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Merging Universal and Indicated Prevention Programs: The Fast Track Model

Conduct Problems Prevention Research Group
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Abstract

Fast Track is a multisite, multicomponent preventive intervention for young children at high risk for long-term antisocial behavior. Based on a comprehensive developmental model, this intervention includes a universal-level classroom program plus social-skill training, academic tutoring, parent training, and home visiting to improve competencies and reduce problems in a high-risk group of children selected in kindergarten. The theoretical principles and clinical strategies utilized in the Fast Track Project are described to illustrate the interplay between basic developmental research, the understanding of risk and protective factors, and a research-based model of preventive intervention that integrates universal and indicated models of prevention.

Keywords

Prevention; Aggression; Anti-social behavior

This paper presents a developmental and clinical model for reducing the prevalence of conduct disorders through the strategy of preventive intervention. The theoretical principles and clinical strategies utilized in the Fast Track Project will be described to illustrate the interplay between basic developmental research, the understanding of risk and protective factors, and a research-based model of preventive intervention that integrates universal and indicated models of prevention. The primary aims of the Fast Track Project were to develop, implement, and evaluate a comprehensive intervention to prevent severe and chronic conduct problems in a sample of children selected at high risk when they first entered school.

Contemporary theories of adolescent delinquency and conduct problems (Moffitt, 1993; Patterson, Capaldi, & Bank, 1991) distinguish between two subgroups of antisocial youth—early starters and late starters. The former group represents approximately 6% of the U.S. population by some epidemiological estimates (Offord, Boyle, & Racine, 1991; Wolfgang, Figlio, & Sellin, 1972) and begins exhibiting pervasive conduct problems in early to middle childhood (Loeber, Lahey, & Thomas, 1991). By adolescence, they account for almost half of all adolescent crime and the majority of violent crimes. In contrast, late starters initiate offending in adolescence and usually desist by late adolescence or early adulthood as they marry and enter the work force.

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While much of the delinquency of the late-starter group may be conceived of as an exaggeration of age-normative trends of adolescence, early-starting delinquents strongly influence the emerging antisocial activity of these late starters. Because of their significant contribution to adolescent antisocial behavior and their influence on peers, any serious attempt to reduce the national problem of youth violence and adolescent problem behavior must place a high priority on prevention efforts with this group of early-starting conduct-problem youth.

Given the serious consequences associated with early-starting patterns of antisocial behavior, researchers have argued that effective prevention programs must begin early and recognize the multiply determined and chronic nature of the maladaptive developmental process (Kazdin, 1985). To date, efforts at prevention have yielded little long-term success; interventions with delinquent youth that have been relatively brief in duration and focused on single dimensions of the problem (e.g., parenting or child skills) have had limited and short-term success (Kazdin, 1985; Lytton, 1990). When multiple components of risk have been addressed, such as in the Montreal early childhood study that employed both parent training and children's social skill training, the effects on later disruptive behavior were more promising (Tremblay, Pagani-Kurtz, Masse, Vitaro, & Pihl, 1995). A similar conclusion about the value of multicomponent programs comes from multisystemic interventions with offending juveniles (Henggeler, Schoenwald, & Pickrel, 1995).

Theoretical Model Guiding the Intervention

The Fast Track intervention was guided by a developmental theory positing the interaction of multiple influences on the development of antisocial behavior (Conduct Problems Prevention Research Group, 1992). The effects of early home environment, exacerbated by neighborhood stressors such as poverty and crime, interact during the preschool years with child factors such as impulsivity and irritability to leave high-risk children cognitively, emotionally, and behaviorally unprepared for school. The intervention model was divided into two major phases: elementary school and the adolescent period. The elementary school phase of the prevention program addressed six areas of risk and protective factors derived from the developmental model: parenting, child problem-solving and emotional coping skills, peer relations, classroom atmosphere and curriculum, academic achievement with a focus on reading, and home-school relations. The adolescent phase emphasized four protective factors: parent/adult monitoring and positive involvement, peer affiliation and peer influence, academic achievement and orientation to school, and social cognition and identity development.

Developmental Model of Early-Starting Conduct Problems

Preschool and early elementary years

A converging body of research suggests that risk factors for early-starting conduct problems can be identified in the preschool years and that by school entry, children at long-term risk can be identified with reasonable accuracy (Haapasalo & Tremblay, 1994). Early childhood characteristics such as impulsivity, irritability, and inattention (Bates, Bayles, Bennett, Ridge, & Brown, 1991; Campbell, Breaux, Ewing, & Szumowski, 1986) combine with family stressors such as poverty, single-parenting, and parental conflict (Dodge, Bates, & Pettit, 1990; Offord, Alder, & Boyle, 1986) and parenting styles that inadvertently reinforce noncompliance (Snyder & Patterson, 1995) to produce children who rely on aversive behaviors to get what they want. Coercive parent-child interactions are often accompanied by inadequate parental support for the child's development of cognitive skills and adaptive emotion regulation capabilities (Cook, Greenberg, & Kusche, 1994). Harsh discipline and aversive parent-child interactions, in turn, may impede the development of critical social-cognitive skills (Lochman & Dodge, 1994). In this way, biologically based risk factors in the child combine with stressors from the larger community context on the family and with family socialization practices to

produce children who enter school poorly prepared for the cognitive, emotional, and social tasks of this important developmental setting.

In addition to their lack of readiness for school, many high-risk children attend schools with a high density of other unprepared children like themselves (Rutter, Maughan, Mortimore, Ouston, & Smith, 1979). This high density of at-risk children makes effective teaching difficult to attain. Finally, the parents of high-risk children often have their own history of school problems, and their discomfort in educational settings may lead to a lack of synchrony between home and school. This dysynchrony may be reflected in ineffective and acrimonious communications between parents and teachers, which undermines the child's chance for success (Comer, 1980). Over time, aggressive and disruptive children are rejected by peers (Ladd, Price, & Hart, 1990) and, in turn, becomes more distrustful of peers (Dodge & Coie, 1987). Teachers provide less support to these children, rather than the increased support they need (Campbell, 1991; Dodge, Coie, & Brakke, 1982), and by preadolescence, parental rejection often occurs as a function of both increasingly aversive parent-child interactions and unpleasant confrontations instigated by the children's school difficulties (Patterson & Bank, 1989). As a result, high-risk children become preadolescents who are alienated from their most important sources of support and social bonding—family and school (Hawkins & Weis, 1985).

The Fast Track prevention project is significant because it took advantage of longitudinal prediction studies, utilizing a multifaceted and integrated set of prevention activities over a sustained period of time in ways that were guided by developmental theory and research. To address processes in early and middle childhood, the elementary-school phase of the Fast Track program included two levels of prevention activities (universal and indicated), and used an integrated set of intervention components to promote competencies in parents (parent training and home visiting), teachers (prevention curriculum and classroom management consultation), and children (social skills training and academic tutoring). An additional goal of the elementary-school phase of the Fast Track prevention program was to strengthen bonds of communication between parents and teachers.

However, developmental research suggests that prevention efforts should not stop at the end of grade school for two reasons. First, while the negative impact of early risk factors may be buffered by the provision of protective support services during the grade school years, the risk factors themselves may continue to influence developmental trajectories during adolescence. For example, the high rates of inattention, impulsivity, and cognitive deficits that contribute to the school adjustment problems of many early-starting youth (Moffitt, 1990) may be buffered when protective support is offered during elementary school in the form of academic tutoring and effective teacher management. As the demands for focused attention and independent work completion increase with the transition to middle school, these cognitive risk factors may undermine school adaptation unless continuing support is offered at later grade levels. Second, developmental research suggests that new risk factors emerge during adolescence that are associated with the escalation of antisocial and related adolescent behavior problems. Elementary-school prevention may improve child “readiness” to tackle the new challenges of adolescence. However, for high-risk children living in unstable and risky contexts, without effective protective supports the challenges of adolescence may also undermine the gains produced by early preventive efforts.

The adolescent period

Adolescence is marked both by changes in youth characteristics and in the contextual influences affecting adjustment. Along with the biological changes, there are accompanying changes in orientation toward adult authority, the relative influence of peers, the structure of schooling, and the goals and values that help shape a sense of personal identity. Contextually,

youth move from self-contained, single-teacher elementary classrooms to large, fluid middle or junior high schools. This leads to reductions in parent and teacher support and monitoring, and youth spend more time with and are more influenced by their peers. Four core domains are critical for their successful adaptation: (1) parent/adult monitoring and positive involvement, (2) peer affiliation and peer influence, (3) academic achievement and orientation to school, and (4) social cognition and identity development. The risk and protective factors that have been identified in each of these domains of adolescent development have implications for preventive intervention during early adolescence.

Parent/adult monitoring and positive involvement—Poor parenting, involving weak monitoring, ineffective parental control, and low levels of parent support, contributes directly to adolescent deviant behavior (Chassin, Curran, Hussong, & Colder, 1996). Because of the greater mobility of adolescents and their increased needs for personal privacy, parents have less opportunity to monitor their adolescents' activities and their friendships. Research indicates that parental monitoring and discipline play a critical role in both early- and late-onset delinquency and drug use (Dishion, Andrews, & Crosby, 1995; Dishion & McMahon, 1998; Patterson & Yoerger, 1997).

Strong bonds of attachment to family serve a protective function in youth otherwise at risk (Brooke, 1993; Johnson & Pandina, 1991). Productive parent-adolescent communication, joint problem solving, and collaborative planning are all indices of supportive family relations in adolescence; interventions focused on promoting communication and conflict resolution skills along with family problem-solving meetings reduce adolescent acting-out behaviors (Henggeler et al., 1995).

Peer affiliation and peer influence—Adolescents who associate with deviant peers have a substantially increased risk for adolescent problem behaviors (Aultman, 1980; Keenan, Loeber, Zhang, Stouthamer-Loeber, & Van Kammen, 1995). Deviant peer influences serve both to escalate the seriousness of offending among those youth with a history of delinquency and to instigate initial delinquency among those with more marginal risk profiles (Coie, Terry, Lenox, & Lochman, 1995; Vitaro, Tremblay, Kerr, Pagani-Kurtz, & Bukowski, 1997). These deviant peer influences affect school dropout (Cairns, Cairns, & Neckerman, 1989) and early substance use (Chassin et al., 1996; Elliott, Huizinga, & Ageton, 1985), as well as criminal activity.

Whereas girls are at considerably lower risk than boys for overt aggression during elementary school, their risk for becoming involved in early sexual activity, substance use, and covert antisocial activity rises in adolescence, due largely to associations with older antisocial boys (Caspi, Lynam, Moffitt, & Silva, 1993). Girls who enter puberty early and who have learning problems and depressed mood are at elevated risk for associations with deviant boys who, in turn, encourage behaviors such as truancy, substance use, covert delinquency, and sexual activity. For example, girls with this early behavior problem profile are the ones at greatest risk for having babies prior to age 14 (Miller-Johnson et al., 1999; Woodward & Fergusson, 1999).

Two protective factors appear to reduce the likelihood that high-risk youth will associate with deviant peers. The first is the adolescent's affiliation with nondeviant peers (Hawkins, Catalano, & Miller, 1992), fostered by their interest in conventional activities and behaviors (Cairns, Cairns, Neckerman, Gest, & Gariepy, 1988; Dishion, Patterson, & Greisler, 1994), opportunities for positive peer contact, and the ability to initiate and sustain positive peer interactions (Ladd et al., 1990). The second is adult monitoring of the child's contact with peers and protection from unsupervised interactions (Patterson & Yoerger, 1997).

Academic achievement and academic orientation—Children who have low commitment to school and high rates of school failure are at risk for a range of adolescent problem behaviors (Hawkins et al., 1992). Adolescents who dislike school and spend little time on homework are frequently truant, show poor achievement and have high rates of drug use (Hawkins et al., 1992; Hundley & Mercer, 1987). Increasing school adaptation by fostering social support in the school setting, promoting positive attitudes toward education, and supporting academic achievement may promote the resilience of high-risk youth (Harter, 1986; Hirsch & DuBois, 1991).

Social cognition and identity development—Adolescents' rates of problem behaviors are heavily influenced by their deviance-prone attitudes and beliefs (Wills & Filer, 1996). Adolescents who have histories of violence, delinquency and substance use often lack effective coping skills, demonstrating impulsive behavioral reactivity, poor self-control, weak problem-solving skills, hostile attributional biases, and dominance-oriented social goals (Dodge, Lochman, Harnish, Bates, & Pettit, 1997; Lochman, Wayland, & White, 1993).

As adolescents become increasingly autonomous and as demands for self-discipline increase in schoolwork and other areas, the importance of a positive self-identity increases. Among high-risk youth, resilient adolescents are those who develop a positive sense of self, perceive themselves as having internal control over their environment, and have good problem-solving skills and a strong network of relationships with adults (Luthar & Zigler, 1991; Werner, 1986). Indeed, interventions that combine training in social influence resistance with problem solving and decision making have produced reductions in the prevalence of substance use (Botvin, 1986; Hansen, Graham, Wolkenstein, & Lundy, 1988; Pentz et al., 1989). In addition, the availability of a positive adult role model/mentor who is of the same race and gender as the high-risk youth may serve as a protective factor promoting the development of a positive sense of self and supporting effective coping skills (Becker, 1994; Saito & Blyth, 1994).

Implications of the Developmental Model for Prevention

Clearly, the dysfunctional development that is associated with the early-starting pattern of conduct problems is multiply determined and is embedded in transactions among family, peer, school, and neighborhood influences and child characteristics. Hence, prevention efforts must target both the promotion of individual competencies and the promotion of protective contextual supports. Given that shifts occur in the risk and protective factors associated with the development of conduct problems as children move from middle childhood into adolescence and from elementary school into middle school, preventive interventions must be attentive to age-related stressors and must address the successive issues of risk across these two important developmental periods (Cicchetti, 1984). Early-starting conduct problems turn into serious and chronic problems because they divert the individual child into a sequence of experiences that intensify risk. Data from the Rochester study (Thornberry, Huizinga, & Loeber, 1995) suggest that protective factors must be continuously present during the transition from early to late adolescence and not simply in place at a single point in childhood or adolescence. Thus, a successful program for preventing serious antisocial problems requires a long-term intervention commitment.

The significance of the Fast Track Project is that it addressed the three organizing principles for the prevention of serious violent delinquency outlined by Thornberry et al. (1995)—it started early, it was comprehensive, and it was carried out over the long term of development. In Fast Track, high-risk youth were selected at school entry from poor, high-crime neighborhoods. The elementary-school intervention addressed the major risk factors implicated in the initiation of early-starting conduct problems. The content of the elementary-

school interventions (for children, parents, and teachers) was upgraded developmentally as the children progressed through school.

Study Design

The design of the study was a randomized trial with randomization at the level of the school, as children entered first grade. The project contained two levels of intervention as well as two types of participants. At the end of kindergarten, high-risk children were selected through a multiple-gating screening procedure (Lochman & Conduct Problems Prevention Research Group, 1995) involving assessment of problem behaviors by both teachers and parents. These children then received the full set of Fast Track interventions (described below). Their classmates then received the universal prevention model. Each year as the targeted children entered a new grade, that grade also received a grade-appropriate version of the universal intervention. Thus, over a 5-year period, all grades in the school received the universal program.

There were three primary goals of the Fast Track intervention. The first was to reduce the frequency, severity, and latency of onset of adolescent problem behaviors in the high-risk intervention sample relative to a randomized high-risk control sample. A subgoal was to move a significant proportion of intervention subjects into the normal range of adjustment.

The second goal was to demonstrate the impact of a comprehensive prevention model that combined universal and indicated intervention into an integrated set of activities. This is a rare event, as the history of psychosocial preventive interventions has indicated that the two different traditions of universal (primary) and indicated and targeted (secondary) prevention have been conducted using different conceptual models (Weissberg & Greenberg, 1998).

There are two central reasons why the integrated delivery of universal and indicated interventions should provide an additive effect. First, it is unlikely that effects of the indicated interventions with the children and families will generalize to the school and classroom setting without providing support for these new skills in the school (Kazdin, 1990, 1993). By providing similar skills, cues, and a common language in both the indicated and universal interventions, teachers and other school staff are able to promote the generalization of skills to the classroom, playground, and peer interactions. Second, a universal intervention intended to promote the development of social competence in all children should lead to an improved classroom atmosphere that supports improved interpersonal relations for all students (Battistich, Solomon, Watson, Solomon, & Schaps, 1989; Elias et al., 1998). Reciprocally, more intensive intervention with the highest risk children in these same classrooms may serve to reduce their highly disruptive impact on the classrooms, and thus make it easier for the remaining children to respond to the universal intervention. Thus, as part of the second goal we are evaluating the impact of the total intervention on classmates of the high-risk participants.

Finally, a third goal was to understand the factors that moderated or mediated successful prevention for both groups of students. Continuous assessments of mediating factors derived from the theoretical model provided the data for testing theory by means of this prevention trial. Within the intervention group, individual differences in outcomes will be predicted from pretreatment factors (such as demographics and family context variables) and implementation variability that potentially may moderate the effects of the intervention. The universal intervention continued throughout the elementary school years. The indicated intervention continued through Grade 10.

Description of Elementary-School Phase of Intervention

Corresponding to the developmental risks associated with the early initiation of conduct problems, prevention activities during elementary school targeted the provision of positive

behavioral support at school and at home; fostering the home-school relationship; promotion of parenting skills, child social skills, child social-cognitive skills, and child reading skills; and provision of mentoring for children by a same-sex, same-race community volunteer. Intervention components focused both on building the child's behavioral and cognitive skills and on changing the patterns of interaction with important people in the child's social environment (family, school, and peer) to promote healthy relationships with peers and adults.

The intervention was organized developmentally and included three levels of prevention activities: (1) universal prevention support provided at the school level; (2) standard indicated prevention support services provided to families of children identified as high-risk during the initial kindergarten screening; and (3) additional individualized indicated prevention support provided to high-risk children and families on an as-needed basis (according to criterion-referenced assessments). Prevention support was intensive initially, with massed sessions offered at the important transition into elementary school (Grades 1–2). Sustained support was then continued through Grade 5. The content of each of the prevention services was organized developmentally, and integrated across components.

At the universal level of prevention, an adaptation of the PATHS (Promoting Alternative Thinking Strategies) Curriculum (Kusche & Greenberg, 1995) was taught by classroom teachers two to three times per week in Grades 1 to 5. The PATHS Curriculum model synthesizes the domains of self-control, emotional awareness and understanding, peer-related social skills, and social problem solving to increase social and emotional competence (Greenberg & Kusche, 1993). In addition to a person-oriented model that focused primarily on developmental integration, the intervention model incorporated an eco-behavioral systems orientation (Weissberg, Caplan, & Sivo, 1989), which placed primacy on the manner in which the teacher used the curriculum model. That is, program impact may have been the greatest when teachers generalized support for curriculum-based skills during the day and built a healthy classroom atmosphere that supported the child's skill use and internalization of skills. It was presumed that improvements in social competence can be a function of both changes in the child, changes in the ecology, and their interaction. Fast Track staff also consulted with the school principal to bring the philosophy of PATHS to the entire school, resulting in various efforts (on a school-by-school basis) such as placing PATHS posters in school hallways, implementing new school behavior guidelines, and painting problem-solving “stop lights” on school playgrounds.

Educational Coordinators (ECs) from Fast Track worked with classroom teachers in the administration of this curriculum and provided individualized teacher consultation about behavioral management issues. In the early school years, targeted skills were designed to enhance adaptation to the rules and routines of school and to foster the development of positive peer relations. In later years, more advanced topics included decision-making skills, study skills, goal setting, character development, coping with peer pressure, and problem-solving skills.

At the standard indicated level of prevention, 2-hour family group meetings were held regularly at local schools. Sessions were held weekly for 22 sessions in Grade 1, biweekly for 14 sessions in Grade 2, and monthly for 8 sessions each year in Grades 3–5. Each session involved separate group meetings for parents and social skill training meetings for children. The last 30–60 minutes of each session included a parent-child sharing session, in which parents and children participated in joint activities. Parent groups, led by Family Coordinators (FCs), promoted the development of positive family-school relationships (e.g., Burgoyne, Hawkins, & Catalano, 1991) and taught effective communication and discipline skills (including praise and ignoring, clear instructions and rules, and time out) (Forehand & McMahon, 1981; Webster-Stratton, 1989). Child social skill groups, led by ECs, focused on friendship and play skills (Bierman,

Miller, & Staub, 1987; Ladd, 1981; Oden & Asher, 1977) and self-control skills, anger-coping strategies and interpersonal problem-solving skills (Coie & Koeppl, 1990; Lochman, Burch, Curry, & Lampron, 1984). Parent-child sharing sessions promoted positive relationships and offered parents an opportunity to practice new parenting skills with staff guidance. As with PATHS, the skill topics addressed in the parent and child groups followed a developmental sequence, with an increasing emphasis over time on communication skills, homework study skills, goal-setting, and negotiating parent-child conflicts. (See Bierman, Greenberg, & Conduct Problems Prevention Research Group, 1996; and McMahon, Slough, & Conduct Problems Prevention Research Group, 1996, for extensive descriptions of this phase of intervention.)

Individualized indicated services included academic tutoring, home visiting, and school-based peer pairing to promote friendships. Children and families received a standard level of these services in Grade 1. In subsequent years, criterion-referenced assessments were used to adjust the dosage of these three indicated components to match the level of functioning of each family and child. In Grade 4, a mentoring program was added, reflecting the growing significance of the child's identity development and the importance of same-gender, same-race positive role models in the identity development process.

Description of Adolescent Phase of Intervention

The adolescent phase of the intervention plan covered Grades 5–10. It began with intensive prevention efforts around the transition into middle school (Grades 5–7) that were followed by continuing individualized preventive support through Grades 8–10. Due to a growing dispersion of the target sample across schools, it was not possible to serve a substantial segment of the sample with a universal prevention curriculum in adolescence. However, a central goal was to encourage youth involvement in normative, healthy peer and community activities (e.g., clubs, sports teams, church groups, and classes).

Reflecting the developmental characteristics of adolescence, the intervention design differed in some fundamental ways from the design used in the elementary phase. Monthly group sessions involving parents and youth continued during Grades 5 and 6. As in the elementary phase, these sessions were held at the school (or other community location), were 2 hours long, and included separate meetings for parents and youth, along with periods for parent-youth discussion. However, reflecting the protective role of adult supervision and monitoring in adolescence, and the corresponding importance of parent-youth communication, group sessions increasingly emphasized joint presentations to parents and youth, along with guided parent-youth discussions. Second, the emerging abstract reasoning capabilities of young adolescents, coupled with their increased independence and mobility, created an opportunity and need to focus on identity development, future goals, and decision-making around both vocational and avocational interests and activities. To meet this need, the adolescent phase intervention included identity development workshops for youth in Grades 7 and 8, called youth forums. Third, adolescence is marked by several critical developmental changes, including puberty, the initiation of romantic relationships and sexual activity, increasing peer group affiliation, and identity development. Youth differ markedly in the age at which and speed with which pubertal development and these other changes occur, creating heterogeneity that has implications for risk and for preventive intervention. As adolescents become more peer-oriented, deviant peer groups also emerge in early adolescence, and can function to support and facilitate antisocial activity (Dishion, McCord, & Poulin, 1999). Group-based interventions for high-risk adolescents can unwittingly strengthen deviant peer affiliations and thus sabotage prevention effectiveness. Given the need to respond to increasing heterogeneity within the Fast Track adolescent sample, along with the need to avoid supporting deviant

affiliations, individualized criterion-referenced services (rather than group sessions) were emphasized in the later grades (Grades 7–10).

During the adolescent phase, the standard prevention activities included two kinds of curriculum-based parent and youth groups: (1) groups focused on developmental issues of adolescence, held monthly during Grades 5–6 and during the beginning of Grade 7, and (2) an additional set of group meetings that comprised a transition support program, times around the student's transition into middle school or junior high school (Grades 5–6 or 6–7, depending upon the local school organization). The key goal of the groups was to introduce skills that could delay the onset and reduce the severity of adolescent problems. Topics for parent groups included parental positive involvement and monitoring, communication and conflict resolution skills, and parental support for student achievement. Youth group topics included coping with peer pressure, resistance and refusal skills, advanced problem solving, and goal-setting and decision-making skills. After providing information about adolescent risks and protective skills during the family sessions, the intervention staff supported candid parent-youth discussions around issues such as middle-school transition adjustment (Grades 5–6); romantic relationships and sex education (Grades 5–6); alcohol, tobacco, and drug use (Grades 6–7); and vocational goal setting (Grade 7).

The middle-school transition program was designed to provide additional support to parents and youth during the spring prior to, and the fall following, the youth's transition into middle school. This program included visits to the middle school, discussions with the school counselor, coaching in organizational and study skills, and support from middle-school student mentors. The family sessions of the transition program were directed toward helping youth and parents acquire knowledge about middle school, learn skills of adapting to middle-school life, communicate more effectively around middle-school issues, and build a positive relationship with middle-school counselors and teachers.

A new aspect of the standard intervention in adolescence involved youth forums. The forums were designed as workshops for groups of four to eight youths. In Grade 7, a four-session forum based on the Future Selves Program developed by Oyserman and colleagues (Oyserman, Sanchez-Burks, & Harrison, 1996) encouraged youth to think about their short- and long-term life goals and to explore different life opportunities and choices. In Grade 8, a four-session forum explored vocational opportunities, budgeting and life skills, summer employment opportunities, and job interview skills.

In addition to these curriculum-based group programs, individualized prevention supports were offered to some of the high-risk youth on an “as needed” basis, according to criterion-based assessments. Given individual growth trajectories and life situations, considerable heterogeneity existed within the high-risk sample in adolescence. Individualized prevention services were designed to strengthen protective factors in areas of particular need for specific youth. The goal was to work toward equalizing the strength of protective factors across high-risk youth, rather than equalizing the amount of intervention delivered to each high-risk youth. Individualized services continued from Grade 5 to Grade 10, and included: (a) academic tutoring, (b) mentoring, (c) support for positive peer-group involvement, (d) home-visiting and family problem solving, and (e) liaisons with school and community agencies.

Systematic procedures were used to monitor and assess the strength of the protective factors (and degree of risk) of each high-risk youth at three time points during each year. When youth showed deficits in a particular area of protection, staff selected an intervention approach from a prescribed menu. Criterion-based assessments were thus used to determine (1) each individual youth's need for additional intervention (i.e., beyond the curriculum-based groups), and (2) the type and amount of individualized service to be provided. Triannual evaluations

(and corresponding individualized intervention planning) targeted the four key domains of protective/risk factors linked by developmental research with adolescent problem behaviors. In the domain of *parent/adult monitoring and positive involvement*, intervention options included home visiting and family problem-solving meetings focused on behavioral contracting and monitoring and communication training to reduce parent-youth conflict. Another intervention option for youth with insufficient protective support in this domain was the provision of an adult mentor who could serve as a same-race, same-gender positive adult role model. In the domain of *peer affiliation and peer influence*, intervention options included social skills training, recreational program planning with parents and youth to support involvement in conventional peer activities (e.g., sports teams, school, church, or community clubs); and mentoring. In the third domain of *academic achievement and orientation*, intervention options included academic tutoring, homework club, support for vocational development, and consultation with parents and teachers. Finally, in the fourth domain of *social cognition and identity development*, intervention options targeted attitudes supporting nonviolent methods of problem solving, respect for the law, concern for others, future goal orientation, and resistance and refusal skills. Intervention options included mentoring and individual or small-group work focused on positive identity development. Within this domain, small groups were constructed to address identity development of subsamples within the Fast Track high-risk group who seemed particularly vulnerable, such as African American boys and early maturing girls. In addition, Fast Track staff served as liaisons, working proactively with school and community agencies to broker appropriate services for youth and families and attending planning meetings with school and community agencies (such as mental health, Planned Parenthood, teen drug programs) in order to contribute to coordinated intervention plans.

In addition to the triannual assessments of youth functioning and protective/risk factors, the initiation of any of the targeted adolescent problem behaviors served as an event trigger for program reassessment and planning (e.g., police contact, truancy). The goal of the prevention activities was both to delay the initiation of adolescent problem behaviors and also, if initiated, to decrease the duration, severity, and escalation of such problems. Using these procedures, prevention services were tailored in a way that was sensitive to the severity and type of risk factors that characterized individuals within the high-risk sample. Furthermore, these prevention services were organized in a way that was consistent with the theoretical model guiding the prevention program, and that allowed for an empirically based approach to intervention planning and evaluation.

The staffing plan for the prevention program was also adjusted to accommodate the differences in intervention structure from the elementary to adolescent phase of prevention. During the adolescent phase, each family was assigned one core staff member (called a Youth Coordinator [YC]), who carried an average caseload of 16–18 youth and families; thus, there was a significant reduction in service during the adolescent years. YCs worked in teams of two to three staff members, providing each other with collegial support in the review of case plans and the implementation of services. Each team had part-time working members, who served as paid tutors, providing supplemental support services to youth who qualified for high levels of individualized support. Throughout the adolescent phase of the prevention activities, YCs maintained regular contacts with parents and high-risk youth and monitored youth progress at school, reviewing the grade records and discipline reports of all target youth with school counselors three times per year.

Initial Results

Early results of the Fast Track trial (i.e., after the first year of intervention) indicated significant effects on both the targeted children and their families as well as at the universal level of the

classroom and school. For the high-risk children and their families that received the indicated intervention, there were consistent, moderate positive effects on children's social, emotional, and academic skills, peer interactions and social status; and reductions in conduct problems and special education resource use. Parents reported less physical discipline and greater parenting satisfaction/ease of parenting; and engaged in more appropriate/consistent discipline, warmth/positive involvement, and positive involvement with their children's school. Evidence of differential intervention effects across child sex, race, site, and cohort was minimal. At the universal level, intervention schools (first-grade classrooms) showed lower overall level of aggression and higher ratings of the quality of the classroom atmosphere (Conduct Problems Prevention Research Group, 1999a, 1999b).

Summary

The Fast Track Project has been presented here to illustrate how prevention science can utilize basic developmental research and a conceptualization of the operation of risk and protective factors to develop a preventive intervention that integrates universal and indicated approaches. Although the primary aim of Fast Track Project is to prevent chronic conduct problems in children showing high risk at school entrance, the intervention model combines indicated and universal interventions. By utilizing such an integrated and comprehensive intervention strategy, we believe that a synergy is created in which administrators, teachers, support staffs, and specialists linked to Fast Track work effectively to alter both the trajectory of individual children as well as the ecology of the school.

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