Prevention & Early Intervention Projects

Chapter 6

Selecting Target Population for Prevention in Systems of Care

Introduction

Decades of prevention-early intervention research have greatly improved the definition of best practices – the *what* to do with an overburdened family to increase their adaptability and quality of life for improved mental health (Reiss & Price, 1996). Today's program development challenge is less designing interventions with a good chance of working, but more shaping service delivery–specifying *how* support is implemented–so that the effects are demonstrable. An additional critical, contemporary issue is creating fiscal strategies that support program operations beyond expiration of demonstration funding.

The Ventura site is one of three counties involved in California's Comprehensive Integrated Services Reinvestment Project (CISRP-V). Its focus is designing a start-up protocol for school-based prevention-early intervention services. The protocol serves as a rationale for service planning which increases the prospect that, following credible evaluation, a program will be re-funded by benefiting organizations. The process is strongly influenced by the local service management environment, Ventura County's system of care for mental health programs.

This summary contrasts the sustainability implications of four different approaches to selecting a target group. Ventura believes this process reveals the economic core driving the reinvestment approach to prevention-early intervention program planning.

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Target Population Strategies: Implications for Sustainability

What was once a relatively simple program planning step–specifying who would receive mental health prevention services–became substantially more complex with system of care management. Participant evaluation added involvement of key stakeholders in target group selection. In Ventura's reinvestment planning strategy stakeholder significance is further elevated as their role shifts from *involved* participant to *primary* decision maker.

Convenience Sampling in the Client Services Context. In the mental health field most prevention service projects and published intervention trials have used samples of convenience. Children, youth, and families are chosen primarily because they were in present or projected need and accessible (e.g., Short et al, 1995). Convenience sampling, however, includes many false positives; incurs high drop-out rates; the sampling procedure often has more meaning to clinicians than members of the funding organizations; single risk factor selection promotes multiple, fragmented prevention services; and sampling by convenience rarely involves future funding from demonstration funders.

These and other implications of selecting the easily available and apparently needy are a major factor in production of the existing inventory of potentially useful program products with no fiscal market. Table 1 shows that while convenience sampling is the strategy of least resistance, it appears to be a common path to unsustainability.

Targeted Sampling in the System of Care Context. Jurisdictions with mental health systems of care can plan prevention sampling by analyzing high-cost program entry data. Here the desired target group is the one consisting of a greater number of persons who will ultimately require expensive care. There are still undesirable implications for sustainability. System of care management principles are sometimes misunderstood by investors, targeted sampling can still encourage fragmented program planning, and the approach does nothing to spread out programming costs across potential funders. Targeted sampling presents a better costs-to-effectiveness picture, but still leaves the preventionist facing tall operational and sustainability hurdles.

Table 1
Budgetary Implications with Four Sampling Methodologies

	Possible Adverse Implications for Sustainability C = Common S = Sometimes U = Uncommon				
Sample Selection Methods	**False Positives Increase Program Costs**	**Non-Compliance in Target Group Increases Costs**	**Criteria Unfamiliar to Host System Providers**	**Narrow Focus Can Encourage Fragmented Services**	**Uncertain Relevance to Agency Budgets**
Convenience Sampling	C	C	C	C	C
Targeted Sampling	U	U	S	C	C
Multi-Focused Sampling	U	U	U	U	C
Reinvestment Sampling	U	U	U	U	U

Multi-Problem Sampling in the Comprehensive, Integrated Services ("One-stop Shopping") Context. Multi-problem sampling is an appealing option for sustainability. When the same families are at risk for various unfavorable consequences–substance abuse, school underachievement, delinquency, poor access to medical care, mental health problems–a versatile prevention staff might effectively address several prevention topics in one place, at one time. The true economic value, however, is rarely known to participant agency administrators. Instead, they take a "leap of faith," hoping the approach is serving their individual mandates better than if they retained all of their resources and worked within familiar tertiary paradigms. In the shifting sands of joint agency program operations, this approach to prevention sampling will always jeopardize sustainability.

This brief review argues that the most common prevention sampling strategies vary in their programmatic utility, but all are weak in making a compelling case for sustainability. These limitations can be overcome. It was in search of options that CISRP-V developed Ventura's reinvestment sampling strategy.

The Reinvestment Sampling Strategy in Perspective

The contrasts in two Ventura prevention case studies, one vintage 1992, the other recently from CISRP-V, show the reinvestment model's unique features.

Case Study A: A Community-Based, Multi-Problem Sampled Project. In 1992 Ventura was funded to implement a multi-problem, community-based, prevention program. During the next four years it delivered home visitation services to volunteering young, primarily Latino families selected prior to and immediately after the birth of a child. Of 750 consecutive families initially screened and referred to the program 226 were offered home visitation service. An additional 42 families meeting all project criteria were assigned for six months to a comparison cohort in which they were linked with a medical home and then oriented to available services.

The project dramatically reduced risk factors in the home visited group. Adaptive behavior and positive medical and mental health outcomes followed. Families in the comparison group remained in disadvantageous socio-economic circumstances, and did not experience the same rate of positive outcome. An economic evaluation showed the exact cost to bring one overburdened, at-risk family into the range of functioning common to neighborhood homes.

Case Study A sampling and evaluation methodology was sophisticated by child abuse prevention standards. When federal and other grant support expired, however, the collaborative gradually dissolved, unable to raise continuation funding either from within its own organizations or from external sources.

Case Study B: A School-Based, Multi-Problem Sampled Project. In 1995 funding was obtained to underwrite an extensive array of school-based and linked prevention programs in one Ventura elementary school. The school of 600 children from about 400 families is located in a neighborhood comparable to Case Study A.

With its own funding, CISRP-V joined the operational school-based program at the conclusion of the first of three funded years. CISRP-V's goal was three-fold: 1) contribute to the delivery of quality services; 2) encourage commitment to a comprehensive, integrated services framework; and 3) write a target group selection and services planning protocol "on-the-fly," in the certain knowledge that in the spring of 1998 core prevention funding and external in-kind memoranda of agreement would expire.

CISRP-V served as an active partner in considering options and their funding implications. CISRP-V provided technical assistance, but it was the school and their prevention-early intervention staff who made and carried out all decisions.

Case Study B is incomplete, having reached only the half-way point in the journey to the "bottom-line" where supporters either refund or back away. There have been enough favorable signs that sampling methodology and related programmatic decisions are favorably influencing the probability of sustainability, however, that a summary of results is justified.

Sampling and Sustainability in the Ventura Reinvestment Model

Building a Case for Sustainability

Many continuing prevention programs, such as DARE (Drug Abuse Resistance Education), are reinvested annually until evidence of limited impact eventually drag them down (Rosenbaum, Flewelling et al, 1994). Such programs are not sustained on scientific merit, but the "leap of faith" conviction previously mention. CISRP-V thinks of sustainability as the consequence of funders confronting compelling evidence for investment and reinvestment. Three pathways for generating this evidence have been identified. First, with a public demonstration of program competence and evaluations of implementation, process, and outcomes in hand, preventionists approach organizations who stand to benefit from continued operations and request fiscal support. Second, prevention is sponsored by a collaboration of potentially benefiting agencies, with whom there is an unwritten understanding that refunding is contingent upon collected data of consumer participation ("units of service"), consumer satisfaction, and provider (e.g. teacher, mental health worker, etc.) endorsement. Third, prior to selecting a target group or planning an intervention, preventionists approach prospective supporting partners. These agencies are engaged in negotiations with one goal in mind, obtaining their response to the question: "What evidence of prevention's impact on your organization would be so impressive that you would make all reasonable efforts to continue its services?"

Case Study A above treated sustainability as an event, a decision or decisions that would be made in the future on the basis of a compelling demonstration of quality effort, with needy families, toward positive outcomes, and at known cost. Evidence would be presented orally, by the project's reputation, and in the form of an outcomes report. Obviously, in some way this was a flawed expectation. The anguish of project staff was undiminished by their awareness that across the country countless other prevention demonstrations have met a similar fate. This had been their commitment to families, day in and day out for over four years. On September 30, 1996, except for the long-range follow-up team, services were abandoned.

CISRP-V's Case Study B is treating refunding differently. Reinvestment thinks of sustaining fiscal support as a process beginning even before prevention services actually get underway. It takes the position that local organizations who are committed enough to fund a project on its *promise* (or participate in prevention service benefits) can become so committed to the *results* they feel compelled to sustain the program. In reinvestment language, "Stakeholders are made, not born."

CISRP-V's draft protocol for reinvestment consists of ten steps, shown in Table 2. The project believes following the recommended directions will produce committed economic partners. Holding to the course is difficult, however, for two reasons. One is the preventionist's natural impatience to organize and deliver programs. This enthusiasm,

inflamed by demonstration capital, is a common path to another program success, but sustainability failure. The other reason is a "cultural problem." Though they may be experienced in their own fields, preventionists cannot know the perspectives of potential funders. A plan from the treatment interventionist's pen has a brief life, usually equaling the grant-funded term. A plan designed by preventionists *for* potentially benefiting agencies may be very durable fiscally.

Though CISRP-V's reinvestment protocol may appear "self-evident" and actions any prevention program might consider common sense, "walking the walk" was much more difficult than making token gestures toward collaborative planning with investors. Staff in the on-going programs in Case Study B made major shifts in their thinking about each and every aspect of their work. Further, lessons learned were relearned by CISRP-V and Case Study B's staff. Finally the two work groups reached the insight that external organization refunding of prevention services–on their terms–would probably target the same children and families preventionists considered in greatest need.

Table 2
CISRP-V Planning Steps and Related "Sustainability Milestones"[1]

Sustainability Step	Sustainability Milestones in 1996-97 Case Study B
1. Prevention partnerships begin their program planning with and keep their focus on the initial investors.	The prevention planning team received strong favorable reactions from agency "fiscal officers" when these persons were given a role in program planning.
2. Target group definition begins with an understanding of each prospective rein-vestor's publicly mandated population.	CISRP-V redefined its target group with input from potential refunding agencies.
3. Risk and protective factors are defined with investing agencies to guarantee a refined target group definition.	A major investing agency critiqued CISRP-V's list of risk factors, found it wanting, and added their own risk assessment protocol.
4. Together the partners and preventionists explore "front-end" agency cost measures.	Agency partners and CISRP-V realized the difficulties in reaching baseline costs. This increased investor confidence, however, in the possibility of actually knowing if prevention had a budgetary value.
5. A written reinvestment agreement specifies the conditions that will make a compelling case for fiscal action by investors.	Investors went through the process of thinking about conditions that would demonstrate effective prevention. They were enthusiastic about pinning down how this might be spelled out on paper.
6. The best practices for service planning must be specified and endorsed by investors.	(step not addressed during 1996)
7. Preventionists design with their partners the baseline, process, and outcome data collection methodology.	(step not addressed during 1996)
8. Prevention program leadership commits to directing services toward cost benefits.	(step not addressed during 1996)
9. Evaluation results are reported and reviewed in the context of the reinvestment commitment.	(step not addressed during 1996)
10. Reinvestment is a process, and evidence is collected as part of continuing, refunded services.	(step not addressed during 1996)

[1]A more complete description of sustainability steps is presented in a subsequently prepared CISRP-V document "Comprehensive Integrated Services Reinvestment Project: Ventura Site 1996-97 Annual Report, A Program and Fiscal Management Protocol for School-Based Prevention Services, July 1997" available from the author.

A Reinvestment Guideline for Target Group Selection: Shared Risk Management

Prevention and early intervention are fiscally valued by organizations when their high-end cost service risks are reduced or contained. *Shared risk management*, cost avoidance benefits enjoyed by multiple agencies who participate equally in prevention service overhead is even more attractive, CISRP-V discovered. The prospect that an organization may reduce their costs by a program partially funded by another budget source appeals to every economically savvy manager. This approach to target group selection will be the central focus of the Ventura site during its second project year.

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Symposium: Family Support for Children of Parents with Severe Mental Disorders

Introduction

This symposium describes a controlled, longitudinal trial of a family support intervention whose aim is to mediate child, parent, and service system outcomes for families with a parent who has a severe mental disorder. The study also provides a test of a theoretical model which stipulates five proximal risk factors as sequelae of parental mental disorder: disruption of the parent-child bond, impaired performance of parenting tasks, social network constriction, diminished familial financial resources, and increased familial stress and discord. Family support is viewed as a protective mechanism which mediates these risks to promote positive outcomes at the child, parent, and service system level.

The symposium featured four brief papers which are included in these proceedings, and comments from a discussant. The papers provide an overview of the initial findings of this study. The first paper, presented by Jacob Kraemer Tebes, Ph.D., includes an overview of the study and describes the theoretical model which guides the research. The second paper, presented by Jean Adnopoz, M.P.H., provides a description of the intensive, in-home family support intervention. The third paper, presented by Joy S. Kaufman, Ph.D., describes initial baseline and posttest findings regarding child and parental health outcomes. Findings are examined as they pertain specifically to childhood and adult resilience as measured both in terms of competence and behavioral dysfunction. The final paper, also presented by Jacob Kraemer Tebes, Ph.D., summarizes initial baseline findings from the cost-effectiveness component of the study.

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Experimental Design and Overview of the Family Psychosocial Model

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Children of parents with severe mental disorders are at increased risk for subsequent behavioral dysfunction and reduced competence. Despite this increased risk, research has been unable to specify with any certainty the types of disorders or behavioral dysfunction likely to be exhibited by these children. Over the years, studies have indicated that parental diagnosis is a primary risk factor for childhood disorder and dysfunction. However, parental diagnosis per se has not emerged as a reliable predictor of either the prevalence or type of childhood disorder likely to emerge. This has prompted researchers to hypothesize that the path from parental psychiatric disorder to child emotional problems and behavioral dysfunction may be indirect and may vary as a function of other, more proximal factors, such as disruptions in the parent-child bond, family stress, or specific parent-child interactions. Importantly, the presence of other key vulnerability factors, such as low socioeconomic status, high familial discord and hostility, or having two parents with a psychiatric disorder, appears to increase the child's risk for disorder or problem behavior.

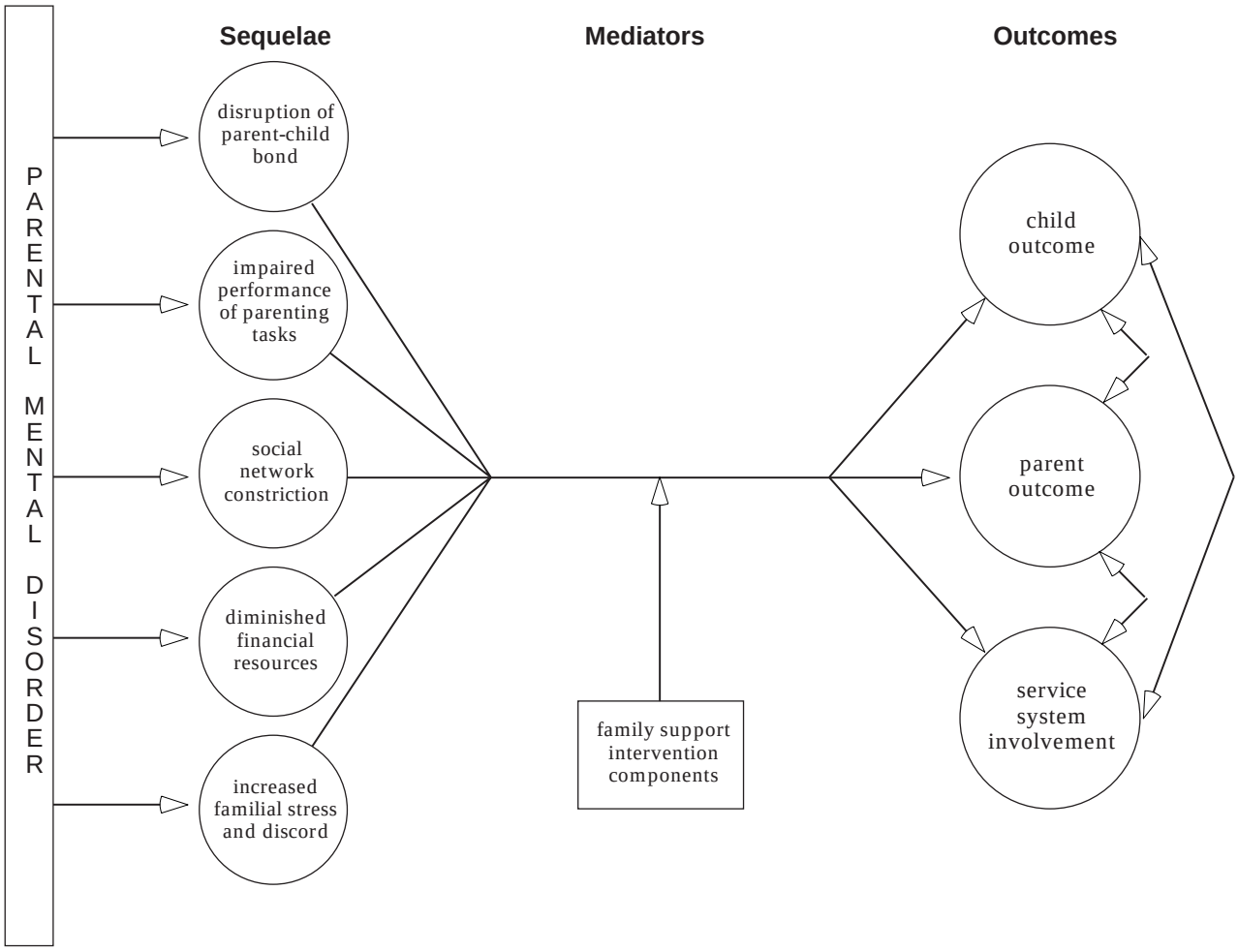
In the proposed study, parental mental disorder is hypothesized as having five potential sequelae which function as proximal risk factors for child and parental adaptation– disruption of the parent-child bond, impaired performance of parenting tasks, social network constriction, diminished family financial resources, and increased familial stress and discord. In a recent summary of baseline findings examining this model, Tebes, Adnopoz, Racusin, Kaufman, and Barone (1997) showed that the model predicted child resilience–defined either in terms of child dysfunction or child competence–by accounting for 15-35 percent of the variance in scores. A schematic of the hypothesized model is provided in Figure 1.

In addition to specification of parental sequelae of mental disorder and their relationship to various outcomes, the model also specifies how a comprehensive family support intervention mediates the relationship between hypothesized sequelae and

outcomes. Family support intervention components involve the provision of services to families in several overlapping domains–basic needs, child welfare, parent-child relationship, family health, social network utilization, and education / work – which are delivered in three phases, including engagement and relationship-building, intensive intervention and referral, and stabilization and maintenance. These activities address proximal risk factors specified earlier to promote resilience.

The study has four specific aims: 1) to promote successful adaptation among children of parents with a severe mental disorder; 2) to enhance parental role functioning and reduce parental symptomatology and problem behavior; 3) to increase the cost-effectiveness of services; and 4) to test a theoretical model in which family support processes and activities mediate outcomes at the child, parent, and service system level.

Figure 1
Conceptual Model



A total of 177 mothers with severe mental disorder currently receiving outpatient clinical services within the managed service system served by the Connecticut Mental Health Center (CMHC) and 260 of their children, ages 2-16 years old, were recruited into the study through a randomized invitation design. Eligibility criteria for enrollment included the following: 1) the parent needed to be a mother or maternal guardian of a child 2-16 years of age, 2) who had a severe mental disorder, and 3) who was currently receiving outpatient mental health treatment in a state-funded outpatient clinic at the Connecticut Mental Health Center or its affiliated area agencies, and 4) who had repeated, ongoing contact with the child in the past 4 years; and 5) had exhibited acute symptoms of the disorder during this period. Women were chosen because, in pilot work, mothers with mental illness were disproportionately represented as caretakers of their children as compared to fathers with mental illness.

Eighty-nine families were enrolled in 9-months of intensive family support services in addition to usual clinical services; while 88 families received usual clinical services along with a comprehensive baseline assessment provided to clinicians of families in each condition. Assessments of the sequelae of parental mental disorder, intervention processes and activities, and the relative impact of the intervention on child, parent, and service system outcomes, including service costs, were made at study entry, and at 6-, 9-, and 18-months post-admission.

References

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Intensive In-Home Family Support Services: Domains, Phases, and Activities

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Children of parents with severe mental disorders have been shown to be at risk for a host of negative outcomes, including poor health, mental disorder, substance abuse, and delinquency. Some risk may be attributable to early disruptions of caregiving or familial instability due to the severity of the parent's disability, and / or the frequency of hospitalizations necessitating parent / child separations. Parenting which does not meet the child's developmental needs, lack of extended familial resources or other social supports, joblessness or financial problems, and increased familial stress and discord can also contribute to negative outcomes for children in these families.

This clinical trial of a randomized, in-home intervention was guided by a manual developed specifically for this study. The manual standardized the intervention and defined the scope of services delivered to families in which a mother had a severe mental disorder. The intervention was intended to mitigate the potentially noxious effects of these conditions, promote resilience, and improve family functioning by addressing six particularly important domains: 1) basic needs (i.e., food, clothing, housing, and entitlements); 2) child welfare (i.e., safety, stability, and continuity of parenting); 3) parent-child relationship (i.e., promotion of satisfying and positive interaction); 4) family health (i.e., ensuring access to appropriate medical care and professional assistance); 5) social network utilization (i.e., identifying and enlisting the support of family members and friends); and 6) education and work (i.e., encouraging

and assisting parents to become positively involved in their child's education and helping parents to become working and productive members of society through continued schooling or employment.

History and Philosophy

Based on more than a decade of home-based clinical work with children and parents at risk, the intervention was provided by a team consisting of a social worker and family support worker. The primary role of the clinician was to develop the therapeutic formulation which informed the work of the individual case; the family support worker addressed more concrete tasks while also contributing to the overall understanding of the needs of the child and family in the specific domains targeted for intervention. The team model had been developed and adapted by the Family Support Service (FSS) of the Yale University Child Study Center to meet the needs of children in families with complex problems who are at risk because of abuse, neglect, parental substance abuse, HIV infection or AIDS, homelessness, or psychiatric disorder. The FSS programs are available 24 hours a day, seven days a week, and they range in length from 12 weeks to several years. The intensity of the intervention can be titrated to meet the family's needs. The programs exist at the boundary between the family, the mental health system, and other community systems and institutions, including child protection, social services, schools, hospitals, and community health centers. Their primary task is to identify and build upon the family's strengths to meet the needs of children for safety, stability, affection, and nurture. Services are relationship-based and include concrete activities to address social and familial needs as well as assessment, testing, referral, and family or individual therapy as indicated.

The family support intervention represents the integration of several theoretical approaches: attachment theory, social learning theory, developmental theory, and family systems theory. Our work is child and problem-focused, and represents a systems-oriented approach to working with families with multiple problems that is culturally sensitive and developmentally informed. The theoretical basis of the intervention as well as its developmental focus and sensitivity to issues of diversity is described in greater detail in the manual that has been developed (Tebes, Adnopoz, Canning, Kaufman, Racusin, & Nagler, 1996).

Since its inception in 1985, six operating assumptions have guided the family support program:

1. existing strengths of families can be utilized to effect positive change;
2. behavioral changes are most likely to occur through the development of a positive working relationship between the parent and the family support team;
3. a well-supervised and trained team consisting of a social work clinician and a lay family support worker can be an effective instrument of intervention;
4. the roles of the social worker and family support worker are flexible such that the needs of the case determine whose work is predominant;
5. strong collaboration with other agencies serving the family is essential; and,
6. discharge planning must begin at the time of intake and continue through actual termination.

The best interests of the child are central in the programs of FSS and guide decision-making regarding the need for child placement and family intervention. In our view, the interests of most children are more likely to be served when the team: attempts to preserve the integrity of the family as a unit; acknowledges and respects the child's primary attachment to his or her caregivers; considers the child's developmental, psychological, cognitive, and social needs; and appreciates the meaning particular

interventions may have to the child and the family. We believe this approach provides an optimal basis for an intervention whose aim is to promote resilience among children of parents with severe mental disorder because it is able to address the complex, interrelated needs of the individual child, the family, and the family within the community.

Intervention Domains and Phases

As noted previously, the intervention is delivered in six domains: 1) basic needs; 2) child welfare; 3) parent-child relationship; 4) family health; 5) social network utilization; and 6) education / work. These domains were developed to address the various individual, dyadic, familial, and social needs in multiproblem families. These domains also generally correspond, in ascending order, to the hierarchy of needs first proposed by Maslow (1970) as essential to optimal functioning. Thus, if basic needs are not met, little further work can be done effectively. Many of the families had never been assisted to access available financial benefits or entitlements, never received appropriate feedback about their experiences and actions, had little or no experience negotiating with schools on behalf of their children, and were seldom supported or encouraged to act assertively and independently. Although the intervention's emphasis differs from that provided in Maslow's hierarchy, his basic concept–that it is essential to address needs at the bottom of the hierarchy (e.g., for survival or safety) in order to most effectively address needs at the top of the hierarchy (e.g., self-esteem)–forms the conceptual basis for the identification and selection of the domains included in the intervention.

Although some children were placed during the course of the intervention, the work prepared both parents and children for a more planful and less conflictual separation. Relationships were developed not only with the client families but with workers in other systems–particularly protective services, health, and mental health–in order to broker services, provide linkage and support, and represent the interests of the child and family. The purchase of a footlocker for an adolescent boy whose total lack of privacy was a significant stressor for him promoted the boy's emerging independence as well as improved the family's functioning. Engaging in play with children helped some mothers to first watch silently and eventually join with their children in making objects of clay, drawing, or game playing.

The intervention was delivered in three overlapping phases: 1) engagement and relationship building; 2) intensive intervention and referral; and 3) stabilization and disengagement. Phase I was implemented in the first month of the intervention. The primary objectives during this phase were to: 1) to build a working relationship with the parent and the family; and 2) to develop an intervention plan for implementation during Phase II. To accomplish these objectives, the team had 1-2 contacts per week with the family. Phase II took place during months 2-6 of the intervention. The primary objective of this phase was to implement the plan of intervention, including referrals to community providers, that was developed in Phase I. To accomplish these objectives, the team had 2-4 contacts per week with the family. Phase III extended for the final two months of the intervention. The primary objectives of this phase were: 1) to maintain the gains made in the Phases I and II; 2) to develop a family discharge plan; and 3) to identify a lead contact person(s) to continue to work with the family following discharge. During this time, contact with the family was reduced to approximately one contact or less per week.

Although the team usually attempted to implement these activities in the sequence of phases outlined, frequently this was not possible. The pressing needs of the family, the parental symptoms of mental illness, some parents' difficulties establishing trusting relationships, and unavoidable changes in staff due to illness and unforeseen irregularities in case flow, demanded flexibility and adaptation.

Critical components of the intervention as delivered involved the following: 1) use of the team model to support the child, the family, and the intervenors themselves; 2) communication through listening, respect, and working through of impasses in problem-solving; 3) weekly clinical supervision; and 4) a family focus that was carefully and consistently maintained. An additional consideration was to limit the scope of the work and establish boundaries in order to maintain the objectivity of the intervention team, refrain from imposing personal values and assumptions on the family, and understand the limitations of our clinical knowledge. Also of major importance was the team's mindfulness of the fact that entry into the lives and homes of clients was a potentially powerful event which we have only begun to understand. This project is the beginning of the process by which we hope to learn more about the application of our own clinical assumptions and theories to the work of promoting resilience and ameliorating the possibilities of negative outcomes for vulnerable children and families in which a parent has a severe mental disorder.

Case Illustration

Ms. L. was a severely depressed, 41-year-old, never married, African-American woman with six children ranging in age from 22 to 4. Her depression had deepened when her therapist left, and she found herself unable to engage with any other therapist at the clinic. At home, Ms. L. had difficulty tolerating the intervention team's attempts to become involved with her younger children. Whenever team members engaged them in conversation or play she would retreat to her bedroom. The children were known to be regularly absent from school, stealing and firesetting. Frequently, there was no food in the house and the rent was unpaid. The oldest child in the home, a 15-year-old son who did attend school and played on a basketball team, would assault the younger children, frequently after they had disturbed or stolen his belongings. In addition, because Ms. L. seldom left the house, her relatives used her to care for their children, even though she could offer little in the way of nurturance or support.

The team undertook the following: they helped Ms. L. to locate a more easily accessible mental health service and supported her work with a new therapist; they purchased a footlocker for the 15-year-old which enabled him to have a modicum of privacy within the home; they patiently led Ms. L. to become involved in creative play with the children; they helped the older son to see that the younger children looked up to him and were hungry for his attention and approval; they supported the mother's interest in modeling and photography and encouraged her to become more active on behalf of her family; and finally, they worked with the extended family to set limits on their behaviors and helped them to find more appropriate child care arrangements.

When the intervention terminated, the siblings were no longer attacking each other, there were no additional reports of physical injuries, delinquent behavior, or truancy. Mother was working as a nurse's aide, her 15-year-old son, who had gained insight into the behaviors of his siblings, was enjoying his position as a member of the basketball team and taking some appropriate distance from his family. The home functioned more smoothly; Ms. L. was able to take pride in her accomplishments and the team gained an important sense of their skills as intervenors.

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Resilience Promotion through Family Support

Joy S. Kaufman, Jacob Kraemer Tebes, Jean Adnopoz & Gary R. Racusin

Over the past two decades, the concept of resilience has become integral to our understanding of adaptation and adjustment following stressful or traumatic life experiences. Until recently, our understanding of resilience has been based almost exclusively on studies of children and adolescents and has been conceptualized, in part, as the absence of signs or symptoms of mental disorder. This presentation challenges both of these conceptualizations by examining findings from a controlled longitudinal trial of the impact of intensive family support to families with a mother who has a severe mental disorder.

Tebes, Irish, Vasquez, and Perkins (in press) have defined resilience as continued normative development despite adverse circumstances and have summarized several assumptions about resilience which have formed the basis for the proposed project. These are that: 1) resilience is distinct from other related constructs; 2) it is a process; 3) that occurs throughout the life span; and 4) has multiple pathways. In the current SAMHSA-funded clinical trial, resilience for both children and parents is conceptualized as part of a protective process that mediates risks through intensive family support. In this model, severe parental mental disorder is viewed as a distal risk factor for poor child, parental, and service system outcomes. Parental mental disorder is hypothesized as having five potential sequelae which function as proximal risk factors for these outcomes–disruption of the parent-child bond, impaired performance of parenting tasks, social network constriction, diminished family financial resources, and increased familial stress and discord. Intensive family support mediates these risks to promote childhood and parental resilience through promotion of normative developmental experiences and functioning.

Methods

Participants. A total of 177 mothers with severe mental disorder and their children, ages 2-16 years old, participated in the study. Mothers were active outpatients of a state-funded and university-managed mental health center and received clinical and case management services as part of their treatment. Mothers must have lived with their children or have had substantive contact with them for the past four years and exhibited symptoms of severe mental disorder during this 4-year period. Fathers were targeted as part of the intervention through their involvement in the family's life.

Measures. Three distinct areas were assessed for this summary: 1) parental mental disorder; 2) the sequelae of parental mental disorder; and 3) child and parent adaptational outcomes. Each of these areas corresponds to the constructs described earlier. Parental mental disorder was assessed through the Structured Clinical Interview for DSM-IIIR (SCID; Spitzer, Endicott, & Robins, 1987).

Each of the five sequelae of parental mental disorder were assessed as follows: *disruption of the parent-child bond* - a modified version of the Detachment subscale of the Child Behavior to Parent - Short Form (Schaefer & Edgerton, 1977); *social network constriction* - a modification of the Social Support Resources Scale (Vaux & Anthanassopulou, 1987); *impairment performance of parenting tasks* - the total score of the Parenting Stress Index - Short Form (Abidin, 1990); *diminished financial resources* - the Hollingshead Four-Factor Index of Social Status (Hollingshead, 1975); and *familial stress and discord* - the total score of the Family Inventory of Life Events (McCubbin, Patterson, & Wilson, 1980).

Child adaptation was assessed using measures of both child competence and behavioral dysfunction.

Child competence was assessed using the Self-Perception Profile for Children (Harter, 1985), the Vineland Screener (Sparrow, Cicchetti, & Carter, 1991), and the Kaufman Brief Intelligence Test (Kaufman & Kaufman, 1990). Child dysfunction was assessed using the Child Behavior Checklist (Achenbach & Edelbrock, 1983), the Diagnostic Interview Schedule for Children (Rubino-Stipec et al., 1994), the Columbia Impairment Scale (Bird et al., 1993), and the Global Assessment Scale for Children (Shaffer et al., 1983). *Parental adaptation* was assessed using the Global Assessment of Functioning Scale (American Psychiatric Press, 1994), the Brief Psychiatric Rating Scale (Overall & Gorham, 1962), the General Health Questionnaire (Goldberg, 1972), and the Modified Social Functioning Scale (Davidson, Tebes, Stayner, & Rakfeldt, 1994).

Procedures. All active public managed service system outpatients eligible for participation were invited into the study through face-to-face meetings with research staff. After consent was obtained, research staff administered the measures through face-to-face interviews in participants' homes. Mothers were paid $50-$100 depending on the length of the interview protocol.

Results

Descriptive characteristics of the families are summarized in Tables 1 and 2. As can be seen in the tables, about one-half of the sample of parents were Caucasian, about one-third African-American, and one-fifth Latina. Almost three-quarters of families were being raised by a single parent, and families were overwhelmingly likely to be low income or poor based on their SES. In addition, the most likely parental diagnosis was major depression or some form of affective disorder, and almost one-half of mothers also had a co-occurring substance use disorder.

Due to space limitations, the data on child, maternal, and family functioning outcomes are

Table 1
Characteristics of Study Families
(*N* = 177)

Age (In Years):	**Mean (Std Dev)**
Mother	37.7 (8.4)
Child	9.0 (3.9)
Child's Gender	**Percentage**
Female	52.5
Mother's Race/Ethnicity	
African-American	30.5
Caucasian	52.0
Hispanic/Latina	17.5
Mother's Marital Status	
Never Married	33.2
Married/Remarried	28.0
Divorced/Separated/Widowed	38.8
Family Socioeconomic Status	
I. Managerial/Professional	0
II. Technical	0
III. Skilled Employment/Trade/Clerical	1.9
IV. Semi-Skilled Employment	39.6
V. Unskilled Employment/Min. Employment	58.5

Table 2
Primary Psychiatric Diagnoses of Study Mothers
(*N* = 177)

Principal Diagnosis (SCID)	Percent
Major Depression	57.1
Bipolar Disorder	16.4
Schizophrenia/Schizoaffective Disorder	12.4
Anxiety Disorder	10.2
Borderline Personality Disorder	4.0
Co-Occurring Substance Use Disorder	48.6

summarized in Table 3. As can be seen in the table, children, parents, and families exhibited high levels of risk in every category examined. However, several indicators revealed evidence of protection–intelligence and perceived competence were within the normative range and one-half of children had no diagnosable disorder. For the most part, however, families reported high levels of risk involving child health outcomes, the extent of parent-child separations, reported problems in parenting behavior and familial stress, and the nature and extent of social networks and supports.

In addition, to baseline descriptive findings, Table 4 summarizes one of several hierarchical regression analyses completed for the first time with the entire sample which provide a test of the model. Only one such analysis is shown for illustrative purposes, although the findings were typical of others observed involving both child and parental health outcomes. As is shown in the table, each of the five hypothesized sequelae were entered as sets (e.g., child separations, parent separations, parental detachment) in a successive hierarchical manner to predict child problem behaviors. Table 4 reveals that the overall theoretical model was significant and accounted for about 36% of the variance in scores. Specifically, the parent-child relationship factor, assessed by various established subscales of dysfunctional parenting behavior, positive parenting behavior, and child obedience, accounted for 17% of the variance, while family stress and disruptions in the parent-child bond (child separations, parent separations, parental detachment) accounted for 11%

Table 3
Selected Outcomes Indicative of Risk for Children, Mothers, and Families at Baseline

Risk Indicator:
Child Outcomes
About one-half of children meet diagnostic criteria for a mental disorder and score in the clinical range on the CBCL.
Children score in the normative range on Intelligence (KBIT) and Perceived Competence (Harter).
Children score in the below average range for their age in Adaptive Behavior (Vineland).
Parent-Child Separations
About one-half of mothers have been hospitalized for their psychiatric disorder, and children their child's mean age at first hospitalization is just over 5 years.
About one-quarter of children are hospitalized for medical reasons, with a mean age of about 2 years 8 months.
About 1 in 7 children have been placed in foster care at some time in their lives, with a mean age for first placement of about 3 years, 4 months.
Parenting Behaviors
Parents report higher than normative problems indicative of risk in the following areas: • lack of confidence as a parent • increased parent-child dysfunctional interactions • parenting stress
Social Network Utilization
Persons in the mother's social network tend to be available for emotional support rather than practical assistance, advice and guidance, or financial support.
Support networks tend to be fairly dense (i.e., members are likely to know one another).
Most mothers report feeling close to only a few people (usually about 3).
Familial Stress
Mothers report high levels of overall stress and an extremely high mean number of significant life events.

and 9% of the variance, respectively. Family SES and network size were not particularly relevant in the prediction of CBCL scores, but in other analyses these were sometimes found to be significant.

Finally, in addition to descriptive analyses and tests of the theoretical model, ANCOVAs were used to examine posttest results with the entire sample at the 6-month assessment. These findings revealed no significant differences in health outcomes for children between the intervention and control group.

Discussion

These findings provide strong empirical support which documents the nature and extent of risk to children of parents with severe mental disorders, and the validity of a theoretical model that describes that risk as a basis for intervention. Despite these promising findings, however, no significant differences between intervention and control conditions were observed after the initial 6 month posttest. This is not surprising since previous related work has shown that the impact of family support services with multiproblem families often is not observed until 18 months or 2 years later (Tebes, Adnopoz, Racusin, Kaufman, & Barone, 1997). In this context, the symposium provides a comprehensive summary of the theoretical and practical basis for intervening with families in which a parent has a severe mental disorder.

Table 4
Summary of Hierarchical Regressions of Baseline Family Psychosocial Predictors of Child Problem Behaviors (CBCL)

Family Psychosocial Predictors	beta	*t*	R^2 to change
Family SES	.093	1.48	.02
Child Separations	.068	1.10	.09
Parent Separations	.053	0.87	
Parental Detachment	.084	1.20	
Network Size	.067	1.02	.01
Family Stress	.189	2.75	.11
Dysfunctional Parenting Behavior	.269	3.61	.17
Positive Parenting Behavior	.034	0.50	
Child Obedience	.282	3.99	

F (9,167) = 12.13, $p < .0001$; R = .40, Adj. R^2 = .36.

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Cost Effectiveness of the Family Support Intervention: Preliminary Findings

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In recent years, social and community interventions to prevent disorders or promote competence have come under increasing pressure not only to demonstrate program effectiveness but also cost-effectiveness. This emphasis in the area of prevention and health promotion duplicates a relatively recent trend in the health care and human service arena to deliver services that are cost-effective. In the mental health field, this trend is reflected in studies over the past two decades that have examined the cost-effectiveness of various psychopharmacological, clinical, and community-based interventions involving persons with severe mental disorders through randomized clinical trials. With only recent exceptions, such as the large scale Fort Bragg demonstration, very few of these studies have involved trials which include children, and virtually none have focused on costs associated with adults, children, and families.

This summary reports initial estimates of costs incurred by families with children in the home in which a parent has a severe mental disorder. In terms of both costs and benefits, this study embodies services and prevention research by examining outcomes for: a) parents receiving public sector mental health and social services, and b) children who may be at risk for problem behaviors who have recently exhibited evidence of such problems, and who also have had generally more limited service system involvement.

Method

Participants. A subsample of 143 families in which the mother had a severe mental disorder and had a child, 2-16 years old, participated in the study. Mothers were active outpatients of a state-funded and university-managed mental health center and received clinical and case management services as part of their treatment. One-half of the mothers received intensive family support services, and the other half received usual services in addition to a comprehensive child and family assessment provided to all families at study enrollment. Mothers must have: 1) lived with their children or had substantive contact with them for the past four years; and 2) exhibited symptoms of severe mental disorder during this 4-year period. Fathers were included in the intervention through their involvement in the family's life.

Measures. For the purposes of this presentation of findings, measures of six types of service utilization costs were examined. These are: 1) Medicaid costs (psychiatric hospital days, general medical hospital days, psychiatric outpatient visits, general medical outpatient visits, prescription costs, and health care transportation costs); 2) additional public sector mental health service costs (inpatient days, day hospital days, entry crisis / clinical and medication evaluation services, therapy / case management / psychopharmacology services); 3) family support intervention costs (number of visits and service hours); 4) social security costs (Social Security Disability Income [SSDI] payments); and 5) federal and state welfare costs (Supplemental Security Income [SSI] payments, Aid to Families with Dependent Children [AFDC], and food stamps). A detailed summary of these measures is provided in Table 1.

Procedures. Unit costs associated with services received in each of the 5 categories above were calculated based on methods described elsewhere (Wolff, Helminiak, & Diamond, 1995; Sledge, Tebes, Wolff, & Helminiak, 1996; Wolff, Helminiak, & Tebes, 1997). In summary, the calculation of unit costs is done in six steps: 1) cost identification; 2) service line identification; 3) overhead cost allocation; 4) mapping outputs to cost centers; 5) enumeration of aggregate service units; and 6) calculation of unit prices. Unit costs are then aggregated for each family by condition. In addition to an aggregation of costs for each condition, unit costs also were aggregated to provide an estimate of the costs of producing a unit of service in each of three areas: direct service costs, operating costs, and capital costs.

Results

Table 2 summarizes baseline clinical service utilization costs from the first 90 families enrolled in the study. Costs are estimated for the 6 months prior to study enrollment. As is shown, by far the single most costly clinical service provided involved individual treatment, representing 79% of the total service utilization costs incurred.

Table 3 details baseline and 6-month costs by condition for the family support intervention and CMHC clinical services, as well as maintenance costs, inclusive of Medicaid, SSDI, SSI, AFDC, & food stamps. As is shown, overall costs by condition were comparable, indicating that the randomization was effective. Importantly, non-medical maintenance costs (SSDI, SSI, SSI State, AFDC, food stamps) represented about one-half the expenditure as health care costs (CMHC & Medicaid) for these families, and family support intervention costs added an amount slightly greater than that incurred for clinical costs.

Table 4 summarizes estimated production costs for the family support intervention and the CMHC clinical service in three areas: capital costs, direct costs, and operating costs. As is shown, the community-based family support intervention incurs about three-quarters of its costs in direct service, and

Table 1
Service Utilization and Cost Estimation Measures

Measure	Data Source for Service Utilization	Data Source for Cost Estimation
Family Support Intervention	Manual logs of intervention staff.	Financial records of intervention operation, plus imputation of costs for resources missing or improperly represented in financial records.
Mental Health Center Treatment	Connecticut Mental Health Center Management Information System (MIS), supplemented by Medicaid data from State of Connecticut Department of Social Services.	Connecticut Mental Health Center financial records, State of Connecticut Office of the State Comptroller, imputation or deletion of costs for resources found to be improperly represented in records.
Other Specialty Mental Health Treatment	Yale-New Haven Hospital MIS, Hospital of St. Raphael MIS, Fair Haven Clinic records, Medicaid and Medicare data.	Financial records for Yale-New Haven and St. Raphael hospitals and Fair Haven Clinic, with imputation for resources found to be improperly represented; estimated algorithms for application to charges and payments data for Medicaid and Medicare claims information.
General Medical Treatment	Yale-New Haven Hospital MIS, Hospital of St. Raphael MIS, Fair Haven Clinic records, Medicaid and Medicare data.	Financial records for Yale-New Haven and St. Raphael hospitals and Fair Haven Clinic, with imputation for resources found to be improperly represented; estimated algorithms for application to charges and payments data for Medicaid and Medicare claims information.
Human Service Resources	Fellowship House, Farnam Neighborhood House, West Haven Community House, Easter Seals/Goodwill records	Financial records of these agencies, with imputation for resources found to be improperly represented.
Civil and Criminal Justice Resources	New Haven Police and West Haven Police Department, New Haven and West Haven Probate Courts, Unified Superior Court, New Haven Legal Assistance and Yale Legal Services case record systems.	Financial records for New Haven and West Haven Police Departments, New Haven and West Haven Probate Courts, Unified Superior Court, New Haven Legal Assistance and Yale Legal Services.
Education Resources	New Haven and West Haven Departments of Education enrollment and fiscal records.	New Haven and West Haven Departments of Education enrollment and fiscal records.
Maintenance Costs	*SSDI and SSI payments data:* Social Security Administration computer records *AFDC, Food Stamps and State of CT SSI supplement payments data:* State of Connecticut, DSS, SOFA (Statement of Financial Assets) computer system. *City welfare payments data:* New Haven and West Haven departments of city welfare. *WIC benefits data:* St. Raphael, Yale-New Haven and Fair Haven WIC programs *Housing benefits data:* Housing Authorities for the cities of New Haven and West Haven.	*SSDI and SSI payments data:* Social Security Administration computer records *AFDC, Food Stamps and State of CT SSI supplement payments data:* State of Connecticut, DSS, SOFA (Statement of Financial Assets) computer system. *City welfare payments data:* New Haven and West Haven departments of city welfare. *WIC benefits data:* St. Raphael, Yale-New Haven and Fair Haven WIC programs *Housing benefits data:* Housing Authorities for cities of New Haven and West Haven.

Table 2
6-Month Baseline Costs of CMHC Services per Family
(*N* = 143)

Costs	Mean	*S.D.*
Inpatient	1	11
Day Hospital	2	13
Crisis / Evaluation	237	582
Individual Treatment	3,005	3,915
Group Treatment	536	1,117
Total CMHC Costs	3,781	4,161

Table 3
Total Costs by Condition for Each Service Per Family
(*N* = 143)

	Family Support Intervention		Enhanced Usual Treatment	
Service Category	*N*	Mean (*S.D.*)	N	Mean (*S.D.*)
Family Support Intervention	86	$5,921 ($4,813)	---	---
CMHC Clinical Services	72	$4,062 ($4,705)	71	$3,508 ($3,620)
Medicaid	35	$7,407 ($15,398)	31	$8,102 ($20,819)
SSDI, SSI	48	$1,461 ($2,125)	43	$1,659 ($2,314)
SSI State, AFDC, Foodstamps	35	$3,243 ($2,243)	32	$3,685 ($1,999)

Table 4
Comparative Distribution of Costs by Condition (*N* = 143)

Type of Clinical Intervention	Capital Costs (%)	Direct Service Costs (%)	Operating Costs (%)
Family Support Intervention	2.3	74.8	22.5
CMHC Inpatient Service	4.1	47.4	48.6
CMHC Outpatient Service	4.7	47.2	48.1

about one-quarter in operating. In contrast, the hospital-based CMHC clinical service incurs almost half of its costs each in direct service and operating. Also, CMHC costs do not appear to differ markedly for the inpatient or outpatient services.

Discussion

These findings indicate that health care costs comprise the overwhelming majority of costs for families with children in which a mother has a severe mental disorder. Such costs mostly consist of individual treatment for the mother, and then additional medical and psychiatric health care costs for the parent and other family members. In this context, family support intervention costs increase health care costs to society by an amount slightly greater than that observed for individual treatment for the mother. Presumably these costs will be offset by benefits to society at subsequent follow-up assessments.

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Head Start Children with SED: Two Years Later

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Introduction

Very few studies have examined the special education identification of Head Start children in the years immediately following their preschool experience. The speech and language impairment (SL) category is overwhelmingly the largest category of special education during the Head Start years, but very few children are identified in the other major categories of special education, including emotional disturbance (ED). Children with ED are generally considered to be underidentified in the early school years, and Head Start has not emphasized mental health issues to a significant degree until quite recently (Forness & Finn, 1993).

The present study is a follow-up of a large national sample of Head Start children in an attempt to identify children who are at risk for emotional or behavioral disorders that would be expected to be eligible for special education. We then wished to determine to what extent these children are actually identified in the natural progression of special education referral. Also identified were children at risk for learning disabilities (LD), mental retardation (MR) and speech or language impairments (SL). These children were selected for identification at the end of first grade, as part of a larger study (Head Start Bureau, 1996).

Method

Subjects were 7145 children in two cohorts identified at 31 different sites across the nation at the end of their Head Start year and followed to the completion of first grade. There were

29% African American, 12% Hispanic and 16% other ethnic identities. Screening measures included the *Peabody Picture Vocabulary Test-Revised* (Dunn & Dunn, 1981), 4 achievement subtests of the *Woodcock Johnson Psychoeducational Test Battery-Revised* (Woodcock & Johnson, 1989), and both teacher and parent forms of the *Social Skills Rating Scales* (Gresham & Elliott, 1990). These were administered to each child in kindergarten, and his/her parent or primary caretaker was interviewed as to presence of hyperactivity, mental health problems, or other disabilities. From these data, research diagnostic criteria (RDC) were developed to determine children at risk for ED as well as for LD, MR, and SL. These results were unknown to school personnel. Natural progression of special education identification in the schools was then obtained from a school records search in spring of first grade.

Findings

Attrition rate and missing data resulted in only 58% or 4161 subjects being available at the completion of their first grade year, but this attrition seemed to be randomly distributed, with just one or two exceptions. By the spring of first grade as shown in Table 1, the four categories of special education show very differing rates with Head Start RDC identification being greatest for LD and school identification (SI) for the other 3 categories. Identification by both means (RDC and SI) is greater, however, than the mean school identification rates for all school children *by this age* as taken from the annual report to Congress on IDEA. In the ED category, there were 0.32% identified as being at risk for ED by research criteria and 0.95% identified by the schools with only about a fifty percent overlap. Of the 6 children co-identified in both ED groups, only half of the RDC-identified subjects were in the school-identified ED category. Of those identified by the schools with ED, 19 of 22 came from the RDC categories of LD or SL.

Table 1
Percent of Children Meeting Research Criteria or Identified by First Grade in Major Categories of Special Education

Categories	Met Research Criteria	Identified by School	Identified in US
LD	12.65%	1.86%	0.27%
SL	2.41%	6.30%	0.09%
MR	0.26%	0.51%	0.11%
ED	0.32%	0.95%	0.05%

Discussion

The pattern of identification of emotional disturbance has some potentially interesting implications. The identification rate in both RDC and school-identified groups ranges from about a third to almost one percent. This is nonetheless about 6 to 20 times the rate identified concurrently in the schools by the same age, possibly reflective of the high need in any sample from a Head Start population. There has been serious concern about underidentification by schools in the ED category. Despite the limitations of this study and the fact that only a small handful of children (11 in the RDC and 39 in the school-identified categories) are involved, potential implications of co-identification between RDC and school-identified groups in the ED category may of particular interest. These results together lend some support to recent studies in which children with emotional or behavioral disorders tend to be initially identified in categories other than ED (Duncan, Forness & Hartsough, 1995; Lopez, Forness, MacMillan, Bocian & Gresham, 1996).

The point is that the number of children with emotional or behavioral disorders actually identified by the schools may be much higher than the current ED identification rate. The problem is that many

seem not to be identified in the *ED* category. Children who have comorbidity in which an emotional or behavioral disorder co-occurs with, or even underlies, a learning or language problem may not receive appropriate treatment or intervention for their mental health needs if the teacher views them as having only academic, cognitive, or language difficulties. Whether these children with emotional or behavioral disorders are actually well served in other categories is a significant but unanswered question. Data collected in second and third grades of this study will include a behavioral-rating scale that was not able to be used in the first two years, and further analyses of children who score high on this measure may provide useful information on this issue.

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Systematic Screening Children at Risk for Developing SED: Initial Results from a Prevention Project

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Introduction

The purposes of this presentation were to report the first year's results of a screening procedure used to identify kindergarten and first grade children who are at risk of developing Serious Emotional Disturbance (SED), and to present additional data on the concurrent validity of the screening procedure. The Systematic Screening for Behavior Disorders (SSBD) is a three-stage, multiple-gated procedure for mass screening to determine whether a child should be referred for psycho-educational evaluation (Walker & Severenson, 1992). We adapted this procedure to assess level of risk status in order to better target instructional, behavioral, and community-based services based on need and applied to a population that is at-risk in general due to a variety of psychosocial factors. This approach has the potential of providing more efficient and cost-effective means for allocating preventive services that vary in intensity and duration based on degree of risk.

Methods

Participants

The available sample of children who participated in the screening procedure were all (n= 624) kindergarten and first grade students in 24 classrooms in two full service schools. One school (FF) was composed of predominantly Hispanic students (79%) and the other (MP) was composed of predominantly African American students (72%). Based on the SSBD teacher nomination procedure (Walker & Severnson, 1992), 205 students

were selected as "at risk" (see *Screening Procedure* which follows). Tables 1 and 2 show the socio-demographic and educational characteristics for the initial screening sample.

Screening Procedure

The SSBD is designed to assess for both the presence of emotional and behavior problems and the effects of problem behavior on academic and social functioning in school. The three-stage procedure involves teacher's nominating ten children who fit a behavioral profile of externalizing behavior and ten who fit a profile of internalizing behavior; the nominated children are then ranked on the extent to which they display each type of behavior (Stage 1). In Stage 2 teachers rated the five highest ranked children in each group (5 internalizers and 5 externalizers) on the Critical Events Checklist and the Adaptive and Maladaptive Behavior Rating Scales. Children who pass cut-off scores based on SSBD norms pass to Stage 3. In this stage, trained professionals use observational measures in the classroom (Academic Engaged Time) and on the playground (Peer Social Behavior). Children who pass cut-off scores based on the Stage 3 SSBD norms have passed through all three gates. When this occurs, the recommended assessment decision is to refer the child for a comprehensive psycho-educational evaluation.

In the present study we used this procedure to classify risk status as either *low*, *moderate*, or *high* based on the number of gates passed during the screening process. Children who did not pass gate 2 after ranking by teachers were classified as low risk. Those who passed gate 2, but not gate 3, were considered to be at moderate risk, and those who passed all three gates were considered to be at high risk.

Other Measures

To assess concurrent validity of the screening procedure, we collected data from the Social Skills Rating (SSRS; Gresham & Elliot, 1990); SSRS Teacher and Parent forms, and teacher ratings on the Classroom Behavior Inventory (CBI, Schaefer, Edgerton, & Aronson, 1977). Apart from social skills, the SSRS also has a brief scale to assess externalizing, internalizing, and hyperactive behaviors and a scale which assesses compliance with school rules. The Parent Form measures the same social skills (cooperation, assertion, and self control) and Problem Behavior, but also includes a scale for measuring responsibility in relationships with others. The CBI broadly measures academic competence, temperament (extroversion and introversion), and social deportment (considerateness

Table 1
Sociodemographic Characteristics of Sample

Variable	School: MP (*n* = 121) *n* (%)	School: FF (*n* = 84) *n* (%)	Total (*n* = 205) *n* (%)
Gender			
Male	72 (59)	55 (65)	127 (62)
Female	49 (40)	29 (34)	78 (38)
Race / Ethnicity			
African-American	82 (68)	6 (7)	88 (43)
Hispanic	33 (27)	70 (83)	103 (50)
White / Non-Hispanic	6 (5)	3 (6)	11 (5)
Other / UK	0 (0)	5 (4)	3 (1)
Free / Reduced Lunch	104 (86)	70 (83)	174 (85)
Home Language			
English	80 (66)	17 (20)	97 (47)
Spanish	33 (27)	62 (75)	95 (47)
Creole	8 (7)	0 (0)	8 (4)
Other / UK	0 (0)	4 (5)	4 (2)
Language Program	33 (27)	50 (59)	83 (40)

Note: *n*s vary due to missing data from school records

versus hostility). Also, we collect school records data yearly in the project; but these data have not been analyzed at the present time.

Results

Screening Procedure

Table 3 shows that 92 (14%) of the children from the initial sample of 628 children were identified as having low risk for SED. Sixty-three (10%) of the children were identified as having moderate risk, and 28 (4.5%) were classified as high risk. Also, Table 3 shows that about 3% more children were identified as having moderate to high risk (*n*=91, 14.5%) than would be predicted from the SSBD norms (*n*=73, 11.6%) This finding was predictable given that the research sample was composed of mostly disadvantaged children who were at risk generally due to a variety of other psycho-social risk factors.

The difference between the obtained and expected frequencies for the moderate and high risk categories was due in part to the finding that relatively more children with externalizing behavior passed gate two. This might be attributed to the fact that externalizing behavior is more visible than internalizing behavior, or to selection bias on the part of teachers. However, it should be noted that the frequencies of both types of behavior problems were comparable among low-risk children and that the assessment criteria were more objective and stringent at the second and third stages of screening. Although the obtained frequencies for moderate and high risk externalizers were higher than expected, they were comparable for internalizing children.

Significant differences were obtained between the means for the Miami sample on the SSBD screening instruments and those for the SSBD normative sample for both externalizers and internalizers. This analysis included 161 children who were at risk at all levels at stage II of the screening procedure for whom data were collected on the Critical Events Checklist and the Adaptive and Maladaptive Behavior rating scales (see Table 3). Those who proceeded to State III (*n* =77 moderate or high risk) were observed with the SSBD Peer Social Behavior instrument. This suggests that the Miami research sample displayed greater levels of severity with respect to risk indicators than might be expected in a general population sample.

Table 2
Educational Characteristics of Sample

		School		
Variable		**MP (*n* = 121)**	**FF (*n* = 84)**	**Total (*n* = 205)**
Age in Months	*M*	82.06	85.81	83.60
	SD	10.39	9.87	10.32
	n	121	84	205
Number School Attended	*M*	1.17	1.29	1.22
	SD	.40	.69	.54
	n	121	84	205
Absences (Days)	*M*	14.13	13.16	13.64
	SD	14.59	11.46	11.38
	n	86	49	135
SAT Reading Total (percentile rank)	*M*	27.00	40.2	30.56
	SD	21.31	30.58	24.60
	n	43	16	59
SAT Math Total (percentile rank)	*M*	43.78	52.60	46.10
	SD	28.97	34.20	30.37
	n	42	15	57

Note: SAT available only for 1st grade. *N*s vary due to missing data from school records.

External Measures

A MANOVA on the three SSRS social skills scores indicated that teachers rated internalizing children higher on all social skills scales than externalizing children, $F(3, 76)=14.44$, $p< .0001$ (see Table 4). Externalizing children were rated as more externalizing and hyperactive than internalizing children on the Problem Behavior Scale. However, teachers tended to rate externalizing children as having more internalizing behavior problems than internalizing children, $F(3, 76)= 17.44$, $p<.0001$ (see Table 4) . Also, as Table 4 shows, externalizers were rated lower on the Academic Competence Scale than internalizers, $t(78)=3.26$, $p<.001$. Parents who completed the Parent Form of the SSRS did not perceive any differences between the children who were classified as having internalizing or externalizing behavior problems by the SSBD. This was the case with measures of both social skills and problem behavior. However, this was a small sample ($n=57$, 35%) due to significant non-response.

MANOVA comparisons of externalizing and internalizing children on the CBI showed significant differences in the predicted direction on all scales except Creativity / Curiosity and Extroversion / Introversion, $F(10, 55)=7.06$, $p<.0001$ Externalizing children were perceived by teachers as less task-oriented ($p<.0007$), independent ($p<.0002$) , and considerate of others ($p<.0001$), and as more distractible ($p<.05$) , dependent ($p<.002$) , and hostile ($p<.0001$) .

Table 3
Results of Sampling Procedure for Risk Status Based on Total Sample in 24 K-1 Classes (n = 628)

		Predicted Sample[1]		Obtained Sample	
		Externalizing	Internalizing	Externalizing	Internalizing
Stage I [2]					
Not at Risk	*n*	120	120	120	120
At Risk Based on Teacher Rank	*n*	120	120	120	120
Stage II [3]					
Low Risk	*n*	60	60	43	49
	(% total sample)	(9.5)	(9.5)	(6.8)	(7.8)
Stage III [4]					
Moderate Risk	*n*	25	25	39	24
	(% total sample)	(3.9)	(3.9)	(6.2)	(3.8)
High Risk	*n*	13	9	18	10
	(% total sample)	(2.1)	1.4)	(2.9)	(1.6)

[1] Predicted sample based on SSBD Norms for n = 628

[2] Teacher nominates and ranks 10 Students in each category (n = 480)

[3] Teacher Ratings on Critical Events, Adaptive / Maladaptive Scales

[4] Observation of Peer Social Behavior and Academic Engaged Time

With respect to gender the SSBD identified 128 (62%) boys and 78 (38%) girls as having some level of risk. Relatively more boys were identified as having externalizing behaviors. However, a significant number of girls with internalizing and externalizing behaviors passed through the first stage of screening, and a proportional number of externalizing and internalizing girls were represented in the moderate and high risk groups (8%, 7%, and 2% each, respectively). Therefore, the procedures at stage 2 and 3 appeared to be successful in identifying a significant number of boys with internalizing problems.

Discussion

In general, the SSBD procedure appears to be well suited as an instrument for the classification of risk status, as well as for screening children who might be referred for evaluation for educational and mental health services. Also, this approach to assessment might have significant implications for refining the definition of risk for the purpose of planning and implementing preventive interventions, particularly of a comprehensive nature. Progress in the area of primary prevention has been impeded by the lack of reliable methods for assessing the level of risk for specific types of disorders. We typically use rather gross measures that are subject to high rates of false positive cases.

These results suggest that many of the children in our sample might benefit from universal interventions that target a defined population of at-risk children, while others might benefit to a greater extent from selective interventions that may meet the needs of particular subgroups of children who are at greater risk. Finally, a smaller group of high-risk children may require more intensive indicated interventions, given their more immediate needs. At the same time, the approach illustrated here has its limitations. There are some technical problems assessing children as young as five years with this instrument, and it is not designed to detect comorbidity, which is part of the clinical portrait presented by high risk children. However, the Early Screening Project (ESP) instruments developed by Walker, Severson, and Feil (1995) to screen children aged 3-6 using the SSBD procedure have been modified and now have been published.

Table 4
Comparison of Externalizers and Internalizers on the SSRS Teacher Rating Scales

		Groups		
Variables		**Externalizers (*n* = 52)**	**Internalizers (*n* = 28)**	***p***
Social Skills				
Cooperation	*M (SD)*	6.36 (4.18)	12.85 (5.22)	.000
Assertion	*M (SD)*	7.88 (4.39)	10.53 (5.69)	.02
Self-Control	*M (SD)*	7.00 (4.16)	12.50 (4.74)	.000
Total SS Score	*M (SD)*	21.25 (10.97)	35.89 (13.46)	.000
Problem Behavior				
Externalizing	*M (SD)*	7.42 (3.35)	2.93 (3.55)	.000
Internalizing	*M (SD)*	5.44 (3.36)	3.89 (2.84)	.04
Hyperactivity	*M (SD)*	9.23 (2.86)	4.39 (3.69)	.000
Total PB Score	*M (SD)*	22.09 (7.70)	11.21 (7.54)	.000
Academic Competence Total Score	*M (SD)*	19.05 (8.09)	25.28 (8.17)	.001

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Lessons from the Village: Early Intervention and Prevention

Introduction

This summary describes early inductive research to identify variables important to the development of systems of care for families that include young children at high risk of abuse, mental illness, substance abuse, and future criminal behavior. The federal Center for Mental Health Services (CMHS) demonstration project, *Kan Focus*, began in October 1994 to develop a system of care for children with SED in rural southeast Kansas. During the year prior to the implementation of *Kan Focus*, the average age of admission of children into mental health services was almost 16 years of age. Three years later, in the period between November and March 1997 the children's average age at admission had decreased to 11 (see Figure 1). Experience with the *Kan Focus* project suggests that establishing truly collaborative systems of care is very difficult and rarely accomplished. This summary addresses lessons learned and strategies that may be important to improving community collaboration and establishing systems of care around families with very young children. These findings are shared to expand the dialogue on identifying key variables in the development of such systems.

More and more younger children are receiving community-based support. As strength based and family centered services begin earlier, teams can utilize short-term, targeted approaches such as information and advocacy for parents, case management, attendant care, and home based family therapy. These supports

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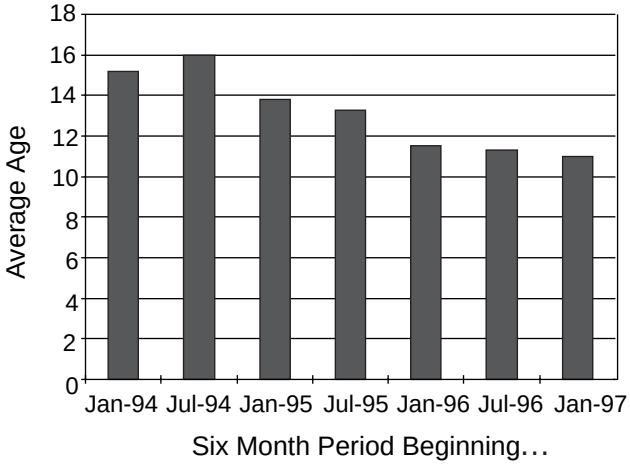
allow families to stay in control, and offer children a much improved prognosis for positive futures. Outcome data in Kansas show that children are progressing more rapidly, completing services sooner, and returning to services less often. Parents and teachers have long known the signs and symptoms of emerging emotional and behavioral problems; once community-based mental health services had demonstrated success and were available for younger children with less severe problems many families began to access them.

In conjunction with this movement toward early intervention, *Project Before* reviewed available research to identify risk factors that greatly increase the probability that a child will be abused, placed out of his home, and have mental illness, substance abuse, and criminal problems. It is important to note, however, that children who have certain protective factors are often buffered from high-risk situations and have good outcomes. The treatment research shows that when the primary risk factors are poverty, single parent homes, and lack of medical care, health and education focused home visitation programs can have a dramatic impact on reducing risks, increasing protective factors, and improving outcomes for both children and their parents. When the same risk factors are accompanied by mental illness, substance abuse, or family violence, however, success rates of these health or education focused programs are much lower. For this reason we began to develop a community based early intervention and prevention program that targeted support for families experiencing multiple risk factors.

Figure 1
Age of Children Entering System of Care



Systems Lessons for Early Intervention

In our effort to build systems of care for high risk families that include very young children, the communities of Southeast Kansas have taught us some critical lessons: 1) Systems of care for young children are very different than the ones for children and adolescents with severe emotional disturbance; 2) Collaboration is worthwhile but hard work; and 3) Good program evaluation improves collaboration, service effectiveness, cost efficiency, and sustainability.

Lesson 1: Systems for young children are different.

Systems of care for young children are different than those for older children and adolescents with serious emotional disturbances (SED). A basic difference is with the service providers and informal supports. The primary service providers in the system of care for older children are education, special education, social services, juvenile justice, and mental health. For families with younger children other providers are prominent, and there are many more of them. Figure 2 shows an organizational listing of the agencies and organizations that provide home visiting for families with young children in our rural communities. There are many programs, however each individual program provides a very limited amount of support. The end result is that supports are fragmented, hard to

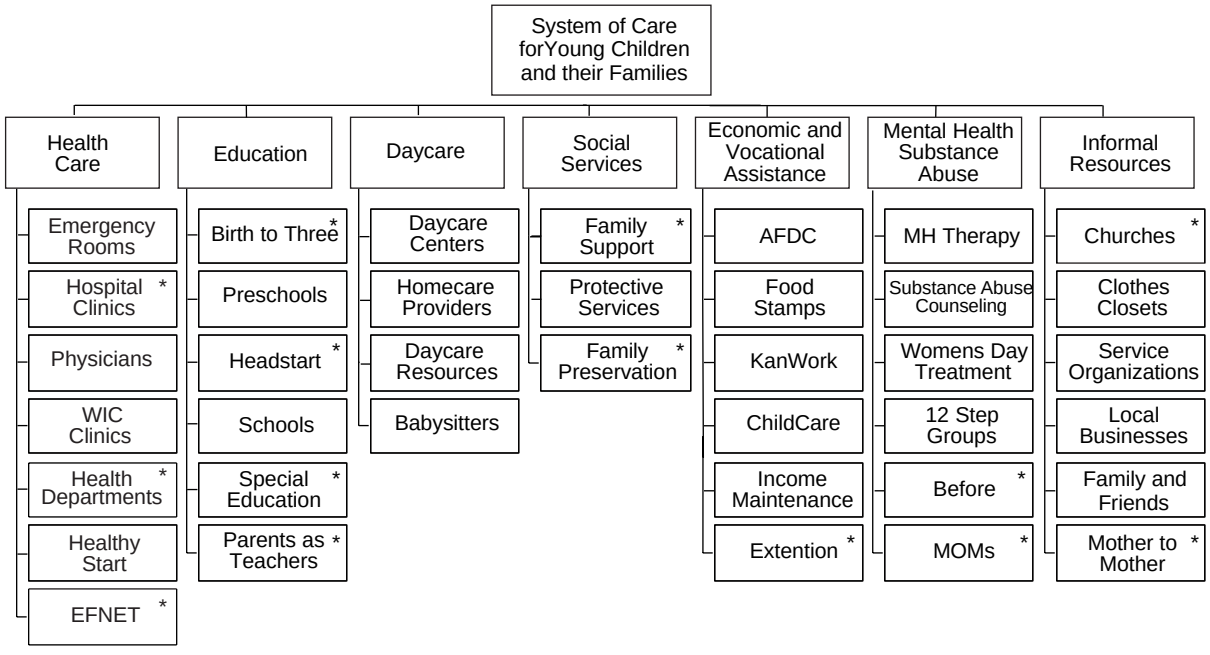
access comprehensively, and inefficiently organized. For example, there are at least 14 separate home visiting programs (note programs with asterisks in Figure 2). In our work we have found families who were receiving home visiting services from as many as six separate programs. The families may not want all these people in their homes, and multiple visitors clearly can be both ineffective and cost inefficient.

The second difference is the priority outcomes for children and families. For families with older children with SED, the focus is on the child. For families with very young children the priority outcomes are safe environments and adequate nutrition, health care, child care, and financial support. The focus for families with very young children is most often the parent(s). For these reasons the planning process must be different. Project KanFocus uses a wraparound approach for all service plans. For the early intervention process, it is meaningful to describe this process as a "whole family" wraparound. While the intent of the wraparound plan for a child or adolescent with SED is to include the family, the focus of the plan is clearly on the child. In the whole family process, however, the focus is on the family and often the priority areas relate to the parent(s).

Lesson 2: Collaboration is worthwhile, but requires hard work.

The second major lesson from the village is that collaboration is worthwhile but hard work. To provide effective services for children and adolescents with SED, it is important for service providers to coordinate their efforts with each other and with the family. As we began to become involved in this collaboration effort, we saw three levels of ongoing coordination. At one level we would attend meetings when coordination consisted of various agencies telling each other what they did and then planning a joint luncheon to improve communication. At

Figure 2
Organizations Providing Services to Families



*= provides home visiting services

another level, collaboration might be a Part H coordinating council going a step further by publishing a combined calendar of events, planning a joint child find, or a parent's university. The highest level of coordination occurred when a number of agencies worked together to write a joint grant that gave money to each to provide their own categorical services. Clearly these were important steps toward collaboration, but more was needed. Over the past two years we have found strategies and practices that both seemed to improve and hamper collaboration. From these efforts, some lessons from the village on improving collaboration are presented below.

Know the village first. Before developing programs or offering suggestions, it is important to understand the current status of families in the community, the resources to support these families, and the current gaps in services. It is important to know the people and organizations that already provide early intervention support. By knowing the status and needs of the families and children and the strengths of the current providers, it is possible to develop a program that best meets the needs of the children and families while gaining the most acceptance from the community. There are a lot of people out there doing good things and building on these strengths results in a better program.

Once you begin to "know the village," the second general lesson is to ***bring food to the table***. If it is a new service, find a new source to fund it. Try to include funds that will support collaboration efforts. We have found that literally providing food with cross training improves attendance. Joint planning and Continuing Education Units for cross training activities increases turnout. When grants or projects include flexible funds, establishing an interagency coalition to handle these funds increases buy-in to the program.

Joint planning and follow through on individual plans ***build collaboration and trust, one family at a time***. Successfully working together on individual plans builds trust between community supports and expands collaboration possibilities. We have also found that successful collaboration is improved by building and focusing on the big system of care. By looking at how people and communities work together to support all children, programs look past their potentially narrow focus and join each other more easily.

Lesson 3: Program evaluation improves the system.

The third lesson from the village is that program evaluation can improve collaboration, program effectiveness, cost efficiency, and sustainability. By setting goals for KanFocus that are meaningful to the community and reporting on the goals, we have seen greater buy-in. The four primary outcomes developed through the advisory committee and focus groups early in the project were to (a) ensure appropriate health care for the children and mothers; (b) ensure support for substance abuse and mental health needs for parent(s); (c) reduce the risk factors; and (d) support the development of protective factors for the children.

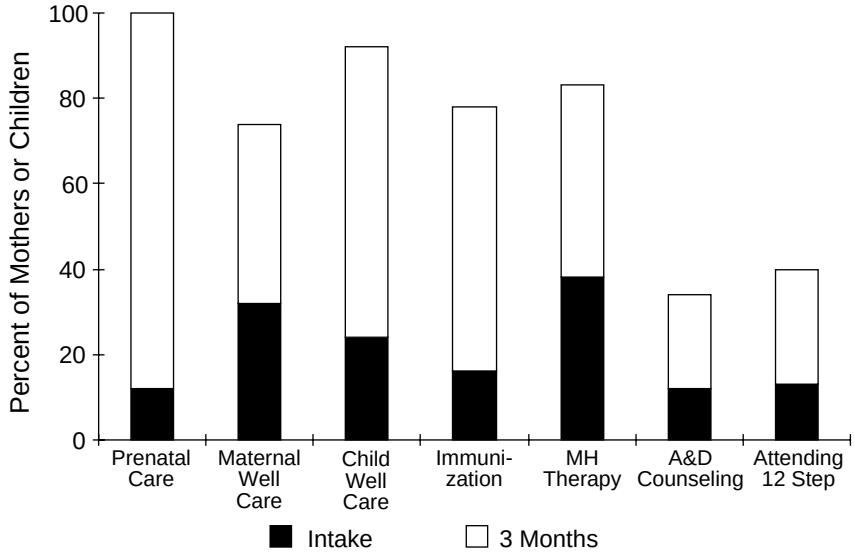
Information on positive outcomes increases community support. As the project has progressed we have measured these outcomes and reported them to the community on a regular basis. We have seen some significant outcomes for our families in all of the primary goal areas (see Figure 3). These data demonstrate the success of the approach, and consequently improve collaboration with our health care partners. Traditionally the health focused home visitors have had difficulty engaging families with significant mental health and substance abuse issues. They were resistant, however, to referring them to the "mental health" program. One key

reason was a fear the families would not receive needed health care services. Figure 3 shows data on health and behavioral health service utilization for families served by the KanFocus project. The black section of each column shows the percentage of children or parents receiving that service at intake. The white section shows the increase at the end of three months. Sharing this health care utilization data showed health care providers that not only are we sincere in our statement of health care as a primary goal, but that we were more successful getting these families to utilize that care than they have been. This has led to many more referrals and improved collaboration.

Our second priority goal is to get parents needed substance abuse and mental health services. We have seen that the care givers in the program are assessing mental health therapy, alcohol and substance abuse counseling and 12 step programs more frequently. Over a third of the women started or restarted therapy and over half became active with one or more of these supports. This is in addition to the ones already receiving services. We have shared this data with the community and with state administration and legislature funders. The response by state funders was both the passage of a children's initiative that includes an early intervention service and approval to use the state's Medicaid plan service for adult case management to fund some of these services.

In addition, program evaluation has revealed unexpected results that have improved community support. Although there was no stated project goal to impact parent employment, we recorded data on employment as both a demographic and risk factor. The Wraparound process asks the family to set the goals. Women targeted by our project were reputed to be the most challenging for job placement programs, however once these women found a safe environment and met basic needs for their children and themselves, they wanted to go to work. Within three months over 75% of them had (see Figure 4). This has built strong local and state support.

Figure 3
Families Recieving Health-Related Services at Intake and 3 Months



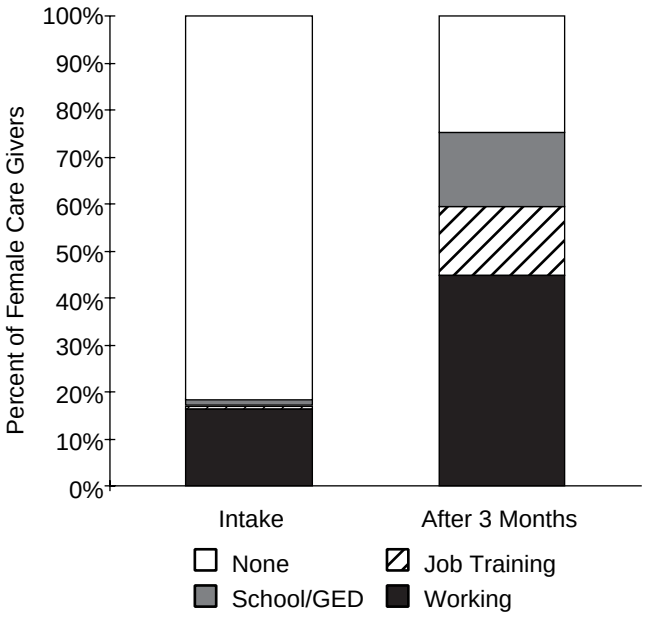
Improved staff performance. Program evaluation efforts also have resulted in improved performance by staff. One aspect of program evaluation and quality improvement is monitoring goals from the individualized family plans. Reviews of these plans revealed few goals that directly addressed the development of protective factors for the children. It appeared that the home visitors were so engrossed in helping families meet basic needs that the needs of children were being put off. We determined that it is critical to provide some focus on the children from the beginning because children will not wait.

While their needs are ignored they just grow right past them. This caused us to re-evaluate and change the overall planning strategy, to include specific goals for children in all plans.

Program refinement. The program evaluation process also resulted in changes in the program's eligibility criteria. First, examination of demographic data showed that mental health and substance abuse criteria were being used very loosely. This resulted in families being served who would have been more appropriately served by other providers, while people with severe mental health and substance abuse problems were placed on a waiting list. The case review portion of program evaluation identified this situation and it was corrected.

Capacity building. Program evaluation also looks at community resources to meet identified needs. For example, this assessment spotlighted the before mentioned fragmentation and inefficiency of home visiting services across agencies. This evaluation has been a primary impetus to the development of collaboration in three of the four counties to form integrated family resource centers, with efforts underway to explore ways to reorganize services in a more coordinated fashion. The village is teaching us many lessons. The most important is to listen.

Figure 4
Single Female Caretakers
Working or Going to School



Home Visitor Job Satisfaction and Turnover

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Introduction

Home visiting is a promising health promotion and early intervention strategy for linking families at-risk for impaired functioning to medical home care and for helping to meet their inter-related and varied needs. It is a part of existing programs funded through the U.S. Department of Education and the U.S. Department of Health and Human Services, has been a part of recently introduced congressional bills, and is used in new initiatives of the Centers for Disease Control and Prevention and the Maternal and Child Health Bureau. The General Accounting Office has recommended giving priority to federal demonstration projects that incorporate home visiting (USGAO, 1990). Child advocacy and professional organizations, such as the American Academy of Pediatrics (AAP), strongly support home visiting for at-risk families (AAP, 1995). Home visitors, whether professional or paraprofessional, act as teachers, role models and advocates for families promoting healthy family functioning and optimal child development (Breakey, Uohara-Pratt, Morrel-Samuels & Kolb-Latu, 1991). Loss of home visitor relationships through home visitor turnover can have important implications for families in distress.

Job satisfaction is the overall positive affect that members have toward an organization. Managers, psychologists, economists, and organizational behaviorists all have taken an interest in it. While the effect of job satisfaction on employee behavior has not

been fully explained, job satisfaction has been consistently and significantly associated with employees' stating their intent to resign from employment and actual resignation from their jobs.

Overall job satisfaction can be considered an independent, dependent or intervening variable. As an independent variable, job satisfaction becomes a proxy for unobserved objective factors, and is related to future mobility and other overt behavior. As a dependent variable, it becomes the outcome measure for organizational and individual factors. For this study, job satisfaction was considered an intervening variable that linked independent personal and organizational setting variables with the dependent variable, actual turnover. We hypothesized that personal and organizational setting variables affected job satisfaction and that job satisfaction, in turn, was directly related to whether a home visitor stayed in his / her organization. The purpose of this study was to examine the relationship between home visitor job satisfaction and turnover.

Method

This study was conducted over three years, beginning in March, 1995, and had three major research questions:

1. What home visitor personal characteristics influence turnover?
2. What organizational characteristics influence job satisfaction and turnover?
3. How does the interaction between the home visitor and the characteristics of the organization influence home visitor job satisfaction and turnover?

This study was conducted as an add-on study to a larger, five year evaluation project which is a randomized clinical trial (Duggan, Buchbinder, Fuddy, Sia & Young, 1996). Our hypotheses were tested utilizing a prospective, longitudinal survey of all home visitors employed in a well-established child abuse and neglect prevention program (N = 46). The relative contributions made by (a) the individual home visitor; (b) the organization; and, (c) the interaction between the individual home visitor and the organization were investigated. Data for this study consisted of personal and organizational setting variables for all home visitors employed by the program.

Annual home visitor interviews began in March, 1995 and went to March, 1997. The survey instrument is a modification of an instrument developed by one of the authors for previous research. Reliabilities and validities of the measures utilized in this survey instrument have been published elsewhere (Judge, Locke, Durham, & Kluger, 1997). The instrument was modified slightly to reflect the nature of home visitor work.

Written informed consent was obtained from each home visitor prior to administration of the survey instrument. Groups of home visitors completed the paper and pencil survey instrument at program sites. The survey instruments were distributed, explained and collected by the researchers. Home visitor supervisors were not allowed to examine the completed instruments due to the confidentiality of the survey.

The instrument included measures of the following individual and organizational constructs: satisfaction with work, supervision and pay; overall job satisfaction; positive or negative affectivity; affect toward the home visitor role; satisfaction with life; locus of control; self-esteem; trust versus cynicism; belief in a just world; belief in a benevolent world; neuroticism; dysfunctional thinking; adult attachment; perceptions of work characteristics; and burnout.

Additional organizational and labor market measures included: current net income; ideal income one should receive; perceived alternative

employment opportunities; comparison of present wages with previous wages; number of levels desired to move up; likelihood of leaving present job within next 12 months; likelihood of leaving job within next 24 months. Demographic measures included: age; gender; race / ethnicity; marital status; length of time married to current spouse; number of children living with respondent; highest level of education; and highest degree received. Individual, organizational and interactional constructs and items collected are outlined in Table 1.

The dependent variable, actual turnover, was obtained by contacting program directors one year after the initial survey, to see which home visitors had quit, been terminated or transferred.

Analysis

Frequency distributions were generated for the total sample for all 329 variables. Separate frequency distributions were generated for those home visitors who had turned over ("Leavers," N =13), and those who had not turned over ("Stayers," N =33). Comparisons were made between the two groups of home visitors, "Leavers" versus "Stayers" using Students' t- statistic and with chi-square statistic to test for significant differences. A p -value of .05 or less was considered significant. SPSS for Windows, Version 6.0 was utilized for data analysis.

Table 1
Data Collection: Individual, Organizational and Interactional Constructs and Items

Constructs and Items	Scales Used
Individual Constructs	
Life satisfaction	Deiner, Emmons, Larson & Griffin, 1985
Affective disposition	Watson, Clark & Tellegen, 1988
Self-esteem	Rosenberg, 1965
Self-efficacy	Judge, Locke, Durham & Kluger, 1997
Neuroticism	Eysenck & Eysenck, 1968
Dysfunctional thinking	Weisman & Beck, 1978
Locus of control	Levenson, 1981
Trust	Judge, Locke, Durham & Kluger, 1997
Belief in a just world	Rubin & Peplau, 1975
Adult Attachment	Feeney, Noller & Hanrahan, 1994
Burnout	Maslach, 1981
Demographic Items	
Age	
Gender	
Race / Ethnicity	
Marital Status	
Number of years married	
Number of children	
Number of children living with you	
Highest level of education	
Highest degree	
Number of years in this type of work	
Labor Market Perceptions	
Perceived adequate pay	
Perceived alternative employment opportunities	
Comparison of present and previous wages	
Organizational Constructs and Items	
Perceived work characteristics	Hackman & Oldham, 1980
Pay descriptions	Smith, Kendall & Hulin, 1969
Current pay	
Interactional Constructs and Items	
Overall job satisfaction	Brayfield & Rothe, 1951
Work and Supervision Descriptions	Smith, Kendall & Hulin, 1969
Number of hours worked per week	
Number of years at present job	
Number of levels desired to move up	
Likelihood of leaving job in 12 months	
Likelihood of leaving job in 24 months	

Results

Home visitor personal characteristics did influence turnover. Home visitors who left their jobs were more likely to report feeling "upset" and were less likely to report feeling "proud". Leavers were also more likely to report that they are "often tense or high strung." Leavers had higher self-efficacy scores than Stayers. Leavers were also less likely to agree with the following statements from the Dysfunctional Attitude Scale (Weissman & Beck, 1978): "I should be able to please everyone"; "If I don't do as well as others it means I'm an inferior human being"; "If I don't set the highest standards for myself, I am likely to end up a second rate person"; and "People who have creative ideas are more worthy than those who do not." Leavers score higher on self-esteem measures, however, this finding did not reach statistical significance ($p < .06$).

Table 2
Comparison of Stayers versus Leavers on Key Individual Variables

Individual Variables	Stayers (N = 33)	Leavers (N =13)	p Value
Self Efficacy (Mean +/- *s.d.*)[a]	6.2 +/- 1.1	6.6 +/- .38	.02
Self-Esteem (Mean +/- *s.d.*)[b]	6.2 +/- .73	6.5 +/-.39	.06
Affective Disposition (Mean +/- *s.d.*)[c]			
"Proud"	8.6 +/- 1.6	6.3 +/- 2.8	.04
"Upset"	2.7 +/- 2.1	3.8 +/- 1.1	.001
Neuroticism (Mean +/- *s.d.*)[d]			
"I am often tense or high strung"	1.6 +/- 1.7	2.6 +/- 2.5	.02
Dysfunctional Thinking (Mean +/- *s.d.*)[e]			
"I should be able to please everybody."	1.6 +/- 2.4	1.1 +/- 1.4	.04
"If I do not do as well as others, it means I am an inferior human being."	.84 +/- 1.8	.07 +/- .27	.02
"If I don't set the highest standards for myself, I am likely to end up a second rate person."	1.1 +/- 2.1	.61 +/- .87	.05
"People who have creative ideas are more worthy than those who do not."	1.5 +/- 2.6	.23 +/- .59	.01

[a] Self-efficacy was assessed utilizing six items. The scale ranged from 0 (not at all) to 10 (very much). Responses were averaged for one self-efficacy score.

[b] Self-esteem was measured by six of the ten items on Rosenberg's Self-Esteem Scale. The scale ranged from 0 (not at all) to 10 (very much). Responses were averaged for one self-esteem score.

[c] Positive or negative affectivity were measured by Watson, Clark and Tellegen's 20-item scale consisting of ten positive and ten negative affect word with which respondents were asked to indicate agreement. The scale ranged from 0 (not at all) to 10 (very much), and scores were averaged to produce a single score for overall mood.

[d] Neuroticism was measured by six items from the 12-item Eysenck Personality Inventory Neuroticism Scale. Individuals were asked to indicate their agreement with statements concerning the frequency with which they experience feelings of irritability, nervousness, worry, embarrassment, or guilt. The scale ranged from 0 (strongly disagree) to 10 (strongly agree), with high scores indicating a greater degree of neuroticism than low scores. Scores were averaged for measures of neuroticism.

[e] Subjects' characteristic mode of thinking was measured by a 22-item condensed version of the Dysfunctional Attitude Scale (DAS), a 100-item instrument that measures dysfunctional cognitions. The condensed version was chosen for the sake of brevity. An earlier study found that the 22 items selected load heavily on the dysfunctional thinking factor. Individuals were asked to indicate their agreement with general statements about life. The scale ranged from 0 (strongly disagree) to 10 (strongly agree), and scores for the 22 items were averaged to produce measures of dysfunctional thinking.

Organizational characteristics also influenced home visitor job satisfaction and turnover. Overall satisfaction with the work itself was useful in distinguishing between Leavers and Stayers. Leavers were less likely to report that "work gives a sense of accomplishment"; "work is a source of pleasure"; "work is interesting"; "work is respected"; or that "work is pleasant". Satisfaction with pay also distinguished between Leavers and Stayers. Leavers were less likely to agree that "income is adequate" or that they are "well paid", despite comparable net incomes and ideal incomes. Additionally, Leavers were more likely to agree that the pay was "bad".

The interaction between the home visitor and the organization also influenced home visitor job satisfaction and turnover. Satisfaction with supervision was particularly effective in distinguishing between Leavers and Stayers, with Leavers being much less satisfied with their supervisors than Stayers. As outlined in Table 4, Leavers were more likely to describe their supervision as: "hard to please"; "bad"; "lazy"; "interferes with my work"; "gives confusing directions"; " cannot be trusted"; "quick tempered"; "annoying"; and "stubborn." Leavers were less likely to describe their supervision as: "knows job well"; "around when needed"; "knows how to supervise"; "praises good work"; and "tactful".

Reported likelihood of leaving the job within the next 24 months was a strong predictor of actual turnover, with Leavers being five times as likely to report that they were "very likely to leave in the next 24 months" than Stayers ($p < .003$). With respect to demographic variables, there were no statistically significant differences between Leaver home visitors and Stayer home visitors by age, race, gender, education, or marital status. Number of years with the current employer did not differ. However, number of years experience with the present job did distinguish between Leaver and Stayer home visitors, with Leavers having been in their present job an average of 1.6 years, and Stayers an average of 3.7 years ($p < .04$).

Discussion

The purpose of this study was to examine the relationship between home visitor job satisfaction and turnover. Home visitor personal characteristics did influence turnover. Most notably, Leaver home visitors felt more self-efficacious than Stayer home visitors. Organizational characteristics, particularly work characteristics and pay, also influenced job satisfaction and turnover. Home visitors who were dissatisfied with the work itself and the pay were more likely to leave the job. Reported likelihood of leaving also was related to actual turnover. Home

Table 3
Comparison of Stayers versus Leavers on Key Organizational Variables

Organizational Variables	Stayers (N = 33)	Leavers (N = 13)	p Value
Work Descriptions[a] **(Mean +/- *s.d.*)**			
Mean Score All Work Descriptions	1.2+/-.10	1.09+/-.39	.002
Individual Work Item Scores			
"Gives sense of accomplishment"	1.0+/-.00	.84+/-.37	.001
"Source of pleasure"	.93 +/-.24	.78+/-.43	.002
"Interesting"	.97+/-.31	.84+/-.55	.01
"Respected"	1.0+/-00	.92+/-.28	.001
"Pleasant"	.96+/-.40	.84+/-.67	.009
Pay Descriptions[b] **(Mean +/- *s.d.*)**			
Mean Score Pay Descriptions	1.3+/-.25	1.3+/-.16	.13
Individual Pay Item Scores			
"Adequate for normal expenses"	1.5+/-.71	2.0+/-.00	.001
"Well paid"	1.8+/-.61	2.0+/-.00	.005
"Bad"	1.3 +/-.83	1.0+/-.70	.04
Net Income (Mean +/- *s.d.*)	$21,160 +/-2947	$17,729 +/-2654	.96
Ideal Income (Mean +/- *s.d.*)	$26,991 +/-7408	$28,181 +/-11,276	.43

[a] Descriptions of work were measured by using two 18-item scales. If the individual was unable to answer, a "?" was used and scored as a 0; if "Yes", it was scored as a 1; if "No" it was scored as a 2. Scores for each scale were averaged. Individual item scores are also presented. Higher scores on the work scale indicated greater satisfaction with the work itself.

[b] Descriptions of pay were measured by using one 9-item scale. If the individual was unable to answer, a "?" was used and scored as a 0; if "Yes", it was scored as a 1; if "No" it was scored as a 2. Scores for each scale were averaged. Individual item scores are also presented. Higher scores on the pay scale indicated greater *dissatisfaction* with pay.

visitors who indicated that they were very likely to leave were, in fact, more likely to leave than those who indicated that they were very likely to stay.

The interaction between the home visitor and the organization influenced home visitor job satisfaction and turnover, most notably in the area of supervision. Quality of supervision is an organizational characteristic and, as such, is a responsibility of managers of home visiting programs. Home visiting programs with supervisors who fail to act as facilitators for their home visitors can expect job dissatisfaction and turnover. It is incumbent upon home visiting program managers to ensure that supervisors are trained to be facilitators for their employees.

When home visitors turnover, human resources are missing that would otherwise contribute to the production of family support services. The resulting loss in production, loss of continuity of family support services, and the need to recruit and train new home visitors can be costly. Costs are also incurred in the form of larger caseloads for remaining workers, as well as family attrition or dropouts. Home visitor turnover is of interest to state and local government managers, policy makers, health and social service planners, educators and researchers who can take advantage of improved information about the reasons for, and timing of home visitor turnover.

Table 4
Comparison of Stayers vs. Leavers on Key Interactional Variables

Interactional Variables	Stayers (*N* = 33)	Leavers (*N* = 13)	*p* Value
Supervision Descriptions * (Mean +/- *s.d.*)			
Mean Score Supervision Descriptions	1.5+/-.07	1.39+/-.34	.001
Individual Supervision Item Scores			
"Hard to please"	1.9+/-.35	1.6+/-.65	.001
"Bad"	2.0+/-.00	1.7+/-.75	.001
"Lazy"	2.0+/-.00	1.6+/-.76	.001
"Interferes with my work"	2.0+/-.00	1.5+/-.87	.001
"Gives confusing directions"	1.9+/-.35	1.6+/-.77	.001
"Cannot be trusted"	1.9+/-.39	1.6+/-.75	.01
"Quick tempered"	2.0+/-.31	1.7+/-.59	.001
"Annoying"	2.0+/-.00	1.4+/-.87	.001
"Stubborn"	2.0+/-.00	1.5+/-.76	.001
"Knows job well"	.94+/-.35	.84+/-.55	.05
"Around when needed"	.96+/-.18	.84+/-.55	.001
"Knows how to supervise"	.93+/-.24	.76+/-.59	.001
"Praises good work"	1.0+/-.00	.85+/-.55	.001
"Tactful"	1.0+/-.31	.77+/-.44	.01

* Descriptions of supervision were measured by using two 18-item scales. If the individual was unable to answer, a "?" was used and scored as a 0; if "Yes", it was scored as a 1; if "No" it was scored as a 2. Scores for each scale were averaged. Individual item scores are also presented. Higher scores on the supervision scale indicated greater satisfaction with supervision.

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Achieving, Behaving, Caring: The ABC's of Early Intervention

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Introduction

The ABC Project at the University of Vermont is one of 13 research and demonstration projects for the prevention of serious emotional and behavioral disorders funded to date by the US. Department of Education Office of Special Education and Rehabilitative Services. At the time of this presentation, the ABC Project staff were in the middle of the second year of work. The project's research methods involved qualitative case studies imbedded in a quantitative, matched-group design.

Intervention

Our sample consisted of 102 children - 72 boys and 30 girls, attending 11 rural schools in northern New England. Cohort One children (N= 44) were recruited in spring 1995 and Cohort Two children (N=58) in 1996. All exhibited either externalizing or internalizing behaviors in Kindergarten that indicated that they were at risk for developing emotional or behavior problems. At the end of the school year, Kindergarten teachers completed the Systematic Screening for Behavior Disorders (SSBD; Walker & Severson, 1990). Parent liaisons visited the parents of identified children to explain the project and obtain informed consent; in Year One, 91% of the parents readily agreed to participate, and in Year Two, 94% agreed. Kindergarten teachers then completed the Teacher Report Form (TRF, Achenbach, 1991b). After matching the children by gender,

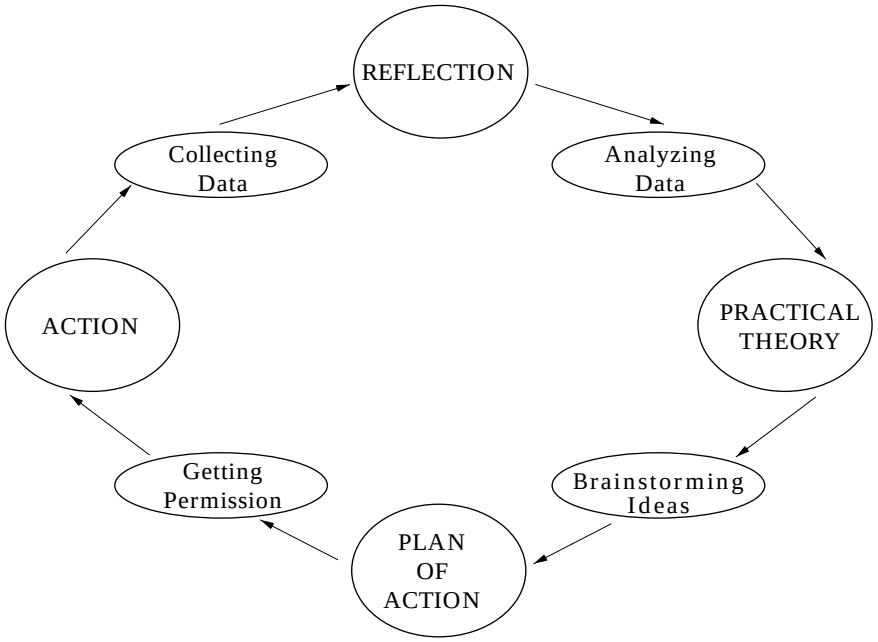
classroom assignment, and TRF total problem scores, the project data manager randomly assigned one of each pair to Intervention A and one to Intervention B. In Cohort One there were 18 such pairs, and in Cohort Two 25 pairs, for a total of 43 matched pairs; there are also 16 additional children assigned to Intervention A.

Intervention A provided social skills lessons given to the whole class. All children in each first and second grade class received the social skills lessons. The first and second grade teachers selected the curriculum they would use, or used the school-wide curriculum already in place when the project began. It was agreed that the lessons be taught at least twice a week from October through May, for a minimum of 15-20 minutes at a time, and that the teachers regularly send home information to all parents describing the social skills the children were learning.

Intervention B brought parents and classroom teachers together regularly to do action research focused on the individual child. Parent-Teacher Action Research (PTAR) combined the benefits of parent-teacher teams with the systematic structure of action research. There were seven essential components to the PTAR approach; parent-teacher equality, the action research cycle, parent liaisons, mutual parent-teacher goals for the child, consistency between home and school, and planned transitions. The action research cycle served as the framework for collecting data, analyzing data, brainstorming ideas, and getting permission. These activities, in turn, produced reflection, practical theory, plan of action, and action for each child (see Figure 1).

Teachers of Cohort 1 children each implemented a school-selected social skills curriculum in their classroom. These included Lions Quest,

Figure 1
The Action Research Cycle



Responsive Classroom, Second Step, Skillstreaming, Taking Part, and one teacher-developed program. Teachers followed the curriculum by conducting social skills lessons each week, communicating regularly with parents about the curriculum, and attending to communication skills, interpersonal skills, personal skills, and response skills.

Each teacher also participated in at least one PTAR team focused on a child in their classroom; three teachers participated in two teams each. All teams followed the ground rules for group process: parents always speak first, parent and teacher take turns speaking, disagreement is OK, all ideas are recorded as spoken, all ideas are considered, and all ideas are expressed positively.

The first PTAR team meeting was always devoted to the Making Action Plans process (MAPS: Forest & Pearpoint, 1992; O'Brien, Forest, Snow & Hasbury, 1989). MAPS is a series of questions designed to elicit parent and teacher thinking about first grade goals for their child. The process reveals the hopes, dreams, fears, and hidden factors related to the child and her/his learning environment. In all cases the MAPS process facilitated the initiation of mutual goal setting for the child.

In each geographic area the project employed, trained, and supervised one or more parent liaisonsrecruited from the community to provide specific support and encouragement to participating parents to help them carry out their roles. The parent liaison was an experienced, local parent, hired by the ABC Project, who acted as an advocate and resource for the parent and teacher. The parent liaison was a neutral person who visited homes, answered questions, arranged meetings, and facilitated the parent teacher action research process. All but one of the seven women currently in this position were also parents. Initially, their jobs involved recruiting parents, visiting homes twice a year to complete parent measures, arranging and attending meetings between parents and teachers, and providing the between-meeting support that parents needed. This year, five of the parent liaisons have also been trained to facilitate parent-teacher meetings.

Analysis

Quantitative methods were used to examine differences between the two Intervention groups. Standardized measures were administered in the fall and spring for all children in the A and B interventions. The Direct Observation Form (DOR; Achenbach, 1986) was used by independent raters to score directly observed problems in the classroom and at recess. The TRF was completed by first grade teachers and the Child Behavior Checklist (CBCL; Achenbach, 1991a) was completed by parents in the fall and spring. The Social Skills Rating System (SSRS; Gresham & Elliott, 1990), was also completed by teachers and parents (see Table 1).

Standardized measures were analyzed for the first year ('95-'96) on the problem scales of the TRF and DOF for the fall and spring assessments for children assigned to Intervention A versus Intervention B. Changes in problem scores for the two intervention groups were tested with ANOVAs, subsequent univariate ANOVAs, and Least Square Means (LSM) pairwise tests for each separate measure.

Qualitative methods were used to describe the process of change as the parents and teachers on the action research teams worked together. Data for qualitative analysis came from field notes by research team members and parent liaisons at meetings; documents of activities within the school; transcripts of interviews with selected parents and teachers; and the data collected by parents and teachers as part of their action research process.

Preliminary Results

The most dramatic changes were found on the DOF. Details of results from year 1 for Cohort 1 are reported by McConaughy, Kay & Fitzgerald (in press). Observers' ratings of classroom behavior showed a significant drop in observed problems from fall to spring for children in Intervention B, in contrast to an increase in problems for children in Intervention A ($p <$ .05). DOF ratings of recess behavior also showed a significant drop in problems for Intervention B versus no change in problems for Intervention A ($p <$.05). The DOF results demonstrated significant effects of the combined social skills instruction plus the PTAR team (Intervention B) for reducing classroom and recess problem behaviors. These findings for the first year of the study were especially encouraging since they were based on ratings by independent observers who were not participants in the interventions and who were blind to the children's group assignment (see Table 2).

In addition to observed changes in problem behaviors, the DOF also showed dramatic changes in competencies, indicated by the classroom on-task scores. The DOF showed a significant increase in observed on-task behavior from fall to spring for children in Intervention B, in contrast to a decrease in on-task behavior for children in Intervention A ($p <$.05). This indicated that social skills instruction, plus the PTAR team, not only reduced observed behavioral problems, but also improved children's attending to academic tasks. This finding was most encouraging since action plans developed by the PTAR teams encompassed both behavioral and academic goals (see Table 2).

Over the same one-year period we found a significant decrease in Teacher Report Form (TRF) total problem scores for both intervention groups ($p <$.05) and decreases in Internalizing and Externalizing scores that approached significance ($p =$.055). Although interaction effects on the TRF scales failed to reach significance, there were trends toward larger decreases in teacher-reported problems for children in Intervention B than Intervention A. Parent ratings on the Child Behavior Checklist (CBCL; Achenbach, 1991) showed no significant changes over the one-year period, although changes in total problem scores approached significance ($p =$.058).

Teacher ratings of academic performance and adaptive functioning on the TRF showed no significant changed, but suggested a trend toward improvements for both groups ($p =$.080). Parent ratings of total competence on the CBCL, on the other hand, showed minimal changes over time for

Table 1
ABC Project
Screening Procedures and Outcome Measures

Screeening Procedures	Assessment Times
Kindergarten Teachers:	
Systematic Screening for Behavior Disorders (SSBD)	Spring
Teacher's Report Form (TRF)	Spring
Quantitative Measures	
First & Second Grade Teachers:	
Teacher's Report Form (TRF)	Fall + Spring
Social Skills Rating System (SSRS-T)	Fall + Spring
Classroom Observers:	
Direct Observation Form (DOF)	Fall + Spring
Parents:	
Child Behavior Checklist (CBCL)	Fall + Spring
Social Skills Rating System (SSRS-P)	Fall + Spring
Family Empowerment Scale-School Version (FES-S)	Fall + Spring

either group. Data collected over two years are necessary to determine whether either of the interventions produces significant changes in teacher and parent ratings of children's adaptive behavior, social competencies, and problems.

Discussion

We also examined the minutes and materials generated from weekly meetings of the project's university-based research team. The two-hour research meetings were attended by the three researchers who managed the interventions and attended all PTAR team meetings (Penny Bishop, Martha Fitzgerald and Pam Kay), the statistician who managed the retrieval and analysis of all data (Marge Coahran), and the secretary who took detailed minutes of the research meetings and coordinated all communication with the seven schools (Margo Rabon). The meetings' agendas included all issues and problems related to recruitment and support of parents, teachers, and parent liaisons; implementation of the two interventions; collection of quantitative and qualitative data; and adherence to the research design. A preliminary document analysis of 110 typed pages of meeting notes and materials revealed the following nine conclusions related to project implementation and effects:

1. Kindergarten Screening

Kindergarten teachers were generally hopeful that children would outgrow their externalizing or internalizing behaviors and were reluctant to explain their screening recommendation to parents.

2 . Teacher Participation

First and second grade teachers were uniformly willing to participate after the Parent Liaison visited the child's home and obtained parental consent.

3. Parent Participation

Of the parents who were invited to participate, most (91 to 94%) agreed to do so, and all of these maintained participation in the second year of the project.

4. Family Perseverance

Despite the difficulties of particular family situations, families persevered in responding to home interviews, completing questionnaires, and (for B families), participating in action research.

Table 2
ABC Project
Summary of First Year Results

Direct Observations:

- Group B *decreased* in total problems, hyperactivity, and aggressive behavior
- Group A *increased* in total problems, hyperactivity, and aggressive behavior
- Group B *increased* in on-task behavior
- Group A *decreased* in on-task behavior

Table 3
ABC Project
Summary of First Year Results

Teacher Reports:

- Both groups decreased in total problems, internalizing, and externalizing behavior (TRF and SSRS)
- Group B showed *greater decreases* than Group A in externalizing, social problems, delinquent, and aggressive behavior (TRF)
- Both groups *increased* in social skills (SSRS)

Parent Reports:

- Both groups *decreased* in total problems and externalizing behavior (SSRS)

5. Parent Liaison

Parent and teacher participation was dependent upon the Parent Liaison, who visited homes, answered questions, arranged meetings, and facilitated the action research meetings.

6. Social Skills Curriculum

All 11 of the participating schools agree to adopt a social skills curriculum that included weekly lessons for the whole class, communicating regularly with parents, and teaching social skills on a daily basis.

7. Ground Rules

All of the 18 Cohort 1 PTAR teams followed the same ground rules of group process: parents always speak first, parent and teacher take turns speaking, disagreement is OK, all ideas are recorded as spoken, all ideas are considered, and all ideas are expressed positively.

8. Making Action Plans (MAPS)

The MAPS process of revealing hopes, dreams, and fears for their child in all cases initiated mutual goal setting by parent teacher teams.

9. Parent Teacher Action Research (PTAR)

The agenda for each PTAR meeting focused on selected elements of the action research cycle in which data leads to reflection, analysis leads to theory, brainstorming leads to a plan of action, and getting permission leads to action.

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