## **Chapter Nine**

School-Based Approaches Chapter Nine — School-Based Approaches

## NLTS2: A National Look at School Programs and Services for Students with Emotional Disturbances

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## Introduction

Efforts of practitioners in the mental health community to address the needs of youth with emotional disturbances (ED) often focus on clinical treatments. Yet, as with all youth, adolescents with ED spend a large proportion of their waking hours in school and their school experiences provide opportunities for intervention to improve outcomes. For youth with ED who receive special education services, those services are an important part of the therapeutic interventions provided many youth with ED. This paper presents a subset of findings from a national longitudinal study of special education programs. Results reported here focus on secondary school programs and services provided related to: course taking, instructional settings, access to the general education curriculum, special education classroom instruction, vocational education and services, and related services and supports.

## Method

These topics were examined through analysis of the data from the National Longitudinal Transition Study-2 (NLTS2), being conducted by SRI International since 2001 for the U.S. Office of Special Education Programs. The study involves more than 11,000 youth who were receiving special education services in grade seven or higher when the study began; 825 students were included in the category of ED. Data were reported from the first wave of telephone interviews with parents, conducted in 2001, from the first wave of mail surveys of school staff best able to describe the overall school program of sample members in the 2001-02 school year, and from a general education academic classroom teacher who could describe the classroom experiences of each student who took a class. Response rates were: 82% for the telephone interviews, 59% for the school program survey, and 60% for the general education teacher survey. Youth were ages 13 through 18 when data were collected. Percentages and means reported for youth with ED and youth with disabilities as a whole were weighted to represent those groups nationally. Results of *F* tests indicate the statistical significance between youth with ED and youth with other disabilities.<sup>1</sup>

## Results

#### Course Taking and Settings

The course-taking pattern of secondary school students with disabilities has a heavy academic emphasis (see Table 1) which has increased over time (Wagner, Newman, & Cameto, 2004). Virtually all secondary school students with ED take at least one academic subject in a given semester, including language arts (96%) and mathematics (93%). Social studies and science also are taken by most students with ED (93% and 84%, respectively). Course taking patterns among students with ED resemble those of students with disabilities as a whole and students in the general population, with the exception that youth with ED are significantly less likely to be enrolled in a foreign language class (15%) than their peers in the general population (50%; Wagner, 2003).

In addition to academics, almost two-thirds of students with all disabilities (61%) and students with ED (60%) take vocational education courses in a given semester. Occupationally specific vocational education is taken by about half of students with all disabilities (52%) and students with ED (51%), and prevocational education by about one-third of students with all disabilities (34%) and students with ED (31%).

17th Annual Conference Proceedings – A System of Care for Children's Mental Health: Expanding the Research Base – 395

<sup>&</sup>lt;sup>1</sup>Author notes: NLTS2 design details, data tables, and reports are available at www.nlts2.org.

In spring semester, 2001-02, percentage taking:	Secondary School Students with ED (%)
Language arts	96
Mathematics	93
Science	84
Social studies	93
Foreign language	15
Fine arts	45
Physical education	71
Life skills/social skills training	46
Study skills training	40
Prevocational education	31
Occupationally specific	
vocational education	51
Any general education class	78
All general education classes	22
Any special education class	74
All special education classes	16

#### Table 1 Course Taking of and Settings of Secondary School Students with ED

Most students with ED take classes in both general and special education settings. About threefourths of students with ED take at least one class in a general education setting and about the same percentage take at least one class in a special education setting. However, for 22% of students with ED all classes are general education, and for 16%, all classes are in a special education setting. Compared with students with all disabilities, students with ED are less likely to take a general education class and are more likely to have all their courses in special education settings.

#### Classroom Activities, by Setting, and Access to the General Education Curriculum

The classroom environment of students with ED differs in general and special education classes. Notably, special education classes are smaller on average (10 students) than classes in the general education setting (which average five students with disabilities and 19 students without disabilities). Special education classes also are likely to have an instructional aide or other adult in addition to the classroom teacher, with an average student-to-teacher ratio of six to one, compared with a ratio of 21 students to 1 teacher in general education classes.

When students with ED are in general education academic classes, 38% receive no curriculum modification; however, substantial modification or specialized curricula are the norm in special education classes (see Table 2). The classroom activities of students with ED do not differ significantly between general and special education classes. Further, the classroom experiences of students with ED in general education academic classes are the same as those of other students in class in ways that are teacher-driven, including receiving a preponderance of whole-class instruction (68% do so "often"); taking quizzes or tests (93% do so at least sometimes) and working with peers or in groups (88%). However, significantly fewer students with ED than other students in class participate often in class in ways they control, such as responding to questions orally in class, presenting information to the class or small group, and working independently.

Learning supports to help youth with ED deal with behavior and learning issues in general education academic classes are provided to fewer than 25% of these students; 23% of students with ED in general education academic classes have a behavior management plan, 21% receive help with learning strategies or study skills, 15% have an adult tutor, and 15% have a peer tutor. In addition, 98% of students with ED have general education academic teachers who report that they expect the student to keep up with the class, but only 65% of the students are reported to actually do so.

	Classroom Experiences in a:			
	General I	Education Class	Special Education Setting	
Levels of Participation	Students with ED	Other Students in Class	Students with ED	
Percentage reported by teachers to have:				
No curriculum modification	38	NA	7	
Some curriculum modification	53	NA	35	
Substantial modification, specialized curriculum,				
or no curriculum	10	NA	58	
Percentage reported by teachers to take part in the	following "	often"		
Whole class instruction	68	69	41***	
Small group instruction	21	19	40***	
Individual instruction from a teacher	31	27	44**	
Individual instruction from another adult	14	7	18	
Percentage reported by teachers to take part in the	following "	sometimes" or "o	ften"	
Takes quizzes or tests	93	98	91	
Works with peer or group	88	92	73	
Responds orally to questions	86	99*	92	
Presents to class or small group	49	66***	40	
Works independently	88	98*	89	

#### Table 2 Classroom Participation of Students with ED and Other Students in General Education Classrooms

*Note*: Statistically different from youth with ED in a two-tailed test at the following levels: \*p < .05, \*\*p < .01, \*\*\*p < .001 NA=Not applicable

#### **Related Services and Supports**

Many students with disabilities receive related services or supports to help them benefit from their instructional programs. NLTS2 asked parents whether students with disabilities receive a variety of services from any source (e.g., outside the school, or from a family member) or from or through the school (see Table 3).

Students with ED are more likely than students with all disabilities to receive at least one of the services investigated in NLTS2 both from any source and from or through their school. Not surprisingly, the biggest difference is in the much higher receipt of mental health services (69% vs. 32% from any source, 36% vs. 16% from school). Notably, schools are the source of more than half of the mental health services received by students with disabilities. In addition to these related services reported by parents, school staff serving individual students with disabilities also reported whether they participate in a variety of schoolbased programs other than special education. More than one-half of students with ED (51%) participate in reproductive health education or services; 44% take part in substance abuse prevention education or substance abuse treatment at school; 30% participate in conflict resolution, anger management, or violence prevention programs; and 17% receive teen parenting education or services.

Parents of students with disabilities also were asked how much effort it took to obtain the services their children were receiving and any barriers they encountered to obtaining those services (see Table 4). Students with ED are much more likely than those with all disabilities to have parents who report working harder to obtain services and encountering almost all the barriers addressed in NLTS. Thirty percent of students with ED have parents who report that they had to exert "a great deal of effort" to obtain the services their children were receiving, compared with 19% of students with all disabilities. All barriers other than language/communication were cited more often by parents of students with ED than students with disabilities as a whole.

	Youth Receives Service from:			
	Any Source		S	School
Percentage receiving in the past 12 months:	Youth with ED (%)	Youth with All Disabilities (%)	Youth with ED (%)	Youth with All Disabilities (%)
Any of these services	81	72***	65	59*
Psychological/mental health services	69	32***	36	16***
Social work services	33	13***	20	8***
Speech-language pathology services	15	26***	14	25***
Occupational therapy	14	12	12	11
Physical therapy	6	9	2	4
Diagnostic medical services	40	24***	15	8***
Vocational services	26	20*	23	18*
Academic tutoring	16	19	13	13
Transportation	22	11***	19	11
Reader or interpreter	2	6***	2	5**
Respite care	4	2	<1	1
Case management	53	56	44	37*

Table 3
Related Services Received by Youth with ED and Youth with All Disabilities
from Any Source and from Their School

*Note:* Statistically different from youth with ED in a two-tailed test at the following levels: \*p < .05, \*\*p < .01, \*\*\*p < .001

# Table 4 Parents Report of Barriers to Obtaining Services for Students with Disabilities and Students with ED

Barrier	Youth with ED (%)	Youth with All Disabilities (%)
Percentage with parents reporting expending "a great deal of effort" to obtain services for their children with disabilities	19	30***
Percentage with parents reporting the following barrier to service:		
Lack of information	34	24***
Services not available	34	23***
Poor quality services	30	20***
Scheduling conflicts	27	18***
Cost of services	25	17**
Youth ineligible for services	24	17**
Where services are provided	26	16***
Lack of time	22	15**
Transportation limitations	19	12**
Language/communication	3	5

Statistically different from youth with ED in a two-tailed test at the following levels: \* p < .01, \*\* p < .01, \*\*\* p< .001

## Discussion

According to this analysis, youth with ED have school programs that emphasize academics, and they are about equally as likely to take general education classes as they are to take special education classes. In general education classes there are, on average, one student with ED out of 24 students, including four students with other disabilities. Many of their classroom experiences are the same as other students in class, indicating many have access to the general education curriculum. Yet relatively few learning supports are provided to students with ED in those classes, and although the these youth are expected by teachers to keep up with other students with ED in general education academic classes and for their teachers if students are to succeed there. In contrast, special education classes have fewer than half as many students, and students in them are more likely to have substantial curriculum modification and more adult help.

Students with ED receive a variety of related services and rely on their schools for many of them (although more than half of mental health services are provided by sources other than schools). They also participate in a variety of school-based programs other than special education (e.g., substance abuse education or treatment). Yet there are a variety of opportunities to enhance school programs for youth with ED. One-fifth receive no related services at all and 35% receive none from their schools. Almost one-third receive no mental health services; 64% receive none from their schools. Seventy percent do not take part in conflict or anger management programs.

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## Meeting the Needs of Traumatized Children Through a School-Based Program

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## Introduction

Violence has been identified as one of the most significant public health issues in America (Koop & Lundberg, 1992; U. S. Department of Health and Human Services, 2001), with an increased awareness in the last decade of the extent to which children are exposed to violence (Fitzpatrick & Boldizar, 1993; Richters & Martinez, 1993; Singer, Anglin, Song, & Lunghofer, 1995). The results of violence exposure include not only emotional disturbance, such as posttraumatic stress (Cuffe et al., 1998; Horowitz, Weine, & Jekel, 1995) and depression (Kliewer, Lepore, Oskin, & Johnson, 1998), but decreased school performance (Hurt, Malmud, Brodsky, & Giannetta, 2001; Saigh, Mroueh, & Bremner, 1997; Schwab-Stone et al., 1995). Despite the growing attention to the problem of violence exposure, no randomized controlled trials have been conducted to assess an intervention aimed at reducing symptoms in children exposed to violence (Stein, Jaycox & Kataoka et al., 2003).

The Los Angeles Unified School District (LAUSD) collaborated with local researchers at UCLA and RAND Corporation to develop a school-based program for students exposed to community violence (Kataoka et al., 2003; Stein, Jaycox & Kataoka et al., 2003; Stein et al., 2002). For a complete review of the present study, see Stein, Jaycox & Kataoka et al., 2003. The goals of the collaboration were to implement a program that was appropriate for a school setting, was based on current practice guideline recommendations, and was culturally sensitive for children and their families. Additionally, collaborators wanted to identify students who would be appropriate for the program, and to rigorously evaluate program outcomes.

## Method

*Intervention.* The intervention was a group therapy curriculum called Cognitive Behavioral Intervention for Trauma in Schools (CBITS; Jaycox, 2004). It includes 10 sessions for children focused on trauma symptoms, in addition to parent outreach and education about trauma and teacher education about detecting and supporting traumatized students in the classroom. Several aspects of CBITS make it conducive to delivery in the school setting. Therapists who already work on school campuses delivered the intervention. These school psychiatric social workers attended a two-day training, received ongoing weekly supervision, and followed a written manual that outlined each session. The group sessions, which consisted of 6-8 students per group, were designed to last one class period and were modeled on a classroom lesson plan. The social workers worked closely with school liaisons and were flexible in scheduling the sessions, with minimal classroom disruption for students and staff.

There are several key components of CBITS that provide students with skills to better cope with trauma related symptoms. The CBITS intervention begins with psychoeducation about trauma and the common symptoms that children experience following a traumatic event. This can be a very powerful part of the intervention by helping students to recognize that other children have similar experiences following exposure to trauma. Students also learn relaxation training, which gives them tools to feel more in control when they experience anxiety. The program then teaches children to identify and communicate their level of distress through visual aids by using a fear thermometer. Cognitive therapy techniques teach children to identify and challenge negative and unrealistic thoughts that they may have developed in response to a traumatic event. With these skills in hand, students then are gradually

introduced to exposure exercises to "face the trauma." An individual session with each child precedes the exposure exercise to identify appropriate types of exposure; the session is structured around the child's individual readiness. Finally, for many children externalizing behaviors are also part of their response to trauma, and so they are taught skills needed to get along with others.

*Measures.* Two instruments comprised a screening measure administered to 769 6<sup>th</sup> grade students to determine level of violence exposure and symptoms of traumatic stress. Community violence exposure was assessed by a modified version of the Life Events Scale (Singer et al., 1995), a self-report measure with items that include both witnessing and being the victim of violence either at school, in the neighborhood, or anywhere else. Exposure to violence is assessed in the last year and over the lifetime. The Child PTSD Symptom Scale (CPSS; Foa, Johnson, Feeny, & Treadwell, 2001) was used to measure trauma symptoms. The items on the scale assess common symptoms of PTSD, including having nightmares, avoiding event reminders, or being jumpy or easily startled. High scores on both the violence exposure and traumatic stress measures determined program eligibility.

Of the 769 students who were screened, 159 students were eligible for the program, out of which 126 chose to participate. The students who participated were randomly assigned to either receive the treatment immediately or later. Sixty-one students were assigned to receive CBITS right away, while 65 students were wait-listed and received the program after three months. Symptoms of traumatic stress were re-evaluated three months after the screening and again at six months.

## Results

The screening assessment identified many children with violence exposure. Regarding violence exposure within the last year, 90% of students reported witnessing violence and 69% reported being the direct victim of violence. Forty-three percent of students reported being exposed to violence that involved a knife or a gun. Level of symptoms among these students was also high. Clinical levels of post-traumatic stress symptoms were endorsed by 27% of students, while 16% reported clinical levels of depression.

After the early intervention group completed the program, symptoms of traumatic stress and depression were re-evaluated. The early intervention group reported significantly fewer symptoms of traumatic stress than the wait-list group (mean difference, -7.0; 95% *CI*, -10.8 to -3.2), with a mean Child PTSD Symptom Scale score of 8.9 for the students in the treatment group, dropping below the clinical range, compared to a mean score of 15.5 for the wait list group, which remained in the clinical range. At the six-month assessment, after the wait-list group received the intervention, there was no difference between the two groups on traumatic stress symptoms (mean difference, 0.3; 95% *CI*, -3.4 to 3.9). The early intervention group maintained the improvements they had at three months, with a mean score on the Child PTSD Symptom Scale (CPSS) of 8.2, and the wait-list group had decreases in symptoms similar to the early treatment group (mean CPSS score 7.2).

Both groups also demonstrated significant improvement in symptoms of depression (mean difference, -3.4; 95% *CI*, -6.5 to -0.4) and psychosocial functioning, as reported by their parents (mean difference, -6.4; 95% *CI*, -10.4 to -2.3). Finally, there was an association between trauma symptom improvement and increased Grade Point Average (GPA), F(1, 114) = 5.37, p = .02, although there was no difference on teacher report of classroom behavior.

## Discussion

The results from this study document the high rates of violence exposure among students in an urban school setting and the corresponding clinical levels of PTSD and depressive symptoms. The CBITS program was shown to be effective in reducing traumatic stress and depressive symptoms of children exposed to community violence. Moreover, those clinical benefits were maintained three months after participation. The program was implemented effectively in the school setting, and was well received by

families and by school staff. Parents reported increased communication with their child and teachers reported that although they were initially skeptical of students missing some class time to attend the group, they noticed that students started participating more in classroom activities and performed better in their schoolwork.

Given the success of this school based trauma program, we will be studying issues around dissemination and how we can support both local and national efforts to replicate this program in other communities. In thinking about replication efforts, we are interested in better understanding how this program can be sustained in schools, how other school personnel may be able to implement some or all of the components of this program, and what modifications may be needed to respond to the unique needs of each school and school district.

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## A Review of Evidence-Based Literature: The Development of the School-Based Youth Suicide Prevention Guide

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#### Introduction

Youth suicide reflects a silent epidemic too frequently ignored by most individuals in the community, with the exception of those who have been devastated by its effects. Youth suicide is a critical but underreported and under-treated public health crisis—and one that has the potential to be prevented once barriers and myths, based on fear, anxiety, and apprehension, are countered through education (Statewide Suicide Prevention Council, 2003; Potter, Powell, & Kachur, 1995; Jougla, Pequignot, Chappert, Rossollin, Le Toullec, & Pavillon, 2002). It is likely that suicide is significantly under-reported and that statistics can underestimate the true extent of the problem (Potter, et al., 1995; Jougla, et al., 2002).

Suicide accounts for 13% of all adolescent deaths and ranks third as an overall cause of death in adolescents (Goldman & Beardslee, 1999). Suicide among children ages 10-14 increased by 100% from 1980-1996 (U.S. Public Health Service, 1999). Everyday, it is estimated that 3,500 adolescents attempt suicide, and 35 of them die (Opalewski, 2001); an average of one child under the age of 25, dies by suicide every two hours (National Strategy for Suicide Prevention: Goals and Objectives for Action, 2001), and more teenagers die by suicide than die from cancer, AIDS, birth defects, stroke, pneumonia, influenza and chronic lung disease combined (Miniño, Arias, Kochanek, Murphy, & Smith, , 2002). Between 1980 and 1995, the suicide rate among African-American youth, ages 10-14, increased by 233%, while the suicide rate for comparable whites increased by 120% (Centers for Disease Control and Prevention, 1998). Further, 90% of teenagers who die by suicide have a mental health problem, usually depression, substance abuse, or both (Shaffer, Gould, Fisher, Trautman, Moreau, Kleinman, et al. 1996).

Our nation's schools, in partnership with families and communities, are an obvious place to identify youth at risk of suicide. Prevention efforts for adolescent suicidal behavior provided in the school are ideal because the school provides an environment with the highest likelihood of exposure to a prevention program and for the simple reason that adolescents spend approximately one third of their day in school (Malley, Kush, & Bogo, 1994; Kush, 1991; King, 1997; Kalafat, 2003). "Healthy," supportive, and informed schools can do much to prevent youth suicide, to identify students at risk and to direct youth to prompt, effective treatment. Prevention, education, intervention and *postvention* (i.e., response to suicide attempts and deaths by suicide) are the keys to reducing the number of young people who take their own lives.

In schools, rather than in the home or community, students' problems with academics, peers and other issues are much more likely to be evident, and suicidal signals may occur with the greatest frequency. At school, students have the greatest exposure to multiple helpers such as teachers, counselors, coaches, staff and classmates who have the potential to intervene. However, given the multiple demands on school systems, districts, schools and school staff, it is essential that any new responsibilities given to school staff should be accompanied by easy to use, efficiently informative, comprehensive, upto-date, accurate, and user-friendly information. Suicide is a public health problem that requires an evidence-based approach to prevention. Time and other constraints may prohibit educators and school administrators from reviewing and evaluating the literature on teenage suicide and from developing and implementing action plans in their schools. The purpose of this paper is to describe the *The Youth Suicide Prevention School-Based Guide* (Lazear, Roggenbaum, Doan, Blase, Wallace, et al. (2003), designed to provide accurate, user-friendly information to school administrators, teachers and staff.

## Methods

In November 2000, the Florida Governor's Office of Drug Control formed the Suicide Prevention Task Force, whose purpose was to establish an infrastructure for a statewide suicide prevention initiative. The Task Force issued suicide prevention guidelines in Preventing Suicide in Florida: a White Paper. In response to these guidelines—and in recognition of the absence of a comprehensive, communitybased, systematic approach to adolescent suicide—the Florida Metropolitan and Non-metropolitan Community Youth Suicide Prevention Prototype Program (2002-2007) was developed This model five-year program takes a broad-based approach to the full continuum of community-based suicide prevention activities. The Louis de la Parte Florida Mental Health Institute (FMHI) at the University of South Florida, under a subcontract from Nova Southeastern University, was chosen to develop a Youth Suicide Prevention School-Based Guide (The Guide) with funding through the Drug Free Communities Program, Florida Office of Drug Control. The Guide was produced by the research team at FMHI through an extensive literature search, focus groups, expert panel meetings, and feedback from individual and district reviewers.

An extensive review of peer reviewed literature and current research was synthesized into a comprehensive picture of which prevention, intervention, and postvention strategies have been shown to have positive results and which were shown to be potentially inimical to adolescents. The Guide limited inclusion to the most recent articles published (1990 and after) with the exception of articles that were frequently identified citations from other articles or addressed important information not published elsewhere. The Guide was subsequently refined through the suggestions, input, and feedback from schools in two Florida school districts. Feedback was also actively sought through the use of an expert panel meeting; regional and national experts were contacted and subsequently met to discuss methods, strategies, and concerns about the content of the Guide. This expert panel meeting provided valuable information on what the expert panel members felt was lacking from the Guide and what needed to be more specifically addressed. The panel was also helpful in pointing out which format and layout methods the Guide may wish to utilize in order to make the Guide more easily readable and practical.

Through the use of collaborate efforts and extensive literature reviews the Guide went through a number of revisions in order to more accurately describe the current trends, concerns, and strategies maintained by those in the field of adolescent suicide prevention and similar fields such as adolescent substance abuse and violence prevention.

## Results

The Youth Suicide Prevention School-Based Guide is a comprehensive, evidence-based guide designed to assist schools, in partnership with families and community partners, in improving their suicide prevention programs or creating new ones. Offering a series of Issue Briefs and Checklists, the Guide allows school administrators to assess the adequacy of their suicide prevention program and to improve its scope and effectiveness (e.g., see Table 1 for a sample checklist). The Guide builds on reviews of the literature and current research, exemplary plans and initiatives throughout North America; evidence associated with suicide prevention programs; and field-based information from educators, clinicians, families, youth, and advocates.

Although the Guide does provide examples of exemplary programs and highlights a number of research-based prevention strategies, the Guide does not attempt to endorse any specific plan, strategy, or program but rather seeks only to present educators, researchers, and the public with what research suggests concerning adolescent suicide. Most research in fact suggest that relying on one strategy or intervention is not advisable and that schools may wish to utilize a number of different strategies in an attempt to provide a more comprehensive and therefore effective effort to combat adolescent suicide. The Guide attempts to describe these various strategies so that schools may choose for themselves what prevention efforts are feasible for their school.

#### Table 1 Checklist 2 – School Climate

This checklist can be used to quickly evaluate what services and policies your school already has in place (indicated by a "yes") or what services and policies your school may be lacking that may need to be implemented or revised (indicated by a "no").

Yes	No	
		Are school service staff members accessible to students?
		Are there methods in place that inform students about who to contact if they do not feel safe?
		Does your school involve students' families in regular meetings or get-togethers so that families can voice their concerns about their children?
		Does your school help support families in getting help they may need in order to effectively address adolescents with behavioral or conduct concerns?
		Does your school have established links to the community for assessment and referral of students in crisis?
		Does your school provide extracurricular opportunities for students such as after school clubs, activities, and student organization meetings?
		Does your school provide regular meetings in which staff and faculty are given the opportunity to discuss students who may be displaying worrisome behavior?
		Does your school have established policies that define antiharassment and bullying?
		Are there policies that state explicitly how to deal with a student(s) who bully and/or harass other students?
		Does your school provide curricula to students focusing on harassment, bullying, tolerance, and problem-solving skills?
		Does your school provide training to staff to help them recognize harassment, bullying, and warning signs of students who don't feel safe?
		Does your school discuss safety issues openly?
		Does your school treat students equally and enforce disciplinary, harassment, and civil right's policies consistently?
		Are there specific safety procedures in place to support the personal safety of students, faculty, and staff?
		Does your school provide clean and safe school buildings and grounds?
		Does your school have in place a system for referring students who are suspected of being abused and/or neglected?
		Does your school conduct regular safety and hazard assessments?
		Does your school ensure that the school environment, including buses and bathrooms, is free from weapons?
		Does your school ensure high academic standards?
		Does your school stress to staff the importance of a positive relationship with students and how such a relationship can prevent dangerous situations from occurring?
		Does your school treat all students with respect, care, and support?

The key features of The Guide include:

- · Identifies and defines the elements of a comprehensive, school-based suicide prevention program
- Examines the scientific literature to determine which of these elements have been proven to work in reducing the incidence of suicide
- Contains checklists and self-assessment instruments that may be completed by schools to evaluate the adequacy of their suicide prevention programs
- Provides a guide to help school administrators and their partners add program elements that would result in more comprehensive programs and/or would replace unproven strategies with proven strategies
- Has been reviewed by national experts in suicide prevention, behavioral and physical health providers, and community-based school personnel, advocates, families and youth.

## Conclusion

The Guide is designed to provide accurate, user-friendly information for school administrators, staff, and faculty. Each Issue Brief offers a rationale for the importance of the specific topic together with a brief overview of the key points related to the topic, and a checklist or self-assessment where one may be helpful. The Guide does not overtly endorse one strategy or intervention over another; it attempts only to provide what research and exemplary practices have found and suggest about issues related to adolescent suicide. The intention of the Guide is to assist schools in determining what strategies they already have in place, what additional strategies they may wish to implement, and what strategies will provide the best fit into their schools' environment and culture. The Guide provides information concerning the myths surrounding adolescent suicide, risk factors for suicidal behavior, prevention strategies, intervention strategies, administrative issues, and how to respond to a suicidal behavior in the school. A resource section with helpful links is also included. The Issue Briefs and resource/links section will continually evolve as new research is conducted, as the best available evidence is evaluated, and as prevention programs are utilized and tested. The Youth Suicide Prevention School-based Guide is available online at: http://cfs.fmhi.usf.edu/StateandLocal/suicide\_prevention/

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## Symposium Introduction Kay Hodges

Results from a school-based preventive mental health intervention

are presented for less impaired youths as well as for a group of youths with multiple impairments across settings. The findings suggest that the prevention program helped both types of youths. The authors provide helpful suggestions regarding which youths may be well served by school-based prevention mental health services and those who may need to be referred for additional services. The second paper describes a school-based wraparound program in Nebraska which serves youths with very severe levels of impairment. A case example is used to illustrate how periodic assessment data are actively used by the wraparound team members to maximize the effectiveness of services.

# *Functional Improvements of Children Referred to a School-Based Preventive Mental Health Intervention: CAFAS Outcomes at Six Months*

Scott Rosas

#### Introduction

The State of Delaware's mental health system for children includes a comprehensive school-based preventive mental health intervention that focuses on the amelioration of behavioral and social problems within the school setting. The approach is flexible and combines social skill development, problem-solving skills training, individual and class wide behavior management components, and parent skills training and support. The approach is similar to other school-based interventions that have demonstrated a reduction of inappropriate behaviors, academic engagement, behavioral compliance, delayed involvement with antisocial peers, reduction of aggressive behaviors with peers, reduction of parent aversive behavior during problem-solving discussions, and improvements in teacher reported prosocial behaviors (e.g., Kamps, Kravits, Stolze, & Swaggart, 1999; Nelson, Martella, & Marchand-Martella, 2002; Reid, Eddy, Fetrow, & Stoolmiller, 2000).

The school-based intervention to which children in this study were referred represents the front end of the services continuum; for some, this was the first contact with the mental health system. Previous work indicated that children with a range of functional problems are referred for these services and as such may experience varying degrees of successful outcome (Rosas, 2004). To determine whether children with higher levels of functional impairment could be supported and improve functioning within the school setting, this study examined the initial and six month differences between children with functional problems in multiple domains and those who were referred for a school-based preventive mental health intervention, but did not have impairments in multiple domains.

## Method

This study included a total of 418 children in kindergarten through sixth grade from 54 elementary schools throughout Delaware, referred by teachers or staff for emotional and/or behavioral problems that interfered with learning. The sample was predominantly African American (50%) and Caucasian (45%) with smaller numbers of children that were Hispanic American (4%) and of other groups or

Chair Kay Hodges *Authors* Scott Rosas Reece Peterson et al. mixed background (1%). Participants were 29% female and 71% male, ranging in age from 5 to 12 years (M = 7.9 years; SD = 1.25). More than 42% of the sample lived in single parent households headed by mothers and slightly more than 26% had both parents present in the home. As indicated on the teacher generated referral form, more than one-third of the children were referred for primarily aggressive/disruptive behaviors. The percent of children identified as academically at risk or performing unsatisfactorily in math and reading was 49% and 55%, respectively.

Upon referral to a school-based clinician for a preventive mental health intervention, children's functional impairment was assessed at intake and again at six months. The Child and Adolescent Functional Assement Scale (CAFAS; Hodges, 2000) was used to determine the degree of functional impairment in eight psychosocial domains: School/Work, Home, Community, Behavior Towards Others, Moods/Emotions, Self-Harmful Behavior, Substance Use, and Thinking; and two caregiver domains: Material Needs and Family/Social Support. Children receive a rating of 0, *minimal* or *no Impairment*; 10, *mild impairment*; 20 *moderate impairment*; or 30 *severe impairment*, on each domain and based on item endorsements on the CAFAS. Students in the sample were not known to be receiving any concurrent mental health treatment services. Children were separated into two groups, based on whether they were rated as moderately (20) or severely (30) impaired on two or more functional domains. Of the 418 students, 31% (*n* = 129) met this criterion.

## Results

As expected, at intake, children with moderate to severe impairment in two or more functional domains were significantly more impaired overall, F(1, 416) = 450.53, p < .001; partial  $\eta^2 = .52$ ), than children without problems in multiple domains. Significant differences between groups were also detected on the School/Work, Home, Behavior Towards Others, and Moods/Emotions subscales.

The average CAFAS total score at intake for the children in the multiple domain impairment group was 72.50, with 13.3% of these youths scoring 100 or higher. As a group their overall level of dysfunction would be typical of youth that may require services beyond outpatient care. In contrast, children without multiple domain impairments had an average total score of 29.76, typical of youth that would be likely to be treated on an outpatient basis, given that no risk behaviors had been endorsed on the CAFAS. A closer examination of subscale scores for children with multiple domain impairments revealed a high proportion displaying moderate or severe impairment in a number of functional domains. Of the children with multiple domain impairments, 89.1% were rated severely or moderately impaired at intake on the School/Work subscale, 34.9% on the Home subscale, 93.7% on the Behavior Towards Others subscale, and 43.4% on the Moods/Emotions subscale. However, caregiver resourcefulness was less of a concern with only 3.1% rated as severely or moderately impaired in the Material Needs and 11% in the Family/Social Support domains.

To assess change in mean CAFAS total score, a paired *t*-test was conducted for the entire sample, comparing intake and six-month scores. The difference between initial and six-month total CAFAS score was significant with a small to moderate effect size, t(416) = 8.21, p < .001; d = .40, and impairment was reduced from intake (M = 42.88) to six-month (M = 32.85). Paired *t*-tests, comparing intake and six-month CAFAS scores, were conducted separately for each group: children with multiple domain impairments and those without. A significant difference and a large effect size were detected for those with multiple domain impairments, t(127) = 7.79, p < .001, d = .80, where impairment was reduced from intake (M = 72.50) to six-months (M = 50.70). Moreover, a significant difference and a small effect size were also detected for those without multiple domain impairments, t[288] = 4.27, p < .001, d = .26, where impairment was reduced from intake (M = 29.76) to six-month (M = 24.85).

Using a reduction to no (0) or mild (10) impairment as an indicator of successful outcome at the six month assessment, 45.2% of children with moderate or severe impairment at intake achieved a successful outcome in the School/Work domain, 66.6% in the Home domain, 47.1% in the Behavior Towards Others domain, and 50% in the Moods/Emotion domain.

## Discussion

The findings in this study provide evidence that the children who received school-based early intervention services experienced improvement in day-to-day functioning over a six-month period. This was not only true for the majority of the children who were functioning at a mild level of impairment, but for children with moderate or severe impairment in two or more functional domains. Although children with multiple domain impairments were functioning at a level typical of youth requiring services beyond outpatient services, improvement in overall functioning occurred from the initial assessment to the six-month follow-up. Moreover, when an outcome indicator of no or mild impairment was used, the overall results were promising. Between 45.2% and 66.6% of the children with multiple impairments achieved this criterion in each of the four areas of functioning: in school, at home, in interaction with others, and in regulation of moods. These results are noteworthy given that day-to-day functioning was assessed rather than just symptoms. Moreover, the outcome criterion used required children to reach a state of no or mild impairment, rather than just improvement.

Second, these results provide preliminary evidence that children, including those with moderate or severe impairment in multiple domains, could be supported by a comprehensive behavioral intervention within the school setting. Intervention research has demonstrated that such approaches can be effective in curbing disruptive behaviors and increasing competencies. In their review, Durlak and Wells (1998) found that preventive mental health interventions for children with subclinical disorders appear as effective as psychotherapy for children with established problems; in particular, approaches that target incipient externalizing problems.

The nature of the intervention available to children in this study was one that addressed several risk factors in multiple functional domains and as such, was more likely to result in positive outcomes than approaches that focus on single risk factors (Kaufmann & Dodge, 1997). The ability of the clinician to address immediate behavioral and emotional concerns in concert with the classroom teacher, school staff and parents, allowed for improvement across several functional domains. However, given the clear differences in functioning among children at intake, caution needs to be taken to ensure that interventions match the level of need and that peer aggregation for the delivery of intervention content is not counter-productive. Evidence is accumulating that interventions that aggregate children and adolescents involved in problem behavior may under some conditions produce iatrogenic effects.

An inherent strength of the children in the sample was the absence of functional impairment in their caregiver's ability to provide safe, consistent, and nurturing environments. It is plausible that higher levels of caregiver resourcefulness coupled with the availability of comprehensive support within the school setting contributed to children's functional improvements. Moreover, the children in this sample lacked some of the high-risk behaviors that typically draw children and youth into mental health systems of care, such as runaway behavior or harm to self or others. In fact, when compared to those involved with the state's managed care clinical services, children with multiple domain impairments displayed no differences in the School/Work, Behavior Toward Others, and Mood/Emotions domains. However, marked differences existed in the areas of Home, Self-Harm, and Substance Use.

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## Implementing Wraparound within School Settings: An Overview of the School-Based Wraparound Program in Central Nebraska and a Case Example

Reece L. Peterson, Al Neuhaus, Ann Tvrdik & Nathan Canfield

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## Introduction

The School-Based Wraparound Program (SBW) began serving children with serious emotional/ behavioral problems in the fall of 1998 as a result of a Center for Mental Health Services grant to Region III Behavioral Health Services in Kearney, Nebraska. The SBW model uses a team of two individuals to organize and coordinate wraparound: one with a mental health or social service background (Family Facilitator), and one with an education background (School Facilitator). The Family Facilitator makes initial contact with the family and obtains permission to exchange information. The Family Facilitator also conducts a strengths discovery process, and assists the family to develop a family-specific wraparound team, and then contacts service providers who are engaged with the family. The School Facilitator makes initial contact with the school and conducts a strengths discovery in the schools. The School Facilitator may also conduct observations to develop a baseline, consult with teachers to brainstorm about interventions related to behavior, and increase communication between school and family. The facilitators work as a team to facilitate all aspects of wraparound for a joint caseload of up to 20 youth and their families.

This model was designed specifically to address some of the school-related partnership issues which had affected service coordination efforts in the past. These issues included:

- Schools may fear that agency coordination may simply be a way to transfer long-term costs to the school.
- Since many service coordination efforts have centered on the family as the first priority, schools may view these efforts as merely being adversarial, engendering suspicion and distrust.
- Human service professionals who have limited knowledge of the organization, operation and culture of schools have conducted most previous service coordination efforts, sometimes leading to unrealistic expectations of the capabilities and limitations of the schools.
- Schools have had little knowledge of or experience with a wraparound approach, making it difficult for school personnel to be active participants.

The SBW Program is able to implement the ideals of the wraparound approach as well as to overcome obstacles to partnership with schools. In Central Nebraska, the SBW teams have had the same intake criteria and process as the wraparound providers working in the mental health agency, Region III Behavioral Health Services. For most of the teams, the mental health agency does the preliminary intake for each case. The SBW teams gather data, and then are provided graphed assessment data specific to the case to assist in the implementation of the wraparound process.

At this time, the four SBW teams in central Nebraska have served 187 youths and their families. The average age at intake was about 12 years, and the average length of service was 420 days for discharged youth. Seventy nine percent were male; 78% were Caucasian, 11% Hispanic, 3% African American, and 8% identified as other. All of the 187 youth had a DSM-IV diagnosis: 47% had Attention Deficit or Disruptive Behavior Disorders, 13% Adjustment Disorders, 11% Depressive Disorders, 9% Bipolar Disorder, 7% Anxiety Disorders and 13% had other disorders. The three most common presenting problems included non-compliance (64%), physical aggression (54%), and academic problems (45%).

## Method

The purpose of this report is to provide one case example which illustrates how the SBW team model works to develop the child/family team and utilizes assessment, particularly the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990), to identify strengths and needs as well as evaluate progress. The data presented are actual program data for one case, whose identity is disguised.

## Subject

Josh is a 13-year-old male diagnosed with Attention Deficit-Hyperactive Disorder (ADHD) and Bipolar Disorder. He resides with his biological mother and an 11-year-old brother in a rural community in central Nebraska. His parents were in the middle of a divorce at the time of initial referral. Josh was placed on stimulant medication at the age of three. He presented behavioral challenges at home and school throughout his elementary school years. Josh was excluded from a private catholic school during his sixth grade year. He participated in a Day Treatment Program during his seventh grade year due to aggressive and non-compliant behaviors.

Josh was referred to the SBW Program in the spring of his seventh grade year after he had engaged in a physical confrontation with his mother. He was oppositional with his mother and verbally and physically aggressive toward his brother. He continued to present challenging behaviors at school; he had poor peer relations and difficulty following basic school rules. Josh is a very capable student but was achieving grades far below his level of expectancy. On the CAFAS where higher scores indicate greater impairment, he scored in the severely impaired range in the areas of School/Work, Home, and Behavior Towards Others. The total CAFAS score (using eight subscales) was 120.

#### Measures

During the two years Josh and his family participated in SBW, additional assessment instruments were utilized throughout the wraparound process. Additional instruments used were: the Weekly Adjustment Indicator Checklist (WAI; Burchard, 1990), Eyberg Child Behavior Checklist (Eyberg, 1992), and the Sutter-Eyberg Child Behavior Checklist (Eyberg, 1992). The WAI indicated frequent noncompliance and occasional episodes of verbal and physical aggression. The Eyberg Child Behavior Checklist indicated some of Josh's more frequent problem behaviors, including: not obeying house rules, arguing with parents, verbally fighting with sibling, getting angry, being easily distracted and physically fighting with sibling. The initial Sutter-Eyberg ratings indicated Josh had difficulty staying on task, he was easily distracted and did not obey school rules.

The Ohio Scales Assessments (Olges, Melendez, Davis, & Lunnen, 2000) were implemented in place of Eyberg and Sutter-Eyberg Behavior Checklists, during the second year that the family participated in the SBW program, due to a change in assessment tools utilized in the Region III programs. The Ohio Scales Assessments were designed to assess behaviors of children with severe emotional disorders and appeared to meet the program's needs.

## Results

#### Goals and Supports

Following intake, a family/child wraparound team was formed to support Josh and his family. Josh's wraparound team included: both parents, his brother, a female friend of his mother, a Teammate mentor from school, his school counselor, an aunt, and a cousin. The wraparound team met at least monthly to identify and review goals. A safety plan was developed to provide immediate support and backup to Josh's mother. Initial goals for Josh were for him to respond appropriately to authority figures, to show improvement in the completion and organization of school work, and to be active in extracurricular activities.

To keep Josh and his brother safe during the summer break from school, a young adult caregiver was placed in the home during their mother's work hours. This person provided supervision and engaged the boys in pro-social activities. Once school started in the fall, an AmeriCorp volunteer was secured to work with Josh after school a few days a week in order to help him with homework and to develop his organizational skills. Josh began successfully participating in extra-curricular sports at school.

When Josh left the middle school and entered high school, his success in school continued. He became actively involved in marching band and drama. He maintained grades of "A"s and "B"s in most subjects and had no suspensions. It was the first year Josh had completed the school year without getting an "early out" from the school administrator because of inappropriate behaviors.

Weekly and monthly assessment data were gathered and reviewed on the WAI, Eyberg, Eyberg-Sutter, and Ohio Scales throughout Josh's participation in the program. These data were displayed graphically and provided for discussion during the monthly family wraparound meeting. Figures 1 and 2 show examples of data provided to families.

#### Outcomes

Josh's functional impairment was assessed through the administration of the CAFAS every six months following intake and discharge. The CAFAS total score (using eight subscales), showed a decrease of 50 points at six months, to a score of 70. There were decreases on School, Behavior Toward Others, Moods, and Self-Harm subscales. Josh's total CAFAS score remained at 70 points at the 12 month and 18 month ratings even though there was some variation in his subscales scores, as shown in Figure 3. His School subscale score went down from a Severe Impairment rating to a Mild Impairment rating while his Mood scale rating of Minimal or No Impairment at 12 months increased to a Moderate Impairment rating at 18 months. This variation in subscale scores is believed to be due to the fact that the 18-month rating covered the summer months when there was less time spent in school and more time spent with family members.

Josh's total CAFAS total score had decreased to 40 points at the time of discharge (24 months) and remained at that level at six months following discharge from the SBW Program (30 months). Josh continues to function successfully at school, home, and within the community. He achieves above average grades and has had no school suspensions in the year following his discharge.

#### Discussion

This case study is just one example of the effectiveness of the SBW program in helping families and children with severe emotional and behavioral impairments. Having the School Facilitator permitted a much better working relationship between the family and the school, and resulted in more communication between them than may have otherwise been the case.

The utilization of frequent and periodic assessment data is extremely important to the implementation of the wraparound process. The child/family team have access to their assessment data on a weekly and monthly basis. The Family Facilitator and School Facilitator collect the assessment data from families, youth, teachers, and caregivers which are submitted to the evaluation department at Region III. The evaluation department then compiles, charts and graphs the assessment data which are reviewed and utilized by the child/family team to adjust goals and interventions, coordinate services and to monitor progress in the team's challenge to empower the families toward natural supports and independent success. The School-Based Wraparound Program continues to demonstrate the importance of utilizing assessment data to determine needs and interventions to improve the lives of children and families.





Figure 2 Weekly Assessment Indicator Checklist - Josh





Figure 3 Child and Adolescent Functional Assessment Scale (CAFAS) Subscale Scores - Josh

> Figure 4 Child and Adolescent Functional Assessment Scale (CAFAS) Total Score - Josh



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## Brief Symposium

## A Comprehensive Approach to School Services: GEAR UP Year One Results

#### Introduction

#### **Oliver Tom Massey**

A number of studies have shown that children from lower socioeconomic class, and minority ethnic families perform worse academically than children from upper and middle-class families. Poverty has been shown to be associated with poor academic *Chair* Oliver Tom Massey

Authors Katheryne Downes Lana Yampolskaya et al. Michael Boroughs et al.

performance (Crooks, 1995; Pong, 1997; Ramey & Ramey, 1990; Richmond, 1992) and children from poor families have more often found themselves on noncollege-bound tracks (Braddock, 1990; Oakes & Lipton, 1995). The severity of the problems related to the poor academic performance and failure to complete high school, particularly among students from lower socioeconomic backgrounds, was recognized by the U.S. Department of Education (USDOE) in 1990, when academic success became a national goal (USDOE, 1990). In light of this, the Gaining Early Awareness and Readiness program (GEAR UP) was developed and implemented. GEAR UP was authorized by the Congress as part of the Higher Education Amendments of 1998 (Higher Education, 1998) and targeted cohorts of disadvantaged low-income students.

The GEAR UP program is a discretionary grant program designed to increase the number of low-income students who are prepared to enter and succeed in postsecondary education. The program provides five-year grants to states and partnerships to provide services to high-poverty middle and high schools. Grantees serve an entire cohort of students beginning no later than the seventh grade and follow that cohort through high school. Funds for the program are also used to provide college scholarships to low-income students.

The program is unique from other initiatives in that it employs partnerships committed to serving and accelerating the academic achievement of cohorts of students through their high school graduation. GEAR UP partnerships supplement existing reform efforts, offer services that promote academic preparation and the understanding of necessary costs to attend college, provide professional development, and continuously build capacity so that projects can be sustained beyond the term of the grant.

The GEAR UP program described in this symposium serves one high school and one middle school in a large urban county in Florida (with a population of about one million). A multiple method evaluation is being carried out to provide information about the program's efficacy. The summaries that follow address the population served, evaluation methods, and preliminary findings regarding student outcomes and satisfaction with GEAR UP activities.

## Demographics and Service Utilization Among GEAR UP Students

#### Katheryne Downes

#### Introduction

The purpose of this report is to summarize the GEAR UP participants' activities, as well as examine similarities and differences between the two schools with respect to demographics, service utilization, academic activities, and outcomes. In order to acquire information about student's participation in services, forms were developed that would capture the amount of time students were spending in services, what types of services they were utilizing, and how frequently these services were used. The development and use of these forms allowed the evaluation team to gain a better understanding of the differences in service utilization and the impact of these services by examining the dose effect of services on the students.

#### Method

Data were obtained from two sources. The primary source of data was the Student Course Information System (SCIS). Data on student GPAs, FCAT scores, attendance, and disciplinary referrals as well as demographic information were obtained at the end of the fall semester, 2002, and at the end of the spring semester, 2003.

The second source of data consisted of activity recording forms completed by GEAR UP case managers, tutors, and teachers. In order to collect data on activities offered by GEAR UP and the amount of time students spent on each activity, two recording forms were developed: (a) the Individual Activity Form, and (b) the Group Activity Form. The Individual Activity Form was used for recording the time case managers spent with individual students, while the Group Activity Form was used for any activity offered for a group of students simultaneously. Case managers and tutors recorded student participation in each activity and the number of minutes each student spent on an activity. Data on participation in activities were collected over a five-month period during the spring semester, 2003.

The GEAR UP program focuses on three domains to enhance student success: (a) academic, (b) behavioral, and (c) social factors. The design of the study consisted of a three-group comparison: the *No Participation Group*, the *Low Participation Group*, and the *High Participation Group*. These groups were compared in order to examine differences that may be attributed to the amount of time students spent in GEAR UP activities. Comparisons were made separately for participation in academic activities, participation in social activities, and utilization of behavior-related services. For each activity category, students who did not participate in that activity comprised the No Participation Group. Student participants whose time spent in activities within a specific category was below the median amount of time for the activity comprised the Low Participation Group. The High Participation Group consisted of students who spent equal to or above the median amount of time on activities. The groups were matched on gender, race, grade level, eligibility for free or reduced price lunch, and age.

#### Results

As of May, 2003, 455 students at the high school and 668 students at the middle school were enrolled in the GEAR UP program. At the high school, 75% of the GEAR UP students were African American and 62% were female. At the middle school only 37% were African American, 38% were Hispanic and there were approximately equal numbers of male and females enrolled (52% Male, 48% Female). Differences in social economic status (SES) existed between the schools as well. Eligibility for free/reduced lunch was used as a measure of SES. Sixty-eight percent of GEAR UP students at the high school were eligible for free/reduced lunch; 80% of GEAR UP students at the middle school were eligible for free/reduced lunch.

Among all GEAR UP students, 395 (87%) at the high school and 284 (43%) at the middle school received services of some type from the GEAR UP program. Of those receiving services, 195 at the high school and 142 at the middle school were designated as being high in service utilization. In the high school, 69.2% were female, and 81.5% were African American. At the middle school, 62.7% were male, 39.4% were Hispanic, 33.8% were African American, and 21.1% were Caucasian.

#### Discussion

Upon examination of the demographics, it is apparent that there are differences in the participants between the two schools. As seen in Figures 1 and 2, within the overall group of participants, African-American females are disproportionately represented in the high school and there are approximately equal amounts of African American and Hispanic students and male and female students in the middle school. Within the high participation group, African American females are again disproportionately represented in the high school and at the middle school males are overrepresented, but there are approximately equal numbers of African American and Hispanic students.



Figure 1 Participant Ethnicity

Figure 2 Participant Gender



## **Profile Characteristics and Outcome Change Among GEAR UP Students**

#### Lana Yampolskaya & Oliver Tom Massey

## Introduction

The purpose of this study was to assess effects of the program on participant outcomes, such as academic improvement, behavior improvement, and reduction of truancy.

## Method

Four hundred forty-seven students participated in this study. Students who dropped out of school or dropped out of the program any time during the spring semester, 2003, were excluded from the analysis. The age range for participants on the day of enrollment was 13 through 18 (M = 15, SD = 1.0). Data for this study were obtained from two sources: the primary source of data was the School District administrative dataset, and the second source consisted of the activity recording forms completed by GEAR UP case managers and tutors. Data on participation in activities were collected over a five-month period during the spring semester, 2003.

The study design includes a comparison of three groups: the *No Participation Group*, the *Low Participation Group*, and the *High Participation Group*. These groups were compared in order to discover differences that might be attributed to the amount of time students spent on GEAR UP activities. The propensity scoring technique was used to match the groups (Rosenbaum & Rubin, 1984). The groups were matched on gender, race, grade level, eligibility for free or reduced price lunch, age, and baseline GPAs. Statistical analyses consisted of Analysis of Variance (ANOVA), Factorial Analysis of Variance (ANOVA) With Repeated-Measures Factors and Between-Groups Factors, and logistic regression.

## Results

Of 447 GEAR UP participants, 167 comprised the High Participation Group when all activities were included. More females (69.2%) than males (30.8%) were in the High Participation Group, as were more African Americans (81.5%) than either Hispanics (10.8%) or Caucasians (5.6%). The majority of higher participants were 14 and 15 years old (68.2), and 53.3% of the students were in the 9<sup>th</sup> grade. In addition, among students in the High Participation Group, 66.2% were eligible to receive free or reduced price lunches. During the spring of 2003, high participants spent on average of nine hours (SD = 8.75) in the program, with a range from 2 hours and 10 minutes to 57 hours.

Students who spent a substantial amount of time on academic activities significantly improved their GPAs over time (see Table 1). The Group x Time interaction was significant, (p < .05). When changes in the FCAT reading scores were examined, a significant Time effect was also observed, F(1, 447) = 7.37, p < .01. Scores significantly improved over time for each group, but the Group x Time interaction was not significant. Similarly, FCAT math scores significantly improved over time for each group, P(1, 447) = 21.99, p < .001 but the Group x Time interaction was not significant.

We next determined whether utilizing behavior-related services had any effect on examined outcomes. For both GPA and FCAT scores, no statistically significant differences were found between the No versus Low and High Participation Groups and between Low and High Participation groups. There was a statistically significant Time x Group interaction and main effect for Time and Group on the number of disciplinary referrals (p < 0.05) when No Utilization Group (M = 1.6, SD = 3.01 at the end of the Fall semester, and M = 0.8, SD = 1.65 at the end of the Spring semester) was compared to Low and High Utilization groups (M = 2.7, SD = 3.83 at the end of the Fall semester, to M = 1.4, SD = 2.02 at the end of the Spring semester). The results of logistic regression also indicated that the High Participation Group for behavior-related services were less likely to have disciplinary referrals than students in the other two groups, Wald  $\chi^2(1, N = 447) = 17.19$ , p < .001, Risk Ratio = 1.76. Specifically, students who received

	No Participation Group Versus Low and High Participation Groups			
Source	df	SS	MS	F
		Between.	subjects	
Group participation	1	0.28	0.28	0.36
Propensity score	4	3.22	0.81	1.05
Group participation X propensity score	4	9.40	2.35	3.07
Error	437	334.74	0.77	
		Within s	subjects	
Time	1	8.56	8.56	0.22
Time X group interaction	1	1.36	1.36	0.35
Time X propensity score	4	9.17	2.29	6.00
Time X group X propensity score interaction	4 437	0.55 16.81	0.137 3.85	1.77
Error	437	16.81	3.85	

Table 1
<b>ANOVA Summary Table for Student GPAs by Participation</b>
in Academic Activities (N = 323)

Note. \*p < .05. \*\*p < .01.

greater than or equal to the median amount of time on behavior- related services were almost 1.8 times less likely to have any disciplinary referral during the spring semester of 2003. The 95% confidence interval for this estimate was between 1.36 and 2.29.

The results of repeated measures ANOVA indicated that high participation in social activities is significantly associated with a decreased number of disciplinary referrals. The average number of disciplinary referrals for students in the No Participation Group was 1.4 (M = 1.4, SD = 2.64) and 2.6 (M = 2.6, SD = 3.5) for the Low and High Participation Groups at the end of the fall semester, 2002. These numbers decreased considerably after participation in the program activities, i.e., at the end of the spring semester, 2003 (M = 0.9, SD = 1.86 for the No Participation Group and M = 1.1, SD = 1.78 for Low and High Participation Groups). The average number of disciplinary referrals declined 50%, from 2.2 to 1.1, for the High Participation Group. There was a statistically significant Time x Group interaction, F(1, 447) = 7.08, p < 0.05, main effect for Time, F(1, 447) = 39.73, p < .001, and main effect for Group, F(1, 447) = 5.98, p < 0.05, on the number of disciplinary referrals when the No Participation Group was compared to Low and High Participation Groups.

## Conclusions

Study findings revealed that participation in the GEAR UP activities did have positive outcomes on student academic performance and behavior. In particular, the results of the study showed that students who spent a substantial amount of time on academic activities improved their GPAs over time and students who spent a substantial amount of time on social activities significantly reduced their number of disciplinary referrals. In addition, students who spent considerable time on behavior activities were less likely to have any disciplinary referrals. These findings seem to be consistent with the emphasis of each component of the GEAR UP program, namely an improvement of academic performance for the academic component, the reduction of disciplinary problems for the behavioral component, and enhancement of social competence for the social activities component.

## **Evaluation: Results from the GEAR UP Student Survey**

#### Michael Boroughs & Oliver T. Massey

The evaluation of GEAR UP included results from surveys conducted with students. The initial student survey, which took place during the summer program, included both middle and high school students that participated in the program. Findings from the survey are summarized below. Because only a subset of participants in the larger program attended the summer program, survey efforts will be carried out in the future with the entire cohort to augment these findings with a more representative group.

## Method

**Participants.** Participants of the GEAR UP program at both the high school (N = 55) and the middle school (N = 89) participated in a student survey during their summer program. Of the 55 high school students that completed questionnaires, 61.8% were female. The majority of students were in the 10<sup>th</sup> grade (50.9%), while 3.6% were in 9<sup>th</sup> grade, 25.5% in 11<sup>th</sup> grade, and 9.1% were in 12<sup>th</sup> grade. The majority of respondents were African American (85.5%); while multiethnic students accounted for 5.5% of the sample and equally represented were Hispanic (1.8%) and other ethnicities (1.8%).

For the middle school students, of the 89 students who completed questionnaires, 39.8% were female. Students in the sample represented grades five through eight as follows: 5<sup>th</sup> grade, 4.2%; 6<sup>th</sup> grade, 35.2%; 7<sup>th</sup> grade, 39.4%; and 8<sup>th</sup> grade, 21.1%. Two groups, African Americans (39.5%) and Hispanics (38.4%), collectively formed the most represented ethnicities in the sample, with Caucasian students accounting for 11.6%. Equally represented were multiethnic and other ethnicities at 4.5% and one Asian student accounting for 1.1%.

*Procedure.* Students completed questionnaires during the GEAR UP summer program held on the campus of a local University. Participation in both the summer program and the survey effort was voluntary and was composed of students active in the GEAR UP program during the regular school year. Evaluators, as well as GEAR UP staff, facilitated the data collection. Other than demographic information, no other identifying information was asked of students on the questionnaires. The survey was confidential and students gave informed consent before their participation.

## Results

Although a total of 144 high and middle school students completed questionnaires, various individual items were not answered by all participants. The survey began with several general questions about GEAR UP student's experiences in their school, followed by specific questions about the program and ended with questions about their future plans. The results are provided separately for each school

#### **GEAR UP High School Program**

When asked how much they like going to class and learning, high school student's responses were an average of 2.1, on a scale from 1 = I like it very much to 5 = I dislike it very much. Using the same scale of likeability, they were asked how much they liked the teachers in their school and they responded with an average of 2.1, indicating "they like them".

Next we asked a series of questions asking students to endorse statements about their school experience. On this scale, ranging from 1 = *Strongly Agree* to 5 = *Strongly Disagree*, lower scores are akin to strong agreement while higher scores indicated strong disagreement. Examples of the statements we asked students to endorse included: *Hallways are safe between classes; school staff help me make plans for after graduation;* and *bullying and teasing are a problems at school. School is a good place to make friends* yielded the highest average score of 1.7 (see Table 1 for complete results).

	High School		Middle	School
Question Items	Average	SD	Average	SD
Hallways are safe between classes	2.0	0.87	2.5	1.24
My personal possessions are safe at school	2.7	1.28	2.7	1.33
Bullying and teasing are problems at school	2.9	1.33	2.4	1.44
I feel safe at this school	2.0	0.87	2.2	1.31
School staff help me make plans for after graduation	2.2	0.89	2.3	1.31
Drug abuse is a problem at school	3.5	1.23	3.1	1.58
School is a good place to make friends	1.7	0.92	1.6	0.91
School rules are fair	3.0	1.30	2.6	1.36
Most students follow the rules at school	2.9	1.19	3.2	1.44
Students do whatever they want at school	3.2	1.05	2.8	1.34
My school supports extra curricular activities	2.3	1.16	2.0	1.06
Teachers and staff respect students	2.7	1.30	2.6	1.36

Table 1
Summary of School Experience by School Type

Next we asked students about participation in organized activities including sports and clubs at school. The scores for these items indicated that students participated in organized activities including sports "a few times a week" and that the majority of respondents (83.6%) answered affirmatively to a question about membership in a club at school.

When asking students about what type of student they consider themselves and how far they think they will go after high school, on a scale ranging from 1 = Excellent, to 4 = Poor, the average score was 1.58, SD = .712—students described themselves as being somewhere between good and excellent students. A substantial number of students (47.3%) said they plan on a graduate degree after high school, followed by 30.9% saying they will pursue a four-year degree, with 12.7% saying they didn't know, and 3.6% saying either they had no plan or that they would pursue a two-year degree. Just 1.8% said that they would pursue a GED.

When asking students why the joined GEAR UP, the most frequently selected reasons was to learn about college (80%) and to learn about careers (76.4%). We also asked students how long they have been enrolled in the program and the majority stated one year or less (60%). Both two-to-three years and three-to-four years had an equal number of respondents (14.5% each) while one-to-two years had 10.9% of the respondents. Knowing how long students have been in the program, we asked how frequently they participated in program sponsored activities. Answers ranged from, 1 = almost every day, to 5 = I usually don't. The average was (1.8, SD = .998), indicating most students participated either almost everyday to a few times a week. We asked why students either participated or did not participate in GEAR UP. The majority said they participated because activities are fun (76.4%) or gives them something to do (72.7%). When asked about why they do not participate, the vast majority of students (98.2%) stated it was because their parents thought it was a waste of time.

In an effort to try to gauge changes in student's grades since joining GEAR UP, we asked students to describe their grades both before and after joining the program. The findings indicate self-reported grades improved for students after joining the program.

#### GEAR UP Middle School Program

When middle school students were asked how much they like going to class and learning, student's responses were an average of 2.08 (SD = .997), on a scale from 1 = I like it very much, to 5 = I dislike it very much. Using the same scale of likeability, students were asked how much they liked the teachers in their school and they responded with an average of 2.07 (SD = .907), indicating they like them.

We asked students to endorse statements about their school experience. On this scale, ranging from 1 = *Strongly Agree*, to 5 = *Strongly Disagree*, lower scores are akin to strong agreement while higher scores indicate strong disagreement. An example of statements we asked students to endorse included: *school is a good place to make friends; I feel safe at school; and school rules are fair.* As with the high school students, the item *school is a good place to make friends* yielded the most positive score with an average score of 1.6 (see Table 1 for further details).

When asking students about participation in organized activities including sports and clubs at school, the average score indicated that students participated in organized activities including sports "a few times a week"; though many said almost every day (38.6%). The majority of respondents (53.4%) answered affirmatively to a question about membership in a club at school.

When asking students about what type of student they consider themselves and how far they think they will go after high school (on a scale ranging from 1 = Excellent, to 4 = Poor), most reported that they were good students (45.5%) followed by excellent (28.4%) and fair (26.1%). None of the respondents rated themselves as poor students. A large proportion of the students (41.9%) said they plan on a graduate degree after high school, followed by 10.5% saying they will pursue a four-year degree, with 9.3% saying they will go for a GED, and 7% saying they do not plan on post-secondary education. Just 5.8% said they would pursue a two-year degree while 25.6% said that they did not know what they would do after high school graduation.

When asking students why the joined GEAR UP, the most frequent responses selected by middle school students included *to improve my grades* (62.9%) and *to get involved in activities* (37.1%). We also asked students how long they have been enrolled in the program and the majority (85.7%) stated for one year or less. Those with one-to-two years accounted for 9.5% of respondents, and those with two-to-three years made up 4.8% of the sample Regarding frequency of participation in GEAR UP activities, half of the middle school students (50.6%) reported that they did *so almost every day*, followed by 33.3% who reported *a few times a week* and 9.2% *a few times a month*. The least frequent responses, *a few times a year* or *I usually don't*, were endorsed by 3.4% of the students each.

When middle school students were asked why they either participated or did not participate in GEAR UP activities, the most frequently endorsed reasons were that *they help with their grades* (50%) or that they *are fun* (44.3%). Finally, when asked about why they do not participate, the most frequent response (29.9%) was because "they did not have enough time."

In an effort to try to gauge changes in student's grades since joining GEAR UP, we asked students to describe their grades both before and after joining the program. The results indicated that, based on student self-reports, grades improved after joining GEAR UP.

#### Discussion

These results summarize questions posed to the student GEAR UP participants of the summer program regarding their participation in activities and satisfaction with the program. A limitation to these findings is that only a self-selected sub-sample of participants attended the summer program. Future surveys will be carried out during the regular school year to augment these results.

This sample of students likes the program and collectively feels that it has provided information to them about college and careers. With most students claiming they plan on graduate study, clearly there is an upbeat attitude that has inspired them to believe that "the sky is the limit."

Future survey considerations included retesting students during the regular school year as well as creating a parent survey to measure parent contributions to students' feelings about post-secondary education.

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Massey, Downes, Yampolskaya et al. & Boroughs et al.

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430 – Research and Training Center for Children's Mental Health – Tampa, FL – 2005

## Parental Involvement and Classroom Behaviors for Students with Academic and Behavioral Risks

## Introduction

One of the most accurate predictors for academic achievement and life-long success of a child is the role of parental involvement in schooling. Numerous studies have reported how parental involvement improves a child's cognitive skills, which makes them Jennifer Y. Lee Felicia L. Dehaney Shirley R. Ball Philip Friedman

more likely to succeed in the academic arena. Edwards and Young (1992) summarized that "studies point to higher student achievement when parents participate in school activities, monitor children's homework, and otherwise support the extensions into the home of the work and values of the school" (p. 73). Epstein (1988) suggested that parental involvement emphasizes to the child the importance of education and therefore leads to more responsible efforts in school. It is fundamental that parents have a positive attitude and outlook on their child's academic success because this impacts the child's perception of school.

Research has also indicated that children whose parents and/or primary caregivers share in their child's formal education tend to excel and perform better in school (Kaplan & Midgley, 1999). The benefits of parental involvement seem endless, from higher grades and test scores to more positive attitudes and behaviors in the school environment. It seems clear that when parents work with schools to support student learning, academic and lifelong success will be evident.

Unfortunately, African American children from disadvantaged backgrounds are often placed at risk for academic failure very early in life. From the time they enter school their cognitive, physical and emotional development lag behind their White counterparts. These patterns continue as they progress through upper grade levels. African-American children are often reported as not succeeding in public schools and fall well below the national average on standardized testing scores in reading and mathematics according to NAEP (2000). Parents of these children are also much less likely to get involved in their children's education, further exacerbating the problem. Engaging the parent in the school environment, however, can shield the disadvantaged child from forces that undermine achievement (Ramey, 1999).

*The student perspective.* Why do students avoid seeking parental help on their schoolwork when they need it? Why might they blame their family or home environment when they do poorly on an exam? What might explain students' disruptive behavior during class? These are the questions that drive our current research. In this study, we focused on goal theory of motivation, basing our research on studies that have linked maladaptive student behaviors to the goals they perceive at the classroom level. We realize, however, that goals represent only one aspect of the students' classroom experience. Students' behaviors may depend upon the extent to which they feel supported and encouraged by their parents when they do not understand what is going on in the classroom. As we consider the ways in which classroom environments relate to young adolescents' academic behaviors, we have examined students' perceptions of parent support and enthusiasm for their academic endeavors and goals.

According to Covington (1992), students engage in some behaviors considered detrimental to learning—such as avoiding parental help—in order to protect self-worth. Situations in which students are likely to be judged negatively by adults or peers threaten self-worth and result in students' avoidance of these situations. Thus, students may not ask questions if they feel that doing so would demonstrate a lack of knowledge or ability. Similarly, students may engage in projective coping (e.g., blaming the home environment when they do poorly on a test) or use disruptive behavior in class in order to deflect attention from their difficulties at home and further protect self-worth. This study seeks to identify the relationship between parental involvement and student academic behaviors. We define parental involvement as suggested by Grolnick and Slowiaczek (1994) as the *dedication of resource by the parent to the child within a given domain* (p. 238). Such a definition recognizes that there is a difference between parents' overall involvement with the child and involvement in the child's education. Because of parents' values, time commitments, and availability of resources, they may choose to, or be forced to, devote their time and energies to domains differentially (i.e., to school, social activities, athletics).

It was hypothesized that student perceptions of parent support, enthusiasm, and encouragement will be negatively related to maladaptive school behaviors. When students perceive parents as enthusiastic about their academic activities, supportive when students need help, and careful not to embarrass them when they have difficulty, they will be less likely to avoid seeking help, disrupt class, or blame their home environment for their difficulties in class. We also hypothesize that the relation of performance approach goals to maladaptive outcomes will depend upon the degree to which the parent is involved in their academic activities. Students may respond differently to classroom environments in which the goal is to outperform others or demonstrate ability, depending on whether they perceive that parents support them when they do not understand something, rather than putting them down when they demonstrate a lack of ability.

## Methodology

*Participants.* A sample of 97 students was selected from a low-income and low performing urban middle school in the Washington, DC. The school's population—100% African American/Black—was comprised of 46.9% seventh grade students, 35.4% eighth grade students, and 17.7% in ninth grade. The students ranged from 12 to 16 years of age, with 12.9% 12 years of age, 32.9% 13 years, 29.4% 14 years, 23.5% 15 years, and 1.2% 16 years of age). With respect to gender, 47.4% of the students were female.

*Project.* This research is part of the CRESPAR II program, which focuses primarily on the development, evaluation, and dissemination of the Talent Development Middle School (TDMS) and the Talent Development High School (TDHS). Versions of these approaches for serving secondary students who have been placed at risk for school failure are being developed at both Johns Hopkins and Howard Universities. Other studies focusing on retention, dropout prevention, and dropout recovery also take place within the CRESPAR program.

*Materials.* Each student responded to a questionnaire designed to survey how students at this particular school feel about school and things that happen in this school. Specifically, questions focused on students' perceptions of classroom practices, school climate, and parental involvement. Parent involvement items rated (a) the degree to which students felt their parents could be counted on for help and emotional support, (b) the parents' academic expectations of the child, and (c) the parental concern about their child's academic progress. All items were rated on a 4-point scale, with 1 = *Strongly Disagree* and 4 = *Strongly Agree*. Internal consistency of this questionnaire was assessed with Cronbach's alpha and was acceptable at .79.

A second 24-item questionnaire, utilizing a 5-point scale, rated the students' self-measurement of their actual behaviors, strengths, and talents in school. The reliability for this scale using Chronbach's alpha reached .88.

## Results

A series of *t*-tests were used to compare student class repeaters and non-repeaters on their perception of parent support and involvement. There was little difference between the two groups in their perception of parents' expectations of them, t(88)=-.73, p>.05, their parents' interest in their school progress, t(91)=1.25, p>.05, or their parents' availability to help with homework, t(91)=.18, p>.05.

However, a number of correlations for the entire group suggested that there was an inverse relationship between perceived parent involvement and behaviors that would lead to poor academic performance. Students with perceptions of high parent availability for help and support were (a) less likely to give up if an assignment was too hard, r = -.254, p < .05; (b) did not come to school just to have a good time, r = -.214, p < .05; (c) felt that doing well academically would pay off, r = .265, p < .05; (d) were more involved with class activities, r = .255, p < .05; (e) enjoyed class activities more, r = .316, p < .01; (f) paid more attention in class, r = .298, p < .01; and (g) felt classroom activities were more interesting and fun, r = .220, p < .05. However, there was little relationship between students' perceptions of their own school performance on specific academic activities and perceptions of parent involvement.

#### Discussion

When students perceived that their parent was involved with their schooling, they reported more positive attitudes and beliefs about school activities. In addition, students' perceptions of parent involvement moderated the relation between mastery goal perceptions and projective coping, and between performance-approach goal perceptions and avoidance of help-seeking. It seems that students' perceptions of parent involvement were good predictors of student attitudes toward school and the school environment.

However, student perceptions of parent involvement did not relate to specific student outcomes or at least self-perceptions of student strengths and competencies. Results suggest that that support, more so than enthusiasm, establishes a sense of trust and acceptance between students and parents, decreasing students' engagement in behaviors that serve to hide their lack of knowledge or understanding. Future analyses will more rigorously test the independence of parent support from perceived mastery goals and parental efforts not to embarrass their children, and will assess parent support as a moderator of the relation between classroom achievement goals and students' maladaptive outcomes.

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## Promoting a Successful Transition to High School: Preliminary Results of a School-based Randomized Controlled Trial

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## Introduction

The transition to high school can be very stressful for students and, for vulnerable students, can lead to increased depressive symptoms, behavioral problems, substance use and school failure. Early intervention designed to support and strengthen the skills of vulnerable students as they move from middle to high school may increase their chances of success in high school. In collaboration with Seattle Public Schools, the University of Washington High School Transition Study is a randomized controlled trial of a skills-based prevention program (Coping and Support Training–CAST) for at-risk students. This summary outlines the procedures developed for the study, and presents preliminary findings.

## Method

All 8<sup>th</sup> grade students in four Seattle Public Schools, who returned consent/assent forms, completed a brief stress and coping screen. The screen included the Moods and Feelings Questionnaire (MFQ: Angold, Costello, Messer, & Pickles, 1995) and the Youth Self –Report form (Achenbach, 1991). A total of 497 students completed the screen, and, of these, 88 agreed to participate in the second part of the study (Part 2) which is a randomized controlled trial of a preventive intervention program. The students in Part 2 were selected based on having a high MFQ score (>15) and low YSR score (<18). In the trial, students were randomly assigned to either the intervention (N = 44) or control (N = 44) condition. In the trial, students were randomly assigned to either the intervention or control condition. The intervention condition involved the implementation of a skills-based curriculum taught to groups of 6 students. Each group of students attends 12 meetings over 6 weeks. The curriculum focuses on four core skills: self-esteem enhancement, decision making, personal control (anger, depression, stress management), and interpersonal communication. These skills are then practiced in applications to improve school performance, mood management, and drug use control. Two additional components to the intervention condition are parent meetings held in family homes and student booster sessions held early in 9<sup>th</sup> grade.

All students and parents complete questionnaires several times during their participation in the program. Questionnaires cover a range of topics with particular emphasis on the target outcomes of the program: mental health status, mood management, drug use control, and school performance. Given that the intervention is still in process for the first study cohort, the data represented in this presentation are predominantly screening and baseline data. All data are based on student self-report.

*Sample.* We plan to enroll 400 students in the HSTS randomized controlled trial over four years. Sample characteristics of the year 1 cohort on which the current data are based are presented in Table 1.

#### Table 1 Cohort 1 Demographics

	Screened (N = 497)	Part 2 (N = 88)
Male	48.3%	31.8%
Female	51.7%	68.2%
White	48.5%	52.3%
Black	11.5%	14.8%
Asian	20.1%	13.6%
Native Am.	.6%	1.1%
Hispanic	8.7%	6.8%
More than One Race	19.3%	18.2%

*Measures.* Measures utilized to assess target outcomes included the Moods and Feelings Questionnaire (Angold, et al., 1995) assessing depressive symptoms, the Drug Knowledge and Involvement Scale (Eggert, Herting & Thompson, 1996) assessing substance use, and the Personal and Social Skills Inventory (PSSI: Eggert, Thompson, Herting, & Nicholas, 1995) assessing skill acquisition (e.g., decision-making, mood management, school performance and drug refusal skills).

## Results

Screening Data. 497 students completed the screening questionnaire. As depicted in Figure 1, scores on the externalizing items of the YSR were low across the sample and did not differ significantly for boys versus girls. On the MFQ, girls endorsed significantly higher scores. Given that little is known about differences across ethnic groups in terms of rates of reported depressive symptoms, ethnic group differences were explored. The sample was predominantly European-American or Caucasian (n = 241) but included substantive subsets of children representing different ethnic groups including Asian-American (n = 100), African American (n = 57), Native American (n = 3), and more than one race (n = 96). Figure 2 depicts the pattern of findings across these groups. Scores on the externalizing items of the YSR were not elevated and no significant group differences were observed. 8th graders from all the ethnic groups represented reported higher MFQ scores than the Caucasian sample with the MFQ scores of the Native American group reaching statistical significance.

*Outcome Findings.* No significant group differences emerged in initial analyses of data after completion of the first stage of intervention. Table 2 presents self-report ratings of mood, as measured by the MFQ, as assessed at Baseline, End of 8<sup>th</sup> grade, and Beginning of 9<sup>th</sup> grade for both the intervention and control participants. Means and standard deviations for smoking cigarettes, drinking, and marijuana use for both groups are presented in Table 3. In Table 4, skill acquisition for the target outcomes for the intervention group, only, are depicted for the Baseline and Beginning of 9th grade assessments.

## Discussion

The High School Transition Study is an evaluation of a randomized controlled trial of a skillsbased intervention for at-risk 8th grade students. Preliminary results were presented for self-report data from the first cohort of participants from baseline to the beginning of 9th grade. There were trends for each target outcome indicating that the intervention participants are performing slightly better in the program goals than the control participants. Specifically, the overall mean for mood, and the percentage of students who had initiated smoking, alcohol use, and/or marijuana were lower for intervention students than for control students. In addition, the intervention students demonstrated



436 – Research and Training Center for Children's Mental Health – Tampa, FL – 2005

MFQ	Control (Mean)	SD	Intervention (Mean)	SD
Baseline*	9.04	(5.74)	8.53	(5.23)
End of 8th	7.07	(4.83)	7.68	(4.92)
Beg. of 9th	6.09	(5.52)	6.89	(6.51)

#### Table 2 Mood based on Moods and Feelings Questionnaire (higher scores indicate more distress)

\* Baseline scores based on brief MFQ with 13 items and 11 as clinical cutoff, versus longer MFQ used in screen with 15 as our cutoff for "distress."

## Table 3 Percentage of Students who had tried Cigarettes, Alcohol, and Marijuana

Smoking % tried	Intervention	Control	
Baseline	19.0	23.3	
End of 8th	23.3	20.9	
	(N = 44)	(N = 44)	
Beg. 9th	30.2	31.0	
Drink % tried			
Baseline	35.7	57.1	
End of 8th	42.9	46.5	
Beg. of 9th	44.2	46.5	
Marijuana % tried			
Baseline	27.9	31.0	
End of 8th	30.2	30.2	
Beg. of 9th	30.2	32.6	

#### Table 4

#### Means and Standard Deviations for the Personal and Social Skills Inventory (PSSI: Eggert, Thompson, Herting & Nicholas, 1995) Assessing Skill Acquisition

	Baseline		Beg. of	
	Mean*	SD	9 <sup>th</sup> Mean*	SD
Appreciate Others	3.55	(.72)	3.70	(.59)
Decision Making	3.37	(.76)	3.43	(.66)
Managing Moods	3.42	(.93)	3.41	(.68)
Managing School	3.76	(.86)	3.70	(.58)
Controlling Drug Use	4.00	(1.06)	4.12	(.98)
Total Skills	3.60	(.71)	3.64	(.52)

\*Lower scores reflect greater skill in each area.

skill acquisition in three target areas: Appreciating Others, Decision Making, and Controlling Drug Use. It is not surprising that ratings of school management dropped slightly from baseline to the beginning of 9th grade as the academic demands of high school are greater than in middle school. Due to the preliminary nature of these results, it is too early to make statements about the effectiveness of this intervention, however the trends are promising. Future analyses over time should identify improved outcomes for youth in the intervention group that can be clearly linked to the program.

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