the school district, community service agencies, police and sheriff's departments, and other elements of the public service system. In all cases, programs selected for implementation were to be of proven effectiveness or identified as promising but of not yet established utility. The combinations of service arrays eventually implemented around the nation proved to be as unique as the individual demographics and needs of the schools they served.

An additional outstanding feature of the Initiative was the mandatory set aside of a minimum of five percent of the budget for evaluation of grant activities. The evaluation was to provide both formative feedback to community stakeholders, an evaluation of the outcomes of local programs, and contribute to the national evaluation of the Safe Schools effort. Thus, from the evaluator's perspective, the Initiative required the integration of multiple evaluation perspectives in addressing a broad array of policy, prevention, and intervention efforts with varying ties to traditional school district activities.

The presentations included in this symposium illustrate the nature of school based interventions and corresponding evaluation efforts. The presentations include evidence of the unique approaches used to engage service providers, implement programs, and accomplish evaluation activities. The papers also provide evidence of the effectiveness of the interventions in the local setting with implications for the transportability of the programs to other schools. These efforts demonstrate not only the importance of mental health services in schools, but also evaluation techniques that can be used to establish the value of services for our students.

In summary, the Safe Schools/Healthy Students Initiative brought together a wide range of school and community based partners for the provision of services aimed at youth violence, mental health, and safety in schools. The challenge in each site was to identify and develop a cogent plan of services and evaluation that took into account the interests, experience and cooperation of school and community program teams given the resources and unique opportunities that existed in the school district. Activities should integrate evaluation into a coherent plan that captures activities of the school district, demonstrates fulfillment of grant obligations, and documents the effectiveness of individual programs. The success of these efforts is well demonstrated in the papers that follow.

The Impact of Coordinated Community Mental Health Services: Safe Schools/Healthy Students

Sharon Telleen, Young O. Rhee Kim, Helen Stewart-Nava, & Susan Maher

Introduction

Provision of community mental health services for children with violent, aggressive behavior is one of the six elements of the Safe Schools/Healthy Students Initiative, funded by the National Institute of Mental Health, US Department of Education and US Department of Justice. Using a community-based intervention in the system of care (Duchnowski, Kutash, & Friedman, 2002) and a collaborative action research framework (Jensen, Hoagwood, & Trickett, 1999; Telleen & Scott, 2001), the Safe Schools/Healthy Students site in Illinois serves the two high schools comprising the J. Sterling Morton High School District 201 and its 26 feeder schools. These school districts serve several suburbs directly west of the city of Chicago, including Cicero, Berwyn, Lyons and Stickney. Of these, Cicero is the largest community, and is comprised primarily of recently immigrated Mexicans. Berwyn, while more diverse, is experiencing rapid growth of its Latino population, especially among school age children.

Method

Referral

The Morton area Safe Schools/Healthy Students Initiative provides funding for each elementary, middle, and high school to refer two students for community-based intensive case management services. Services are delivered by professionals holding a master's degree in social work. Five case managers maintain a case load of 12 families each. To be eligible for the program, a student has to be determined to be at risk for aggressive and/or violent behaviors by the school social worker or other school mental health professionals. Additionally, only students not already receiving services are eligible.

In the first nine months of the program, 49 students were referred for intensive case management and an additional 11 students were referred for less intensive services. Of the 49 students who were referred for intensive case management, 44 students were still receiving services three months later. Of those, 28 students have been receiving services for six months. After 18 months of program operation, 117 students and their families had received services.

Most children referred for services are in grades 2-3, grades 6-8, or in their freshman year of high school. (See Table 1.) Thirty-eight percent of the students are female and 75% of all referrals are from Latino families. English and Spanish is spoken in 27% of the homes; 38% of families speak English only, and 35% only speak Spanish in the home. Most children live with both parents (40%) or with the mother only (43%); the rest live with their father, a relative or a guardian.

The children served by Safe Schools/Healthy Students wraparound case management program attend school regularly. However, most of the children are doing poorly in school—only 22% perform at average for their grade level. Twenty-seven percent of the students have been placed in special education classes.

Each child referred faces multiple risk factors for poor outcomes. The most frequent risk factors are academic problems (62%), social isolation of the child (52%), social isolation of the family (35%), family violence (40%), drug abuse (32%), alcohol abuse (25%) and unemployed parent(s) (40%).

Assessment

Counseling with the child involved evaluating the child at intake using the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1994) to assess impairment by determining the negative effect of problem behaviors and symptoms on child functioning. The CAFAS subscales assess the child's role performance in school, at home and in the community; behavior toward others; moods and self-harmful

Table 1
Demographic Characteristics of Youth and Family (*N*=117)

Variables	Percentag
Place of First Contact	
Family's Home	70.0
School	15.4
Phone	6.0
Office	7.7
Child Grade	
Early childhood - Grade1	8.8
2-3 grade	23.1
4-5 grade	14.9
6-8 grade	22.5
9-12 grade	15.8
Child Gender	
Female	38.3
Male	61.7
Child Ethnicity	
Caucasian	28.2
Hispanic	71.8
Language Used by Child	
Spanish	12.3
English	46.5
Bilingual (Spanish & English)	41.2
Current Educational Placement	
Alternative school	4.3
Regular class	62.1
Special education	26.7
Drop out	2.6
Not in school (e.g., graduate or others)	4.3
Language Used by Primary Caregiver	
Spanish	35.0
English	37.6
Bilingual (Spanish & English)	27.4
Marital Status of Primary Caregiver	
Never Married	14.3
Married	41.1
Separated	12.5
Divorced	22.3
Widowed	2.7
Live-in Partner	7.1
Annual Family Income	
Less than \$5,000	9.9
\$5,000-9,999	17.1
\$10,000-\$14,999	19.8
\$15,000-\$24,999	21.6
\$25,000-\$34,999	18.0
\$35,000-\$49,999	9.0
\$50,000-\$74,000	3.6
\$75,000-\$99,999	.9

behavior; substance abuse; thinking and cognition. CAFAS also assesses the caregiver by determining the family's material needs, level of social support, and family composition. Based on the assessment, a family wraparound plan is developed which determines the case management and referral plan.

Case Management

Using the case management time, activity, and referral log developed by Telleen (1999), case managers record the referrals made for each child and the time spent in various aspects of case management. This provides for the measurement of the intensity of the intervention and of each component of wraparound case management.

One goal of case management is to stabilize the families so that they can benefit more effectively from mental health counseling for the child. This involves helping the family find livable, affordable housing and transportation to appointments; access to food pantries, Women, Infants and Children (WIC) and other food programs; and to receive employment counseling and services for the parent. Family counseling is also provided, which helps parents develop coping strategies in the areas of parenting and life skills. In an effort to stabilize the families, case managers access a total of over 25 different services. This necessitates an enormous commitment on the part of the case managers, and includes locating appropriate resources for families, following up to ensure that the families receive the services, and maintaining contact with the individuals and agencies providing services to the family. This wraparound case management approach is based on programs described by Evans and Armstrong (2002) and Burchard, Burns and Burchard (2002).

Results

The longitudinal effects of the wraparound case management intervention were assessed by comparing the child's functioning (as measured by CAFAS) at intake, three months and six months. Using a paired t-test analysis, results indicated that there was significant improvement in the overall functioning of the child for those families who remained with the wraparound case management for six months, t (43) = 2.86, p = .007. This significant improvement in child functioning occurred in the areas of school functioning, t (42) = 2.87, p = .006) and mood/emotions, t (38) = 2.89, p = .006.

The intensity of the wraparound case management effort was measured using the Telleen case management information system developed for this project and based on previous work by Telleen (1999). The case managers completed a daily activity log indicating each client seen and the time spent on each activity. Over the first ten months of the intervention, the case managers spent time assessing the child's emotional well-being and functioning, assessing the family's area(s) of need, and developing the wraparound plan. After intensive assessment of the family's situation, the case managers spent as much time counseling the family as a whole as they do counseling individual family members. Though most of the case manager's direct service time was spent in counseling (62%), the second largest amount of time (38%) was spent in collateral contact with others in the child's life (e.g., the child's teacher) on behalf of the child or the family, and in contact with family members other than the child or caregiver.

The most prevalent referral activities included visiting the provider with the client and making calls to the referral agencies and providers. Follow up with both the client/family and the provider were also conducted by the case managers. Eleven percent of the case managers' time was spent in staffing and consultation about the case and direct supervision regarding the case. These activities all necessitated a tremendous amount of travel for the case manager. Family counseling was intended to help parents develop coping strategies in the areas of parenting and life skills.

Once the child and family leave the wraparound case management of the Safe Schools/Healthy Students Initiative, it is hoped that the family will remain connected to the services to which they have been referred. We will contact these families again at 12 months follow up.

Discussion

The model of coordination among the five community mental health agencies, as well as the coordination of the mental health agencies with school social workers and school psychologists, positively affects the retention of families in the service delivery system. In addition, this model of coordination positively affects the child's academic and school functioning as well as social and emotional functioning. Other studies have found that parenting behaviors and attitudes are significantly improved with the presence of social support, similar to the types of support offered through wraparound case management (Andresen & Telleen, 1992). The wraparound case management approach within this Safe Schools/Healthy Students Initiative has had the effect of connecting schools, families and communities in providing mental health services for children at risk of poor outcomes. (Taylor & Adelman, 2000; Zins, 1997).

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Results of a Longitudinal School-Based Intervention Study

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Introduction

In recent years, violence in the nation's schools has become a central concern to society. Media reports imply that this is a growing problem that must be addressed. One strategy to combat youth violence in schools is intervention via programs to curb violence, reduce substance use and increase safety.

The Safe Schools/Healthy Students Initiative (SS/HSI) is a U.S. government grant awarded to local school districts to fund programs to improve school safety. Pinellas is one of four districts in the state of Florida to receive a three-year grant from the SS/HSI. Pinellas County has approximately one million residents and a large urban school district with about 111,000 students. Part of the Initiative includes an evaluation to measure and report the success or shortcomings of the programs funded by the grant. Our role as evaluators is to collaborate with the district, and community agencies that provide services, in an effort to collect data using multiple methodologies to report an accurate reflection of the grant funded activities.

One source of data includes referral records that were provided by the district. Each occurrence of inappropriate student behavior is collected and organized into a large annual database of individual student's referral histories. Behavioral categories range from *not severe* (e.g., tardiness) to *severe* (e.g., battery on a student). While only a minority of students are represented in these files, a disproportionate number (i.e., the vast majority of total referrals) are categorized as *not severe* and *non-violent*.

Data have been collected for four years, or eight semesters, and will be analyzed to highlight differences in student behavior. While two years of data were collected prior to the beginning of the SS/HSI grant (during 1998 and 1999), data from years 2000 and 2001 were collected during the first two years of the grant.

Although there are over 36 different disciplinary referral categories used in this school district, we organized the data to be analyzed into two critical clusters: (a) the policy-related or manadatory suspension catergory, and (b) the violent referrals category, in order to provide a precise glimpse of the more severe disciplinary problems in this school system. The policy group included referral data for disciplinary offenses that result in a mandatory suspension from school (i.e., zero tolerance policy). Examples of referrals in this category include substance abuse or use or possession of a weapon in school. The violence group included referral data for acts such as fighting, sexual harassment or threats and intimidation.

Data on referral histories for policy and violent behavior resulting in disciplinary referrals were analyzed. This article presents general trend analyses of disciplinary referrals and discusses these trends in relation to the SS/HS Initiative. Five targeted interventions that have been implemented in Pinellas County schools will also be discussed. These programs cover interventions ranging from an elementary school program supporting parental involvement in the learning process to a high school program that offers an alternative to out-of-school suspension.

Method

Participants

This study used secondary data analysis. Using the 2000 school year as an example, 109,628 students were enrolled in the district during this period with 42,615 students having at least one referral. A total of 180,912 referrals were reported in the district during this school year (see Table 1). As the data demonstrate, a small percentage of students generate a high number of referrals. That is, they are repeat offenders with multiple referrals.

Analysis

The most pressing issues are those related to violence and policy referrals and therefore, these categories were the focus of our analyses. Comparative percentages and descriptive statistics were used to highlight the data. Data analyses were also conducted on the five targeted programs.

Results

Analyses of the data over a four year period revealed several trends. For instance, contrary to the perception of increased violence and substance use in the schools as reported by media, referrals were found to be on the decline in this district. During the 1998 school year, a total of 182, 488 referrals were reported. For 1999, this increased to 186, 717 and then began a downward trend to 180, 912 in 2000 and 159, 339 in 2001. There was a corresponding trend found in aggregated referrals (i.e., unduplicated referrals) which is a measure of the total number of students who received at least one referral during a given school year. In 1998, unduplicated referrals were 50, 478; this increased to 58, 862 in 1999 and then decreased to 48, 828 in 2000 and 47, 914 in 2001 (see Table 1.).

Only a small percentage of theses referrals were either violent or policy-related referrals. Therefore, while most students in Pinellas County never receive a disciplinary referral, other students receive many. In fact, the *classroom behavior* and *campus/school rules* categories account for over 85% of the total referrals in each of the four years analyzed. With *bus misconduct* added to the mix, these three less severe categories account for over 92% of total referrals. Thus, less than 8% of referrals in the district included *harm to the self or others, carrying a weapon* or *using or possessing an illegal substance* over the four year period. Although these results do not suggest that violence and substance abuse are negligible, they certainly negate the public perception that violence and policy referrals are in the majority, or even a large minority, of referrals.

Delving further into violence and policy referrals, we examined what had taken place over the fouryear period of the longitudinal study. When highlighting violence and policy referrals only, some interesting trends were discovered during the period beginning in the fall of 1997 and ending in the spring of 2001.

The percentages of total referrals for the two severe categories are as follows. In 1998, policy referrals represented 1.4% of all referrals, followed by 1.3%, 1.4% and 1.2% in 1999, 2000 and 2001, respectively. Likewise, in 1998 violence referrals accounted for 5.5% of all referrals, followed by 5.6% in 1999, 5.3% in 2000, and 6.1% in 2001. In practical terms, there was no change over the four-year period. However, it is too early to make any inferential statements from the results presented. Furthermore, under 6% of the total referrals over four years were violence related, while under 2% were policy related. These two severe categories account for just 8% or less of the total number of referrals.

During the observed period, referrals for tobacco use decreased by almost one fourth (24.7%) while alcohol and weapon referrals remained essentially unchanged. Conversely, drug use rose over the four-year period. From 1998 to 2001, drugs referrals increased from about 17% to about 38%. According to information obtained from the Safe and Drug Free Schools report (2000), most of this increase is accounted for by the use of *club drugs* (e.g., Ecstasy, MDMA, etc.) or steroid use by males.

With regard to referrals in the violence category, fighting decreased by over 10%, with an in-kind increase in threats and intimidation. The battery category showed a slight decrease over the four years, while sexual harassment increased slightly; however, these changes were not statistically significant.

What is uncategorically the most striking finding in our analyses was the association of school type with the percentage of violent referrals. Middle schools had the lowest population of students of all non-special schools and yet showed the highest referral rate for violence. In order to examine all violent referrals by school type, we took the total number of violent referrals in the district over the longitudinal period and broke down just these violent referrals by the type of school. The population of middle schools (25,654) is less than half that of high schools (51,053) and yet the percentage of violent referrals is more than double across all four years. Table 1 illustrates these findings, with the population estimates for each of the four school types and the percentage of the total number of violent referrals across the four-year period.

	1998	1999	2000	2001
Elementary Schools Population approx. 51,053	20.0%	21.8%	20.8%	18.6%
Middle Schools Population approx. 25,654	58.6%	57.2%	53.8%	54.2%
High Schools Population approx. 30,789	13.3%	13.0%	16.0%	16.6%
Other Schools Population approx. 2,132	8.1%	7.9%	9.3%	10.6%
District Census	108,315	108,551	109,628	111,599
Unduplicated Referrals	50,478	58,862	48,828	47,914

182,488

Table 1
Violence and Policy Referrals by School Type

Targeted Programs

Total Referrals

There were five targeted programs included in the evaluation: Families and Schools Together (FAST), Anger Management, Chill Out, Partnership and the On-Campus Intervention Program (OCIP). At the elementary level, FAST is a program that supports parents and families with school involvement, while partnership is a mental health services program for younger children. At the middle school level, Chill Out provides an antiviolence and substance abuse reduction curriculum. At

186,717

180,912

159,339

the high school level, Anger Management provides an antiviolence curriculum; OCIP, an alternative to typical in- and out-of-school suspension, was available to middle and high school students.

When examining the trend data, there are a few important points to keep in mind. First, the grantfunded activities began in the spring of 2000. Therefore, when analyzing these trends, one indicator of success of the program is a decrease in average referrals from the 2000 to 2001 school years. With that criterion, the anger management and OCIP programs succeeded in the reduction of referrals, while the other programs had no significant increases (see Table 2).

Second, because information was made available by Pinellas Schools for the 1998 and 1999 school years, evaluators decided to use this information to augment the trend analysis for the two years prior to the grant's inception. While in the case of the elementary school programs (FAST and Partnership) and the middle school program (Chill Out), the prior years data are easily interpretable; however this is not the case for the high school programs (Anger Management and OCIP). As seen in Table 2, the trend for these high school programs spikes up and then drops. While it would be wonderful to attribute this finding to program effectiveness, it is highly unlikely. The most reasonable explanation of the spike would be error in data reporting that has something to do with high school level referrals. However, it is important to note in the case of OCIP that there is still a downward trend even if 2000 figures were not included. That is, without the spike, OCIP participant referrals still dropped over time. Anger management on the other hand returned back to the 1999 average in 2001 after the spike.

Table 2 Longitudinal Average Referrals by Targeted Program

	1998	1999	2000	2001
Anger Management	5.7	4.9	12.1	4.9
Chill Out	0.88	2.2	4.3	5.2
FAST	0.3	0.2	0.6	1.6
OCIP	7.2	7.4	11.6	5.4
Partnership	0.3	0.6	0.4	1.9

Discussion

The information presented in this longitudinal study is tentative because the grant period has not yet expired. Only after all of the data are submitted for analysis, including the 2002 and 2003 school years, will we have a clearer picture about what effect these intervention programs may have had on trends in disciplinary referrals. A goal for the school district is to both reduce the total number of referrals while also reducing the severity of referral types. We have demonstrated, at least initially, that this trend is already underway. Total referrals are down while the district census is up, and violent referrals remain steady despite increases in the student population.

Data on referrals show a global outcome, in that they do not tell us how or why behaviors increase or decrease; all these data tell us are whether behaviors changed. Therefore, while no concrete explanations can be drawn from these analyses, the data contribute to a better understanding of the evaluation process and provide insight into possible future trends in student behavior.

Results show that while violence does occur in Pinellas County schools, the frequency of violence appears to be much lower than perceived by the general population. The benefactors of this information include parents, especially those with children in the schools; the district, particularly administration and professionals who are given an accurate report of what indeed takes place; and communities, researchers, and evaluators.

When these referral categories for violence were analyzed, it was found that shifts in referral frequencies had occurred. Within the violent category, both battery and sexual harassment remained steady while fighting decreased and threats and intimidation increased. Certainly the goal is to

eliminate these behaviors altogether, but it is a positive step that some physical violence is reduced in lieu of threats.

Within the policy category, alcohol and weapons remain constant over the four-year span with only negligible increases in these categories. Conversely, a great shift was present with a large reduction in the use of tobacco, while the use of other drugs almost doubled. Trends in this category may be due to the institution of zero tolerance policies, or the fact that data on drug use increases are clustered, in particular, around the use of club drugs such as ecstasy (MDMA) and steroid use in males.

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Student Perceptions of School Safety in the Omnibus Survey

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Background

In 1989, Pinellas County School District began the Omnibus project in order to collect data following a cohort of students from kindergarten until they graduated from high school. The project began with 8,268 children when they registered for kindergarten in 1989. Survey information was collected about the students from parents each year from 1990 to 1998, except for 1996 and from teachers each year from 1990 until 1996. Students filled out the Omnibus surveys beginning in 1992, from 1994 to 1999, and in 2001. A Pinellas County Schools committee determined survey questions each year. Information obtained from Omnibus surveys has been used for several purposes including early identification of educational failure, tracking high-risk student progress, nutrition and school performance, and child health practices.

For the 2001 Survey, The Pinellas County Safe Schools, Healthy Students Initiative (SS/HSI) evaluation team submitted additional questions about student perceptions of school safety to the Omnibus committee for addition to the survey. These questions compliment items on the School Safety Survey (Massey, Armstrong, & Santoro, 2001) developed by the SS/HSI evaluation team to examine school staff perceptions of school safety.

Three sections of school safety questions were added to the 2001 Omnibus (Pinellas County Schools, 2001). In section one, students reported the frequency with which they witnessed or experienced violent or aggressive events in school. Students were asked to record how often they witnessed or experienced 11 items on a five-point scale from 1 (never) to 5 (daily). Section one included items such as verbal threats in school and students bringing weapons to school. In section two, students were asked to rate the effectiveness of violence prevention strategies in their schools. Students rated 13 strategies on a five-point scale from 1 (very effective) to 5 (very ineffective). For example, students were asked to rate the effectiveness of strategies including suspending/expelling students who commit acts of violence and training teachers to resolve conflicts. In section three, students were asked to rate their level of agreement with the application of school rules, such as principals apply rules fairly and some students are getting away with too much. Students rated their level of agreement with these items on a five-point scale ranging from 1 (strongly agree) to 5 (strongly disagree).

Methodology

Participants

The 2,413 participants consisted of 1,238 females and 1,158 males who attended fifteen Pinellas County high schools. Seventy-seven percent of the participants were White, 14 % were Black, 4 % Hispanic, 4 % Asian, and American Indian and multi-ethnic participants comprised the remaining percent. Eighty-six percent of participants were eleventh grade students, while tenth grade students (students who had repeated one grade) made up 12.5% of the sample. Less than 1% of participants were in the ninth or twelfth grades.

Procedure

All eleventh grade students were given surveys to fill out during school hours. Surveys were also distributed to students in the original cohort who had either been retained or advanced a grade since beginning kindergarten. Their participation in the study was voluntary; participants were assured that the information provided was confidential and would be reported as group data with no identifying individual information.

Results

Section 1: Witnessed or experienced violent or aggressive events in school

In section one, students reported the frequency with which they witnessed or experienced events in school (Table 1). Bullying and teasing were reported most often with over 40% of students witnessing or experiencing teasing or bullying on a daily basis. Verbal threats were experienced or witnessed at least once per week by 39.5% of students. Additionally, more than 35% of students experienced or witnessed discrimination at least once per week. Weapons and gang activity in school were reported with low frequency (Table 1). More than 60% of students reported never seeing or taking part in gang activity in school. More than 50% of students reported never bringing a weapon or seeing another student bring a weapon to school. In addition, 48% of students reported never seeing drugs sold in their school.

Table 1
Frequency of Witnessing or Experiencing Violent or Aggressive Acts

ITEMS	% Never	% 1 or 2 times per year	% 1 or 2 times per month	% 1 or 2 times per week	% Daily
Verbal threats in school	21.3	22.0	17.1	16.9	22.6
Physical violence in school	18.5	31.3	29.2	13.3	7.7
Students bringing weapons to school	57.1	30.9	6.4	1.6	3.9
Students using drugs or alcohol in school	29.9	22.6	16.4	11.7	19.4
Drugs being sold at school	48.0	19.9	13.1	9.1	9.9
Teasing or bullying in school	14.0	12.7	14.1	16.8	42.4
Gang activity in school	62.5	18.2	8.3	4.4	6.6
Personal property stolen or destroyed in school	19.9	31.5	23.4	13.5	11.8
Vandalism of school property	22.4	31.8	20.1	10.3	15.4
Discrimination at school	23.2	23.2	18.3	11.8	23.6
Violence in the community where your school is located	35.8	28.0	18.2	8.5	9.5

A chi square analysis was used to identify the significance of association between two variables. For purposes of this analysis, students were split into two groups for each question in section one: (a) students who reported seeing or experiencing an item frequently (once a month or more), and (b) students who saw or experienced an item rarely or never (2 times a year or less).

A chi square analysis of those items and gender revealed that males reported seeing or experiencing acts of violence or aggression significantly more often than females reported (χ^2 = 24.756). For example, significantly more male students reported seeing or experiencing physical violence, weapons being brought to school, gang activity in school, and verbal threats in school than female students.

A chi square analysis of the items and ethnicity revealed that White students reported witnessing or experiencing acts of violence or aggression significantly more often than other students. In particular, White students reported witnessing or experiencing significantly higher numbers of verbal threats, incidents of teasing and bullying, and physically violent acts in school than other students ($\chi^2 = 25.032$).

Section 2: Effectiveness of violence prevention strategies

These items were designed to assess student opinion of the effectiveness of school violence prevention strategies. Students reported that controlling guns in school (68.5%), having counselors to help students in school (53.3%), and keeping drugs out of school (52.4%) would be the most effective strategies to help keep their school safe. According to students, putting more security devices in schools and training students in conflict resolution and anger management are the least effective violence prevention strategies in schools.

Section 3: School discipline

In this section, students reported their level of agreement with school disciplinary measures in response to behaviors that disrupted safety at school. Answers were normally distributed with a nearly equal number of students agreeing and disagreeing with each item.

Students are expected to complete a final Omnibus survey in May 2002, the expected year of graduation for their cohort. The SS/HSI evaluation team has submitted additional items to Section 1: Witnessed or experienced violent or aggressive events in school. However, items that were included in Section 2: Effectiveness of violence prevention strategies, and 3: School discipline, will be replaced with items relating to resilience and protective factors in the school. In addition, the SS/HSI evaluation team plans to conduct focus groups with high school seniors during the 2001-2002 school year in order to find out more about their experiences of school violence and safety during their school years. These focus groups may be able to tease out more detailed information about what students think help to keep schools safe.

Conclusion

This paper presents results of a survey of high school students who have been followed since beginning kindergarten and were due to graduate in 2002. One of the most startling findings was that over 40% of students experienced or witnessed teasing or bullying on a daily basis. Controlling guns in schools, having more counselors to help students, and keeping drugs out of school were reported by over 50% of students as the most effective strategies helping to keep schools safe.

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Safety in Schools: Staff Perceptions

Gina Santoro, Kathleen H. Armstrong, & Oliver T. Massey

Introduction

There is a recent trend whereby youth are becoming increasingly involved as perpetrators and victims of violent crimes. Youth aged 18-24 comprise the highest rate of violent offenders and victims of violent crimes (Fox & Zawitz, 2000). Overall, the average age of both victims and offenders of violent crime has been declining since the late 1980s. Young people are three times more likely than adults to be victims of violence, and one-fourth of these victimizations involve the use of a firearm (Arredondo, et al., 1999). Although violent crime rates have decreased overall, crimes have become more intense when they do occur (Anderson, et al., 2001). Additionally, while single-victim events are decreasing, multi-victim events are increasing. As a result, when accounting for the increasing intensity of the multiple-victim events, the total homicide rate for students killed at school actually has increased in recent years. The proportion of school-based deaths involving multiple victims increased from 0% in 1992 to 42% in 1999 nationwide (Furlong & Morrison, 2000). Acts of targeted school-based violence are extremely rare, but when they occur, they hamper student development, reduce academic learning and harm the school's climate (Furlong & Morrison, 2000).

Studying the perceptions of school safety from those most intimately affected is one avenue for investigating the influence of school violence on school climate. This paper discusses the results from a survey intended to identify educators' perceptions of safety in a large urban school district, which had received federal funding from the Safe Schools/Healthy Students Initiative (SS/HSI). Implications from these findings may be useful to both educators and program evaluators. For educators, such descriptive information may be used as a needs assessment at the school and district level to identify areas of need in order to allocate resources for appropriate interventions. For program evaluators, this information can be used for accountability and tracking purposes in evaluating the efficacy of the interventions.

Method

In order to investigate staff perceptions of school safety, the School Safety Survey (Massey, Armstrong, & Santoro, 2000) rating scale was developed by the evaluation team and administered to staff members (e.g., teachers, counselors, administrators) in Pinellas County, Florida. The instrument includes 36 items that sample six factors associated with school safety: administrative effectiveness, student crime, child behavior problems, family involvement, teacher effectiveness, and school location. Respondents were asked to rate "How serious are these issues at your school?" using a multi-point scale ranging from 1 (extreme problem) to 5 (not a problem). Questions related to administrative effectiveness included items about effective leadership and disciplinary practices and procedures. Student crime included items about illegal activities at school, such as selling or using drugs and alcohol. Child behavior problems included items such as teasing and bullying of other students. Family involvement included items about disciplinary practices and school involvement. Teacher effectiveness included items regarding supervision of students in the classroom and classroom management practices. School location included items that inquired about the safety of the area surrounding the school.

Participants

Administrators from eight schools and the district counseling staff agreed to participate in the data collection efforts. Nine hundred instruments were distributed to staff at three high schools, three middle schools, two elementary schools, and the district counseling staff. Four hundred seventy-seven completed instruments were returned for a 53% response rate. Forty-three percent of the instruments were completed by high school staff, 27% by middle school staff, and 28% by elementary school staff. Sixty-two percent of the sample was made up of teachers, 26% were school counselors, 2.5% were administrators, and 6.5% held other positions within the school.

Results

Concerns were examined separately for elementary, middle, and high schools. Insufficient parental involvement and support in addressing discipline were the main concerns at the elementary school level, with 49% of respondents rating it as a serious or extreme problem. Lack of alternatives to suspension and expulsion (36%), teasing among students (36%), ineffective disciplinary practices (33%), and verbal threats among students (33%) were other serious concerns for elementary school respondents. Middle school participants reported that teasing among students was their most serious concern, with 39% of respondents rating it as a serious or extreme problem. Other serious problems reported at the middle school level were bullying among students (34%), verbal threats among students (31%), and lack of alternatives to suspension and expulsion (28%). High school participants indicated insufficient parental support in addressing discipline problems as their greatest concern, with 39% of respondents reporting it as a serious or extreme problem. Other serious problems reported at the high school level included insufficient parental involvement in school (35%), inadequate supervision of students during class (32%), and teasing among students (29%).

Teasing among students emerged as a significant concern at all levels: elementary, middle, and high schools. Both high schools and elementary schools reported that reduced parental support created a serious concern. Elementary and middle schools agreed that administrative policies and practices were related to more serious problems at school, while decreased classroom supervision was problematic at high schools.

Conclusion

These data indicate that while there are some common concerns regarding the perception of safety at schools, there are also differences that also need to be addressed according to the level of the school and the age of the students. Insufficient adult involvement and supervision of child behaviors, whether parents, teachers, or administrators, was identified as compromising the sense of school safety at all levels. With respect to intervention planning, schools will need to carefully determine how to best promote parental involvement—a goal that will probably require more effort at different levels. For example, parents of younger children may become more easily involved than parents of middle school students. Problematic student behaviors, especially teasing and bullying, must be attended to at all school levels, and both victims and bullies must be taught acceptable social and problem solving skills early on and throughout school. Finally, alternative consequences for more serious misbehaviors must be developed, rather than the current and often ineffective practice of suspension and expulsion.

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Understanding School Safety: A Qualitative Inquiry

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Violence in the schools is a very complex problem. Despite several recent high-profile violent acts in the schools, much of the violence in schools is not life-threatening and incidents have actually decreased over the past eight years (Elliot, 2001). Nevertheless, the public has been inundated with news of school violence in the media. School shootings perpetrated by classmates have gained an enormous amount of publicity. An Interim Report by the U.S. Secret Service and Department of Education (2000) stated that such publicity focuses on rare events and has resulted in increased fear among students, parents, and educators. While school shootings are serious, they are actually uncommon events and, in fact, schools are one of the safest places for students to be (Vossekuil, Reddy, Fein, Borum, & Modzeleski, 2000; U.S. Department of Education, 2000).

A myriad of programs have emerged in schools to prevent violence. In an effort to document the issues surrounding school safety, the Safe Schools/Healthy Students Initiative (SS/HSI) evaluation team conducted a series of focus groups with students, parents, and teachers in the Pinellas County schools. The goal of these focus groups was to gain an understanding of the experience of safety in the schools, from multiple perspectives. While national data show that schools are indeed safe places, our aim was to qualitatively measure how these groups felt about safety in their schools. Qualitative analyses of transcripts from these groups revealed some interesting findings that in some ways support, while in other ways contradict common perceptions about school violence and safety.

Method Participants

Eight focus groups were conducted in Pinellas County over the 2000-2001 school year, and included a total of 70 participants who were placed in *student* (n = 37, including elementary and middle school students), *parent* (n = 21, including parents of elementary, middle and high school students), or *educator* (n = 12, including teachers from elementary schools) groups. Table 1 describes demographic characteristics of the participants. Participation was voluntary for all participants and responses were confidential.

Table 1
Demographic Characteristics of Focus Group Participants (*N* = 70)

Demographics	Students (N=37)	Parents (N=21)	Educators (N=12)
Age Range	9-15	NA	NA
Grade Range	3-8	NA	NA
Gender			
Male	25	NA	12
Female	12	NA	0
Race			
White	10	16	9
Black	3	4	2
Other	24	1	1

Procedure

Potential student participants were identified via faculty and staff referrals and parental consent was granted in advance for all students that participated in the study. Parents were recruited through the Student Advisory Council Teams (SAC) at two of the schools and all parents were given the opportunity to participate at a third school. Focus groups lasted 45 minutes for students and ranged from 1 to 1.5 hours for parents and teachers. The focus group data were recorded using two audio recording devices, then transcribed and finally coded and analyzed using Ethnograph software (Qualis Research, 1998).

Results

Student Responses

Notable differences emerged between elementary and middle school students with regard to feeling safe at school. Elementary students reported a fear of intrusion or danger from the outside. This fear varied based on the school structure (open versus closed campus) and safety drills (i.e., lockdown procedures for intruders on campus). While attending school, elementary students reported feeling relatively safe. However, they reported concerns about fighting and the use of profanity within the school. Their greatest fear related to threats from others outside of the school. Elementary students reported that they preferred being in school rather than at home because there were more activities in school. Middle school students, by contrast, worried more about threats from other students. Bullying and teasing were identified as major problems in the schools and contributed to violent outbreaks:

Like you don't know what they're gonna do and that's why a lot of shootings happen because a lot of people pick on other people and they just get sick and tired of it and fed up. And they don't know what to do to make it stop. (Middle School Student)

Transitioning to the next level of schooling (from middle to high school) created anxiety according to our student participants. Worried about moving from middle school to high school, middle school students expressed the need to really "watch yourself" in order to stay safe. Further, middle school students worried about being shot or getting caught up in gang activity.

Both elementary and middle school students reported that teacher attitudes and practices contributed to their decreased sense of safety. Both groups commented on "yelling teachers," whose moods contributed to uneasiness in the classroom. Participants attributed student conflict, in part, to a lack of adequate discipline by teachers. Middle school students portrayed teachers who failed to properly deal with conflict, especially when a student was consistently being bullied or teased, as follows:

They didn't handle like how they were really supposed to. And at the end something happened that was really dangerous and it could have gotten worse. (Middle School Student).

Elementary and middle school students alike stressed concern about the lack of supervision at school, and overwhelmingly reported feeling safer when they had more adult supervision. Elementary students wanted supervision for the purpose of being protected against intruders, while middle school students wanted adults to address conflict when it arose among students. Younger children (grades 3 and 4) reported that attentive teachers could help promote a feeling of safety among students. Fifth graders and middle school students acknowledged the role of policies and procedures in their feelings of safety. The student council at the fifth grade level was one way of dealing with problems within the school while enforcing rules to prevent further problems. Middle school students acknowledged that policies and procedures were a good idea, but were not convinced that they were serving their purpose. As one student stated, "Policies don't make me feel safe at all because just cause it's a policy doesn't mean people are gonna do it."

There was also consensus across the groups that parents contribute to their child's sense of safety when they visit them at school and follow up on any conflicts their child may be involved in. However, parents also contribute to a decreased sense of safety when they fail to discipline their own children or fail to encourage appropriate behavior in school.

Parent Responses

Parents of elementary, middle and high school students shared the perception that school is less safe now than when they were growing up. Specifically, parents of middle and high school students were concerned about drug and gang activity, weapons, and bullies. Parents of elementary and middle school students reported a fear of their children transitioning to the next level (i.e. from elementary to middle school or middle to high school).

Parents were concerned with safety issues within the schools, outside of the schools, or from unknown factors. Concerns about the location of schools also surfaced in these focus groups. Parents felt that dangers existed in the neighborhood, and that neighborhoods were less safe than schools. Neighborhood characteristics such as high drug/crime areas, racial tensions, and lack of supervision at the bus stop were perceived to create dangerous situations for students outside of school.

Many parents reported dissatisfaction over the dearth of information being provided to them regarding school problems. Parents consistently blamed other parents for problems affecting schools. Most often they attributed the problems to other parents' lack of supervision and discipline of their children, modeling of bad behavior, and allowing children access to weapons at home. One group of parents blamed the government for laws and regulations that "tie the parents' hands" and do not allow them to control their children "like they need to."

Teacher Responses

Teachers' concerns mirrored those of students, in that they felt relatively safe in their classrooms but feared intrusions from the outside. Teachers reported that disrespectful and sometimes hostile parents, the size of the school facility (too small), the location of the school and open campuses contributed to the vulnerability of problems. While policies and procedures are in place to assure safety, these teachers reported that the procedures themselves rendered feelings of unease. The constant drills to prepare children for threats seemed to be causing fearful reactions and would possibly desensitize them to dangerous events.

Teachers blamed parents for doing a poor job of modeling appropriate behavior for their children. There were stories of parents who were disrespectful to teachers in front of the students, not involved in the lives of their children, and provided insufficient supervision at home. Teachers reported that student behavioral problems were a result of parents' failure to reinforce rules and expectations taught at school.

Conclusion

The findings from these focus groups suggest that students, parents, and educators believe that while schools may be safe, a number of issues remain that compromise safety. Teasing and bullying were identified as two behaviors that make school unpleasant, if not horrific, for some students. The interschool transitions, especially from elementary to middle school, created feelings of dread for students and their families. To address these issues, both parents and teachers must take responsibility for student supervision and discipline, and schools need to do a better job in preparing students for transitions. A review of the procedures being implemented in schools to keep students safe needs to occur so that undo anxiety is not created among students and staff.

While statistics may show that school is one of the safest places for students to be (Vossekuil, et al., 2000; U.S. Department of Education, 2000), this perception, or sense of safety, has been compromised by a combination of real events and the repetitive reporting of them in the media. If students and teachers are uncomfortable in school, learning will be compromised. It is essential that schools and communities come together to discuss these issues, identify concerns, and develop interventions that will successfully address and overcome the belief that schools are unsafe places.

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Symposium Discussion

Kathleen H. Armstrong

The Safe Schools/Healthy Students Initiative was offered to school districts across the nation by the federal government, to create an array of prevention and intervention efforts to stem the tide of violence in our schools and among our youth. These efforts were to include community providers, specifically mental health and juvenile justice, in a proactive and collaborative manner, in order to expand and strengthen supports and services needed for healthy child development. While most of the evidence points to schools as being safer than homes and communities, the question remains as to how best to create a safe and healthy school. Each of the papers presented in this symposium help us to identify key areas that must be addressed if we are to achieve that goal.

Creating a positive school climate is essential as a foundation for a safe and healthy school. This means that school must be a positive place for both students and teachers. Students must have opportunities to learn both the academic and social competencies required for success in school. Teachers must be able to teach in an orderly classroom environment, free from distractions that often stem from disruptive behaviors and conflicts. Administrators must provide teachers with the support that they need to meet the needs of an ever-growing diversity of learners. And parents must support schools, by setting high expectations for their children's education and behavior.

To make this happen, it will be necessary to create an array of interventions in schools that are multifaceted and start early on in a child's development; this will promote social and academic competencies in all students. No program by itself is likely to be successful in these efforts; rather the combined efforts of schools, families and communities will be necessary. Strengthening families, especially young families just starting out, will be a key factor toward achieving the goal of safe and healthy schools. Providing high quality childcare and preschool programs is another factor that promotes healthy child development and success in school, even for children living under adverse circumstances. Teaching not only academic skills, but also social and problem solving skills equips children with the social and emotional competencies that are of critical importance to school success. Providing a classroom with clear and consistent rules, fair discipline, and high expectations for all children creates a positive and supportive classroom culture. Strong and effective leadership in schools creates security and promotes high quality education. In addition, the willingness of leaders in the community to collaborate and share resources promotes not only the health of schools but the community at large.

And, finally, we need to pay more attention to transitions, those times in human development when we move ahead to a new, and often-unfamiliar environment. Perhaps one of the most vulnerable times for students involves the transition from elementary school to middle school, which happens at the same time that children become young adolescents. At a time in life when it is most important to feel a sense of belonging, adolescents leave the more protected world of elementary school and move into the world of middle school, a more diverse, more competitive, and often less supportive place. Teasing and bullying reaches its peak in middle school, and for vulnerable students, this period may begin the decline of a successful school career. Coupled with physical development and school changes comes the increased risks from engaging in unprotected or early sex, drugs and alcohol. Eating issues, resulting in obesity or eating disorders such as anorexia and bulimia often emerge at this time. Television watching, computer surfing, or electronic game playing often fill up the young teen's unsupervised hours, and may increase isolation or feelings of despair.

It is time that communities, schools, and families come together to create structures that promote healthy child development. For those children at-risk, schools may serve as the most influential protective factor available. In order to be effective in this very important role of providing children with the tools needed for success, communities and families must also support school efforts. And for children and families requiring additional support, there needs to be an array of interventions readily available in the community. Only when those critical pieces are in place will we reach the goal of creating safe and healthy schools.

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Evaluation Activities at a Summer Camp for Youth Experiencing Homelessness

Introduction

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Children who are homeless often lack access to mental health services (Nabors, Proescher, & DeSilva, 2001; Shirley, 1995). Exposure to prevention activities may play an important role in promoting coping and reducing risk behaviors for these children (U.S. Department of Health and Human Services, 1999). Additionally, school-based settings, such as the educational summer program where this intervention was implemented, may be ideal locations for conducting prevention activities and behavior management programs (Nabors et al., 2001; Tashman et al., 2000). This project was designed to evaluate a behavior management system created to improve the interpersonal functioning and classroom achievement of children, experiencing homelessness, attending a summer camp. Undergraduate students participating in a service-learning program recorded data, ran the token system, and presented mental health prevention activities (St. Pierre & Kaltreider, 2001).

Method

Participants. Fifty-one children between 5 and 12 years of age (M = 8 years) participated in this study. Forty-eight children were African American and three were Caucasian. All of these children and their families were residing in shelters for the homeless when they were asked to participate in the camp program. Forty-six parents completed surveys to provide their perceptions of their child's functioning before camp began, and 26 parents completed surveys at the end of camp. Teachers completed similar surveys for all of the children at the beginning and at the end of the camp.

Program Description. The summer camp was an academic enrichment program aimed at improving children's reading skills. Mental health prevention activities were provided during classroom activities. These activities focused on several topics: conflict resolution, anger management, social skills, and group cohesion. Additionally, a token system for rewarding positive classroom (e.g., on-task behavior) and prosocial behavior (e.g., sharing, being polite) was implemented by teachers and paraprofessionals. The children earned daily and weekly rewards based on the number of daily and weekly tokens (i.e., neon bracelets) they earned.

Measures. Surveys were used to examine parent and teacher perceptions of children's behavioral, emotional, and academic functioning. Parents and teachers rated the children's functioning on four-point scales for five questions. These questions asked them to rate acting out behaviors, social skills, grades, behavior at home, and sadness among individual children. These measures were used in a previous study (Nabors et al., 2001).

Event Coding. Teaching assistants (all were undergraduate students and Americorp Vista volunteers) completed daily journals in which they recorded positive and negative behaviors exhibited by the children. Teaching assistants coded positive and negative behaviors in their logs (notebooks). They were instructed to record salient events representing, "your perceptions of positive or negative behaviors exhibited by the children." They were asked to be as specific as possible and include all details related to the event including both the antecedents to and consequences of behavioral events and descriptive data about the children involved in the event. (Bakeman & Gottman, 1986). The first author reviewed the logs on a weekly basis and provided written suggestions for improving the detail in notes about events, in terms of specifically recording the antecedents, behaviors, and consequences for each event (Nabors, Hines, & Monnier, in press).¹

¹ More detailed information is available from the first author, Laura Nabors.

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After camp ended, the first author and a research assistant reviewed the journals and developed themes representing categories for the positive and negative behavioral events. Disagreements were resolved based on consensus. Themes for positive and negative behaviors exhibited by the children are presented in Table 1.

Table 1 Operational Definitions for Positive and Negative Behavior Categories

Theme	Operational Definition
Helping Others	Showing kindness toward and assisting other children or adults (e.g., holding doors, helping others with work).
Following Directions	Following class rules. Listening to and following instructions given by adults (teachers and assistants; e.g., walking not running, remaining quiet on the bus).
Completing Work/ "On-Task" Behavior	Completing class work and assignments appropriately and enthusiastically. Child remains seated and is accomplishing assigned work.
Role model	Child exhibits behavior that is exemplary and is a model for appropriate behavior for other children to follow.
Sharing/Taking Turns	Sharing bracelets, materials, food or drink, or toys with another child.
Unkind Behavior	Behavior that is unkind toward others, but does not involve physical aggression (e.g., teasing, name-calling).
Not Following Directions	Not following class rules or instructions given by an adult.
Not Doing Work/ "Off-Task" Behavior	Child refuses to do class work. Child unable to sit still or concentrate on assignment. Child is distracted and does not finish assignments.

Results

Parent and Teacher Surveys. Total scores were analyzed for the parent surveys. Results indicated that parents perceived boys as exhibiting less positive behaviors than girls. Gender differences were not found when teacher reports were analyzed. Parent report of the children's functioning was related to the number of bracelets the children earned over the course of camp, suggesting that parents may provide useful information about the children's potential for success using the token system. Analyses of teacher ratings revealed few differences between children.

Bracelet Program and Event Coding for Journals. Findings showed that girls earned significantly more bracelets for exhibiting positive classroom and prosocial behavior compared to boys. This finding was supported by an analysis of teaching assistants' reports in the journals. They also recorded more positive behaviors for girls than for boys.

Overall, however, data in the journals demonstrated that the children displayed more positive than negative behavioral events over the course of the camp. Sixty-one percent of the positive behaviors were in the "role model" area, which involved exhibiting positive behaviors and receiving a compliment indicating that this behavior was exemplary and could be modeled by other children. In contrast, 50% of the negative or inappropriate behaviors involved physical aggression toward another camp member, indicating that this was an area requiring additional strategies to improve the behavior management program.

Discussion

Findings provided support for the effectiveness of the camp in promoting positive classroom and social behaviors for youth experiencing homelessness. In general, girls exhibited more positive behaviors than boys. This was supported by parent report prior to the start of camp. In future years, boys might benefit from additional prevention efforts to improve their classroom functioning and social skills. Behavior management planning for boys, especially those who exhibit acting out or aggressive behaviors, should focus on increasing positive behaviors, such as setting an example for peers by following class rules. Before this study was conducted, staff at the camp were not collecting data on parent perceptions of their child's behavioral and emotional functioning. Results for this evaluation indicated that this might be a helpful indicator of how boys would respond during camp. This finding was presented and the camp director is planning to gather this information during the next intake period.

One shortcoming of this study is that many interventions were implemented during camp (e.g., token system, mental health prevention classes, reading enrichment program), and there was no control group for this evaluation. Therefore, we cannot be certain which interventions caused what degree of change in children's behaviors (Mercier, Fournier, & Peladeau, 1992). With a control group we could have answered the question of whether the intervention prevented the children from exhibiting problems, however, it was not ethically possible to recruit a control group for this project. To answer questions about the preventive nature of the experience it may be important to use control groups or recruit alternative comparison groups in future studies. Additionally, it was difficult to understand the antecedents and consequences for negative behaviors recorded in journals. Understanding the causes and maintaining factors for negative behaviors is a goal for future projects. Observational measures with established psychometric properties should be implemented in these projects.

Results provided preliminary support for continuing the use of prevention activities and a token system to promote positive and prosocial behaviors during classroom and recreational activities. Additionally, The university-based service-learning program was a way to connect undergraduates with a social service program for youth while contributing to their own education (i.e., academic enrichment through research experience). Collaboration between universities and other local businesses and charities may help with staffing programs for youth experiencing homelessness. Partnerships between universities, community agencies, and children's service programs may benefit youth, providing them with access to mentors who can support and teach them as well as help them to improve their classroom behaviors and academic achievement (St. Pierre & Kaltreider, 2001; Ward & Wolf-Wendel, 2000).

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