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Journal of School Psychology 47 (2009) 245–265

Journal of School Psychology

# Families and schools together: An experimental study of multi-family support groups for children at risk

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Received 5 November 2008; received in revised form 11 February 2009; accepted 9 March 2009

**Abstract**

We evaluated a multi-family support group intervention program in elementary schools. Kindergarten through third-grade children at eight urban schools in a Midwestern university community were universally invited to participate in the Families and Schools Together (FAST) program, and made up half of the study participants; the other half were K-3 children identified by teachers as having behavioral problems and being at risk for referral to special education services. Children were initially paired on the basis of five relevant matching variables, including teacher assessment of behavioral problems, and then randomly assigned to either ongoing school services (control) or the FAST program. Parents and teachers completed pre-, post-, and 1-year follow-up assessments. Data were available and analyzed for 67 pairs. Immediate follow-up parent reports showed that FAST students declined less on a family adaptability measure relative to control group students. This effect was still present at the 1-year follow-up

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ACTION EDITOR: Robert C. Pianta.

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doi:10.1016/j.jsp.2009.03.001

assessment. In addition, FAST parents reported statistically significant reductions in children's externalizing (aggressive) behaviors, as compared to the reports of control group parents. School district data showed descriptively fewer special-education referrals for FAST children (one case) as compared with control group children (four cases). Results are discussed in relation to future research on universal prevention programs.
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*Keywords:* Families and schools together; Family intervention; Prevention

Prevention services have become a priority for many federal agencies for policy, practice, and research for over a decade (Institute of Medicine, 1994). Congress requested a report ("Promotion and Prevention in Mental Health: Strengthening Parenting and Enhancing Child Resilience"), presented in June 2007, by the U. S. Department of Health and Human Services (2007), Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, which highlighted 13 evidence-based programs. Prevention of childhood mental health problems has become a priority in the evidence-based practice movement (APA Task Force on Evidence-Based Practice for Children and Adolescents, 2008).

This collective recognition of the importance of school-based prevention is based on strong evidence that school-based prevention and early intervention services can and do prevent the onset of problems among students in low-, moderate-, and high-risk categories (e.g., Dickson & Bursuck, 1999; Lane & Menzies, 2003; Simmons et al., 2002;Walker & Shinn, 2002). Consequently, education policymakers, researchers, and practitioners have begun to recognize the importance of prevention to national education goals and have called for school reform initiatives that incorporate research-based prevention and early intervention programs into ongoing school activities. Response-to-Intervention (RtI) is, in part, an outgrowth of these developments (Kratochwill, 2006; 2007; Kratochwill, Albers, & Shernoff, 2004).

A growing number of school-based mental health programs for children with serious emotional disturbance (SED) have empirical evidence of their efficacy (Rones & Hoagwood, 2000). Some authors (e.g., Brown et al., 1996; Kumpfer & Collins, 2004) have identified parent training and family-based programs as effective interventions for children with or at risk for SED. Such programs provide parents and families with resources, social support, and techniques for dealing with challenging behavior. These authors have also recommended family-centered interventions–that is interventions that address the needs and stresses of the entire family–in addition to interventions that focus only on the individual child's behavior. These authors have recognized that the family system can experience stress that is specific to raising a child with SED, while also struggling with stresses related to social context, such as poverty, domestic violence and child abuse, and substance abuse, which affect the family context and the family members.

Traditional interventions for children with SED concentrate on improving maladaptive behavior after it has become a significant impairment. An alternative approach is to offer prevention and early intervention programs that can decrease the risks for, and increase the protective factors for, children with or at risk for SED, their families, the school, and the community (e.g., Levine, Perkins, & Perkins, 2005; Mrazek & Haggerty, 1994; Walker & Shinn, 2002). Such approaches could reduce the need for SED services over time and blends in nicely to a population-based perspective and a prevention-oriented service

delivery approach (Baker, Kamphaus, Horne, & Winsor, 2006), as well as the prevention-based developments in RtI (Kratochwill, Clements, & Kalymon, 2007).

The study reported here implemented and evaluated one such approach — Families and Schools Together (FAST), a family-centered, multi-family support group program that has been successful at engaging low-income, stressed, and socially isolated families of school-aged children in school-related activities (McDonald, Billingham, Conrad, Morgan, & Payton, 1997; McDonald & Moberg, 2002). FAST is listed in the National Registry for Effective Prevention Programs of the Substance Abuse and Mental Health Services Administration (SAMHSA) based on a peer review of FAST evaluations (Schinke, Brounstein, & Gardner, 2003), and it has been identified by the U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention (2006) as an "exemplary" research-based model program. The FAST program has been successfully implemented in more than 800 schools as an early prevention and intervention program for high-risk youth (McDonald & Frey, 1999). The program is distinguished by its cultural sensitivity to diverse populations and its fostering of partnerships between parents and schools (Kratochwill, McDonald, Levin, Young Bear-Tibbetts, & Demaray, 2004).

At each school where FAST is implemented, a trained collaborative team that is constituted to reflect the social ecology of the child guides parents as they in turn direct their families in the program activities. At a minimum, the team must include four members: a parent from the child's school; a school representative (usually a school social worker or an outreach specialist appointed by the principal); and two members of local community-based agencies (usually a social services agency or alcohol and other drug abuse prevention program). Teams are created based on needs identified by the implementing agency, usually the school. For example, if a school identifies domestic violence as a significant issue for the families they are recruiting, a team member from a domestic violence prevention program may be included as one of the two community-based agency representatives.

The team is also required to represent the culture of the families that will be participating in the program. If half of the families being served are Spanish-speaking Mexican-Americans and half are English-speaking Anglo-Americans, the team must be similarly composed of half Spanish-speaking Mexican-Americans and half English-speaking Anglo-Americans. The cultural representation of the team enables it to communicate respectfully and appropriately with parents in the parents' language of choice.

The shared governance approach of FAST has resulted in high program retention rates (see Kratochwill et al., 2004; McDonald, Coe-Braddish, Billingham, Dibble, & Rice, 1991; McDonald et al., 1997; McDonald & Sayger, 1998). Parents, school personnel, and representatives from community mental health and substance abuse treatment agencies combine their expertise to facilitate the multi-family groups through a nontraditional, nondidactic process.

FAST sessions last approximately 2 1/2 h and include a meal at the family table, singing, parent-led family activities, coaching of parents to do "responsive play" and parent support groups. The FAST activities that are based on experiential learning are designed to enhance social capital—building relationships while also reducing family stress and increasing children's attention span. The activities apply the social ecological theory of child development (Bronfenbrenner, 1979); family stress theory (Hill, 1949; 1972; McCubbin & Patterson, 1983); and family systems theory (Alexander & Parsons, 1982; Boyd-Franklin & Bry, 2000; Minuchin, 1974; Satir, 1983; Szapocznik & Kurtines, 1989). FAST's highly interactive group

process involves multiple behavioral rehearsals (using embedded compliance requests) with the goals of increasing parents' control over their children, enhancing families' communicative and problem-solving skills, increasing sensitivity to and expression of feelings within families, strengthening children's impulse control, and increasing reciprocal and responsive play between parents and their children. Weekly attendance for 8 weeks at the multi-family group also builds trust among a socially inclusive, social support network of parents. Eighty-six percent of FAST parents report maintaining friendships over time with parents they met at the 8-week group sessions (McDonald & Sayger, 1998). More detailed information on the components of the FAST program is provided in Kratochwill et al. (2004) and on the various websites where FAST is featured as an evidence-based program.

Each technique used in FAST is based on National Institute of Mental Health—funded research on the interplay among: (a) child development and parent-child responsiveness (Barkley, 1987; Kogan, 1978; Guerney & Guerney, 1989; Luthar & Zigler, 1991; Webster-Stratton, 1985); (b) family systems (Alexander & Parsons, 1982; Minuchin, 1974); (c) social support (Egeland, Breitenbucher, & Rosenberg, 1980; Ell, 1984; Gilligan, 1982; Wahler, 1983); and (d) poverty (Belle, 1990; Dunst, Trivette, & Deal, 1988; Hill, 1949, 1972; McCubbin & Patterson, 1983).

Evaluations of FAST have demonstrated the program's positive effects on parent involvement, child behavior, and teacher perceptions of child performance, along with reductions in child aggression. Three randomized controlled trials (RCTs) of the FAST program have been completed. All three completed studies used standardized outcome measures of child behavior: the *Social Skills Rating System* (SSRS; Gresham & Elliott, 1990) and the *Child Behavior Checklist* (CBCL; Achenbach, 1991).These include subscales for social skills, aggression, and academic competence. Two of the studies used measures of parent involvement. However, the populations, recruitment strategies, and research designs varied.

The first study (Abt Associates, 2001) involved low-income urban African-American children in New Orleans ($N=400$) who were identified as at risk by teachers and randomly assigned to a FAST treatment or control group. Among families that agreed to participate, 77% actually participated in at least one session, and among those who attended at least one session, 78% attended at least five, for an overall completion rate of 60%. Outcome ratings by parents and teachers for students assigned to treatment and control groups were analyzed using hierarchical linear modeling (HLM) and an intention-to-treat (ITT) model. One year after the intervention, children in the FAST treatment group showed statistically more positive scores than control group children on social skills (SSRS), as rated by parents. In addition, children in the treatment group had statistically lower scores than children in the control group on the CBCL subscale for externalizing (aggressive) behaviors, as reported by their parents (Cohen's $d=.26$). Parent involvement was analyzed after 1 year: FAST parents volunteered more and were more involved as parent leaders than control group parents (Abt Associates, 2001).

A second study involved randomly assigning second-grade classrooms to either FAST or a comparison condition called FAME in 10 inner-city elementary schools serving at-risk, low-income communities in Milwaukee, with a focus on African-American and Mexican-American students (McDonald et al., 2006). In the FAME condition, family education booklets based on behavior modification principles were mailed to participants' homes, with active follow-up. The study included a 2-year follow-up. In this study, 75% of all the families randomly assigned to FAST attended the program at least once, and 78% of these

families completed at least six sessions of the 8-week program. An ITT HLM analysis of 2-year outcomes found that teachers blind to condition gave higher ratings of academic competence to children assigned to the FAST condition ($d$=.23) than to children assigned to the comparison condition (McDonald et al., 2006; Moberg, McDonald, Brown, & Burke, 2002). In the sample as a whole, findings for behavioral outcomes were statistically nonsignificant (Moberg et al., 2002). However, an HLM analysis that examined the program impact on Latino children in the sample ($N$=130) found that at the 2-year follow-up, teachers gave FAST students statistically higher ratings on academic competence and social skills and statistically lower scores on aggression than FAME students (McDonald et al., 2006). Ninety percent of the Latino families randomly assigned to FAST attended the program at least once and 85% of these families graduated from the 8-week group program.

The third RCT (Kratochwill et al., 2004) featured universal recruitment of K-2 American-Indian children from three reservation schools in a generally low-income, rural area. Fifty matched pairs were created based on five variables (age, gender, grade, tribe, and teacher assessment of high vs. low classroom aggression on the CBCL). The matched pairs were then randomly assigned to FAST or control groups, and pre-post and 1-year follow-up data were collected and analyzed with an ITT model. Of the parents who attended at least one FAST session, 85% returned for a minimum of five more weekly sessions to graduate. Results showed selected statistical differences at 1-year follow-up. For example, assessments by teachers, who were again blind to condition, favored FAST participants over control participants with regard to their academic performance ($d$=.77); and parent reports indicated that FAST students were much less withdrawn in comparison to control students ($d$=1.92).

Although the foundation of FAST from the mental health literature is strong, integration of the research knowledge base from education or special education into FAST has been minimal. For example, there has been little review of education-specific variables (such as engaged learning time) that promote academic achievement and equity. Even parent involvement, which would seem to be an area for conceptual overlap, is featured differently in the mental health and education literatures (e.g., Christenson, Rounds, & Gorney, 1992; McDonald et al., 1991; Sheridan & Kratochwill, 2008). Our research begins to address this gap. In this study, we elaborated on Epstein's (1990) empirical research and the education literature (Christenson et al., 1992) by organizing FAST's program components around the mental health/family systems/support network research and the academic correlates.

FAST creates a structure for a respectful partnership between the service-user parent and the school staff in anticipation of a collaborative evaluation process. The benefits of these relationships should result in enhanced services to the child over the years. With reduced family stress and enhanced social support, there may also be a reduction in the symptomatology of the child and prevention of a formal referral for special education services. We undertook an RCT to test these hypothesized benefits.

## Method

### *Participants*

Through a collaborative effort with an urban school district in a Midwestern university community, three types of participants were recruited for the 3-year study: teachers, parents,

and their children. Informed consent for participation was obtained from teachers and parents following approval of the project from the university and the school district's institutional review boards. The number of participants and the recruitment criteria are described below.

*Teacher participants*

School administrators selected eight district elementary schools based on their willingness to participate in the FAST program. Kindergarten, first-, and second-grade teachers from the eight schools received in-service training on the research and the multi-family group intervention. If the teachers were willing to participate in the project, they were informed about the nature of the research and asked to provide written consent. Participating teachers were asked to refer children with emotional and behavioral problems to the project. These children ($N=69$) were considered to be part of the "pre-referral" system operating in the school (i.e., pre-referral interventions were considered prior to a referral for SED).

*Parent and child participants*

The schools facilitated a mixed recruitment process. Families were recruited universally across K-3 classes, as well as from teacher-identified at-risk checklists. Each school generated names of children and their parents across K-2. In all, 225 families were visited at home and invited to voluntarily participate in the research project. The recruitment included both children without any behavioral problems and the children identified by teachers as "at risk" students based on the Child Behavior Checklist. Initially, 172 of the 225 visited families (76%) agreed to participate in the study. Within each of the eight resultant "cycles" (i.e., school-based FAST interventions implemented sequentially at the eight participating schools over a 3-year period), (1) as many volunteering students as possible were matched on the basis of a number of designated characteristics, and then (2) randomly assigned either to participate in the FAST program or to serve as non-FAST controls. This process produced a total of 67 matched pairs. All teachers, observers, and testers were kept "blind" concerning participants' experimental condition. Primary student matching characteristics included grade level, gender, and teacher ratings on the internalizing and externalizing behavior scales of the Child Behavior Checklist.

Specifically, the recruitment involved the following:

a) Project staff met with K-2 teachers and staff at each elementary school to review the project, secure consent to participate from teachers, and encourage help with recruitment. All K, 1, 2 (and in some cases, 3) teachers agreed to participate.
b) The school sent out letters to all K-2 parents explaining the project and asking for consent to participate and/or permission to visit the family at home.
c) A list of "referred" students and their families was compiled by school staff such as social workers, principals, teachers, and psychologists and was given to FAST team members. These families were contacted by school staff or FAST team members and then visited by FAST team members at home. Home visitation was usually conducted by the parent partner and mental health partner.

d) If these methods failed to produce adequate numbers for the project, some schools elected to hold an open house at a local community center to explain the project and secure informed consent to participate.
e) In addition, some classroom teachers made phone calls and personal contacts with hard-to-reach parents.
f) FAST team members continued to recruit families into the FAST project until the end of week 2 by calling, stopping by their home, or meeting them at school.

The parents were invited to voluntarily participate in the research project after having been informed that they would have a 50% chance of being included in the multi-family group FAST program and a 50% chance of being in the "services as usual" group. The participating families ($N=134$) came from multiple cultural and ethnic, primarily low-income backgrounds. The ethnicity of the child sample was European Caucasian (40%), African American (35%), Latino (12%), and Asian (13%). The 134 participants were randomly assigned to FAST or Control conditions in pairs by cycle (see design section below). Table 1 provides information on all participants in the study.

*Settings*

Eight elementary schools serving low-income communities within the school district and showing increased rates of children with SED participated in the study. Specifically,

Table 1
Participants' entering characteristics.

| Cycle | Number of pairs | Condition | Grade level | | | | Gender | | CBCL: Teacher | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | K | 1 | 2 | 3 | F | M | Internalizing | Externalizing |
| 1 | 12 | FAST | 4 | 4 | 4 | 0 | 9 | 3 | 48.9 (3) | 54.0 (3) |
| | | Control | 4 | 5 | 3 | 0 | 8 | 4 | 53.8 (4) | 54.5 (3) |
| 2 | 9 | FAST | 2 | 5 | 2 | 0 | 3 | 6 | 59.6 (6) | 60.1 (5) |
| | | Control | 2 | 5 | 2 | 0 | 5 | 4 | 56.8 (3) | 62.8 (6) |
| 3 | 6 | FAST | 1 | 3 | 2 | 0 | 3 | 3 | 54.8 (1) | 58.3 (3) |
| | | Control | 1 | 4 | 1 | 0 | 5 | 1 | 50.8 (0) | 60.8 (4) |
| 4 | 11 | FAST | 6 | 5 | 0 | 0 | 6 | 5 | 52.5 (2) | 60.1 (8) |
| | | Control | 6 | 5 | 0 | 0 | 7 | 4 | 53.5 (4) | 57.1 (5) |
| 5 | 5 | FAST | 1 | 4 | 0 | 0 | 2 | 3 | 59.2 (3) | 64.8 (3) |
| | | Control | 1 | 4 | 0 | 0 | 1 | 4 | 64.4 (3) | 66.6 (4) |
| 6 | 8 | FAST | 2 | 2 | 0 | 6 | 2 | 4 | 49.8 (2) | 55.9 (1) |
| | | Control | 4 | 2 | 2 | 0 | 5 | 3 | 45.1 (2) | 54.5 (2) |
| 7 | 8 | FAST | 2 | 3 | 1 | 4 | 4 | 5 | 51.0 (2) | 56.4 (5) |
| | | Control | 2 | 2 | 3 | 1 | 2 | 6 | 55.4 (3) | 57.8 (2) |
| 8 | 8 | FAST | 4 | 3 | 1 | 0 | 5 | 3 | 55.9 (3) | 55.9 (3) |
| | | Control | 4 | 3 | 1 | 0 | 6 | 2 | 49.9 (0) | 54.5 (3) |
| All | 67 | FAST | 24 | 28 | 14 | 1 | 38 | 29 | 53.4 (22) | 57.1 (31) |
| | | Control | 24 | 30 | 12 | 1 | 39 | 28 | 53.3 (19) | 57.5 (29) |

The grade level and gender cell entries are the number of students. The CBCL/TRF: Teacher entries are mean teacher ratings of the participating students on the Internalizing and Externalizing scales, with values in parentheses indicating the number of students who were at or above a "borderline" level score of 60.

there were eight elementary schools in a middle-size city (approximately 250,000 inhabitants). Children in the eight schools were in kindergarten (36%), first grade (43%), second grade (19%), and third grade (1%).

### *The FAST intervention program*

The eight schools (representing the eight FAST intervention cycles) received an 8-week multi-family group implementation as an after-school evening program. For each cycle, the FAST program was implemented in a standardized fashion, as outlined in the FAST practice profile developed by McDonald and her associates (see www.familiesandschoolstogether.org). Six days of training, manuals, and technical advice on program services were provided in school sites by certified FAST trainers directly supervised by the FAST program founder. FAST training included: (a) multiple site visits by certified FAST trainers to directly observe the multi-family groups, encourage teams to locally adapt the group processes to fit their unique setting; and (b) use of FAST training manuals and operations checklists to monitor the program integrity of the implementation provided in school settings across the 3 years of the project.

### *Instrumentation*

Broad-band standardized rating scales–specifically, the *Child Behavior Checklist* (CBCL; Achenbach, 1991) Parent Report and Teacher Report Form (TRF; Achenbach, l991) and the *Social Skills Rating System* (SSRS; Gresham & Elliott, l990)–were used to assess social, emotional, and behavioral outcomes. Both scales use teachers as well as parents to rate children's skills and behavior. The SSRS and CBCL were useful in providing norm-referenced measures of children's overall behavioral functioning both at home and in the classroom.

The CBCL/TRF consists of 120 items and is intended to screen for serious problem behaviors that a child may exhibit at home and at school. Two major subscales are usually reported in outcome studies: (a) the externalizing subscale, which measures delinquent and aggressive behavior; and (b) the internalizing subscale, which measures withdrawn, somatic complaints, anxiety, and depressive behaviors. In addition to these, the CBCL/TRF includes measures of thought problems, social problems, and attention problems. Using a 3-point rating scale, parents and teachers indicate the extent to which each item describes a child's behavior within the past 6 months (0 = not true, 1 = sometimes or somewhat true, 2 = very true or often true). Internal consistency of the CBCL subscales range from .78 to .97, with test–retest values ranging from .95 to 1.00 (Achenbach, 1991). In the present study, two-month test–retest reliabilities (calculated for participating control students to avoid any potential confounding effects of the FAST intervention) were .82 and .81 for the externalizing and internalizing parent CBCL subscales, respectively; and they were .76 and .66 for the externalizing and internalizing teacher TRF subscales, respectively.

The SSRS also has both parent and teacher versions, consisting of 52 and 57 items, respectively. The SSRS measures social skills and problem behaviors (the teacher version also measures academic competence, as described in the previous section). Parents and teachers rate how often a child exhibits certain behaviors (0 = never, 1 = sometimes, 2 = often). Social

skills measured on the SSRS include cooperation, assertion, and self-control. Externalizing, internalizing, and hyperactive behaviors are measured on the problem behaviors subscale. The internal consistency of the SSRS subscales range from .73 to .95, with test–retest values ranging from .65 and .93 (Gresham & Elliott, 1990). In the present study, two-month test–retest reliabilities were .70 and .78 for the social skills and problem behaviors subscales, respectively, on the parent version of the SSRS; and they were .65, .60, and .92 for the social skills, problem behaviors, and academic competence subscales, respectively, on the teacher version.

The FACES (*Family Adaptability and Cohesion Evaluation Scales*) instrument was developed to measure two specific aspects of family functioning: Adaptability and Cohesion, each thought to be related to child development. Adaptability is the family's ability to be flexible in terms of its power structures, roles and rules in order to meet developmental needs of the child. Cohesion is the emotional bond between family members. The scale consists of 30 items, such as "Our family does things together" and "When problems arise we compromise," answered on a 5-point rating scale ranging from "almost never" to "almost always." Internal consistency for Adaptability is .78 and Cohesion 0.87, with test–retest values of .80 and .83, respectively (Olson, Portner, & Bell, 1982). In the present study, the two-month test–retest reliability was .57 for both the adaptability and cohesion subscales.

FSS (*Family Support Scale*) measures availability and helpfulness of social support for the family, including informal support (immediate family, relatives, and friends), as well as formal support (social organization and professional services). The measure consists of 18 items covering different social support sources, with each source rated on a 5-point scale in terms of helpfulness, ranging from "not at all helpful" to "extremely helpful." Internal consistency of this scale is .77, with a test–retest reliability of .75 after 1 month (Dunst et al., 1988). In the present study, the two-month test–retest reliability of the Family Support Scale was .64.

### *Intervention costs*

The school district provided additional data to determine the effects of implementing the FAST program with children at risk for SED. The district data tracked the 134 students in the research project over a 4-year period to determine the utilization of special education services based on SED. The district data identified the year in which any of the students started to receive these services and each semester in which they received services.

### *Research design*

Within each of the eight participating schools, all students for whom consent for participation was obtained were matched on the basis of grade, gender, race, age, and teacher ratings on the internalizing and externalizing behavior subscales of the CBCL and randomly assigned either to participate in the FAST program or to serve as non-FAST controls. The teachers at 1-year follow-up were not the same teachers who initially identified the children as at risk for SED and were therefore blind to the participants' experimental condition. Participants' entering characteristics, by cycle and experimental condition, are summarized in Table 1.

From the information in Table 1, it can be seen that, within each cycle, FAST and control participants were generally quite comparable with respect to various relevant matching characteristics. In fact, no initial statistical differences between FAST and control participants materialized, either within or across cycles. The largest conditions-related difference emerged in Cycle 8, in which FAST students were rated somewhat higher (i.e., exhibiting more negative behavior) on the CBCL internalizing subscale than their paired control counterparts (although the 6-point mean difference was not statistically significant).

### *Data analysis*

Across the eight cycles, all 67 students who participated in the FAST program attended at least one of the 8 weekly meetings with their families. However, not all of the FAST students attended six or more of the weekly meetings, the number required to graduate from the program. To be certified as a FAST cycle, a program implementation must graduate a minimum of five families. In the present study, the average number of families to graduate across the eight cycles was more than seven. Across cycles, the number of FAST graduates was 60, or almost 90%, with individual cycle graduation rates ranging from 64% to 100% (the national graduation rate for FAST is 80%). Cycle graduation rates were not statistically correlated with selected outcome measures.

The extent to which the analyses and conclusions reported here are based on the total sample of 67 students who participated in the FAST program varies. In these analyses, the FAST and control students within a pair are considered to be "yoked," in the sense that if the data for one member of a pair were not available (usually due to parent nonresponse or student/parent inaccessibility), then the data for the other member of the pair were not included in the analysis. In some cases, FAST student data were unavailable on certain outcome measures; and in other cases, control student data were unavailable on certain outcome measures. Although there are problems of selective attrition here and in any other longitudinal study, of the various analytic alternatives possible we regarded the approach we adopted as the least program-biased way of interpreting the results and the most conservative.

We focused our analysis primarily on changes in FAST-control matched pairs on behavior and academic measures from (a) the pretest to the posttest immediately following the 8-week FAST implementation, referred to here as Post 1; and (b) the pretest to the 9- to 12-month follow-up, referred to here as Post 2. In these two-period split-plot analysis-of-variance comparisons of FAST and control participants, the between-cycles factor consisted of the 8 school levels and the two within-cycle factors consisted of Conditions (FAST vs. Control) and Time (Pretest vs. Posttest). Because the eight cycles comprised the independent units of treatment implementation (i.e., within each cycle, the FAST program involved a single group of nonindependent entities), the most scientifically credible FAST-control comparisons are those based on what we call *cycle-level analyses* (i.e., analyses consisting of the $N=8$ paired FAST and control cycle means based on the weighted average of participating pairs within the cycle/school)—see, for example, Levin (2005) and Levin, O'Donnell, & Kratochwill (2003). In the cycle-level analyses, intervention effects were assessed on the basis of $F$-ratios calculated by dividing the mean square associated with Conditions x Time by the mean square associated with Conditions $\times$ Time $\times$ Cycles.

Table 2
FAST attendees vs. matched controls (Pretest to Post 1 changes).

| Measure | Control | | FAST | | Change (Post-Pre) | | | *F*-Ratio/Level | |
|---|---|---|---|---|---|---|---|---|---|
| | Pre | Post | Pre | Post | Control | FAST | Diff (F-C) | Cycle | Student |
| *Child behavior checklist: teacher (N = 60 pairs, 8 cycles)*[a] | | | | | | | | | |
| Internalizing | 52.8 | 50.6 | 53.2 | 52.3 | −2.2 | −0.9 | 1.3 | 0.81 | 0.89 |
| Externalizing | 57.2 | 55.1 | 56.3 | 55.8 | −2.1 | −0.5 | 1.6 | 2.66 | 2.18 |
| Withdrawn | 57.2 | 55.2 | 55.8 | 55.4 | −2.0 | −0.4 | 1.6 | 2.09 | 1.75 |
| Somatic complaints | 53.8 | 53.9 | 52.4 | 52.4 | 0.1 | 0.0 | −0.1 | 0.01 | 0.01 |
| Anxious/depressed | 55.4 | 53.9 | 55.8 | 55.1 | −1.5 | −0.7 | 0.8 | 0.32 | 0.43 |
| Social problems | 57.4 | 56.0 | 56.8 | 56.4 | −1.4 | −0.4 | 1.0 | 1.71 | 1.34 |
| Thought problems | 55.3 | 53.4 | 53.8 | 53.5 | −1.9 | −0.3 | 1.6 | 5.14 | 2.17 |
| Attention problems | 58.3 | 56.4 | 55.4 | 55.0 | −1.9 | −0.4 | ***1.5*** | 2.05 | ***4.00*** |
| Delinquent behavior | 58.5 | 57.8 | 57.4 | 57.6 | −0.7 | 0.2 | 0.9 | 0.55 | 0.47 |
| Aggressive behavior | 58.5 | 56.7 | 57.9 | 57.3 | −1.8 | −0.6 | 1.2 | 4.19 | 1.20 |
| *Child behavior checklist: parent (N = 53 pairs, 8 cycles)*[a] | | | | | | | | | |
| Internalizing | 52.0 | 48.8 | 53.2 | 50.5 | −3.2 | −2.7 | 0.5 | 0.28 | 0.13 |
| Externalizing | 53.2 | 51.5 | 54.7 | 52.4 | −1.7 | −2.3 | −0.6 | 0.20 | 0.23 |
| Withdrawn | 55.8 | 55.5 | 55.7 | 54.4 | −0.3 | −1.3 | −1.0 | 1.00 | 0.74 |
| Somatic complaints | 54.1 | 53.4 | 54.3 | 53.8 | −0.7 | −0.5 | 0.2 | 0.02 | 0.02 |
| Anxious/depressed | 55.3 | 54.0 | 57.0 | 54.9 | −1.3 | −2.1 | −0.8 | 1.55 | 0.63 |
| Social problems | 55.6 | 54.9 | 56.8 | 55.2 | −0.7 | −1.6 | −0.9 | 0.39 | 0.57 |
| Thought problems | 55.2 | 55.9 | 54.3 | 54.4 | 0.7 | 0.1 | −0.6 | 0.20 | 0.27 |
| Attention problems | 57.4 | 56.8 | 56.8 | 55.3 | −0.6 | −1.5 | −0.9 | 0.57 | 0.51 |
| Delinquent behavior | 56.3 | 55.8 | 57.5 | 56.6 | −0.5 | −0.9 | −0.4 | 0.13 | 0.14 |
| Aggressive behavior | 55.7 | 55.0 | 57.6 | 55.6 | −0.7 | −2.0 | −1.3 | 0.89 | 1.75 |
| *Social skills rating system: teacher (N = 59 pairs, 8 cycles)* | | | | | | | | | |
| Social skills[b] | 93.2 | 95.7 | 94.7 | 95.7 | 2.5 | 1.0 | −1.5 | 0.96 | 0.65 |
| Problem behavior[a] | 101.3 | 102.4 | 105.1 | 104.7 | 1.1 | −0.4 | −1.5 | 0.30 | 0.43 |
| Academic competence[b] | 88.2 | 89.9 | 90.6 | 91.3 | 1.7 | 0.7 | −1.0 | 1.04 | 1.36 |
| *Social skills rating system: parent (N = 54 pairs, 8 cycles)* | | | | | | | | | |
| Social skills[b] | 95.8 | 95.5 | 94.8 | 96.8 | −0.3 | 2.0 | 2.3 | 0.69 | 1.03 |
| Problem behavior[a] | 103.4 | 99.9 | 104.5 | 101.0 | −3.5 | −3.5 | 0.0 | 0.00 | 0.00 |
| *Family Measures (N = 53 pairs, 8 cycles)*[b] | | | | | | | | | |
| Family Adaptability and Cohesion Evaluation Scales | | | | | | | | | |
| Cohesion | 38.8 | 38.7 | 40.0 | 39.9 | −0.1 | −0.1 | −0.0 | 0.00 | 0.00 |
| Adaptability | 26.3 | 25.0 | 22.7 | 24.9 | −1.3 | 2.2 | **3.5** | **8.51** | **9.70** |
| Family Support Scale | 15.0 | 14.1 | 15.7 | 14.6 | −0.9 | −1.1 | −0.2 | 0.24 | 0.04 |

Mean differences and corresponding *F*-ratios **in bold** indicate statistically greater improvements ($p < .05$) for FAST students. Mean differences and corresponding *F*-ratios ***in bold italics*** indicate statistically greater improvements ($p < .05$) for control students.

[a]Higher scores represent poorer behavior/performance.

[b]Higher scores represent better behavior/performance.

Table 3
FAST attendees vs. matched controls (Post 2).

Child behavior checklist: teacher (N = 39 pairs, 6 cycles)[a]

| Measure | Post 2 | | | *F*-ratio/level | |
|---|---|---|---|---|---|
| | Cont. | FAST | Diff (F-C) | Cycle | Student |
| Internalizing | 51.8 | 50.5 | −1.3 | 0.17 | 0.27 |
| Externalizing | 53.2 | 55.7 | 2.5 | 4.52 | 1.31 |
| Withdrawn | 55.3 | 53.7 | −1.4 | 2.87 | 1.07 |
| Somatic complaints | 53.4 | 54.9 | 1.5 | 0.49 | 0.23 |
| Anxious/depressed | 55.0 | 54.4 | −0.6 | 1.96 | 0.12 |
| Social problems | 57.6 | 56.3 | −1.3 | 1.45 | 0.51 |
| Thought problems | 51.2 | 54.3 | ***3.1*** | 1.74 | ***9.69*** |
| Attention problems | 55.9 | 57.0 | 1.0 | 2.02 | 0.96 |
| Delinquent behavior | 55.5 | 58.1 | 2.6 | 1.96 | 1.74 |
| Aggressive behavior | 56.0 | 57.4 | 1.4 | 1.08 | 0.83 |

Child behavior checklist: parent (31 pairs, 6 cycles)[a]

| | Control | | FAST | | Change (Post-Pre) | | | *F*-ratio/level | |
|---|---|---|---|---|---|---|---|---|---|
| | Pre | Post 2 | Pre | Post 2 | Cont. | FAST | Diff (F-C) | Cycle | Student |
| Internalizing | 52.6 | 52.7 | 53.9 | 51.1 | 0.1 | −2.8 | −2.9 | 1.00 | 1.26 |
| Externalizing | 55.6 | 53.7 | 56.0 | 50.3 | −1.9 | −5.7 | **−3.8** | **16.94** | 4.07 |
| Withdrawn | 55.6 | 57.1 | 56.1 | 54.8 | 1.5 | −1.3 | −2.8 | 1.64 | 1.60 |
| Somatic complaints | 54.1 | 55.9 | 54.5 | 52.6 | 1.8 | −1.9 | **−3.7** | 3.58 | **5.84** |
| Anxious/depressed | 56.2 | 55.0 | 57.6 | 55.3 | −1.2 | −2.3 | −1.1 | 0.21 | 0.19 |
| Social problems | 56.7 | 57.4 | 57.1 | 55.1 | 0.7 | −2.0 | −2.7 | 1.18 | 2.05 |
| Thought problems | 54.8 | 54.8 | 54.4 | 54.3 | 0.0 | −0.1 | −0.1 | 0.01 | 0.01 |
| Attention problems | 59.0 | 59.2 | 57.4 | 55.3 | 0.2 | −2.1 | −2.3 | 4.40 | 1.23 |
| Delinquent behavior | 58.1 | 56.9 | 58.2 | 55.5 | −1.2 | −2.7 | −1.5 | 3.79 | 0.76 |
| Aggressive behavior | 57.1 | 56.3 | 58.0 | 54.5 | −0.8 | −3.5 | −2.7 | 5.01 | 2.20 |

Social skills rating system: teacher (38 pairs, 6 cycles)

| | Post 2 | | | *F*-ratio/level | |
|---|---|---|---|---|---|
| | Cont. | FAST | Diff (F-C) | Cycle | Student |
| Social skills[b] | 95.2 | 97.8 | 2.6 | 1.94 | 1.05 |
| Problem behavior[a] | 104.6 | 102.6 | −2.0 | 0.41 | 0.37 |
| Academic competence[b] | 90.1 | 90.8 | 0.7 | 0.57 | 0.26 |

Social skills rating system: parent (31 pairs, 6 cycles)

| | Control | | FAST | | Change (Post-Pre) | | | *F*-ratio/level | |
|---|---|---|---|---|---|---|---|---|---|
| | Pre | Post 2 | Pre | Post 2 | Cont. | FAST | Diff (F-C) | Cycle | Student |
| Social skills[b] | 94.1 | 98.8 | 94.1 | 99.9 | 4.7 | 5.8 | 1.1 | 0.08 | 0.04 |
| Problem behavior[a] | 105.0 | 100.4 | 107.0 | 98.0 | −4.6 | −9.0 | −4.4 | 1.84 | 1.17 |
| Family measures (30 pairs, 6 cycles)[b] | | | | | | | | | |
| Family adaptability and cohesion evaluation scales | | | | | | | | | |
| Cohesion | 38.7 | 37.8 | 40.4 | 41.4 | −0.9 | 1.0 | 1.9 | 1.75 | 1.72 |
| Adaptability | 27.0 | 23.7 | 23.8 | 22.9 | −3.3 | −0.9 | **2.4** | **7.24** | 2.18 |
| Family support scale | 13.8 | 13.8 | 16.9 | 15.2 | −0.0 | −1.7 | −1.7 | 1.77 | 1.05 |

For the two teacher measures, Post 2 scores and means are covariate-adjusted (by pretest scores) because different teachers were involved in the two ratings. Mean differences and corresponding *F*-ratios **in bold** indicate statistically greater improvements ($p < .05$) for FAST students. Mean differences and corresponding *F*-ratios ***in bold italics*** indicate statistically greater improvements ($p < .05$) for control students.

[a]Higher scores represent poorer behavior/performance.

[b]Higher scores represent better behavior/performance.

Results of *student-level analyses* (based on the $N=67$ across-cycle FAST and control student pairs) are less scientifically credible because of likely inflated Type I error probabilities due to violation of independence assumptions (see Baldwin, Murray, & Shadish, 2005; Barcikowski, 1981; Levin & Serlin, 1993, Table 2) but are also reported primarily as auxiliary descriptive information.

All statistical conclusions reported here are based on a Type I error probability ($\alpha$) of .05. Because of the large number of statistical tests conducted and the Type I error probability associated with each, we pay more attention to overall statistical patterns than to the outcomes for individual measures. Similarly, for the reasons stated above, we pay more attention to cycle-level results than to student-level results. In the primary cycle-level analyses, reported effect sizes (*d*s) are based on the incorporation of cycle means as the experimental units and are defined as the difference between FAST and control students' mean pretest-to-posttest changes, divided by the pooled within-cycles, within-conditions estimated standard deviations of the pretest means. For example, for the second to the last measure in Table 2 (Adaptability), the effect size was calculated by taking the difference between FAST and control students' posttest and pretest means $[2.18-(-1.32)=3.50]$, divided by the pooled estimated standard deviation of the pretest means, 2.59 (calculations not shown here), resulting in $d=3.50/2.59=1.35$. In the auxiliary student-level analyses, *d*s are defined as the same mean change, divided by the pooled within-cycles, within-conditions pretest standard deviation. According to traditional guidelines in the social sciences (e.g., Cohen, 1988), absolute values of *d* of .2 or less were interpreted as "small," those of .5 as "medium," and those of .8 or more as "large."

## Results

### *FAST program implementation and integrity*

Each of eight schools implemented one 8-week multi-family group FAST cycle on the building grounds as an after-school evening program, with meals and structured, interactive, and experiential learning. Across cycles, the number of families assigned to the FAST condition that attended at least one session was 67. Also, 60 students (90%) completed the program and were FAST graduates (i.e., they attended at least six sessions). The total number of families for whom we obtained at least some pretest-posttest (Post 1) data was 134 (100% of the original sample), with the individual measures ranging from 106 (79%) to 120 (90%)—see Table 2. For the follow-up Post 2 measures, the percentages of available data were considerably lower (see Table 3 and the Post 2 results section).

The quality of implementation varied in each school in terms of feel, intensity, and enthusiasm, as well as with respect to what was done during children's time, how the meals were presented, the songs that were sung, and topics discussed in parent group, among other things. However, the core FAST components were all in place for the 8 programs. These components determine whether FAST values of cultural representation and parent-professional partnerships are manifested on the teams, and whether the standard activities all take place as specified (i.e., 15 min spent with parents playing one-to-one with their child while being coached by team members to be responsive without teaching, bossing, or criticizing, etc.). University research assistants were trained and supervised by the program

developer to directly observe several FAST implementations at each school to support the teams and to determine program fidelity. These observers found that all of the eight program cycles had "ideal" program integrity, based on the checklist developed and tested in previous FAST program research.

### *Post 1*

Table 2 reports mean pretest, Post 1, and change data for the 67 FAST attendees and their matched controls, along with the statistical tests of FAST-Control mean change differences. Only one measure was associated with statistically greater cycle-level improvement for FAST attendees on Post 1: the Family Adaptability Scale, on which FAST students were rated as having improved by an average of 2.2 points, compared to the average decline of 1.3 points by matched controls ($d = 1.35$, about a 1–1/3 standard deviation difference). Note that no statistically significant program-related differences emerged on the parent CBCL measures or on the SSRS measures (both teacher and parent forms).

### *Post 2*

Table 3 reports 9- to 12-month follow-up data for FAST and matched control students for whom complete data (pretest through Post 2) were available. (Unfortunately, Post 2 data could not be collected for the final two cycles of the project, which reduced the number of cycles to six and consequently also reduced the number of students associated with the teacher and parent follow-up measures). On the parent-reported measures, changes from pretest to Post 2 are provided. For the teacher-reported measures (CBCL and SSRS), however, only follow-up means are given, due to the fact that pretest and follow-up ratings were completed by different teachers. For those data, repeated-measures analyses of covariance were conducted, controlling for cycle, with the matched pairs representing the repeated measure and pretest teacher ratings representing a separate covariate for the FAST and control students within each pair.

The bold values in Table 3 show that two Post 2 measures, both favoring FAST participants, are statistically significant at the more scientifically credible cycle level. Specifically, as on Post 1, there was a difference between FAST and their matched controls on the Family Adaptability scale. Although Adaptability scores descriptively declined (indicating poorer adaptability) in both experimental conditions, FAST participants exhibited statistically less decline (means = 23.8 and 22.9 for Pre and Post 2, respectively, for a Post 2-Pre difference of −0.9) in comparison to their control counterparts (respective means = 27.0 and 23.7, for a difference of −3.3), which resulted in an effect size of $d = .79$. In addition, parent CBCL ratings indicated a statistically greater reduction in FAST participants' externalizing behaviors ($d = .68$; see also Fig. 1). Moreover, paralleling the 1-year follow-up teacher-rating data in the Kratochwill et al. (2004) study discussed earlier, evidence for greater overall FAST student improvement than for control students on the parent CBCL can be seen in the 10 descriptive individual scale mean differences, all of which are negative (i.e., all 10 suggest larger problem behavior reductions for FAST students). Although an assumption of inter-scale independence is untenable here (see, for example, Onwuegbuzie & Levin, 2005), a

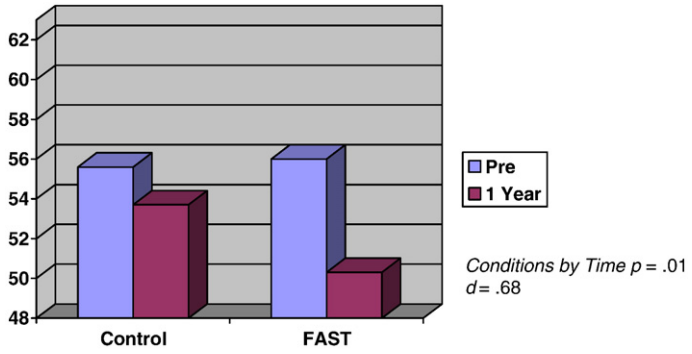


Fig. 1. Parents' Pre and Post 2 (one-year followup) mean ratings of their children on the CBCL externalizing subscale.

standard binomial test applied to the set of signed outcomes is associated with a one-tailed probability of less than .002.

With the less scientifically credible student-level analyses, relatively greater improvement from Pre to Post 2 was also observed among FAST students on the parent CBCL Somatic Complaints scale ($d$=.53). On the other hand, teachers viewed FAST students as exhibiting relatively more thought problems at Post 2 ($d$=.45). As with the Post 1 data, no program-related differences were detected on any of the parent or teacher SSRS measures.

### *School district data*

The school district data on special education for SED revealed that 4 of the 67 students from the control group were designated as having SED and received special education

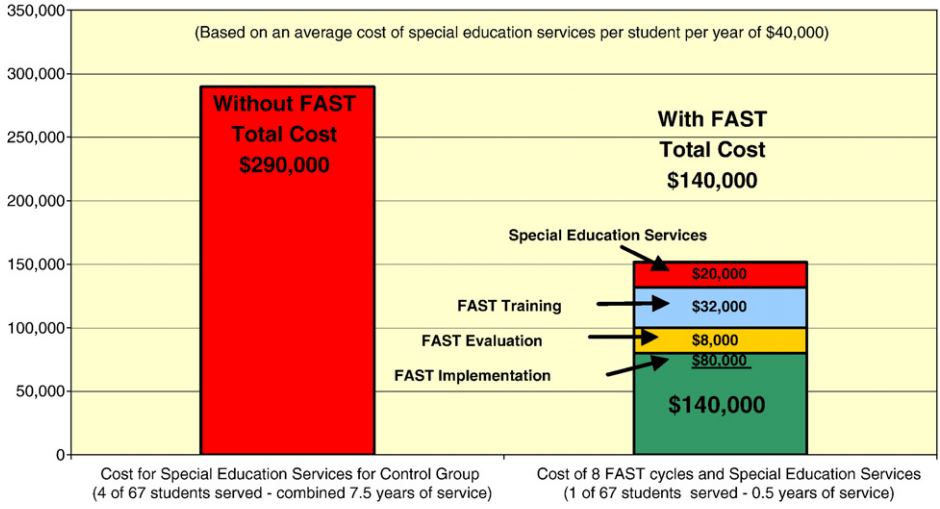


Fig. 2. Total cost to school district (2000–2002): FAST vs. control students.

Table 4
Low- and high-incidence costs of special education: school district data 2002.

| Costs | # of students | Average cost | Total cost | Range |
|---|---|---|---|---|
| Costs exceeding $50,000 | 44 | $57,195 | $2,516,597 | $75,749–50,266 |
| Costs between $50,000 and $40,000 | 38 | $46,362 | $1,761,763 | $49,927–40,578 |
| Costs between $40,000 and $25,000 | 47 | $30,714 | $1,443,559 | $39,482–25,006 |
| Totals | 129 | $44,757 | $5,721,919 | |

services between 2000 and 2002. In contrast, only 1 of the 67 FAST students was identified as having SED. In addition, the length of services provided to these students differed. The duration of services provided to the 4 control students totaled 7.5 years, an average of 1.9 years of service per student. In contrast, the 1 student from the FAST group was served for only half a year (.5 years; see Fig. 2).

The average cost of special education services per student per year was calculated using the school district data provided in Table 4, specifying the low- and high-incidence costs of special education in 2002. As of May 2002, 4,589 students were enrolled in special education programs in the school district, at an average cost of $40,000 per student per year. The total costs do not include supplies, materials, equipment, or regular education tuition that is accessed by special education students for different portions of their school days.

Based on the 2002 $40,000 average cost figure, the cost of special education services provided to control students between 2000 and 2002 (based on the combined 7.5 years of service for all 4 students) totaled $290,000. In contrast, the cost of special education services provided to the FAST students totaled $20,000 (i.e., the cost for the 1 student who was identified as having SED in 2002 and who received special education services for only half a year), and the total cost for the FAST students–the $20,000 in special education costs, plus the cost of FAST training, implementation, and evaluation (approximately $1,200 per child)–was $140,000 (see Fig. 2). In the case of this study, the savings were $160,000.

## Discussion

FAST is a universal prevention program designed to strengthen the parent-child bond, family functioning and the family's social networks, thereby reducing children's emotional and behavioral difficulties along with referrals to special education. In this regard it has special significance for schools as they scale up evidence-based programs for RtI (Kratochwill et al., 2007). However, results of the investigation were quite mixed. On the positive side, we found that the retention rate for FAST cycle participants was nearly 90%, which is quite high (given traditional dropout rates in mental health treatment research) and consistent with the literature on retention rates in previous FAST research (e.g., Kratochwill et al., 2004; McDonald et al., 1991, 1997; McDonald & Sayger, 1998). For example, in a 3-year FAST study Kratochwill et al. (2004) found that of 50 Native American families who attended FAST meetings at least once, 40 (80%) graduated from the program.

With regard to the present study's major outcomes of interest, FAST was associated with a large positive impact on family adaptability. In particular, compared to their matched counterparts, FAST participants exhibited relatively better family adaptability on both Post 1 ($d$=1.35) and Post 2 ($d$=.79). These findings suggest that FAST may be targeting

variables within the family that, to some extent, improve overall functioning. Through experiential learning in the FAST structured family activities, parents practice being in charge, practice parent-delivered play therapy with their children, and establish weekly family routines involving a shared family meal, games, and play. This treatment may need to be strengthened or other treatments added to increase the positive impact on family adaptability measures.

Our findings also demonstrated a reduction in FAST participants' externalizing behaviors on the follow-up CBCL parent ratings ($d = .68$). Adding support to this finding was that parent CBCL ratings on each of the 10 individual scales suggested behavior reductions for FAST students. Such results are potentially important as these behaviors are among the more salient concerns about students with behavioral problems in schools and have important implications for prevention (see Walker & Shinn, 2002).

In fact, the policy-level changes necessary to implement and sustain prevention programming in schools have already been codified in school law and U.S. Department of Education regulations. For example, the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA, 2008) included provisions on the need for schools to provide early identification, prevention, and intervention services to address children's learning and behavioral needs. The No Child Left Behind Act of 2001 (NCLB, 2002) stresses the importance of accountability in responding to students at risk for failure and requires the use of prevention and intervention programs found effective through scientific research. The President's Commission on Excellence in Special Education (U.S. Department of Education, 2002) has specifically recommended that schools adopt a prevention-focused service delivery model in recognition of the ongoing failure associated with the traditional "wait-to-fail" approach.

Federal funding is aligned with these priorities. For example, under IDEIA 2004, up to 15% of federal funds allocated for special education services may be used to develop and implement prevention and early intervention services for students who do not meet the definition of a child with a disability but need additional educational support to make adequate progress within the educational setting. The U.S. Department of Education has also provided extensive funding for experimental field tests of multi-tiered prevention programs as a vehicle for systemic reform.

FAST is based on both reducing the risk factors for disability and promoting processes that buffer or protect against risk. This dual focus has proven particularly effective in achieving prevention goals for a variety of childhood problems with complex etiological trajectories (Farquhar et al., 1990; Jacobs et al., 1986; Pushka, Tuomilehto, Nissinen, & Korhonen, 1989). A focus on reducing risk and promoting resilience presents a powerful framework for organizing school intervention service delivery systems and training (Coie et al., 1993).

FAST has the potential to fit within a multi-tiered model of prevention and could be included as part of the RtI initiative. Based, in part, on developments in medicine RtI proponents have embraced a multi-dimensional model of services to school children. The Institute of Medicine (IOM, 1994) identified three forms of preventive interventions applicable to RtI in school settings: universal, selective, and targeted (also known as primary, secondary, and tertiary). Although this taxonomy emerged from the public health field (e.g., Gordon, 1983, 1987), it is potentially a powerful model for restructuring school service delivery systems and training programs in accordance with prevention goals.

Services delivered within a multi-tiered RtI prevention framework at the universal preventive interventions level target the general student population that has not been identified based on individual risk. Examples include childhood violence prevention and school-based competence enhancement programs. Because universal programs are positive, proactive, and provided independent of risk status, their potential for stigmatizing students can be minimal. In this regard, our findings have some implication for special education services.

Specifically, an important finding in the current study related to special education services for children in the urban school district in which the FAST program was implemented. We found that only one student who participated in FAST eventually became identified as having SED**,** which suggests that, despite the high cost of the FAST program, fewer students ended up receiving special education services. Thus, FAST has the potential to fit into a multi-tiered model of prevention and could blend well with current RtI initiatives (see Kratochwill et al., 2004).

In summary, the FAST program results in some positive influences on the family and has the potential to improve parent/school relationships and develop protective factors for children at risk of developing SED. In addition, some modest positive findings on externalizing behaviors were noted in this study. Future research should focus on several dimensions of FAST. First, an expanded assessment of student outcomes should be planned using direct observational measures of student behavior. Second, it would be desirable to examine family variables on the adaptability dimension that contribute to positive change and eventually may have an impact on individual students. Finally, future research on the FAST program might take into account emerging criteria for evaluating intervention research (e.g., Chambless & Ollendick, 2001; Kratochwill & Stoiber, 2002).

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