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Developing Capacity and Competence in the Better Beginnings, Better Futures Communities: Short-Term Findings Report

EXECUTIVE SUMMARY

NOVEMBER 2000

citation

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EXECUTIVE SUMMARY

THE BETTER BEGINNINGS, BETTER FUTURES INITIATIVE

In 1990, the Better Beginnings, Better Futures Project was announced as "a 25-year longitudinal prevention policy research demonstration project to provide information on the effectiveness of prevention as a policy for children". In one variation, prenatal/infant development programs were to link with preschool programs for children from birth to age 4 (the younger cohort model). In a second, preschool programs were to integrate with primary-school programs for children between the ages of 4 and 8 (the older cohort model). Five sites were selected, by competition, to implement the younger cohort model (Guelph, Kingston, South-East Ottawa, Inner City Toronto, and Walpole Island), and three to implement the older cohort model (Cornwall, Highfield and Sudbury).

These sites were chosen, in part, because of socio-economic disadvantage. To illustrate, among those interviewed at the sites before programs were in place (to establish a baseline) at the younger cohort sites 37% of families were headed by a single parent, and 83% were below Statistics Canada's Low Income Cut Offs (LICOs). At the older cohort sites 36% were headed by a single parent, and 64% were below the LICOs.

The program guidelines for the demonstration sites were ambitious. They were expected to: 1) develop high-quality prevention programming in very disadvantaged communities or elementary school attendance areas; 2) blend and unite services for children and families; and 3) involve families and community leaders to determine local needs and desires for healthy child development (Government of Ontario, 1990).

Sites interpreted this broad mandate in various ways, and found they could not give equal attention to all parts of it, so that different choices from site to site were made about where to invest the most energy. Five major project development threads had to be woven together:[1]

- Focused Programming: implementing and maintaining a defined prevention program model.
- Creating Partnerships and Integrating Services: fostering voluntary collaborations among service organizations.
- Empowering Resident Participation: fostering and maintaining local resident involvement and influence in program design, implementation and maintenance.
- Community Development: using locally controlled, participatory processes to create the project organization, to identify priorities for programming, to bring additional resources to the neighbourhood and to carry out initiatives beyond the original mandate of Better Beginnings.
- Building a Project Organization.

Each thread requires that attention be paid to different tasks, and each produces different types of benefits. We have compared the seven urban demonstration sites in terms of the relative emphasis placed

[1] A more detailed discussion of the nature and expected outcomes from each project development thread is available in *Finding a Balance: Project organization in Better Beginnings, Better Futures* (Cameron & Jeffery, 1999).

on focused programming, creating partnerships, resident participation, and broader community development. Our analysis reflects the relative differences in emphases among the sites, not the absolute amount. For example, while all sites had a much greater investment in resident participation than other prevention programs for young children or most established social agencies, there remain important differences in emphasis across sites.

Among the younger cohort sites, Toronto, Ottawa and Kingston placed similar emphasis on focused programming, and all three had moderate investments in creating partnerships. Toronto and Ottawa had a relatively moderate investment in broader community development efforts. Kingston put almost all its resources into family visiting, pre-and-postnatal support, and support of childcare programs, and incorporated its community building efforts into these focused programs.

Guelph showed a very different profile. It had a very strong emphasis on broad community development, creating partnerships and resident participation in project governance along with less concentration in its programming. It offered perhaps the widest range of programs/activities for varied groups of participants of any demonstration site, but put only half as much of its core funding into family visiting as Kingston, Ottawa and Toronto.

There are clear differences among the three older cohort sites. Sudbury is the most distinctive, placing a higher relative emphasis on resident participation and community development. Highfield had a high relative emphasis on focused programming, with its emphasis on school-based programming in one primary school and concentration of several programs exclusively on the research cohort of children and their families. Cornwall placed the greatest emphasis on creating partnerships. It also had a major investment in in-school programming activities including classroom enrichment, homework help and a breakfast program. This site's emphasis on broader community development efforts grew over the demonstration period, finishing with a relatively high investment in this area compared to most demonstration sites.

The Unique Situation of Walpole Island

Walpole Island, a younger cohort site, was the only demonstration site working exclusively within a First Nation. It has stressed a set of community and project values and working principles, based on traditional culture. Another unique aspect of Walpole Island is that the Band Council is the host agency for the demonstration project, and it has the power to write community by-laws, restructure community services and override any program decisions. The Band Council also promotes the integration of all Walpole Island First Nation services and requires representatives from the Parent/Child Support Program and Bkejwanong Children's Centre to sit on the project's Steering Committee. Walpole Island invested about 60% of its base budget in community development and community healing activities.

RESEARCH OBJECTIVES AND QUESTIONS

A consortium of researchers from Queen's University, University of Guelph, and Wilfrid Laurier University was selected in 1990 to carry out the project evaluation, following a separate Request for Proposals process. Researchers from the University of Ottawa, Ryerson Polytechnic University, and the University of Windsor were added to the team.

Research on the Better Beginnings project was designed to address several major objectives. As listed in the Research Request for Proposals (Government of Ontario, 1990) these were:

- to demonstrate how great an effect can be achieved from a primary prevention model, "not to discover the most efficient or leanest package of prevention services, but to determine how effective a reasonably financed and community-supported project can be".
- to investigate the costs of the Better Beginnings model.
- to investigate process and organizational issues.

RESEARCH DESIGN AND DATA COLLECTION

Due to the government's competitive process for selecting project sites, and the intention to serve all children at a site, it was not possible to employ a randomized controlled trial design. Therefore, two major quasi-experimental designs were employed: a) a baseline-focal design, and b) a longitudinal comparison site design. To implement the latter design, a comparison site in Peterborough was selected for the younger cohort demonstration sites. For the older cohort, comparison sites in Ottawa-Vanier and in Etobicoke were chosen.

Baseline measures on children, families and neighbourhoods were collected in 1992-93 before the local programs were fully operational. These baseline measures were collected on 350 four-year-old children in the younger cohort sites and 200 eight-year-old children in the older cohort sites. These children were compared to others of the same age in the same neighbourhood after four years of Better Beginnings programming had been provided.

In 1993-94, a "focal" longitudinal research group of children and their families were recruited in the eight project sites and in three comparison neighbourhoods where there was no Better Beginnings funding. In the younger cohort sites, children born in 1994 constitute the focal research group, and outcome measures were collected on these 700 children when they were 3, 18, 33, and 48 months of age. In the older cohort sites, children who turned four years in 1993 constitute the focal research group, and data were collected on this group of 700 at ages 4, 5, 6, 7, and 8 between 1993/4 and 1997/8.

SHORT-TERM OUTCOMES

In the following sections, the results of the Baseline-Focal and Longitudinal statistical analyses on the child, family, neighbourhood and school outcome measures are presented. The analyses are reported separately for younger and older cohort sites due to differences in programs and outcome measures. In order for a result to be considered noteworthy, it must either be part of a cross-site pattern or a site-specific pattern.

Cross-site patterns reflect consistent results on a particular outcome measure (e.g., decreased child emotional problems) *across* all the younger or older Better Beginnings sites. Site-specific patterns reflect consistent results as a series of related measures (e.g., reduced child emotional problems, reduced child behavioural problems, increased child prosocial behavioiur, increased child school readiness all at Junior Kindergarten) *within* a particular site.

Emotional and Behavioural Problems

In three of the younger cohort Better Beginnings sites (Kingston, Ottawa and Toronto), there was a decrease in JK teacher ratings of children's emotional problems from 1993 to 1998. Kingston JK teachers also rated children as showing smaller decreases in behavioural problems and increases in prosocial behaviours, and a substantial increase in school readiness over the same time period. At Kingston, home

visiting and informal playgroups were important components, as they were in all the other younger cohort sites. However, Kingston also invested extensive program resources in childcare, both by enriching local daycare centres and also by providing a large number of informal childcare experiences. This combination of supports, available from birth to JK entry, may have contributed to the substantial improvements seen in social and emotional functioning.

In the three older cohort Better Beginning sites, children also showed decreases in teacher ratings of overanxious emotional problems, as well as improvements in social skills as rated by both parents and teachers. In Cornwall, teacher ratings of behavioural problems also showed substantial decreases. Improvements in social-emotional functioning as rated by teachers were stronger in Cornwall and Highfield, where school-based programming was more intense, using classroom assistants, than in Sudbury.

Decreases in emotional and behavioural problems as rated by parents were only noted in Highfield where there was a direct connection between Better Beginnings and the parents via regular home visits by Better Beginnings staff. Also, Highfield teachers were trained to provide a social skills program in their classrooms which included specific activities to involve parents.

General/Cognitive Development and Academic Achievement

In all the younger cohort Better Beginnings sites, there was consistent improvement on a measure of auditory attention and memory, one of the six subtests from a standardized test of general developmental skills. That is, children in the Better Beginnings sites improved in their ability to hear, process, and act on simple instructions and to repeat increasingly complex words and numbers in sequence. This is an important area of development, reflecting children's ability to process and respond to verbal communication. There were no other consistent cross-site improvements on any of the other subtests, which included expressive and receptive language, fine and gross motor skills, and visual attention and memory. For Walpole Island, children showed a consistent improvement in their general development, especially in their expressive language and gross motor skills.

There were no improvements in the older cohort Better Beginnings sites on any of the measures of cognitive development or on measures of reading or mathematics achievement.

The failure to find any other consistent improvement in cognitive development or academic achievement may reflect the difficulty of effecting positive changes in this domain in young children. A recent review of home-visiting programs for families with children from birth to five years of age (Gomby *et al.*, 1999) concluded that these programs have produced no general improvement in children's cognitive development. Projects that have been successful in improving cognitive/intellectual development in preschool-aged children have all provided intensive, centre-based educational programs to very high-risk young children with a heavy emphasis on cognitive activities (e.g., the Abecedarian and Perry Preschool Projects). Since none of the younger cohort Better Beginnings sites provided this type of intensive centre-based programming, the failure to demonstrate general improvements in intellectual functioning is not surprising.

In the older cohort sites, the failure to find improvements in cognitive functioning or academic achievement again is consistent with findings from other projects focusing on this early primary school age group.

One reason for the difficulty in demonstrating improved cognitive and academic achievement in the older cohort sites is that all children in project and comparison schools receive regular primary school

education programs throughout the implementation period. In order for a positive effect to show, programs would have to improve academic achievement over and above that being accomplished by regular Kindergarten and Grade 1 and 2 educational activities. It is unlikely that any of the Better Beginnings programs, designed to improve cognitive/academic performance, was intensive enough to produce such an effect.

Child Health and Nutrition

In the younger cohort sites, only children in the Toronto Better Beginnings neighbourhood showed improvements in nutrition. However, the overall nutrient intake was within acceptable levels for children in all younger cohort sites. There was a tendency to overweight among 4 year olds, suggesting a need for greater physical activity.

Improved parent ratings of their children's general health status were found in all three older cohort sites. Also, in both Cornwall and Sudbury, a general pattern of improvements occurred on variables dealing with illness prevention and health promotion, including reduced child injuries, more timely booster shots, more parental encouragement to wear a bicycle helmet, and an increase in parents' sense of control over their children's health.

There was, however, a higher than average percentage of children who were overweight in all demonstration and comparison sites. This remained unchanged and underscores the need to increase opportunities for physical activity. In all the older cohort Better Beginnings sites, particularly Cornwall, there was a general increase in children's intake of all nutrients over the first two years of the project. Parents had increased access to food though emergency food cupboards and other food resources set up in each site, and all three sites set up one or more snack or meal programs before, during or after school as well as offering food in all child-related programs.

Parent Health and Nutrition

The rates for adults being overweight were considerably higher in all the research sites for males (52% to 76%) and females (42% to 57%) compared to Ontario averages of 48% for males and 28% for females of comparable age. There were no changes in any sites over the course of the study.

There were higher levels of exercise prenatally in all the younger cohort Better Beginnings sites than in Peterborough, which may have resulted from the heavy emphasis on prenatal classes and home-visiting. However, mothers in the Peterborough comparison site reported higher rates of breastfeeding at birth than those in the Better Beginnings sites, higher levels of breast self-examinations and more exercise for the first 18 months after pregnancy. A strong breastfeeding campaign has been operated by the local health unit and hospital in Peterborough, which has rates of initiation substantially higher than the Ontario average. Levels of breast self-examinations and exercise during the first 18 months after pregnancy may have been affected by the same public health program.

Energy, zinc, folate, and calcium intakes of breastfeeding women in all sites were below recommended levels. Since low levels of these nutrients may jeopardize the nutritional health of the mother, public health initiatives to encourage breastfeeding among low income women should include strategies to ensure their access to fresh fruits and vegetables (best source of folate), and milk and dairy products (or alternate sources of calcium and zinc).

At all three older cohort sites, there was reduced smoking by mothers and others in the home. The reduction in maternal smoking and smokers in the home is an important outcome since smoking levels are

high in disadvantaged communities and often are considered the leading health problem in Ontario.

Parenting Practices and Parent-Child Interactions

On ratings of the quality of parent-child interaction made by researchers during their in-home visits in the younger cohort sites, Walpole Island showed large improvements, ending up substantially higher at 48 months than other sites. This large increase may reflect the emphasis on Better Beginnings programs which were developed and implemented in conjunction with the local parent-child centre.

In the older cohort sites, the only improvements in parenting measures occurred in Highfield, where there were increases on measures of consistent parenting and satisfaction with the parenting role, and also a large decrease in hostile/ineffective parenting. These improvements in Highfield provide further evidence for the strong impact that the Better Beginnings programs had on parents in that site.

Parent/Family Social and Emotional Functioning

Decreased violence between parents and their partners was reported in the younger and the older cohort Better Beginnings sites between 1993 and 1995, but not later. The causes for the reported change are unclear, as explained in Chapter 8. There were improved ratings of marital satisfaction in the older cohort sites.

In two of the younger cohort sites, Toronto and Walpole Island, parents reported decreases on several measures of parent and family stress. In Highfield, there was a general pattern of improvement in parents' level of stress, depression, and social support, in addition to the general improvements in marital satisfaction and domestic violence reported in all sites.

Quality of Local Neighbourhoods

Effecting changes in the quality of neighbourhood life within a five year time frame is a challenging task, especially when the neighbourhoods are large, and contain high percentages of socioeconomically disadvantaged families. As well, personnel in all the Better Beginnings projects reported that changes to the welfare system during the period of this study raised stress and produced crises for some families.

In the younger cohort Better Beginnings sites, parents reported increased safety in the neighbourhood when walking at night. One negative finding, a decrease in the reported frequency of getting together with friends, resulted from a small group of parents in the Peterborough comparison site reporting very large increases in contacts with friends.

Parents at both Guelph and Kingston reported increased community cohesion and less deviant activity (alcohol and drug use, violence and theft), and gave more favourable ratings to the condition of their homes, safety walking on the street, and the general quality of their neighbourhood. At Toronto, there was a decline in ratings across the same range of variables.

In all three older cohort Better Beginnings sites, there was an increase in parents' satisfaction with the condition of their personal dwellings, particularly in Highfield. There was a large increase in children using neighbourhood playgrounds in Highfield and Sudbury. General neighbourhood satisfaction rose modestly across the sites.

Neighbourhood Schools

Information about schools obtained from the parent interview, and from Principals' September Reports concerning special education students showed changes that could be linked to Better Beginnings.

In Highfield, parents showed improved ratings concerning both their child's teacher and school, again underscoring the potential value of programs designed to actively forge parent-school connections and involvement.

Principal's Reports, from 1992 to 1997 show decreasing percentages of students identified for special education instruction in Cornwall and Highfield, and increasing percentages in the two comparison sites. It is possible that the in-classroom supports provided through the Better Beginnings programs from JK to Grade 2 in both Cornwall and Highfield may have contributed to reducing the percentage of students requiring special education in these schools.

SUMMARY OF SHORT-TERM CHILD, FAMILY AND NEIGHBOURHOOD OUTCOME MEASURES: GENERAL CROSS-SITE AND SITE-SPECIFIC PATTERNS

Given the complex mandate of the Better Beginnings model and the finite project resources, it was expected that successful program implementation would yield broad but modest outcome effects. The patterns of results confirm this and can be summarized as follows.

A. Younger Cohort Sites

I. Child Outcomes

a. General Cross-Site Patterns
- (+) decreased emotional problems rated by JK teachers
- (+) improved auditory attention and memory
- (+) more timely immunizations at 18 months
- (-) less parental encouragement to use bicycle helmets

b. Site-Specific Patterns
- (+) Kingston: improved social-emotional functioning and school readiness
- (+) Walpole Island: improved language, motor, attention and memory development
- (+) Toronto: improved nutrition

II. Parent and Family Outcomes

a. General Cross-Site Patterns
- (+) increased accessibility to professionals when desired
- (+) more frequent exercise during pregnancy
- (+) reduction in reports of domestic violence: respondent to partner
- (+) reduction in reports of domestic violence: partner to respondent
- (-) less frequent exercise after pregnancy
- (-) lower initiation rates for breastfeeding (but rates are comparable to national norms)
- (-) less frequent breast self-examinations

(-) less frequent get-togethers with friends

b. Site-Specific Patterns
(+) Walpole Island: improved quality of parent-child interactions
(+) Toronto: decreased parent and family stress and tension
(+) Walpole Island: decreased parent and family stress and tension
(-) Kingston: decreased quality of parent-child interactions

III. Neighbourhood Outcomes

a. General Cross-Site Patterns
(+) increased safety walking at night

b. Site-Specific Patterns
(+) Guelph: improved sense of neighbourhood cohesion, satisfaction and safety, and decreased neighbourhood deviance
(+) Kingston: improved sense of neighbourhood cohesion, satisfaction and safety, and decreased neighbourhood deviance
(-) Toronto: decreased sense of neighbourhood cohesion, satisfaction and safety, and increased neighbourhood deviance

B. Older Cohort Sites

I. Child Outcomes

a. General Cross-Site Patterns
(+) decrease in overanxious emotional problems as rated by teachers
(+) improved self-controlled behaviours as rated by teachers
(+) improved cooperative behaviours as rated by parents
(+) improved health as rated by parents
(+) improved nutrition

b. Site-Specific Patterns
(+) Cornwall: decreased emotional and behavioural problems
(+) Cornwall: increased health promotion and injury prevention
(+) Highfield: decreased emotional and behavioural problems; improved prosocial behaviour
(+) Sudbury: increased health promotion and injury prevention
(-) Sudbury: increased emotional and behavioural problems

II. Parent and Family Outcomes

a. General Cross-Site Patterns
(+) reduction in smoking
(+) fewer smokers in the home
(+) increased marital satisfaction
(+) reduced reports of domestic violence: respondent to partner
(+) reduced reports of domestic violence: partner to respondent

b. Site-Specific Patterns
   (+) Highfield: improved parent health and health promotion; decreased health-risk behaviour
   (+) Highfield: improved parenting
   (+) Highfield: improved parent and family social and emotional functioning

III. Neighbourhood Outcomes

a. General Cross-Site Patterns
   (+) increased satisfaction with personal housing
   (+) increased use of playground and recreational facilities in the neighbourhood
   (+) increased general neighbourhood satisfaction
   (+) decreased number of all students identified for special education instruction

b. Site-Specific Patterns
   (+) Highfield: improved parent ratings of child's school and teacher

DEVELOPING HIGH QUALITY PROGRAMS

Younger Cohort Sites

The younger cohort sites demonstrate a number of significant similarities in the kinds of programs that they offer, particularly with regard to those provided for children, parents and families. Family visiting is a core component of the programming at all younger cohort sites. While some of the details of the programs differ (e.g., how often the visits occur, the age up to which visits are made, the background or training of the family visitors), visiting generally occurs frequently (often weekly during infancy, progressing to less frequently as the child gets older), and is used to support parents and provide information about a variety of topics, including nutrition, community resources and the like.

In addition to providing home visits, all younger cohort sites provide a drop-in for parents and children to spend time together doing play-centred activities such as singing and crafts. All these sites also provide playgroups for children to play with each other under adult supervision, often while the parents or caregivers meet with one another for parent support or information-sharing. Three of the five younger cohort sites also provide a toy-lending library from which parents can borrow toys and books. Another set of programs offered at all younger cohort sites revolve around parent relief, support and training. All sites offer parents relief by providing care for children while parents take a break or run necessary household errands. All sites also provide parent training and workshops (e.g., Nobody's Perfect, child nutrition), and provide the opportunity for parents to get together informally to support one another.

Compared to other programs which have provided only home visiting, for two to five years, Better Beginnings is strikingly inexpensive. Perhaps funding was too low for maximum results, but nonetheless there are encouraging findings. Teacher ratings showed reduced emotional problems in JK students, possibly because of their playgroup experiences. An emphasis on continuity of programming from infancy to kindergarten was notable at Kingston, and may be related to the improvements shown in several areas of social-emotional functioning at that site. At Kingston, mothers are contacted during pregnancy, and where appropriate can receive family visiting until their children are five. During these

years, children may be taken to an infant group, then a toddler group, then attend playgroups.

While community-based programs vary from site to site, all younger cohort sites provide programming such as clothing exchanges, food-related programs such as community kitchens and emergency food supplies, and community events such as multicultural fairs and community barbecues.

Older Cohort Sites

While the older cohort sites are more varied in the programs they offer from site to site, there are still some similarities in the program offerings among the three sites. All older cohort sites offer playgroups for children (though some of these are offered before and after school, and some on Saturdays), and summer and holiday programs for children. Nutrition is also a key component of the programming at the older cohort sites with all sites providing a breakfast or snack at the school. Although all sites provide some programming in the schools, school-based programming in the Highfield and Cornwall sites has been substantially more intensive than in the Sudbury site.

In Highfield, educational assistants, called "enrichment workers", worked with the children in the focal research cohort, following them from JK to Grade 2. Similar classroom workers called "animateurs" at Cornwall, dealt with children at all four grade levels simultaneously.

A second activity of the Highfield enrichment workers was to visit each child's parents on a regular basis, to provide information about the child's activities in school and about community resources, and to encourage parent involvement at the school. These enrichment workers followed the same children for four years. In addition, Highfield provides the Lion's Quest "Skills for Growing" program beginning in 1995, a social skills development program provided by all primary classroom teachers.

Highfield appears to be unique in having provided major programs specifically for the focal cohort, and in being able to concentrate its resource on a single school. These factors may account for Highfield's showing more positive results for children and parents than any other site.

While the community-focused programs have varied considerably from site to site, all sites have been very involved in cultural programs, given the prominent concern with the multicultural mix in two of the sites (Highfield and Sudbury) and the minority status of the Francophone culture in Cornwall.

DEVELOPING COMMUNITY CAPACITY THROUGH RESIDENT INVOLVEMENT

Developing organizations that successfully involved neighbourhood residents was an extremely challenging task, and was one major reason why most sites took up to three years to implement programs. Early on a 50% rule was established, requiring that each Better Beginnings steering committee and subcommittee contain at least 50% local residents as members. Challenges in establishing this level of resident involvement have included: unfamiliar terms and procedures used by professionals, feelings of intimidation and power imbalances felt by residents in relation to professionals; ethnic tensions; failed expectations for residents not hired for project positions; and language barriers in bilingual and multilingual communities.

Residents now are involved as active members of major project committees, and subcommittees, often as chair or co-chair, and in program management and support. In 1998, researchers interviewed many residents who had been involved with Better Beginnings projects for several years. Personal benefits reported by participating residents included: greater confidence, self-knowledge, assertiveness, awareness

of rights, political awareness and public speaking skills. Resident volunteers have also freed up staff. Averaging across the years 1994-97, the time volunteered to the Better Beginnings projects by neighbourhood residents was the equivalent of three full-time positions per year per site.

ESTABLISHING A STRONG LOCAL ORGANIZATION

Developing a viable local organization was a formidable challenge at each site. Because of the breadth of their mandate, and its innovative nature, putting in place stable organizations and programs took at least two to three years. At almost every site there was initial difficulty in recruiting and maintaining a core of residents for committees. This meant modifying decision-making procedures, working out relationships between residents and professionals, and developing partnerships with other service-providing organizations.

Sites varied in their relative emphasis on community development, developing focused programs, and creating partnerships. Because project goals were broad, and time and energy limited, choices had to be made. Sites also varied in their emphasis on "alternative" organizational models. Project managers, with one exception, were hired on formal qualifications and work experience. On the other hand, service delivery staff were usually chosen primarily on personal characteristics and life experience.

Consistently, project coordinators influenced the direction of program development, contributing, for example, to the strong emphasis on community development at some sites.

Most sites were blessed with positive and productive relations between the project and the sponsoring organization, which assumed financial and legal responsibility for the project.

PARTNERSHIPS WITH OTHER HUMAN SERVICE ORGANIZATIONS

All the Better Beginnings sites involved representatives from local organizations in the original proposal development process in 1990. Except for Sudbury, the sites have maintained a core of service-providers from other organizations as members of project committees, including the steering or executive committee.

Service-providers became involved because they held objectives similar to those of Better Beginnings, Better Futures, because they saw ways to increase their resources or to improve their services through partnership, or both. As the reputation of Better Beginnings grew over the years, outside agencies saw increased advantages in connecting with a project with networks and credibility different from their own. The creation of partnerships has resulted in significant new resources and programming being created in each Better Beginnings community through joint programming, finding of new sources of funding, encouragement of agencies to locate in the neighbourhood, and mutual enrichment of programming. There is agreement that Better Beginnings has been the catalyst for most collaborations, which would not have happened without its initiative.

PROGRAM COSTS

Annual site program budgets have stayed quite stable from 1993/4 through 1997/8. On average, each site receives $570,000 per year from direct government funding. For the younger cohort sites, the average estimated annual cost-per-family was $1,400. The average estimated annual cost-per-child in the older

cohort sites for 1996/7 was $1,130.

One way to put these estimated annual costs in perspective is to compare them with costs of frequently cited prevention programs. Annual costs of influential U.S. demonstration project for which figures are available, in 1997 Canadian dollars, begin at three times those of Better Beginnings ($4,300 for the Elmira Home Visiting Project) and rise to over $20,000.[2] By comparison, the costs of Better Beginnings are quite modest, particularly when one considers that the programs were so broad, i.e., not focused exclusively on either children or parents, but also on the local neighbourhood, on integrating local services, and on involving residents in project management and other community development activities.

One reason Better Beginnings has been able to do what it has with modest funding is that it receives services in kind. Estimated at a value of approximately $300 per child per year, volunteer services are an important ingredient in the implementation and operation of the programs.

LIMITATIONS OF THE RESEARCH

Limitations of the research include: lack of assessment of program quality; lack of information on program involvement; lack of measures corresponding to some local objectives; assessment of only one birth cohort; and the presence of other, sometimes idiosyncratic programs at the sites. Although some sites carried out evaluations for some of their programs, there was no provision in the research contract for such assessments, and, given the number of individual programs, the costs would have been considerable. With no common management information system in place, the only information on program involvement available over time was that collected in the parent interview, which provides only broad indicators of parent and child participation in major program categories, and is subject to the frailties of long term memory.

The research design, together with the organization of the project, required outcome measures to be approved by both government funders and local project sites before programs were in place. However, after site programs were developed, it became apparent that measures to address some unique program goals were weak or absent. For example, the heavy emphasis placed on creating local leadership in several communities was not well addressed by measures collected.

Children and their families were studied over time, in comparison sites as well as the Better Beginnings sites. If children and families in the comparison communities were similar to those in the Better Beginnings communities, and if, apart from Better Beginnings, human services were similar as well, outcome differences could be attributed straightforwardly to Better Beginnings. Due to the extensive cultural and socio-economic diversity among the five younger cohort Better Beginnings sites, the one comparison site in Peterborough, used alone because of funding limits, could not match well demographically with all the others. To minimize the effects of any socio-demographic differences

[2] More specifically, annual costs per family for some influential projects are:

Elmira Home Visiting Project	$ 4,300
Perry Preschool Project	$ 8,600
U.S. Head Start Program	$ 6,400
U.S. Infant Health and Development Program	$ 14,300
U.S. Comprehensive Child Development Project	$ 21,000

between sites, all of the analyses of outcome variables statistically controlled for demographic differences.

It would have been impossible to control other programs and activities for children and families, either within the Better Beginnings sites or the comparison neighbourhoods. Their influences are background noise against which the effects of Better Beginnings programs must be detected.

One birth cohort in each site was studied longitudinally, and was the first wave of children and families to move through the full four years of Better Beginnings programming. During the first year, however, each Better Beginnings site was adjusting and fine-tuning programs. Since the demonstration was scheduled to end in 1997, the last two years of programming for the longitudinal cohort (1996 and 1997) were characterized by increasing staff uncertainty and stress. There is a belief among program staff that the programs experienced by the longitudinal research cohort were weaker than those currently being implemented.

CONSIDERATIONS FOR ORGANIZING FUTURE INITIATIVES

The experience of Better Beginnings, taken with that of other projects, suggests some core considerations to be taken into account in future initiatives.

Projects of this complexity need at least three years to reach a stable state of functioning. Demonstration projects often experience turmoil as the end of funding approaches. Projects can best be evaluated when they have reached maturity, but are not experiencing instability due to the possible termination of funding.

Projects need to balance breadth and focus. There are often attractive reasons for expanding a project's range of activities, but this can introduce conflicting priorities. It is important to be clear in the beginning about the key elements to be tested and how they fit together.

There is a deep tension between community control and implementation of predetermined programs. Where local participatory processes are to be used, it is important to be clear about their role. In particular, if specific, focused programs are to be tested in conjunction with participatory processes, it is critical to clarify their respective roles.

It is helpful if the funding organization, host organization and project negotiate early on how the project will be accountable to the sponsor, how the project's needs for independent functioning will be met, and what long-term administrative arrangements are foreseen.

Project coordinators can have pivotal influence on priorities and ways of working, so that clarity about the characteristics to be sought in the project coordinator is critical.

KEY SHORT TERM FINDINGS

The Better Beginnings, Better Futures Initiative

The Better Beginnings, Better Futures Project being implemented in eight disadvantaged communities throughout Ontario, is one of the most comprehensive and complex prevention initiatives ever implemented for young children. It is unique in that it attempts to incorporate the following aspects into a *single* program model: a) an ecological view which requires program strategies focusing on individual children, their families, and their neighbourhoods, including childcare and school programs; b) a holistic view of children, including social, emotional, behavioural, and cognitive development; c) programs universally available for all children within a specified age range and their families living in the neighbourhood; d) resident involvement in all aspects of the organization, management, and delivery of programs; and e) partnerships with local social service, health, and educational organizations.

In the analyses of the operating costs presented in this report, it was concluded that the costs are quite modest when compared to other prevention projects for which comparable financial information is available. Further, these other demonstration projects have typically not been sustained for more than two or three years; have provided a much smaller number of programs to a smaller group of children and/or parents; have not involved local residents in any aspect of program development or implementation; have not attempted to integrate their programs with those of other organizations; and have collected evaluation information on a small number of child or parent measures, with modest short-term outcome effects. When placed in this context, the accomplishments of the Better Beginnings projects to date are encouraging.

Program Development

Better Beginnings, Better Futures has produced many new or improved programs for children and families, parents, schools and communities in the eight participating sites.

- These programs are characterized by high levels of community acceptance and accessibility to groups of differing languages and cultures.

- Many of these child and family support programs are typically found in middle-class neighbourhoods, but were missing or poorly accepted in the Better Beginnings neighbourhoods before the project began.

- The strong involvement of local residents in all aspects of program development and implementation are widely believed to be critical to the acceptance and appropriateness of the Better Beginnings programs.

Resident Involvement

At all program sites, local residents have played a wide variety of key roles in:
- project management and decision-making
- program development and implementation
- program staff (as volunteers and paid staff)
- program advocacy

This involvement has led to:
- enhanced skills and greater employability on the part of involved residents
- reduced program costs
- greater acceptance of programs

Service Integration

Significant partnerships have been established between Better Beginnings and programs in social services, health, and education. This has resulted in:
- sharing of staff and physical resources
- creation of new programs and organizations
- collaboration on other family and child initiatives (e.g., Healthy Babies, Healthy Children)

Child Outcomes

The most frequent and consistent patterns of positive child outcomes were in the area of emotional, behavioural and social functioning. This is encouraging since the major goal of the Better Beginnings project at its inception was the prevention of serious emotional and behavioural problems in young children.

Positive patterns of decreasing children's emotional and behavioural problems and improving social skills arose in three project sites that provided the greatest continuity of child-focused programs across the four-year age span, and that allocated the largest part of their budgets to programs for children in the focal age range (Kingston, Cornwall and Highfield).

Also, these positive patterns were stronger in the Cornwall and Highfield older cohort sites that provided continuous and extensive classroom-based programs for children from four to eight years of age than in the Kingston younger site. These differences may be due to the fact that all children in the older cohort sites participated in classroom programs daily throughout the school year, while child-focused programs for children from birth to four years of age (e.g., home visiting, playgroups, childcare) provided experiences that were substantially lower in frequency and duration.

These results are consistent with previous findings that programs which have been most successful in improving the development of very young children from birth to school entry have provided full or half day centre-based interventions directed at the child over a 2 to 4 year period. None of the younger cohort Better Beginnings projects provided child-focused programs of that intensity.

Parent and Family Outcomes

The strongest pattern of parent outcomes appeared at Highfield, where parents reported fewer tension producing events, less tension juggling child care and other responsibilities, more social support, reduced alcohol consumption and increased exercise. This combination of changes might be expected to reduce illness, particularly stress-related, and parents at this site reported reduced use of prescription drugs for pain, as well as a reduced number of types of prescription.

They also reported improved family relations, reflected in increased marital satisfaction, more consistent and less hostile-ineffective parenting, and increased parenting satisfaction.

Many of these variables could easily affect one another, so that Better Beginnings may well have

produced its outcomes by affecting some of them directly, with these in turn influencing the others. This possibility makes it difficult to specify the pathways through which the programs achieved the effects they did, but it is possible to point to a distinctive feature of the Highfield program that could have produced the difference between this site and others.

Highfield made consistent, ongoing, attempts to involve parents in their programs and in school events, and to discuss issues that arose for their children or their families. The site's educational assistants visited all the parents of all focal cohort children regularly for four years, discussing how the children were coming along at school, issues in child rearing, and questions about family living. Parents were encouraged to become involved in parenting programs sponsored by Better Beginnings and other activities at the school, and informed about community resources that could be of assistance. In sum, at Highfield parents of the focal cohort, like their children, were the focus of more frequent, intensive and wide-ranging attention from Better Beginnings than those at any other site.

Neighbourhood Outcomes

There was improvement in general neighbourhood satisfaction, and improvement in housing satisfaction across the older cohort sites. The broadest patterns of change in neighbourhood ratings, however, arose at two younger cohort sites, Guelph and Kingston, where parents reported improvements in community cohesion, decreased levels of deviance (alcohol and drug use, violence and theft), and improvements in several other aspects of neighbourhood life (housing, safety walking on the street at night, and overall quality of life in the neighbourhood).

Guelph's strong emphasis on community development and local capacity building, which began with the creation of its original proposal, could well have led to the improvements seen at that site. Kingston has consistently attempted to incorporate community building into the development and implementation of all programs, including those it has worked on in partnership with other agencies.

School Outcomes

In Highfield, parents showed improved ratings concerning both their children's teacher and school, underscoring the potential value of programs designed to actively forge parent-school connections and involvement.

There were significant reductions in the percentage of special education students reported by schools in the Cornwall and Highfield Better Beginnings sites over the same time period when percentages were increasing in schools in the two comparison sites. The in-classroom supports provided through the Better Beginnings programs from JK to Grade 2 in both Cornwall and Highfield may have contributed to these findings.

The possibility that school-based Better Beginnings programs reduced or replaced the need for special education resources provided by Boards of Education has important implications for the way in which the integration of services for young children can yield potential cost savings.

CONCLUSIONS

- The original Better Beginnings, Better Futures Project model emphasized the ecological nature of child development, which resulted in all project sites developing some programs to support the improvement of child, family and neighbourhood functioning. Analyses of the short-term

outcomes support the conclusion that changes were strongest for programs that were intensive, continuous and focused.

Further, short-term outcomes were greatest in the area of program focus, with child-focused programs effecting child outcomes, parent/family-focused programs effecting parent and family and outcomes, and neighbourhood programs effecting neighbourhood characteristics. These conclusions are consistent with those presented recently in reviews of effective programs. For example, St. Pierre and Layzer (1998) concluded that recent evaluations "call into question the wisdom of relying too heavily on 'indirect' intervention impacts on children, especially when compared with the larger effects of more child-focused, developmental programs. Most researchers conclude that children are best served by programs that provide intensive services to children directly for long periods of time, instead of trying to achieve those effects by delivering parenting education to parents" (p. 18).

- In many ways, the eight "locally owned and operated" Better Beginnings, Better Futures organizations represent the greatest short-term outcome of this Ontario Government initiative. Faced with an extremely broad and complex mandate, high expectations and relatively little explicit direction, each of the eight communities has developed an organization characterized by significant and meaningful local resident involvement in all decisions. This alone represents a tremendous accomplishment in socioeconomically disadvantaged neighbourhoods where ten years ago, many local residents viewed government funded programs and social service organizations with skepticism, suspicion, or hostility.

  In developing their local organization, Better Beginnings projects have not only actively involved many local residents, but also played a major role in forming meaningful partnerships with other service organizations. They developed a wide range of programs, many of which are designed to respond to the locally identified needs of young children and their families, and others to the needs of the neighbourhood and broader community. As they strengthened and stabilized over the seven year demonstration period from 1991 to 1998, each Better Beginnings project increasingly gained the respect and support not only of local residents, service-providers and community leaders, but also of the Provincial Government which, in 1997, transferred all eight projects from demonstration to annualized funding, thus recognizing them as *sustainable*.

  The short-term findings from these projects are encouraging, and provide a unique foundation for determining the extent to which this comprehensive, community-based prevention initiative can promote the longer-term development of some of Ontario's most vulnerable children.

- There is mounting evidence that poverty and other manifestations of socioeconomic disadvantage are becoming increasingly concentrated in specific urban neighbourhoods across Canada (Zeesman, 2000). This "ghettoization" of family poverty is associated with fewer and lower quality child and family health and social services, poorer schools, and increased toxicity for child and family development. It is in exactly these types of neighbourhoods that the Better Beginnings projects are located. The lessons being learned in the eight Better Beginnings communities have much to contribute to other disadvantaged neighbourhoods searching for ways to foster the future well-being of their children and families.

NEXT STEPS FOR RESEARCH AND EVALUATION: DO BETTER BEGINNINGS LEAD TO BETTER FUTURES?

Longitudinal Followup Research

There is still much to be learned from the Better Beginnings, Better Futures initiative. As consistently pointed out in the recent reviews of the prevention and early- intervention programs, there are very few studies on the long-term effects of programs for young children, and those that do exist have involved small numbers of children and narrowly focused program interventions. Only one, the Montreal Longitudinal Experiment, has been carried out in Canada.

Research on the Better Beginnings project is in an excellent position to contribute to knowledge in this field, since the expectation of longitudinal follow-up research was established as an important goal in the original project design.

Therefore, the RCU is carrying out a longitudinal follow-up study of the focal cohort of children and their families to determine longer-term outcomes of the Better Beginnings programs as children develop into adolescence. Research issues for the longitudinal follow-up study will include the following:

Pathways for Change. Based on results from this report, three models or pathways for change will be examined: child and family social-emotional development; parent health promotion and illness prevention; and neighbourhood/community change. This will provide a test of the hypothesis that these pathways can mediate long-term child outcome effects.

Cost Savings. Are there long-term cost-savings from the Better Beginnings Project? The short-term costs of delivering the Better Beginnings programs will be related to potential longer-term cost-saving outcomes such as secondary school graduation rates, use of health and special education services, employment and use of social assistance, criminal charges and convictions, teen pregnancy, and drug/alcohol abuse.

Ongoing Outcome Evaluation

An *ongoing outcome evaluation* of the local Better Beginnings projects will also be included in the longitudinal follow-up study. The programs in all eight Better Beginnings sites have developed and matured over the past 7 years. The longitudinal research cohort of children and families experienced many of these programs in their early stages of development and refinement. There is a definite belief among program staff that the programs experienced by the longitudinal research cohort were less stable and of poorer quality than those currently being implemented. To the extent that this is true, the outcome results presented in this report underestimate the effects that would be expected from children and families currently involved in the Better Beginnings programs. The periodic collection of several key outcome results on four and eight year old children in the younger and older cohort sites, respectively, would yield valuable information on the degree to which the child outcomes presented in the current report are stable or changing in important ways.

Project Sustainability Research

Very few model demonstration projects survive the end of the demonstration phase. Virtually all of these projects, however, have been "top-down", expert-driven interventions which end when demonstration grants end. Important questions remain to be answered concerning whether or not the community-based nature of the Better Beginnings projects will improve their sustainability and maintain continued resident

participation, partnerships with other services, and the delivery of child, family and neighbourhood support programs.

Research on these questions, funded by the Ontario Ministry of Health and Long-Term Care, will provide important information concerning the long-term outcomes as well as the continued viability of the Better Beginnings, Better Futures Project.

Chapter 1

REPORT SUMMARY

The Ontario Better Beginnings, Better Futures Project is a prevention project for young children and their families living in eight disadvantaged neighbourhoods throughout the province. The report begins by briefly reviewing the current state of knowledge concerning prevention programs for young children, and then describes how the Project was developed and implemented in each of the eight demonstration sites from 1991 to 1998. Short-term outcome results from this period are then presented, and the implications of these findings discussed.

SETTING THE CONTEXT: WHAT WE KNOW AND DON'T KNOW ABOUT PREVENTION/ EARLY INTERVENTION PROGRAMS FOR YOUNG CHILDREN

Within the last 15 years, there has been increased interest in the influence of the early years of life on children's social-emotional well-being, health, development, and readiness to learn. This interest in early child development has prompted many recent reviews of the effects of prevention and early intervention programs designed to facilitate the healthy development of young children and their families, with special attention to those who are socio-economically disadvantaged.

The results of these reviews have concluded that:

- few studies of the effects of these programs have been adequately designed, implemented, and evaluated, particularly for children younger than seven or eight years of age, and
- even fewer studies have followed the children or parents after the program ended to determine long-term effects.

Successful Programs

There are, however, a small number of studies identified in these reviews that incorporated adequate research designs and long-term follow-up. It is the results of these studies that form the current state of knowledge concerning the long-term effects of early-intervention and prevention programs with high-risk young children and their families. The following is a brief description of these successful programs and their findings.

Home visiting starting before or at birth and continuing for two to five years after birth. The best researched home-visiting program is the Elmira (NY) Nurse Home Visitation Program, operated by Olds and colleagues from 1978 to 1982 (Olds, 1997; Olds *et al.*, 1997). A total of 116 first-time mothers received an average of nine prenatal home visits and 23 visits for the first two years of their child's life. Home visits were carried out by well-trained public health nurses, and each visit lasted approximately 90 minutes. Thus total home visits averaged approximately 48 hours over the 2-plus years.

The children and mothers have been followed up for 15 years. Nurse home visited mothers have shown lower rates of child abuse than a control group of mothers, over the follow-up period. All other outcome effects for mothers have been restricted to a subgroup of 38 single, low socio-economic status (SES) mothers. No consistent effects on the children's cognitive, health and social-emotional behaviour were found until the children were 15 years of age. At that point, arrests, convictions, cigarette smoking, alcohol consumption and behavioural problems related to use of drugs were reduced for the children of the 38 single, low-SES mothers.

Comprehensive centre-based educational daycare programs. The most effective model program of this type is the Carolina Abecedarian Project which was carried out at the University of North Carolina Child Development Center from 1972 to 1977 (Campbell & Ramey, 1995). A group of 57 very high-risk, African-American newborns were enrolled in a full-day, full-year centre- based daycare program by three months of age. The program ran for five years, until the children entered public school. Full-day programs were provided by well-trained early childhood educators on a ratio of three children to one teacher for the first three years and then on a ratio of 6 children to one teacher for years four and five. A home-school resource teacher visited the mothers every two weeks over the five-year period, and the children received medical services at the daycare centre. This resulted in nearly 7,000 hours of centre-based daycare for each child and 135 hours of home visitation for their mothers over the five-year program. Children in the program showed substantial improvement in standardized IQ test performance until age 12 and improvements in school achievement through age 15, the last period for which data have been reported. There was no effect on a measure of home environment quality, but mothers showed small increases in years of education and employment status over the five years the children spent in the full-day program. No other effects on children or parents were reported for this extremely intensive, and likely very expensive, intervention.

High-quality, comprehensive educational preschool programs. The High/Scope Perry Preschool Program offered two years of half-day preschool to 58 poor, high-risk, African-American three- and four-year-old children in Ypsilanti, Michigan, between1962 and 1967 (Schweinhart *et al.*, 1993)). Classes ran from October to May, five half-days per week. Teachers were certified public school teachers who received extensive training and supervision. The teacher-student ratio was 1 to 6, and teachers also visited each child's mother at home for 1 ½ hours each week during the school year. This resulted in over 700 hours of highly enriched preschool for the children and 90 hours of home visiting for their mothers over the two years. Compared with a control group of 65 children, the 58 Perry preschool children showed higher IQ scores from 4 to 7 years of age, but no differences at age 8 or later. There were no differences between the groups in children's social or emotional behaviour, or on measures collected concerning the mothers. One of the most interesting aspects of this study is that the children have been followed to age 27, i.e., 23 years after completing the Perry Preschool Program, and continue to show superior performance relative to control group children on measures of educational achievement, employment, public assistance, income, and criminal arrests. Calculations of costs saved by these outcomes have indicated a return on the initial program investment of nearly $7 to $1 invested, although most of the savings were realized as program participants became adults. These long-term cost-saving outcomes have made the Perry Preschool Study the single most influential early intervention program to date in terms of public and social policy.

School-based training in social skills and problem-solving. The Montreal Prevention Experiment (Tremblay *et al.*, 1996) provided school-based training in social skills and problem-solving to 43 highly disruptive boys for two years (Grades 2 and 3). The boys attended 19 small group sessions and their parents received an average of 17 in-home training sessions over the two school years. At the end of the two-year program, the boys in the program group showed no beneficial effects on any behavioural outcome measures compared to a control group. No measures were collected from parents. However, the boys were followed into adolescence, and at ages 12 to 14 the boys who had been in the program began to show significant improvements in school achievement and fewer delinquent activities than the control group. These differences have been maintained through 17 years of age.

Parent training, education, and support programs. All four of the above programs included parent education and support. It is not clear how effective parent-only programs are on influencing children's outcomes. For example, the Elmira Nurse Home Visiting program had lasting effects on a small group of

the highest-risk mothers, but no demonstrable effects on their children until they were 15 years of age. St. Pierre and Layzer (1998) recently reviewed the available evidence for the assumption that "The best way to improve child outcomes is to focus on improving parents' ability to parent their children rather than providing an educational intervention directed at the child". They concluded that this assumption is not supported by the available research literature, and that there is "extensive research that posits effects on children are best achieved by focusing on children rather than through parenting education" (p.13). Similar conclusions were drawn in a recent review of home-visiting programs. "Several home visiting models produced some benefits in parenting or in the prevention of child abuse and neglect on at least some measures. No model produced large or consistent benefits in child development or in the rates of health-related behaviours such as acquiring immunizations or well-baby check-ups" (Gomby, Culross & Behrman, 1999).

Limitations to Current Knowledge Regarding Effective Intervention Programs

Most effective demonstrations are small-scale (involving less than 100 families). Little is known about the effects of expanding these demonstration programs to larger groups. In a recent study of this issue, the Comprehensive Child Development Project (CCDP; St. Pierre *et al.*, 1997) evaluated the effectiveness of providing lower-SES parents with a home visitor/case manager for five years, from the birth of a child until he/she entered kindergarten. CCDP was implemented in 21 sites across the U.S., each having approximately 100 program and 100 control families. After five years of program intervention, there were no significant child or parent/family program outcomes on over 100 measures analyzed.

There have been few well-researched early intervention/prevention programs for young children in Canada. Mrazek and Brown (1999) identified 32 well-designed and evaluated studies in this area. Only two were Canadian and both dealt with children at 7 or 8 years of age.

Costs of implementing programs are seldom collected or reported. This makes it difficult for policymakers to make informed decisions. A few projects have carried out good economic analyses; however, again, these projects have had small sample sizes, making it difficult to extrapolate costs to large-scale implementations. An exception is the CCDP Project described earlier, where costs were collected systematically over the five years of implementation. The issue of program costs is discussed in more detail later.

Model demonstration programs for young children have had a narrow focus. There is much rhetoric about the importance of programs being comprehensive and holistic, ecological, community-based, and integrated. However, virtually no well-researched programs for young children have successfully incorporated these characteristics into the program model.

In the U.S. studies, the focus has been on predominantly African-American children's intelligence and cognitive functioning, not on emotional and behavioural problems, social competence, or physical health. So the program focus had *not* been comprehensive or holistic in addressing a broad range of child outcomes.

Ecological models of human development emphasize the importance of incorporating child, parent/family, *and* neighbourhood interventions. Most programs have focused outcome measures mainly on children and parents (e.g., the Perry Preschool, the Elmira Nurse Home Visitation and the Abecedarian projects). None of the well-researched demonstration projects for young children has included activities designed to improve the quality of the local neighbourhood for young children and

their parents, and outcome measures are restricted to either children or mothers.

Local community members have had little or no involvement in the development and implementation of the demonstration programs described above. University-based researchers designed, implemented, and evaluated the demonstration projects, and when their involvement ceased, typically after 2-5 years, the programs ceased to function. There was little sustainability to the projects; they were truly demonstrations, although children and sometimes mothers were followed longitudinally after the project ended.

There has been little attempt to weave the demonstration projects into the local fabric of service providing organizations, either formally or informally. Home visitors and case managers often attempt to refer and connect clients to existing services, but coordination at the agency level has not been a key goal of the projects. St. Pierre and Layzer (1998) reviewed the available evidence for the assumption that "To be effective for low-income families, existing services need to be coordinated". They concluded that there is little evidence to back up this assumption because there has been so little research on the question.

Conclusions

Most of the current knowledge about the long-term effects of prevention programs for young children rests on small-scale U.S. demonstration programs carried out 20-30 years ago on extremely disadvantaged, high-risk children or their mothers. These demonstration programs focused primarily on the intellectual and cognitive development of young children or on improving the quality of life for their mothers. None of these model programs focused on the child's neighbourhood, involved parents or other local residents in program or research planning or implementation, or attempted to integrate the program with other services or organizations in the community.

The extent to which the findings of these programs can be generalized to Canada today is unknown.

Several recent Canadian early intervention/prevention programs have the potential to yield important information regarding comprehensive, ecological, community-based programs for young children, their families, and their neighbourhoods. These include the national Community Action Programs for Children (CAPC), the Montreal 1,2,3 Go! Project, the Growing Together Project in Toronto, Montreal, and Halifax, and Ontario's Better Beginnings, Better Futures Project. Of these, the Better Beginnings, Better Futures Project has been operating for the longest period of time, and this report describes the development, implementation and short-term findings from that initiative.

THE BETTER BEGINNINGS, BETTER FUTURES INITIATIVE

The Ontario Child Health Study (Offord *et al.*, 1987), funded by the Ontario Ministry of Community and Social Services, showed that one in six children between 4 and 16 years of age in Ontario suffers from one or more severe emotional or behavioural disorders. Also, only 20% of all children suffering from one or more of these disorders had received any mental health services within the past six months. An important implication of these findings was the need to develop and evaluate prevention strategies for children's emotional and behavioural problems.

A Technical Advisory Group was convened in the Spring of 1988 by the Ontario Government. The task of this 25-member interdisciplinary group of program directors and researchers was:

- to review the literature and existing prevention programs, and
- to recommend a prevention model to the Ontario Government that had the greatest potential to prevent problems in child development for children living in economically disadvantaged communities/neighbourhoods.

The Technical Advisory Group concluded that the model with the greatest promise for preventing problems in child development must have seven characteristics:

- the model must be based on known effective prevention programs;
- the model must be ecological;
- the model must be tailored to meet local needs and desires;
- the model must be comprehensive;
- the model must be of high quality;
- the model must be integrated;
- the model must have meaningful, significant involvement of parents and community.

In 1990, the Better Beginnings, Better Futures Project was announced as "A 25-year longitudinal prevention policy research demonstration project to provide information on the effectiveness of prevention as a policy for children".

There were two variations of the Better Beginnings model to be evaluated, depending on the age of children involved. In the first, prenatal/infant development programs were to integrate with preschool programs for children from conception to age 4 (the younger cohort model). In the second variation, preschool programs were to integrate with primary-school programs for children between the ages of 4 and 8 (the older cohort model).

This Request for Proposals described the project model as follows:

> "This research demonstration project will consist of **all** promising components that can be launched within the budget constraints and with the support of the community. The purpose of such projects is not to discover the most efficient or leanest package of prevention services, but to determine how effective a reasonably-financed and community-supported project can be." (Government of Ontario, 1990, p. 12)

The Ontario Government released a Request for Proposals in the Spring of 1990. Forty-eight proposals were submitted in July 1990 and reviewed by a 15-member Proposal Review Panel. Eight selected communities were announced on January 29, 1991, five younger cohort sites and three older cohort sites.

PROJECT ORGANIZATION

The Better Beginnings, Better Futures Project consisted of three major partners: a) project sites, involving project coordinators and staff, parents and other community residents, and service providers and educators, established under local sponsorship in eight Ontario communities; b) a government committee, consisting of representatives from the co-funding Ontario ministries; and c) the Research Coordination Unit (RCU).

Community Projects

The Five Younger Cohort Project Sites [1]

- Guelph: Willow Road neighbourhood (625 children)
- North Kingston neighbourhood (1,095 children)
- Southeast Ottawa: Albion-Heatherington-Fairlea-Ledbury neighbourhoods (690 children)
- Toronto: Moss Park/Regent park (1,125 children)
- Walpole Island First Nation (250 children)

The Three Older Cohort Project Sites [2]

- Cornwall: 4 Francophone primary schools (530 children)
- Highfield: Highfield Junior School neighbourhood (517 children)
- Sudbury: Flour Mill/le Moulin à Fleur and Donovan neighbourhoods (503 children)

These sites were chosen, in part, because of socio-economic disadvantage. To illustrate, among those interviewed at the sites before programs were in place (to establish a baseline), at the younger cohort sites 37% of families were headed by a single parent, and 83% were below Statistics Canada's Low Income Cut Offs. At the older cohort sites, 36% of families were headed by a single parent, and 64% were below the Low Income Cut Offs.

Government Committee

This committee consisted of representatives from the Ontario Ministries of Community and Social Services, Health and Long-Term Care, and Education and Training.

The purpose of the Government Committee was to provide guidance, support, advice, monitoring, coordination, and approval for the Better Beginnings Project to: a) funding ministries, b) the eight communities, and c) the Research Coordination Unit.

The Children's Services Branch of the Ministry of Community and Social Services was responsible for central staff support to the Project as well as administrative and financial coordination of the Better Beginnings Project. The Branch provided a Project Design Coordinator for the Project, who was responsible for the overall design and implementation of the program and research. Two positions of Site Supervisor/Coordinators were responsible for the financial and administrative coordination and implementation of the Better Beginnings model in the eight communities.

The comprehensiveness of the scope of research, as well as the problems of implementing research in communities that are extremely cynical about the possibility of research to improve daily life, required innovation and sensitivity at almost every step of the research. The Government Committee worked closely with the communities and the researchers to develop research procedures that would not compromise confidentiality and/or freedom of information.

[1] Number of children between zero and four years of age estimated from 1996 Census data.

[2] Number of children between four and eight years of age estimated from local school records.

Research Coordination Unit

In the Spring of 1991, a separate Request for Proposals was issued by the Ontario Government to form a Research Coordination Unit (RCU) for the Better Beginnings, Better Futures Project to facilitate comparable research across the selected project sites.

A consortium of researchers from Queen's University, University of Guelph, and Wilfrid Laurier University was selected. Researchers from the University of Ottawa, Ryerson Polytechnic University, and the University of Windsor were added. The RCU employed research teams in each of the sites, plus a research director and central support staff located at Queen's University.

Major Goals of the Better Beginnings, Better Futures Project

Each selected community was funded to develop a local prevention project that would address the following goals:

Child Goals.
Prevention: to reduce emotional and behavioural problems in children.
Promotion: to promote social, emotional, behavioural, physical, and educational development in children.

Parent/Family Goals.
Parent Education and Support: to strengthen the abilities of parents and families to respond effectively to the needs of their children.

Neighbourhood/Community Goals.
Comprehensive/Holistic Programs: to develop high-quality programs for children from birth to age four or from four to eight years of age and their families that respond effectively to the local needs of the neighbourhood.
Resident Participation: to encourage neighbourhood parents and other citizens to participate as equal partners with service-providers in the development and implementation planning, designing and carrying out programs for children and families, as well as other activities in the local community.
Integrated Programs: to establish partnerships with existing and new service-providers and educational organizations and to coordinate program activities.

UNDERSTANDING THE DEVELOPMENT OF THE LOCAL BETTER BEGINNINGS, BETTER FUTURES PROJECTS: BALANCING BREADTH AND FOCUS [3]

Critical choices in defining the guidelines for a prevention demonstration project include how detailed and prescriptive to be about the program model to be demonstrated and how broad the project's scope or objectives should be. Most of the successful prevention demonstration projects for young children reported in the literature have clearly defined the program focus, participant population, and specifications for program content, frequency and duration (Schorr, 1997; Cameron & Vanderwoerd, 1997). Historically, prevention projects which provided demonstration sites with general principles and

[3] The *Finding a Balance: Project organization in Better Beginnings, Better Futures* report (Cameron & Jeffery, 1999) provides an in-depth consideration of these topics and links the Better Beginnings experiences and lessons with those reported in the literature. This report is available from the Better Beginnings, Better Futures Research Coordination Unit at Queen's University.

allowed local participatory processes to define the prevention initiative often produced less conclusive results (Larner, Halpern & Harkavy, 1992).

The initial prevention project guidelines available to the Better Beginnings, Better Futures demonstration sites were both very ambitious and expressed as general principles to be followed (Government of Ontario, 1990). Overall, demonstration sites were expected to: 1) develop high-quality prevention programming in small and very disadvantaged communities or elementary school attendance areas; 2) blend and unite services for children and families; and, 3) involve families and community leaders to determine local needs and desires for healthy child development (p. 9).

Our research confirms that the broad and general nature of the original Better Beginnings, Better Futures mandate had significant implications for project development and organization at the demonstration sites. First, sites interpreted the mandate in various ways and significant differences in project organization and programming evolved across demonstration communities. Second, sites were unable to pay equal attention to all parts of the mandate and different choices from site to site were made about where to invest the most energy. Third, the mandate proved challenging to understand and implement.

From its inception, prior to the sites creating their proposals, the mandate for Better Beginnings, Better Futures was very broad. The site mandates did not give priority importance to any portion of these expectations. The implication is that Better Beginnings, Better Futures cannot be credibly understood based on the limited range of operating principles or evaluation criteria employed by the more focused programs commonly described in the literature.

The Role of Project Development Infrastructures

The program development literature is unequivocal about the pivotal importance of an infrastructure in building and replicating programs (Dryfoos, 1997; Cameron & Vanderwoerd, 1997b). Two broad roles or functions have been identified for these infrastructures. The first is encouragement and expert guidance with the myriad of organizational challenges in creating a complex program/project, along with training and consultation about intervention procedures. The second is management to assure that quality conditions are maintained in project development and in working with program participants. This includes the responsibility and the ability to intervene if concerns arise.

The guidance available to Better Beginnings, Better Futures demonstration sites bears little resemblance to the in-depth support recommended in the development literature. It is also true, however, that the literature includes few references to projects with mandates as broad and complex as Better Beginnings, Better Futures, particularly with the expectation that programs be tailored to local needs. Site reports provide ample evidence of their struggle to implement complex challenges such as service integration, resident involvement and program development.

Notwithstanding the lack of a centralized infrastructure, a great deal of effort to support project development was provided in various ways by the government committee around the need to increase resident participation, re-negotiate agreements with host organizations, remain affiliated with existing sponsors, move more quickly with staff hiring and program development, improve accountability arrangements, modify relations between professional and paraprofessional employees, modification of salary scales, steering committee functioning, the development of program working groups, and geographic areas to be served.

With limited central guidance, and with a broad prevention mandate given to the demonstration sites, local processes had a major impact on the nature of the prevention projects created in the eight demonstration communities. The next sections illustrate how the demonstration sites put varying emphases on different elements of the Better Beginnings, Better Futures model and created prevention strategies that differed in important ways across some communities.

Five Project Development Threads

In the Better Beginnings, Better Futures model, various project development threads had to be woven together. Our analyses have identified five threads.[4]

- **Focused Programming:** This thread concerns the implementation and maintenance of a defined prevention program model. Most of the prevention programs with demonstrated positive impacts on disadvantaged children and families in the literature are guided by an articulated theory base and have well-defined service delivery parameters. While this is not a direct reflection of the quality of programs, because many of the better known promising prevention models have concentrated larger budgets than the demonstration sites on one or two specific programs, concentration of programming resources is one measure of similarity with these earlier efforts.

- **Creating Partnerships and Integrating Services:** This project development thread focuses on fostering voluntary collaborations among relevant service organizations in the local community.

- **Empowering Resident Participation:** This thread focuses on generating and maintaining local resident involvement and influence in project/program design, implementation and maintenance. In Better Beginnings, Better Futures, this was accomplished mainly through resident involvement in project governance, by residents volunteering in project programming and activities, and through hiring residents as program staff.

- **Community Development:** This thread focuses on the use of locally controlled, participatory processes to create the project organization and to identify priorities for prevention programming as well as on investments in broad community development efforts to bring additional resources to the neighbourhood and to carry out initiatives beyond the original mandate of the Better Beginnings Project.

- **Building a Project Organization:** This focuses on the requirements of creating and maintaining a project organization and developing appropriate management capabilities.

Each of these project development threads comes from the original Better Beginnings prevention model for the project as well as from evolutionary processes at each of the the demonstration sites. Figure 1.1 provides a general overview of the nature and anticipated outcomes for each of these threads.

These threads have been woven together into different patterns at each site. Our argument is that these types of project organization differences make a difference. While these threads can at times complement each other, each has a different focus and requires that attention be paid to different tasks and activities. Most importantly, each produces different types of benefits. From this perspective, an emphasis on

[4] A more detailed discussion of the nature and expected outcomes from each project development thread is available in *Finding a Balance: Project organization in Better Beginnings, Better Futures* (Cameron & Jeffery, 1999).

Figure 1.1

FIVE PROJECT DEVELOPMENT THREADS FOR THE BETTER BEGINNINGS, BETTER FUTURES INITIATIVE

Threads	Focused Programming	Creating Partnerships	Empowering Resident Participation	Community Development	Building a Project Organization
Focus	The implementation and maintenance of a set of defined programs	Fostering voluntary collaborations among service organizations	Increasing local resident involvement and influence in project design, implementation and maintenance	The increase of local community capacity to make decisions and to take action on its own priorities	Creating and maintaining project organization and management capabilities
Development Requirements	• understanding and respecting the theory/evidence guiding the model • respecting the prescribed service parameters: type of participants, frequency and consistency of involvement, duration of participation, service content • adapting to local community conditions • monitoring and correcting deviations from effectiveness criteria • attracting and training qualified personnel	• creating incentives and motivation to collaborate • animating dialogue and information exchange between service-providers • creating venues and structures for decision-making • promoting exchanges of information, resources and personnel • encouraging joint programs and activities • improving coordination of existing programs	• recruiting and training sufficient numbers of residents on governance structures • modifying procedures at meetings and offering supports for resident participation in governance • controlling behaviours and numbers of professionals in meetings • creating a self-sustaining resident membership base • hiring, training and supporting residents	• creating non-directive, democratic functioning processes • fostering self-help and mutual aid • building self-sustaining representative organizations • increasing community pride and commitment • developing local leadership • fostering local consensus and positive working relationships among all local groupings	• creating and supporting project steering committee and sub-committees • developing administrative policies and procedures • creating management and personnel policies and procedures • building management and supervision capabilities • recruiting, training and sustaining staff • creating financial and other formal control and accountability procedures
Anticipated Outcomes	• benefits for active program participants (children, parents, families) in areas related to program content (if effectiveness criteria are respected) e.g., child development, school success, mental health	• new projects, programs and initiatives • new resources attracted into community • increased collaboration between project and existing agencies • increased collaboration among existing agencies	• higher levels of meaningful resident participation and influence in project governance • new learning opportunities and roles for volunteer leadership • benefits from employment in project for sub-set of participants • greater adaptation of project programs to local conditions	• having locally-controlled representative decision-making structures • new learning opportunities and roles for leaders/members • creation of new locally-acceptable programs and resources • greater community pride and involvement • more cooperation between various groupings • improved professional-resident relations	• a viable and stable project organization • appropriate and efficient use of project resources • greater volunteer and employee satisfaction with participation

focused programming is not necessarily preferable to a concentration on creating partnerships or on resident involvement or on broader community development.

On the basis of the extensive information collected and reported by local researchers beginning in 1991, we have attempted to compare the seven urban demonstration sites in terms of the relative emphasis placed on four threads of the Better Beginnings model: focused programming, creating partnerships, resident participation, and broader community development. The unique situation of the Walpole Island First Nation site is described later.

The position of each site on these project development threads is relative to the other sites; that is, is there a greater or lesser emphasis on each dimension. For example, while all of the demonstration sites had a much greater investment in supporting and empowering resident participation than other prevention programs for young children or most established social agencies, there remain important differences in these investments across the demonstration sites. In addition, these are general rather than precise estimates. They are useful only when the differences between sites are clear and substantial.

Figure 1.2 compares the younger cohort sites on the four project development threads, and Figure 1.3 profiles the older cohort sites.

Figure 1.2 shows substantial comparability among the Toronto, Ottawa and Kingston sites on these dimensions. Toronto and Ottawa had a relatively moderate investment in broader community development efforts, while Kingston had one of the lowest investments of the demonstration sites on broad community development efforts outside of its core programming. Kingston, rather, tried to incorporate community building into development and delivery of all its core programs. All three sites had similar ratings on the concentration of programming resources, with Kingston having the least diversity in its programming efforts. All three had moderate investments in creating partnerships, while Kingston experienced more success in sustaining adequate levels of consistent resident involvement on its governance structures. Guelph, on the other hand, showed a very different profile than the other younger cohort sites on these dimensions. It had a very high emphasis on broader community development efforts, creating partnerships and resident participation in project governance along with a lower concentration on programming resources, having perhaps the broadest range of programs/activities for varied groups of participants of any demonstration site (Pancer, 1995; Pancer, Cornfield & Amio, 1999). Its overall profile is similar to that of Sudbury, except for Guelph's high valuing of creating partnerships. The Sudbury and Guelph sites are the only sites with clearly articulated philosophies of broad community development processes as the core element in building the project organization and in deciding on programming priorities.

Figure 1.3 shows little similarity among the three older cohort sites. Sudbury was the most distinct with a higher emphasis on broader community development efforts as well as on resident participation in project governance along with a much lower emphasis on concentration of programming resources in one or two core program strategies (Pancer, 1995; Pancer *et al.*, 1999) and creating partnerships. Highfield had a relatively low emphasis on broader community development efforts and on resident participation in project governance. However, Highfield had a high relative emphasis on concentration of programming resources, both in terms of its emphasis on school-based programming in one primary school and concentrating several programs exclusively on the research cohort of children and their families (Pancer, 1995; Pancer *et al.*, 1999). Highfield placed a moderate emphasis on creating partnerships with organizations other than its host school. Cornwall placed the greatest emphasis on creating partnerships of the three older cohort sites, and a moderate emphasis on concentration of programming resources and resident participation in project governance. Cornwall also had an increasing investment in broader

Figure 1.2

YOUNGER COHORT SITES:
RELATIVE EMPHASIS ON THE FOUR PROJECT THREADS

	Higher Relative Emphasis		**Lower Relative Emphasis**
Concentration of Programming Resources	Toronto, Ottawa, Kingston		Guelph
Creating Partnerships	Guelph	Toronto, Ottawa, Kingston	
Resident Participation in Project Governance	Guelph	Kingston, Ottawa	Toronto
Broader Community Development Efforts	Guelph	Toronto, Ottawa	Kingston

Figure 1.3

OLDER COHORT SITES:
RELATIVE EMPHASIS ON THE FOUR PROJECT THREADS

	Higher Relative Emphasis		**Lower Relative Emphasis**
Concentration of Programming Resources	Highfield	Cornwall	Sudbury
Creating Partnerships	Cornwall	Highfield	Sudbury
Resident Participation in Project Governance	Sudbury	Cornwall	Highfield
Broader Community Development Efforts	Sudbury	Cornwall	Highfield

community development efforts over the demonstration period finishing with a relatively high investment in this area compared to most demonstration sites.

Each of these project development threads requires that attention be paid to different requirements and produces different types of benefits. The development requirements of each of the threads are only partially compatible with each other. This introduced both tension and complexity into the project development at the demonstration sites. In addition, having multiple development threads requires that a range of types of outcomes be considered when assessing the demonstration project. Finally, given the variability across demonstration sites on these development threads, outcome expectations should be tailored to the development pattern at each site.

The Unique Situation of Walpole Island

There are two reasons for considering Walpole Island separately from the other seven demonstration sites. First, it was the only demonstration site working exclusively within a First Nation. Also, since Walpole Island did not participate in our program model/project development research on the same basis or with the same intensity as the other sites, much less detailed information is available on which to base comparisons.

The Walpole Island Better Beginnings site stressed a set of community and project values and working principles which differentiated it from the seven urban sites:

- Tribal people practice an ethic of non-interference. People do not tell each other what to do even if it is for their own good.
- Kinship is the strongest bond and people interact as members of families.
- In tribal societies, everyone knows everyone else. When strangers arrive, tribe members ask about kinship ties and seek ways of relating as families.
- In Ojibway teachings, the seventh and last stage of life is the teaching stage. If the teacher is an elder, the class has a greater chance of success.
- Learning by observation is the usual way.
- Decision making by consensus is universal to tribal societies and the most acceptable procedure for most modern Native groups.
- Work is done as communally as possible. Members encourage each other and share in the rewards.
- One must never take oneself too seriously. All members must maintain flexibility in their viewpoints. The Ojibway are a "laughing ... people". "The ability to laugh is central to our Being and should be formally recognized within any new programs as it was central to our original teachings."
- "We are a strongly kinesthetic or 'feeling' people."
- Because of the effects of colonialism, "...we are still in a survival mode... and change may be experienced as a threat to our cultural survival and... met with... resistence..."
- "Tribal people view life and society as circular, whose aim is to live in harmony. We had no linear sense of progress and had no ways of instituting change except by consensus."

Another unique aspect of Walpole Island is that the Band Council is the host agency for the demonstration project. The Band Council has the power to write community by-laws, restructure community services and override any program decisions. "The Band Council also promotes the integration of all Walpole Island First Nation services and requires representatives from the Parent/Child Support Program and Bkejwanong Children's Centre to sit on the project's Steering Committee."

It is important that the unique situation of Walpole Island be considered both in understanding the demonstration site as well as in interpreting the project's outcomes presented in this report.

Program Models at the Demonstration Sites

Tables 1.1 and 1.2 provide an overview of programming for children, families and neighbourhoods at the younger and older cohort communities respectively. There are three reasons for this presentation: 1) to provide an understanding of programming at each site as a guide to interpreting the outcome patterns described in this report; 2) to allow a comparison of the similarities and differences in prevention programming across the eight demonstration sites; and, 3) in conjunction with the previous analyses of the development threads, to help comprehend in a general fashion the complexity of the Better Beginnings, Better Futures Prevention Project.

The Kingston, Ottawa and Toronto younger cohort demonstration sites invest over half of their base government funding in family/community visitor programs and also invest in childcare and playgroup supports. However, Kingston is unique in investing almost all of its programming efforts directly into family visitor, perinatal and postnatal support and childcare programming. Toronto and Ottawa have greater investments in programming activities which fall outside of their government mandate.

The Guelph and Walpole Island younger cohort sites present very different programming profiles. Guelph devoted about half as much of its core government budget to family visiting as the above younger cohort sites and has more variety in its programming strategies for preschoolers and children. There has been substantial investments in broader community development efforts and programming beyond their government mandate, with strong emphasis on local leadership development as a prevention vehicle. Walpole Island invested about 60% of their base budget in community development and community healing activities. They reported very little activity outside of the government mandate.

There are substantial programming differences across the three older cohort demonstration sites. Cornwall had a substantial investment in in-school programming activities including classroom enrichment, homework help and a breakfast program. Highfield had the highest investment in classroom enrichment activities and all of their programming took place on the school premises. Even additional resources raised by Highfield went in good measure to support additional in-school programming. Sudbury had comparatively very little classroom enrichment activities and has been quite successful in raising money to support activities beyond their core mandate. It had the lowest proportion of its programming resources focused on the 4 to 8 age group among the older cohort sites.

It is clear that there is substantial variation in programming attributes across these demonstration sites. While there are similarities in broad emphases across some younger cohort sites, it will be important to consider each site's outcomes in light of its particular programming investments, project development emphases and community context.

Table 1.1

PROGRAM MODEL SUMMARY OF YOUNGER COHORT SITES

SITE	SUMMARY
GUELPH	Onward Willow - Better Beginnings, Better Futures places a strong emphasis on community development and empowering residents to assume greater control of their community. A guiding principle behind the project is that everyone should have a voice. As well, there is a high value placed on partnerships – between the project and other agencies as well as between residents and service providers. The programming at Guelph is quite diverse, and there is less concentration of programming resources in one or two program strategies than at the other younger cohort sites. Their program model report described the highest number of different programming strategies and activities of all the demonstration sites. One-third of the core government budget is devoted to family visiting, less than the other younger cohort sites which devote at least one-half of their core government budgets to home visiting. Programs for preschoolers and parents are another major emphasis. Included in this program area are many different activities such as playgroups, drop-ins, Books for Birthdays, Kindergarten readiness, a toy library, and parent workshops. The project reports that about 85% of its core government budget is invested in programming for children from birth to four years of age. Community development processes and values have been central to how creating the project organization, building programming and working with the neighbourhood were approached. About 15% of the core government budget was allocated to directly support community development. The recruitment and training of community leadership and their participation in project governance has also been an important priority. Guelph is the only demonstration site with an independent residents association which influences program development. Onward Willow - Better Beginnings, Better Futures also had the highest number of resident volunteer hours of all eight sites during the demonstration period. The project has stressed broader community development efforts, which have lead to an expansion of the Better Beginnings mandate to provide programming for children outside of the mandated age range (0 to 4), and have resulted in more resources becoming available in the neighbourhood. A fundraising committee raises approximately $90,000 per year. Additional activities offered by the site include programs for school-aged children and youth including after school programs, camps and drop-ins, special interest groups (e.g., karate, cooking club, Vietnamese group for parents and children), employment readiness and skills workshops, adult education, clothing program, emergency food program, and legal clinic. The project also raised $120,000 for a Stay in School program. There also has been an emphasis on participation in broader coalitions which extend beyond the neighbourhood.

TABLE 1.1 (CONTINUED)

SITE	SUMMARY
KINGSTON	Better Beginnings for Kingston Children is committed to the development of primary prevention programs and community ownership. One of the guiding values is that partnerships among agencies, and between agencies and community residents should be developed. The strongest concentration of resources is on the family visitor program. Over one-half of the Better Beginnings core government budget is devoted to this program. It is modelled after the Parents Helping Parents program and strives to provide information on all phases of healthy infant and child development. Perinatal and postnatal support is another significant component of the project. This includes weekly prenatal sessions, infant groups, parenting workshops and considerable information dissemination. Child care provision is another major component of Better Beginnings programming at this site. This includes child care during meetings and program participation, parent relief, and assistance to existing preschool groups in the community to enhance the provision of service at those locations. Additional activities or programs offered at Better Beginnings for Kingston Children include a good food box, hot meal program, playground equipment fundraising committee, food buying club, Christmas referrals, a low income needs coalition and special events. Compared to most other Better Beginnings sites, there has been very little additional fundraising and expansion of programs and activities beyond the Better Beginnings mandate in Kingston.
OTTAWA	One of the guiding philosophies for the South-East Ottawa Better Beginnings, Better Futures has been a holistic and ecological approach to supporting children and families from prenatal to preschool years. There is an emphasis on community development, parent and service provider collaboration, and inter-agency coordination. Approximately 60% of the Better Beginnings core government budget is devoted to the family visitor program. The emphasis is on providing support and information, linking the parent with necessary resources, intervention in crisis situations, and on practical/concrete assistance and advocacy. Playgroups, offered four days a week, for parents and children are the other major component of South-East Ottawa's programs. These two programming components make up 82.4% of the Better Beginnings core government budget. This site also has a community nurse (.6 FTE) who conducts two morning groups on site (as well as occasional groups off-site) designed to educate family visitors, pregnant women, new mothers, and mothers with young children on health-related topics (e.g., breastfeeding, adjusting to a new lifestyle, self-care, nutrition and care of babies, etc.). Other activities or programs offered include a mobile toy lending library, subsidized child care at a local nursery school, parent workshops, and respite for parents. Better Beginnings is located in a community house and is very visible in the neighbourhood. The house is open to all residents and is very welcoming in nature. The project also has its own school bus, brightly painted by neighbourhood children, that offers necessary transportation to families in the community.

TABLE 1.1 (CONTINUED)

SITE	SUMMARY
OTTAWA (Continued)	Other community-oriented activities include a clothing exchange, a sewing crafts group, a women's group, and a food buying club. The project has expanded beyond the Better Beginnings mandate to involve teens and the community. The project supports the Kids in the Hood program, a weekly drop-in for kids aged 10 to 14. Teens are also involved as volunteers and grants have been received to provide summer employment for anywhere from 1 to 4 teens. The project raises from $20,000 to $70,000 annually to fund additional activities.
TORONTO	Parents for Better Beginnings believes that the approach to be taken to prevention programming should be ecological and holistic. There is a belief in the capacities of individuals, and that their strengths and capacities should be nurtured and supported in an empowering fashion. Programs have to be community-driven, and there is an emphasis on inclusiveness and flexibility. Over one-half of the Better Beginnings core government budget has been devoted to the community visitor program. The program involves one-to-one visits with expectant moms, and families with children aged 0 to 5. Community visitors provide support and information on child development and prenatal development. Referrals are also made on behalf of the family, and community visitors will advocate on their behalf when necessary. Education and support for parents, including perinatal nutrition and support groups, and parenting groups and workshops, are also important components of Parents for Better Beginnings programming. Additional activities and programs include parent relief, playgroups, a play-and-learn resource centre, and a family drop-in. Community-oriented activities include special events, community clean-up and barbeque, a women's group, Kindergarten registration, outreach, and community organizing and advocacy. Parents for Better Beginnings has developed partnerships beyond the scope of the Better Beginnings mandate. They worked on an extensive review of the local police division, and have partnered with Parks and Recreation and the Housing Authority to provide a youth and community drop-in and community garden. The site was also able to secure funding to run an anti-racism education training program in which project staff, committee members, staff and board members from eight local agencies, and community residents were involved. The project was also successful in fundraising with a private company. That company raised money to send 42 children to a 10-day summer camp and to purchase a school bus. Fundraising efforts also resulted in a nutritional component being added to the perinatal group.

TABLE 1.1 (CONTINUED)

SITE	SUMMARY
WALPOLE ISLAND	Two visions guide programming at Walpole Island Better Beginnings, Better Futures. One, that healthy child development is crucial for the future, and two, that community ownership is critical. The Native philosophies and values guiding both the community and the project differ in important ways from those influencing the urban demonstration sites, stressing for example, the importance of kinship patterns, valued ways of working together, and teaching methods that include elders as teachers and involve learning by observation. Community development and community healing programming take up approximately 60% of the Better Beginnings core government budget. Native language instruction is an important component of this type of programming, including weekly language classes, and the enrichment during the preschool playgroups. In addition to the Native language classes, cultural and community enrichment (e.g., Women's Time Out, Native learning circles, craft teachings) have also been offered. In addition, Better Beginnings produces a Boozhoo Niijii newsletter, a monthly publication providing information about events/activities which includes Native language content. Another main component of the project is child and family-focussed programming. Three family support workers conduct home visits and provide other child and family activities and programs through the Parent/Child Support Program and the Bkejwanong Children's Centre. Home visiting constitutes approximately 20% of the Better Beginnings core government budget. The purpose of the home visits is to provide support and resources to expectant mothers and families with young children. Other family and parent-focussed programming take up approximately 20% of the Better Beginnings core government budget. The family resource drop-in centre runs twice-weekly playgroups, one drop-in "day" per week, and monthly parent workshops and information sessions. The drop-in day offers a clothing exchange, weighing and measuring of babies, breastfeeding support, a toy-lending library, and socialization and networking for mothers, children, and staff. The parent information sessions cover topics related to child development and parenting, as well as prenatal nutrition, and the parent workshops have included You Make the Difference and Nobody's Perfect workshops. Other activities and programs offered by Walpole Island Better Beginnings include an outdoor playgroup where children are brought to different parks on the island (offered only during the summer months), and a monthly food box draw for seniors and community members on social assistance. Unlike most of the other sites, there is no mention of additional fundraising and only one activity is reported as serving children outside of the mandated 0 to 4 age range: the blanket program, an outdoor playgroup is open to all children, not just those aged 0 to 4.

Table 1.2

PROGRAM MODEL SUMMARY OF OLDER COHORT SITES

SITE	SUMMARY
CORNWALL	Partir d'un bon pas values a comprehensive approach to child development. There is a strong emphasis on resident participation and partnerships with different agencies and services. This project strives to facilitate active participation at all levels. A substantial proportion of the Better Beginnings core government budget is devoted to school-based activities including full-time school animators in four schools, who provide classroom enrichment in JK to Grade 2 classes. Homework help and summer tutoring also is provided by Better Beginnings. A breakfast program is available in each of the four schools. Finally, a toy library, including various resources and materials, is also funded by Better Beginnings. Additional project activities include: activities for children and families during holidays, school breaks, and summer holidays, play groups for children, family visits, welcome baskets and home visits to new families, and local French initiatives/activities for the community. At the Cornwall site, there is more of an equal balance between a concentration of programming resources and broader community development efforts than in the other two older cohort sites. There has been an evolution towards greater partnerships with other organizations and more effort to provide programming that falls outside of the Better Beginnings mandate. For example, Better Beginnings was instrumental in the creation of the incorporated Community Action Group, which has successfully created prevention initiatives beyond the Partir d'un bon pas mandate. There also are several examples of the project's success in securing additional funding for programs outside of their mandate.
HIGHFIELD	The Highfield Community Enrichment Project places considerable value on an ecological approach to child development. There is a philosophy to address a child's major environments: the family, the school, and the community. There is also an emphasis on resident involvement, and a respect for the various ethnocultural groups represented in the community. There are two unique programming aspects of this project: the focussing of much of the in school programming resources directly on the research focal cohort and the creation of a strong relationship with a single school. All programming is provided on school premises. The research focal cohort had educational assistants in the classrooms from JK to Grade 2 (currently, the assistants focus exclusively on the JK classes) and received summer enrichment programming for each summer from JK to Grade 2. In addition to the above, major program activities include the Lion's Quest social skills programming in the classroom, health and nutrition programming (including a snack program, hot lunch program, and most recently, a breakfast program), and programs for parents and children including parent-child drop-in, parent relief, before and after school programs, a toy library, and programs during school breaks and summer holidays.

TABLE 1.2 (CONTINUED)

SITE	SUMMARY
HIGHFIELD (Continued)	Additional program activities include professional development activities for teachers, ethnocultural activities, community celebrations, neighbourhood safety activities, and a number of smaller programs for children and parents that responded to the community's wishes (e.g., fitness classes for parents, ballet classes for children, bus trips to the US). At Highfield, more emphasis has been placed on concentrating programming resources on the focal cohort children than at the other older cohort sites. Comparatively, less emphasis has been placed on broader community development efforts and on resident participation in project governance. The project has been successful in building a very strong partnership with its host school. The project has done additional fund raising to provide programming outside the original government mandate (e.g., expansion of the snack program, creation of the breakfast program, recreation program for pre-teens). Many of these resources have supported additional in-school programming.
SUDBURY	Sudbury Better Beginnings, Better Futures strives to promote a healthy environment for families. They place a very strong emphasis on community involvement and ownership in the project, and in building community leaders. Their philosophy is to provide integrated and universal services to all groups within the community. A fair proportion of the Better Beginnings' core government budget is devoted to before and after school and holiday programs. These programs include games, craft activities, outings, and the provision of nutritious snacks. The focus on community development processes as central to the creation of the project organization and programming and in working with the neighbourhood also is very strong. Community kitchens, community gardens, environmental enhancement, as well as other community initiatives are all components of the strong community development focus at this site. A strong emphasis has been placed on resident control of project organization and management. In fact, the Board of Directors is now composed solely of community residents. There has also been a comparatively high investment in alternative ways of organizing and administering the project. Additional project activities include school-based activities including a Peaceful Playground Program (e.g., project staff run cooperative games, children discuss anger management), a Native Cultural Program, and a Multicultural Program in the Francophone schools. Parent and child-based programs including a parent and tot drop-in, organized workshops, play group activities, and family visiting are also provided. At the Sudbury site, there is less concentration of programming resources on children aged 4 to 8 than at the other older cohort sites. Their has been an emphasis on securing additional funds for programs and activities that fall outside of the Better Beginnings mandate. The project has been very successful in raising additional money through its own incorporated Education Fund. The Education Fund raises more than $100,000 a year. Because of these additional funds, several self-sustaining projects have been created (e.g., Myths and Mirrors, a community arts program, and a Community Economic Development project).

RESEARCH OBJECTIVES AND QUESTIONS

Research carried out in conjunction with the Better Beginnings Project was required to address several major objectives.

1. Outcome Evaluation Research

Objective: "The first research objective of a primary prevention research demonstration project should be to demonstrate how great an effect can be achieved from a primary prevention model. Thus, the Better Beginnings, Better Futures research demonstration package will consist of all promising components that can be launched within the budget constraints and with the support of the community. The purpose of such projects is not to discover the most efficient or leanest package of prevention services, but to determine how effective a reasonably financed and community-supported project can be." (Government of Ontario, 1990) .

Questions: Are the Better Beginnings programs effective in:

- preventing serious emotional and behavioural problems in young children?
- promoting healthy child and family development?
- enhancing the abilities of disadvantaged communities to provide for children and their families?

2. Economic Analysis Research

Objective: "One of the major inadequacies of primary prevention research to date has been the lack of attention to program costs. Often the issue has been ignored. When costs were addressed, they were almost always computed retrospectively. Therefore, the second research objective is to investigate the costs of the Better Beginnings model from the commencement of funding." (Government of Ontario, 1990).

Question: What are the annual costs of the Better Beginnings programs?

3. Project Development and Program Model Research

Objective: "The third important research objective is process evaluation and organizational analysis. This area has also been largely overlooked in past research demonstration projects. There has been little documentation of the structure, processes, activities and organization of the programs that are associated with positive outcomes for children. In the Better Beginnings Project, investigating process and organizational issues will be one of the three main research objectives." (Government of Ontario, 1990).

Questions: How do the Better Beginnings communities develop and implement the program model? To what extent are the local demonstration projects characterized by:

- parent and community involvement?
- integration of services?
- comprehensive, high-quality programs?

4. Follow-up Research

Objective: There are very few prevention programs for young children which have followed young children and their families into adolescence and beyond. Policy questions concerning long-term outcomes and cost savings can be answered only by longitudinal research. This is an important research objective of the Better Beginnings Project.

Questions: What are the long-term effects and cost benefits for children and their families in terms of:

- educational achievement and high school graduation rates?

- use of health, social and correctional services?
- employment and social assistance?
- criminal charges and convictions?
- teen pregnancy?
- drug and alcohol abuse?

How sustainable are the local Better Beginnings projects? Do they change in terms of programs, organization, budget? What changes in short-term outcomes for children, families and neighbourhoods occur over the first five years of annualized funding, i.e., 1998-2003?

The first three objectives are being addressed by the results of the RCU research on the Demonstration Phase of the Project (1991-1998) in this report.

The fourth and fifth questions are to be answered in follow-up research of Better Beginnings children as they develop into adolescence and as local programs continue to operate under the supervision of Ontario Ministry of Community and Social Services area offices.

RESEARCH DESIGN

Program funding of the eight sites began in April 1991. It took 2-1/2 years for local projects and programs to develop to the point where evaluation could begin in the Fall of 1993. Extensive information was collected and reported by Research Coordination Unit (RCU) local researchers on "start-up" processes from 1991 to 1993.

Determining program outcome effects across the various communities after the first five years of program implementation entailed an on-going collection of a wide range of child, family, and community characteristics. Due to the process adopted by the government for selecting project communities, it was neither possible nor feasible to employ a randomized controlled trial design. Therefore, several quasi-experimental designs were incorporated in the research plans: a) a baseline-focal design, b) a longitudinal comparison site (or non-random control group design), and c) a geographical comparison design where outcome data from a project site are compared to other geographical areas such as the surrounding metropolitan area.

The Baseline-Focal Design. Baseline measures on children, families and neighbourhoods in all Better Beginnings sites were collected in 1992-93 before the local programs were fully operational. These baseline measures were collected on 350 four-year-old children in the younger cohort sites and 200 eight-year-old children in the older cohort sites. Then, five years later in 1997/8, the same measures were collected from four and eight year old children and their families who were part of the "focal" longitudinal research group described below. Measures collected from the focal group in 1997/8 were compared with those collected from the baseline group in 1992/3 to determine what changes had occurred in four and eight year old children and their families during the first five years of Better Beginnings programs.

The Longitudinal Comparison Site Design. In 1993-94, a "focal" longitudinal research group of children and their families were recruited in the eight project sites and in three comparison neighbourhoods where there was no Better Beginnings funding. In the younger cohort sites, approximately 700 children born in 1994 and their families constitute the focal research group, and outcome measures were collected when these children were 3, 18, 33, and 48 months of age. In the older

cohort sites, it is children who turned four years of age in 1993 and their families that constitute the focal research group, and data were collected on this group of approximately 700 children at ages 4, 5, 6, 7, and 8 between 1993/4 and 1997/8. Longitudinal analyses contrast changes over time in measures from the Better Beginnings sites relative to those that occur in the comparison sites.

Child, Family and Neighbourhood Measures. Information about children, parents, families, and neighbourhoods was collected in a variety of ways:

- annual two-hour in-home parent interviews carried out by RCU local site researchers;
- annual direct child measures also collected by RCU researchers;
- annual teacher reports;
- existing neighbourhood level data (e.g., police and CAS records, Canadian Institute of Health Information, Statistics Canada Census data);
- federal and provincial databases (e.g., Statistics Canada Census data, Health Canada's Recommended Nutrient Intake, Ontario Principals' Report data of Special Education Instruction).

Economic Analysis. To monitor project costs, the RCU worked closely with government committee and site representatives to develop a cost accounting format. Costs were collected using a common accounting system and software at each site.

The cost data collected have included both direct dollar expenditures and the other costs of operating the programs, particularly volunteer time (so-called "service in kind" or "opportunity costs"). These latter costs typically have not been measured in projects of this sort.

Project Development and Program Model Analysis. In the Better Beginnings Project, the generation of extensive descriptions of all aspects of project development and program implementation at the local project level is an important research objective.

This qualitative research has concentrated on collecting information which describes how the individual communities developed and implemented child, family, and community development programs adhering to the major characteristics of the Better Beginnings Model: high-quality programs, developed with meaningful local resident participation, and involving the integration of new and existing child and family services.

Local site researchers have written descriptive reports on various aspects of program development and implementation at each site. These individual local site reports were summarized in comprehensive "cross-site" reports that discuss similarities and differences across the various project sites. These cross-site reports cover the following topics: 1) how the original Better Beginnings initiative was developed; 2) how local communities generated their proposals for the original competition in 1990; 3) how local residents are involved in project decision-making; 4) how local service providers and educators are involved in project decision-making and resource provision; 5) the specific program activities and components, as well as the staffing patterns at each site; 6) the formal and informal decision-making structures and values, committee structure, and management procedures in each project site; and 7) personal stories from program participants, staff, and local residents concerning their experiences with the Better Beginnings Project. Updated information on several of these topics appears later in this document. Brief descriptions of the sites themselves are found in Appendix B.

Implementing the Research

During 1991-92, the Research Coordination Unit finalized research designs, outcome measures, and procedures for collecting qualitative data about local project development; formed local research committees; hired and trained local research staff in each site; and began to collect data. Since this was all accomplished before the local programs were in place, the research had to be undertaken on the basis of certain assumptions about how the Better Beginnings programs would be implemented. These assumptions included the following:

- High-quality programs would be implemented in each site to provide continuous, ongoing services and support to all children and their families, starting before or at birth though to four years of age in the younger cohort sites, and from four to eight years of age in the older cohort sites.
- These programs would reflect the most effective models identified in the Technical Advisory Group report published in 1989. Thus in the younger sites, home visiting programs based on the Elmira project would start at birth and be provided for several years, followed by high-quality preschool programs based on the Perry Preschool Project for children ages three and four. In the older cohort sites, high-quality preschool programs would be combined with comprehensive primary school programs for all children from four to eight year of age.
- All or most children and their families would be actively involved in these prevention and promotion programs as well as in other child, parent, and community programs developed to meet local needs.
- Children and families in the research cohort would receive continuous and meaningful levels of program support throughout the five years they were involved in the research, i.e., from 1993/94 to 1997/98.

In several ways, these assumptions may not have been valid, thus rendering the research design and outcome measure less sensitive to program outcomes than originally intended. Of particular relevance is the fact that there is little evidence that all or most children and families in the research cohorts received a "seamless web" of services and supports over the five-year period. In fact, the degree to which programs were focused on children in the designated age range showed considerable variability across the demonstration sites. Also, there was little explicit attempt to exactly replicate the intervention procedures of the effective models identified by the Technical Advisory Group. For example, none of the preschool programs attempted to directly employ the High/Scope preschool curriculum procedures.

STAGES/TIMELINES OF THE BETTER BEGINNINGS PROJECT DEVELOPMENT

New projects typically progress through stages of development, each of which has its own tasks and challenges. Generally, projects progress from earlier stages characterized by informality and trial and error towards more clarity, structure, and stability in their core operations. These stages and timelines for the Better Beginnings Project provide a context for what the sites were focussing on while the research was being implemented.

The project development cycle is divided into three stages: a start-up stage, a stabilization stage, and a transition stage. The data for this report do not allow a consideration of developments after the transition from demonstration to annualized funding in 1997.

Start-up. A unique aspect of the Better Beginnings, Better Futures Project was having proposal development and initial project design prior to, and separated by about a year from, the start of project

funding. Our estimation is that the start-up phase lasted from three to four years (1990 to 1994) before basic organizational structures, procedures and core programming were relatively stable. For a project so complex, combining multiple organizational processes in innovative ways with participants learning as they proceeded, this time frame is consistent with the start-up experiences described in the literature. Although the original Better Beginnings, Better Futures one-year timeline did not make sufficient allowance for these start-up processes to unfold, the start-up phase was eventually extended by 1½ years.

Start-up of the Better Beginnings, Better Futures sites, like that of other complex projects, was a time of high enthusiasm, but also of learning, experimentation, and frustration along with pride in accomplishment. It was several years before most sites regularly maintained at least 50% resident membership in project governance. Sites went through a long process, with little external guidance, of modifying committee procedures to support resident involvement and working out relations between professional and resident participants. Struggling to understand what was meant by service integration and what was within their power to accomplish was common at every site. Hiring the initial group of management and program staff was demanding at every site. Educating new personnel for their particular jobs and also about Better Beginnings, Better Futures and the principles and ways of working of their site took a great deal of effort and time. Training and supervision represented unusual challenges with the large numbers of local residents employed at most sites.

Stabilization. If the challenges of the start-up stage have been successfully negotiated, a project should be at the peak of its organizational and program capacity during the stabilization phase. It is at this point that assessments of program effectiveness should take place. Stabilization is characterized by greater clarity about how things are done and more detailed specification of roles and procedures. Usually, there is a cadre of experienced staff, and authority distinctions often become more evident. There is a focus on "doing what we do as efficiently and as effectively as possible" as well as on organization and staff development and maintenance. Under optimal circumstances, assessment of project effectiveness would begin only at the point when a relatively stable project organization and programming existed.

Better Beginnings, Better Futures had a relatively short period of stabilization for the demonstration sites. There were from one to two years (1994 to 1996) of functioning with relatively well-defined and stable core organizational and programming elements. In permanently funded projects, this period of stable operations, barring unanticipated crises, would be expected to continue for at least several more years, providing an ongoing opportunity to assess project and program effectiveness.

Transition. The fate faced by many promising projects once the funded demonstration period ends is not encouraging. Lerner (1995) reports that about fifty percent of the programs described by Schorr (1988) as effective did not exist one year after she visited them. The stress and uncertainty about future prospects faced by project personnel as the end of demonstration funding approaches are substantial, inevitably diverting attention from normal work preoccupations and making morale hard to sustain.

For Better Beginnings, Better Futures, this transition period (which included both preparing for the possible end of demonstration funding and then adjusting to acquiring annualized funding) extended from 1996 until the end of our data collection period in 1998. While there were clear differences, many sites reported high levels of anxiety and lower morale prior to the announcement of annualized funding. On a very positive note, none of the Better Beginnings, Better Futures demonstration sites experienced the radical changes to their basic operating principles and programs at the end of the demonstration period so commonly experienced by demonstration projects elsewhere.

To summarize, the project sites were in a start-up phase from 1990 to 1994, then experienced stabilization for approximately two years, followed by a transitional phase from 1996 to 1997 until permanent funding was announced.

SHORT-TERM OUTCOMES

The results of the Baseline-Focal and the Longitudinal statistical analyses on the child, family, neighbourhood and school outcome measures are presented in Appendix 1.1 for the younger cohort sites and Appendix 1.2 for the older cohort sites. The analyses were performed and are reported separately for younger and older cohort sites due to differences in programs and outcome measures.

Each variable in the table is assigned a '+' or '-' symbol to indicate whether the tested difference favoured Better Beginnings or the control group (either baseline or comparison site). All variables were coded so that a '+' represents a desirable or beneficial effect for Better Beginnings and a '-' represents an undesirable or non-beneficial effect. If the result was statistically significant, this was indicated with a '**' if the p value was .01 or with a '*' if the p value was .05. A p value of .01 means the result would be expected to occur by chance less than one time in 100; similarly, a p value of .05 means the result would be expected to occur by chance less than five times in 100.

Patterns of outcome effects were identified for the younger and older site analyses, respectively, from the data in these tables. The shaded areas in Appendices 1.1 and 1.2 identify two types of outcome patterns. Horizontal shading reflects a pattern of consistent results on a particular outcome measure *across* the Better Beginnings sites (general patterns). Vertical shading indicates a pattern of consistent results on a series of related measures *within* a site, (site-specific patterns).

General "Cross Site" Patterns: In a study with two basic designs, sometimes the results will not match. Also, with many dependent variables, sometimes apparently meaningful results will arise by chance, i.e., through random processes. Finally, with programs set up to meet local conditions, results may differ between sites. To deal with differing results from the two basic designs, with the risk of taking random fluctuations seriously, and with the need to pick up systematic differences among sites, the following criteria were adopted:

- If results were available from both designs, statistically significant results from one must be confirmed in direction by the other, or no Better Beginnings effect would be suggested.
- If the results for all older or younger cohort sites, taken together, were significant, but if more than one site showed results in the opposite direction, or one site was significant in the opposite direction, no general Better Beginnings effect would be suggested.
- A result for a single site, on a single dependent variable, would need to reach a p-value of .01 to be discussed as evidence of a statistically significant effect for that site. Insisting on a p-value of .01, rather than the more usual .05, is a way to deal with the number of tests possible within a cohort. At the 0-to-4-year-old level, there are five sites, so that to require .01 sets the overall p-value to .05. At the 4-to-8-year-old level, there are three sites, so that to require .01 sets the overall p-value to .03.

Site-Specific Patterns: Often variables within a content area yielded consistent results for a site. Such patterns are mentioned frequently in the report. Some of the patterns mentioned include variables which are all individually significant. In other instances, where results are favourable (or unfavourable) for several variables, but not all are individually significant, we have taken a nonparametric approach. At minimum, a sign test must reach .05, and some individual variables must do so as well.

Effect Sizes: Appendices 1.1 and 1.2 also present effect sizes for all the identified patterns of outcome results for the younger and older cohort site analyses, respectively. Effect sizes indicate how large a statistical difference or change is in a standard way across different analyses or different measures. An effect size of 0.2 is considered small, 0.5 is considered moderate, and 0.8 or above is considered large. In program outcome research, especially involving universal interventions such as Better Beginnings, effect sizes are typically small (Hundert *et al.*, 1999; McCartney & Rosenthal, 2000).

In the following sections, the results of the short-term findings of the Better Beginnings initiative from 1992 to 1998 are presented and discussed in terms of the Project's main goals.

GOAL: TO PREVENT EMOTIONAL AND BEHAVIOURAL PROBLEMS AND PROMOTE SOCIAL FUNCTIONING IN YOUNG CHILDREN

This was the first goal outlined in the Request for Proposals in 1990 and was the main reason for undertaking the Better Beginnings Project.

In three of the younger cohort Better Beginnings sites (Kingston, Ottawa and Toronto), there was a decrease in children's emotional problems as rated by JK teachers from 1993/4 to 19989. (No data were available for Guelph because few children had access to JK.) This decrease was substantially larger in Kingston where JK teachers also rated children as showing decreases in behavioural problems, increases in prosocial behaviour, and an increase in school readiness over the same time period. In the Kingston Better Beginnings programs, home visiting and informal playgroups were important components, as they were in all the other younger cohort sites. However, Kingston also invested extensive program resources in childcare, both by enriching local daycare centres in the neighbourhood and also by providing a large number of informal childcare experiences for children. This combination of supports, available from birth to JK entry, may have contributed to the more consistent improvements in social and emotional functioning of children in the Kingston site.

Few studies have reported improvements in social-emotional functioning in young children before school entry. Two studies which have reported such effects provided full-time, year-round, centre-based childcare for a minimum of two years, and in both cases the improvement disappeared after the children entered school. No home visiting programs have reported improvements in preschool children's social-emotional functioning. The finding of reduced emotional problems at school entry in three of the younger cohort sites suggests that the combination of home visiting, playgroups and childcare provided in these Better Beginnings sites may be effective in allowing children to begin school with less anxiety. The additional improvements in JK teacher ratings of behavioural problems, prosocial behaviour and school readiness at the Kingston site are promising.

In the three older cohort Better Beginning sites, children also showed declines in teacher ratings of overanxious emotional problems, as well as improvements in social skills as rated by both parents and teachers. In Cornwall, teacher ratings of behavioural problems also showed substantial decreases. Improvements in social-emotional functioning as rated by teachers were strongest in Cornwall and Highfield, where school-based programming was more intense than in Sudbury. Although there were programming differences, both the Cornwall and Highfield programs included educational assistants who provided in-class individual and group activities for children from JK through Grade 2.

Decreases in emotional and behavioural problems as rated by parents were noted only in Highfield where there was a direct connection between the Better Beginnings school-based programs and the children's

parents via regular home visits by Better Beginnings staff. Also, Highfield teachers were trained to provide a social skills program in their classrooms which included specific activities involving parents.

The original Better Beginnings program model recommended the establishment of continuous program supports for children from pre-birth to age four in the younger cohort sites and from age four to age eight in the older cohort sites. The results of the outcome measures of children's emotional and behavioural problems, as well as social skills, suggest that the improvements in these areas of children's functioning were more apparent in those sites where continuity in programming was most evident. The combination of early home-visiting in Kingston followed by a variety of playgroups and childcare programs may have provided the intensity and continuity of support required to positively influence social-emotional development in children up to the age of four and allow them to enter kindergarten with less anxiety and better able to relate effectively to teachers and peers.

The improvements in children's emotional problems, behavioural problems and social skills were substantially greater in the older than the younger cohort Better Beginnings sites. These improvements were larger and more widespread in the two sites (Cornwall and Highfield), that provided in-classroom individual and group support to all children continuously from JK to Grade 2. These findings suggest the value of classroom-based program strategies for preventing emotional and behavioural problems in young primary school children. The specific outreach to parents in order to connect them with the school and other Better Beginnings programs in Highfield was associated with large improvements in their ratings of children's social-emotional functioning.

It is interesting to compare these findings with those of the Helping Children Adjust Project, also funded by the Ontario Government (Hundert *et al.*, 1999). That project provided one year of teacher-provided social skills training and enhanced reading instruction in kindergarten through Grade 2 for 1,400 children attending 30 primary schools in disadvantaged neighbourhoods. (A third program component, parent training, was poorly attended and dropped after the first year.) Children receiving social skills training showed significant improvements in ratings of prosocial behaviour on the playground, as well as decreases in parent and teacher ratings of behavioural problems over a three year period relative to comparison groups which received no social skills training. There were, however, no improvements in parent or teacher ratings of prosocial behaviour, and no results were presented concerning ratings of emotional problems.

The overall decreases in teacher ratings of children's emotional problems and increases in children's self-control found in the older cohort Better Beginnings sites were nearly three times larger than the decreases in behavioural problems reported for the Helping Children Adjust Project, and the size of the differences in Cornwall teacher ratings were even greater.

In Highfield, the effect sizes for parent-reported decreases of both emotional and behavioural problems and improved social skills in their children also were substantially larger than those reported in the Helping Children Adjust Project over a similar period of time.

There are several possible reasons why the size of the improvements in the social, emotional and behavioural functioning in young primary school children were larger in the Better Beginnings Project. An obvious one is the fact that the classroom programs in the Cornwall and Highfield schools were provided for four years, compared with one year in the Helping Children Adjust study. This again points to the potential value of continuous, longer-term programs. Costs between the two programs would be interesting to explore, but no financial data were provided on the Helping Children Adjust Project by Hundert *et al.* (1999). A second relevant factor may be differences in the way in which the school-based

programs were designed in the two projects. In the Helping Children Adjust study,

> "... there was little or no contact between the investigator team and individual teachers in schools. Interventions were introduced in the schools using an "expert" consultation model. Here, the program was developed outside of the school and was introduced with slight modification in the same manner from school to school.
>
> There is considerable evidence that the commitment of individuals to an intervention is determined by the extent to which they contribute to its design. The effectiveness of the programs may have been weakened by the absence of a collaborative consultation process with teachers, intended to enlist their help in program design. Perhaps the time has come to develop and evaluate programs that start with a process of school engagement around the definition of behavioural issues that need to be addressed and the identification of promising alternative responses. The creation of a partnership in the formulation of programs may facilitate their relevance, acceptance, implementation, and sustainability – program ingredients likely to be associated with bringing about desirable change." (p. 1071, Hundert *et al.*, 1999)

The engagement of principals, teachers, parents and project personnel in developing the school-based programs is precisely what occurred in the Better Beginnings sites, particularly the classroom programs in Cornwall and Highfield, and may have been an important influence on the size of the "desirable changes" which occurred in these sites.

GOAL: TO PROMOTE OPTIMAL DEVELOPMENT IN CHILDREN

To reflect the holistic view of the child emphasized in the Better Beginnings model, a wide range of measures were collected on various aspects of children's development, in addition to those assessing social, emotional, and behavioural functioning described in the previous section. These included the child's physical health, growth, nutrition, and general and cognitive development, as well as academic achievement.

Child Health

In the younger cohort Better Beginnings sites, children had more timely immunizations at 18 months than in the comparison site. On the other hand, there was less encouragement by parents to wear bicycle helmets in the Better Beginnings sites. Direct measures of health promotion status showed no consistent differences.

The failure to find any consistent indication of positive Better Beginnings effects on children's physical health in the younger cohort sites is consistent with other studies employing home-visiting, playgroups, and childcare programs for infants and preschoolers which have failed to demonstrate positive program effects on children's health (Karoly *et al.*, 1998; Gomby *et al.*, 1999).

In the older cohort sites, improved parent ratings of their children's general health status occurred in all three Better Beginnings sites. Also, in both Cornwall and Sudbury, a general pattern of improvement occurred on preventive and promotive activities, including reduced child injuries, more timely booster shots, more parental encouragement to wear a bicycle helmet, and an increase in parents' sense of control over their children's health.

The positive outcomes in the older cohort sites indicate an increase in parents' knowledge and actions taken to prevent injury and disease in their children similar to changes regarding their own health described later.

Child Growth and Nutrition

Better Beginnings, Better Futures provides the first population-based information on dietary intake, height and weight status of Canadian children since the Nutrition Canada Survey (1973).

The growth patterns of all children in the study compared favourably with normative data for height and for the percentage of children who were underweight. There was, however, a higher than average percentage of children who were overweight. This remained unchanged over the five years and underscores the need to increase opportunities for physical activity in young children.

In the younger cohort sites, only children in the Toronto Better Beginnings neighbourhood showed improvements in nutrition, and these improvements were substantial and involved 11 of the 12 nutrients measured. However, the overall nutrient intake was within acceptable levels for children in all younger cohort sites, a finding in sharp contrast to U.S. studies which show several dietary inadequacies in preschool children.

In the older cohort Better Beginnings sites, there was a general increase in children's intake of all nutrients over the first two years of the project. This was likely accomplished in two ways. First, parents had increased access to food though emergency food cupboards and other food resources set up in each site, thereby increasing the amount of food available to each family. Secondly, all three sites set up one or more snack or meal programs before, during or after school, as well as offering food in all child-related programs, thereby increasing all children's access to foods of high nutritional quality. The programs in Cornwall were particularly effective in improving children's nutritional intake.

Other approaches to improving the nutritional health of low-income children have been dominated by federally mandated programs such as the National School Lunch and School Breakfast Programs in the United States (Gordon *et al.*, 1995). Although these programs have improved the daily nutrient intake of children, they are formally structured and do not allow for either parent input or involvement. Nor are they amenable to the changing needs of the community. The Better Beginnings approach is unique and empowers neighbourhood residents to decide how food programs should be designed and implemented.

General/Cognitive Development and Academic Achievement

In all the younger cohort Better Beginnings sites, there was consistent improvement on a measure of auditory attention and memory, one of the six subtests from a standardized test of general developmental skills. That is, children in the Better Beginnings sites improved in their ability to hear, process, and act on simple instructions and to repeat increasingly complex words and numbers in sequence. This is an important area of development, reflecting children's ability to process and respond to verbal communication. There were no other consistent cross-site improvements on any of the other subtests, which included expressive and receptive language, fine and gross motor skills, and visual attention and memory.

The Walpole Island First Nation Better Beginnings site was the only younger cohort site to show consistent improvements in child development. Children in the research sample showed improved performance overall on the standardized test of development and on all of the six subscales. One possible

explanation for this finding in Walpole Island is the continuity of home-visiting and parent-child play-group programs provided to young children by the Better Beginnings Project, in conjunction with a high-quality local daycare facility, that was attended by over 50% of the children participating in the research at 48 months.

There were no improvements in the older cohort Better Beginnings sites on any of the measures of cognitive development or on measures of reading or mathematics achievement.

The failure to find any other consistent improvement in cognitive development or academic achievement may reflect the difficulty of effecting positive changes in this domain in young children. A recent review of home-visiting programs for families with children from birth to five years of age (Gomby *et al.*, 1999) concluded that these programs have produced no general improvement in children's cognitive development. Projects that have been successful in improving cognitive/intellectual development in preschool-aged children have all provided intensive, centre-based educational programs to very high-risk young children with a heavy emphasis on cognitive activities (e.g., the Abecedarian and Perry Preschool Projects). Since none of the younger cohort Better Beginnings sites provided this type of intensive centre-based programming, the failure to demonstrate general improvements in intellectual functioning is not surprising.

In the older cohort sites, the failure to find improvements in cognitive functioning or academic achievement again is consistent with findings from other projects focusing on this early primary school age group. The Helping Children Adjust Project, described earlier, provided one year of enriched experiences in reading to children from JK to Grade 2, yet found no positive effects on the same reading achievement measure employed in the Better Beginning's research. This was the only cognitive outcome measure reported in the Helping Children Adjust Project (Hundert *et al.*, 1999).

One reason for the difficulty in demonstrating improved cognitive and academic achievement in this older age group is that all children in project and comparison schools receive regular primary school education programs throughout the implementation period. In order for a positive effect to show, programs would have to improve academic achievement over and above that being accomplished by regular Kindergarten and Grade 1 and 2 educational activities. It is unlikely that any of the Better Beginnings programs, designed to improve cognitive/academic performance, was intensive enough to produce such an effect; nor, apparently, was the reading program in the Helping Children Adjust Project.

GOAL: TO IMPROVE PARENTS' AND FAMILIES' ABILITIES TO FOSTER HEALTHY DEVELOPMENT IN THEIR CHILDREN

Parent Health and Nutrition

The rates for overweight in parents were higher than Ontario rates, and these rates did not change over time. Between 52 to 76% of male parents in the Better Beginnings sample were overweight compared to 48% reported in 1990 Ontario Health Survey. Between 42 to 57% of the female parents in the Better Beginnings sample were overweight compared to 28% in the 1990 Ontario Health Survey.

There were higher levels of exercise prenatally in all the younger cohort Better Beginnings sites which may have resulted from the heavy emphasis on prenatal classes and home-visiting. However, mothers in the Peterborough comparison site reported higher rates of breastfeeding their children at birth than in the Better Beginnings sites, although the breastfeeding rates after three months were comparable across all

sites. Peterborough mothers also reported higher levels of breast self-examinations and more exercise for the first 18 months after pregnancy than mothers in the Better Beginnings sites.

A strong breastfeeding campaign has been operated by the local health unit and hospital for several years in Peterborough, resulting in extremely high rates of mother's initiating breastfeeding, substantially higher than the Ontario average. The higher levels of breast self-examinations and exercise during the first 18 months after pregnancy may also be affected by this public health program in Peterborough.

Energy, zinc, folate, and calcium intakes of women in all sites who were breastfeeding were below the recommended nutrient intakes. This has little effect on the quality of the breast milk, but may jeopardize the nutritional health of the mother. Since these data were collected, the Canadian recommended intake of folate has been increased substantially. Thus, the dietary intake of women who are breastfeeding is an even greater concern. The public health initiatives to encourage breastfeeding among low-income women must include strategies to ensure their access to fresh fruits and vegetables (best sources of folate) and milk and other dairy products (or alternate sources of calcium and zinc).

In the younger cohort sites, there were few indications of improved health status or health behaviours in the parents. In fact, mothers in the Peterborough comparison site showed greater improvements in several health areas than the mothers in the Better Beginnings sites. The possibility that these differences resulted from the effects of a highly organized and long-standing maternal health program in Peterborough focusing on breastfeeding appears plausible.

For all of the older cohort sites, there was reduced smoking by mothers and others in the home. The reduction in maternal smoking and smokers in the home is an important outcome since smoking levels are high in disadvantaged communities and often are considered the leading health problem in Ontario. The reduction in smoking may have resulted from the increased opportunities for mothers to interact with others in parent support groups, Better Beginnings committees and volunteering for a variety of community activities where smoking is restricted or discouraged. Parents in the Highfield site showed the greatest improvements on a variety of health measures, perhaps a result of the strong emphasis in that site on providing outreach to parents through home visits, and active encouragement of parents to engage in a variety of programs offered by Better Beginnings at their child's school.

Parenting Practices and Parent-Child Interactions

There were few consistent changes in measures of parenting practices or parent/child interactions in either the younger or older cohort sites. Ratings of the quality of parent-child interactions were made by researchers during their in-home visits in the younger cohort sites when the children were 18, 33, and 48 months old. These ratings were highest at Kingston and Toronto at 18 months and remained stable over the two following periods. The ratings were lower in Ottawa, Walpole Island, and Peterborough at 18 months. However, all three sites showed improved ratings over the following periods with the ratings in Walpole Island showing large improvements, ending up substantially higher at 48 months compared with all other sites where ratings at 48 months were essentially equal. This large increase in the quality of parent-child interactions in Walpole Island (effect size = 1.01) may reflect the emphasis on Better Beginnings programs that were developed and implemented in conjunction with the local parent-child centre.

In the older cohort sites, the only consistent change in parenting measures occurred in Highfield, where there was a general improvement in parenting practices, especially increases in consistent parenting, decreases in hostile/ineffective parenting, and an increase in reported satisfaction with the parenting role. The measure of hostile/ineffective parenting, also used in the National Longitudinal Survey of Children

and Youth, has been found to relate strongly with children's emotional and behavioural problems. The fact that this measure showed a very large decrease in Highfield (the effect size was 1.73), along with decreases in children's behavioural and emotional problems, provides further evidence for the strong impact that the Better Beginnings programs had on parents in that site.

Parent/Family Social and Emotional Functioning

A general pattern of decreased domestic violence reported between parents and their partners occurred in the younger and the older cohort Better Beginnings sites, accompanied by an increased rating of marital satisfaction in the older cohort sites. The changes in reports of domestic violence occurred early in the program between 1993 and 1995. After that, reports remained stable. The processes by which the early changes were produced are not clear, as explained in Chapter 8.

In two of the younger cohort sites, Toronto and Walpole Island, parents also reported decreases on several measures of parent and family stress. In Walpole Island, this finding, in conjunction with the improvement in parent/child interactions, again suggests that the program was effectively influencing parents and children in that site, possibly through the variety of activities provided by the parent/child centre. In Toronto, a major source of the reduced stress derived from a reduction in the tension experienced by employed parents who had to juggle childcare with other responsibilities.

In Highfield, there was a general pattern of improvement in parents' level of stress, depression, and social support, in addition to the general improvements in marital satisfaction and domestic violence reported in all sites.

The strongest Better Beginnings effects on parent/family functioning occurred in Highfield, including improvements in a number of measures of parents' health, health risk and health promotion behaviours, parenting practices, and parent/family social and emotional functioning. The intensity and breadth of these changes are impressive, given the outcomes of other studies.

Not to be overlooked, however, were positive outcomes on several parent measures in the other two older cohort sites in Cornwall and Sudbury. In addition to reductions in reports of domestic violence and increased marital satisfaction, parents in both Cornwall and Sudbury showed a pattern of increased health promotion behaviours, both for themselves (reduced smoking) and for their children (more timely booster shots, less child injuries, more parental encouragement of their children to wear bicycle helmets and to be vigilant when crossing streets, and increases in a sense of control over their children's health). These outcomes suggest a general increase in parents' awareness of preventive and promotive health behaviours, which, in turn, could have important long-term influences on their own health as well as that of their children.

GOAL: TO IMPROVE THE QUALITY OF LOCAL NEIGHBOURHOODS AND SCHOOLS FOR YOUNG CHILDREN AND THEIR FAMILIES

According to the ecological model of child development, the quality of neighbourhoods and schools exerts a strong influence on young children, both directly in terms of such factors as safety and resources for play, and indirectly through parents, friends, and neighbours.

Effecting and demonstrating changes in the quality of neighbourhood characteristics within a five year time frame is an extremely challenging task, especially when the neighbourhoods are large, and contain high percentages of socioeconomically disadvantaged families. Also, personnel in all the Better

Beginnings projects reported that the changes that occurred to the welfare system during the period of this study decreased disposable income and access to affordable housing for some families in their neighbourhoods, raising stress and increasing crises in these families. These changes were widely viewed as increasing the difficulty of improving neighbourhood characteristics.

In the younger cohort Better Beginnings sites, parents reported increased feelings of safety on the street at night. One negative finding, a relative decrease in the reported frequency of getting together with friends, resulted from a small group of parents in the Peterborough comparison site reporting substantially larger increases in the frequency of social contacts with friends relative to all of the Better Beginnings sites.

Parents at both Guelph and Kingston perceived an improvement in neighbourhood cohesion; less deviant activity (alcohol and drug use, violence and theft); and gave more favourable ratings to the condition of their homes, safety walking on the street, and the general quality of their neighbourhood. In contrast, at Toronto there was a consistent pattern of decline in all ratings of neighbourhood cohesion, satisfaction and quality.

In all three older cohort Better Beginnings sites, a scale for general neighbourhood satisfaction showed modest but consistent improvements, and there was an increase in parents' satisfaction with the condition of their personal dwellings, particularly large in Highfield. Also, there was a large increase in children using neighbourhood playgrounds in Highfield and Sudbury.

In addition to parents' interview responses to questions concerning characteristics of their neighbourhoods, two other sources of data regarding characteristics of Better Beginnings neighbourhoods were collected and analyzed: a) Children's Aid Society records reflecting the percentage of total agency open family/child cases and children-in-care cases that came from the local Better Beginnings neighbourhoods, and b) police records reflecting the percentage of total municipal occurences of break-and-entry and for vandalism/wilful damage which came from the local Better Beginnings neighbourhood.

There were no consistent substantial changes in either the CAS data from 1992 to 1997 or the police records from 1991 to 1998 for the Better Beginnings neighbourhoods. In many ways, the lack of results was to be expected, since so many people living in each neighbourhood would not be expected to be involved or influenced by Better Beginnings programs in any direct way. This is not to imply that there were no attempts by Better Beginnings projects to establish close working relationships with their local CAS and police. In several communities, CAS connections with the Better Beginnings projects were strong from the point of proposal development in 1990. This was especially true in Guelph where the CAS is the host agency for the Better Beginnings project, the CAS Executive Director has been actively involved from the beginnings, and a satellite CAS office was established in the same building with close working relationships with the Better Beginnings project. Also, in most other project sites, connections between Better Beginnings and CAS programs have been ongoing. Although these efforts have been successful in forging partnerships and may be helping to break down local suspicion, the official CAS figures do not yet reflect any consistent changes in involvement. The same observations apply to police records.

One exception occurred in Highfield, where analyses of both police and CAS records yielded statistically significant decreases in the percentage of total municipal arrests for break-and-entry and for vandalism, as well as decreases in the percentage of total CAS cases and children-in-care coming from the Better Beginnings community since the project started in 1992. While the effect sizes were very small, this overall pattern of decrease in arrests and CAS involvement adds to the improvements in child behaviour and parent functioning in Highfield.

None of the other "model" prevention programs for young children described earlier has included measures of neighbourhood characteristics or attempted to focus programs on neighbourhood change; programs and their outcome measures have been limited to one or more aspects of child development or parent functioning. The fact that the Better Beginnings program model included local neighbourhood improvement as an important goal for the project is another unique aspect of this initiative.

The positive changes reported indicate that parents in several of the Better Beginnings sites view their local neighbourhoods as improving in safety and quality for young children and families. Neighbourhood improvements were most evident in two younger cohort sites, Kingston and Guelph, where parents reported improvements in neighbourhood safety, cohesion, satisfaction, and quality.

A strong program emphasis in Guelph on community development and local capacity building beginning with the original project proposal have likely resulted in the improved parent perceptions of neighbourhood quality in that site. In Kingston, an attempt has been made to incorporate community building in all aspects of project management and organization, including the development and implementation of individual programs, and establishing partnerships with other service organizations.

Explanations for the negative pattern of neighbourhood effects in the Toronto Better Beginnings site are not apparent from its programming. The Toronto site has the greatest multicultural diversity, the highest percentage of single-parent families, and the lowest mean income of the urban Better Beginnings sites. Combined with major revisions to welfare support, these factors may have overwhelmed any ability of the Better Beginnings programs to foster improvements in parents' perceptions of neighbourhood quality, satisfaction and cohesion.

These findings will make an important contribution to the literature on the effects of prevention programs for young children by demonstrating that improvements in the quality of disadvantaged neighbourhoods can occur in conjunction with programs which are also providing supports to children and their families. It is important to determine whether these improvements can be maintained or enhanced, and what long-term consequences these changes have on the children who have experienced these improvements.

Neighbourhood Schools

Next to parents and family, schools are among the most important influences on the development of young children, particularly between the ages of 4 and 8. In the older cohort Better Beginnings program model, described in the original Request for Proposals, school-based programs were to be a key program ingredient, and one of the model programs described was Comer's comprehensive school change project (Comer, 1985). Information was collected from three sources concerning a variety of characteristics of the schools in the older cohort Better Beginnings and comparison sites: the parent interview, teacher ratings of various school characteristics, and Principals' September Reports concerning special education students.

Parents answered interview questions on a scale about their children's teacher, including how much they enjoyed talking with their children's teacher, and how much the parent asked the teacher questions or made suggestions about their children. A second series of questions asked the parent about their children's school, including whether they thought the school was a good place for their children to be, and whether they felt confident in the people at their children's school. In Highfield, parents showed improved ratings concerning both their children's teacher and school, while parents in Sudbury and Cornwall did not show any consistent changes. The size of the effects were moderate. The finding that parents increased in satisfaction both with their child's teacher and school again underscores the potential value of programs designed to actively forge parent-school connections and involvement.

A set of ratings concerning various aspects of school climate collected from Senior Kindergarten through Grade 3 teachers in all the demonstration and comparison site schools yielded no changes over time. Unfortunately, the first set of school climate ratings were collected in 1995, at least one and a half years after the school programs were implemented, so changes may already have taken place.

Information concerning the percentage of students in all grades who received special education instruction was provided by the Ontario Ministry of Education and Training for every school in the three older cohort Better Beginnings sites, as well as those in the comparison sites from 1992 to 1997. These were students identified as those with exceptionalities such as learning disabilities and behavioural problems. These data show schools in all Better Beginnings sites decreasing in the number of all students identified for special education instruction, and schools in both comparison sites with increases over the study period. The largest relative decreases occurred in the Cornwall schools between 1992 and 1994 with a decrease from 20% to 8% of the students receiving special education instruction. However, the percentage continued to decrease through to 1997. In Highfield, the percentage of students receiving special educational services was the lowest of all sites beginning in 1992 at 5%. Despite this, however, the percentage decreased slowly but significantly over the five year period through to 1997. There was no decrease in the Sudbury schools from 1992 to 1996, but a substantial drop from 1996 to 1997. It will be interesting to see whether this one year change is maintained when data for 1998 and 1999 become available.

It is possible that the in-classroom supports provided through the Better Beginnings programs from JK to Grade 2 in both Cornwall and Highfield may have contributed to reducing the number of special education students in these schools. In Sudbury, the major programs for early school-aged children were outside the classroom, and many were outside of school hours, which might account for the smaller overall reductions of special education students in that site. It is important to note that reductions in the numbers of special education students reported by schools in the Cornwall and Highfield Better Beginnings sites occurred over the same time period when numbers were increasing in schools in the two comparison sites. The possibility that school-based Better Beginnings programs reduced or replaced the need for special education resources provided by Boards of Education has important implications for the way in which the integration of services for young children can yield potential cost savings.

SUMMARY OF OUTCOME MEASURES

Given the complex mandate of the Better Beginnings model and the finite project resources, it was expected that successful program implementation would yield broad but modest outcome effects. The patterns of results confirm this and can be summarized as follows.

A. Younger Cohort Sites

I. Child Outcomes

a. General Cross-Site Patterns

(+) decreased emotional problems rated by JK teachers
(+) improved auditory attention and memory
(+) more timely immunizations at 18 months
(-) less parental encouragement to use bicycle helmets

b. Site-Specific Patterns

(+) Kingston: improved social-emotional functioning and school readiness
(+) Walpole Island: improved language, motor, attention and memory development
(+) Toronto: improved nutrition

II. Parent and Family Outcomes

a. General Cross-Site Patterns

(+) increased accessibility to professionals when desired
(+) more frequent exercise during pregnancy
(+) reduction in reports of domestic violence: respondent to partner
(+) reduction in reports of domestic violence: partner to respondent
(-) less frequent exercise after pregnancy
(-) lower initiation rates for breastfeeding (but rates are comparable to national norms)
(-) less frequent breast self-examinations
(-) less frequent get-togethers with friends

b. Site-Specific Patterns

(+) Walpole Island: improved quality of parent-child interactions
(+) Toronto: decreased parent and family stress and tension
(+) Walpole Island: decreased parent and family stress and tension
(-) Kingston: decreased quality of parent-child interactions

III. Neighbourhood Outcomes

a. General Cross-Site Patterns

(+) increased safety walking at night

b. Site-Specific Patterns

(+) Guelph: improved sense of neighbourhood cohesion, satisfaction and safety, and decreased neighbourhood deviance
(+) Kingston: improved sense of neighbourhood cohesion, satisfaction and safety, and decreased neighbourhood deviance
(-) Toronto: decreased sense of neighbourhood cohesion, satisfaction and safety, and increased neighbourhood deviance

B. Older Cohort Sites

I. Child Outcomes

a. General Cross-Site Patterns
- (+) decrease in overanxious emotional problems as rated by teachers
- (+) improved self-controlled behaviours as rated by teachers
- (+) improved cooperative behaviours as rated by parents
- (+) improved health as rated by parents
- (+) improved nutrition

b. Site-Specific Patterns
- (+) Cornwall: decreased emotional and behavioural problems
- (+) Cornwall: increased health promotion and injury prevention
- (+) Highfield: decreased emotional and behavioural problems; improved prosocial behaviour
- (+) Sudbury: increased health promotion and injury prevention
- (-) Sudbury: increased emotional and behavioural problems

II. Parent and Family Outcomes

a. General Cross-Site Patterns
- (+) reduction in smoking
- (+) fewer smokers in the home
- (+) increased marital satisfaction
- (+) reduced reports of domestic violence: respondent to partner
- (+) reduced reports of domestic violence: partner to respondent

b. Site-Specific Patterns
- (+) Highfield: improved parent health and health promotion; decreased health-risk behaviour
- (+) Highfield: improved parenting
- (+) Highfield: improved parent and family social and emotional functioning

III. Neighbourhood Outcomes

a. General Cross-Site Patterns
- (+) increased satisfaction with personal housing
- (+) increased use of playground and recreational facilities in the neighbourhood
- (+) increased general neighbourhood satisfaction
- (+) decreased number of all students identified for special education instruction

b. Site-Specific Patterns
- (+) Highfield: improved parent ratings of child's school and teacher

GOAL: TO DEVELOP HIGH-QUALITY PROGRAMS TO MEET THE LOCAL NEEDS OF YOUNG CHILDREN AND THEIR FAMILIES

Balancing the goals of high-quality programs with those of community capacity building and resident involvement and also building partnerships with other service-providing organizations proved to be very challenging for the Better Beginnings sites. The younger cohort projects all developed home-visiting (also referred to as family visiting) programs and placed an emphasis on hiring and training local residents to staff the programs. These programs provided information and support to mothers and their children beginning prenatally or at birth. In addition, all younger cohort sites provided parent-child play groups and a variety of other programs for parent support or training. Given the responsiveness of the programs to local needs, the number and range of programs was large, including some programs and activities open to all community members and in some cases, programs for children of school age and older.

When the costs of operating the Better Beginnings' programs are compared to programs which have provided only home-visiting for two to five years, the Better Beginnings programs are strikingly inexpensive. This suggests that the amount of financial resources available to operate any of the individual program activities may have been too low to allow for maximum effects to be realized. Despite this limitation, however, the positive outcomes that were realized in the younger cohort Better Beginnings sites are encouraging.

Several outcome effects in the younger cohort communities warrant comment is terms of specific programs. One is the general finding of reduced teacher ratings of emotional problems in JK students. A plausible influence on this change in the Better Beginnings communities is the number and variety of play group experiences provided to young children and their parents, including informal and formal childcare programs. Anxiety at school entry is a common phenomenon in young children and increased experience with other children and other adults during the preschool years increases the likelihood of positive emotional adjustment to kindergarten. Play groups and informal childcare activities were provided by all Better Beginnings programs but an emphasis on organizing an ongoing continuum of such activities from infancy through to kindergarten appeared to be intentionally supported in the Kingston Better Beginnings programs and as noted earlier, may be related to the greater improvements in several areas of social-emotional functioning for JK students at that site. How Kingston organized their programs to follow the development of children was described on a local report,

> "Moms are contacted during pregnancy and the Health Educator does an intake assessment that would lead to Prenatal classes and/or Family Visiting. Family Visiting can continue until the child reaches his 5th birthday. During this time, a parent and her child might participate in the Infant Group, Toddler Group, attend playgroups and use Parent Relief. Parents may place their children in Childcare while they attend committee meetings. Some weekends, the whole family might attend a Special Event or visit the Parks program in the summer."

Organizing programs in this fashion is consistent with the original Better Beginnings, Better Futures program model which emphasized the development of a "seamless network" of programs for children and their families throughout the four years of children's development.

In Walpole Island, the Better Beginnings project provided home visiting as well as a variety of programs through a local parent-child centre. These programs, offered in conjunction with a separately funded, high-quality childcare centre, also provided a continuum of child and parent programs which may have contributed to the positive child development, parent-child and stress outcome effects in that site.

In the older cohort Better Beginnings sites, Cornwall and Highfield developed programs in conjunction with the primary schools in the neighbourhood, providing classroom and school based social skills training and academic enrichment.

In Highfield, educational assistants, called "Enrichment Workers", provided by the Better Beginnings Project worked with the children in the focal research cohort and their families throughout the first four years of primary school, following them from JK to Grade 2. Although similar educational assistant positions (Animateurs) existed at Cornwall, they worked with children at all four grade levels simultaneously. Although this arrangement in Cornwall provided continuous classroom support as children moved through JK, SK, Grades 1 and 2, the concentration of resources in Highfield on one age group of children likely provided them with more intense program support than in Cornwall. A second important role of the enrichment worker in Highfield was to visit each child's parents on a regular basis in order to provide information concerning the child's activities in school, to encourage parent involvement in various Better Beginnings programs, and to provide support for parents concerning child and family issues and information regarding community resources. The enrichment workers followed the same group of children and families for four years. This strategy in Highfield yielded more concentrated Better Beginnings program support to the research children and their families than in any other project site. In addition, several other programs were provided in Highfield: a health and nutrition program which provided lunch for children who required it, and also, beginning in 1995, the Lion's Quest Skills for Growing program, which is a comprehensive social skills development program provided by all primary classroom teachers. This later program receives support from Better Beginnings and the Highfield Junior School. Although Highfield, like other Better Beginnings sites offered a variety of additional child, parent and community programs, it appears to be unique in having provided several major programs to the children and families in the focal research cohort from 1993/4 to 1996/7, with a heavy emphasis on classroom assistance and connecting parents to the local school and other Better Beginnings programs. Also, Highfield Junior School is the only school in the Better Beginnings neighbourhood, in contrast to Sudbury and Cornwall where there were five local primary schools in 1996/7. These factors may well account for the fact that Highfield yielded more positive outcome results for children and their parents than any other Better Beginnings site.

GOAL: TO STRENGTHEN THE ABILITY OF SOCIO-ECONOMICALLY DISADVANTAGED COMMUNITIES TO RESPOND MORE EFFECTIVELY TO THE NEEDS OF YOUNG CHILDREN AND THEIR FAMILIES: DEVELOPING COMMUNITY CAPACITY THROUGH RESIDENT INVOLVEMENT

The involvement of community residents in all aspects of Better Beginnings program development and implementation was a key element in the original conceptualization of the Better Beginnings, Better Futures model. This community-driven nature of Better Beginnings distinguishes it from other prevention programs involving young children and their families.

Developing local Better Beginnings organizations that successfully involved neighbourhood residents was an extremely challenging task, and was one of the major reasons that most sites took up to three years to establish and begin to implement programs.

Community representation is present in many private and public organizations, typically in the form of one or two volunteer nonprofessionals who sit on the boards of directors and its committees. It became apparent early in the Better Beginnings Project that including one or two community members on a committee with six to 10 paid professionals from area service-providing agencies did not provide the "critical mass" required for neighbourhood residents to feel comfortable and confident in raising concerns

and offering opinions. Therefore, a "50% rule" was established, requiring that each Better Beginnings organization's steering committee and subcommittees contain at least 50% local residents as members.

There have been many challenges in establishing and maintaining this level of resident involvement in all of the Better Beginnings sites. These include: unfamiliar terms and procedures used by professionals; feelings of intimidation and power imbalances felt by residents in relation to professionals; ethnic tensions; jealousy; feelings of favouritism; failed expectations for residents not hired for project positions; difficulties experienced by both staff and volunteers in setting boundaries between work and personal life; juggling family and project responsibilities; and language barriers in bilingual and multilingual communities.

Despite these challenges and through the hard work of many people in each site, resident participation with the local projects and other community activities and organizations has become firmly established, and represents one of the most successful short-term outcomes of the Better Beginnings projects. For example, residents are involved as active members of major project committees, and subcommittees, often as chair or co-chars, and in program management and support, including hiring project and research staff. They also donate goods and services and raise funds. Some local residents have been employed as project staff and many others volunteer time to Better Beginnings programs; for example, in schools, parent-child centres, and community events. Also, residents have become actively involved as local leaders in advocacy and promotional activities including making presentations to public officials.

In 1998, local RCU researchers interviewed many residents, project staff, and other agency representatives who had been involved with the local Better Beginnings projects for several years. Based on these interviews several areas of positive outcomes resulting from resident participation were identified.

Personal Benefits for the participating residents. The kind and degree of benefit that residents experienced appeared to relate to the type and level of their involvement. Individuals who participated in the planning and development of programs as members of steering and working groups, who were hired as program staff, or who had spoken on behalf of their project to outside audiences, were the ones who appeared to derive the greatest benefit. These included greater confidence, self-esteem, self-knowledge, assertiveness, awareness of rights, political awareness and involvement. They also reported the development of skills, including public speaking, improved language ability, and employment skills. These experiences have encouraged some residents to go back to school or seek employment.

Benefits of resident participation for the Better Beginnings projects. Resident volunteers have freed up staff time, making more and better quality programs possible.

Information on volunteer hours were systematically collected at each site from 1994 to 1997. The time volunteered to the Better Beginnings projects by neighbourhood residents totalled over 128,000 hours for the three-year period, which is equivalent to three full-time staff positions per year per site.

Resident's knowledge of their community has enhanced the relevance of programs and organizational structures, making projects more accountable to the community in which they operate. Also, local resident involvement in the promotion and advocacy of the programs, both as program staff and volunteers, has increased the level of trust and respect for the Better Beginnings projects, from other neighbourhood residents, but also more widely from other service providing organizations and local politicians.

Benefits of resident involvement for the communities. Residents who have been actively involved are seen as positive role models for their children and other community members. Many of the residents expressed increased feelings of ownership and responsibility for their neighbourhoods, and also felt an increased understanding and acceptance of people with different personalities and cultural backgrounds.

Finally, individuals from other local organizations felt that they benefited from seeing how the Better Beginning projects successfully involved local residents, and many began to adopt a similar approach in the management of their own organizations.

Some residents reported that their neighbourhoods had become more safe and more secure places for themselves and their children. Two examples of this were reported in both Sudbury and Guelph where the buildings in which the Better Beginnings projects were based had been vandalized repeatedly early in the project, but not at all during the past four years.

As with all the different threads of the Better Beginnings program model, the relative emphasis placed on resident participation varies across the eight project sites, although it is present in all.

Two sites, Guelph and Sudbury, have placed a particularly strong emphasis on resident involvement in developing programs and managing their organizations. Interestingly both of these project sites had employed community development activities and personnel to assist with the preparation of their original Better Beginnings proposals in 1990. Empowering local residents, creating local leaders, and fostering broad community development have remained key principles for the Guelph and Sudbury Better Beginnings projects throughout the decade.

Broad community development and healing activities have played an important role in the Walpole Island project and also have become central to the Cornwall project (Partir d'un bon pas) where preserving and strengthening Franco-Ontarian culture is the foundation for all program activities.

GOAL: TO ESTABLISH A LOCAL ORGANIZATION CAPABLE OF IMPLEMENTING THE BETTER BEGINNINGS. BETTER FUTURES MODEL

Although this was not stated as a formal goal of the Better Beginnings, Better futures initiative, developing a viable local organization represented one of the most formidable challenges faced by each demonstration site.

Because of the breadth of the Better Beginnings mandate, and its innovative nature, designing and putting in place stable organizational structures and programs took at least two to three years. At almost every site, there was initial difficulty in recruiting and maintaining an appropriate number of residents to participate in project committees. This occurred more easily in Sudbury and Guelph where great effort had been made to involve local residents in the proposal development process in 1990. Sites went through a long process of modifying decision making procedures, working out relationships between resident participants and professionals, and developing strategies to build partnerships with other service-providing organizations.

In developing their projects, sites differed in the relative emphasis on community development and involvement, establishing focused programs and creating partnerships among service organizations. Because the project goals were so broad, and time and money limited, choices had to be made as to where to invest most heavily.

Sites also varied in the extent to which they embraced 'alternative' organizational models, defined in terms of egalitarian structure and remuneration, hiring on the basis of local residency and life experience, and consensus decision making.

There was little variation, though, in the criteria for hiring managers. Except for one site, this was done on the basis of formal qualifications and relevant work experience. On the other hand, service delivery staff at most sites were chosen almost exclusively on the basis of personal characteristics and life experience. Across the sites, the average proportion of service delivery staff who worked part time was 55%; the proportion tended to be lower for core program staff. The use of many paraprofessional and part time staff required much attention to training, which was done in varied ways from site to site.

A consistent finding was that project coordinators, besides coordinating and supporting activities, influenced many core aspects of program development, contributing, for example, to the strong emphasis on community development and resident empowerment at one site, and to clear articulation of an alternative organizational approach at another. Hiring the project coordinator was consistently linked to the beginning of rapid program development at all sites.

Ontario Government representatives were involved with the Better Beginnings sites around many issues, including: increasing resident participation, dealing with the sponsoring organization, hiring, program creation, accountability arrangements, staff relations, salary structures, development of program working groups, and consideration of geographic areas to be served. Although there has been much more direction and guidance from funders in other projects reported in the literature, there are few references to projects as broad or as community-based as Better Beginnings.

Finally, most sites have been blessed with markedly positive and productive relations between the local Better Beginnings project and the sponsoring organization that assumes financial and legal responsibility for the project. In Sudbury, a new corporation was formed to serve this sponsoring function.

GOAL: TO ESTABLISH PARTNERSHIPS AND PROGRAMS WITH OTHER EDUCATIONAL AND SERVICE-PROVIDING ORGANIZATIONS: INTEGRATING SERVICES

All the Better Beginnings sites had a number of representatives from local organizations involved in the original proposal development process in 1990. Except for Sudbury, the sites have maintained a core of service-providers from other organizations as members of project committees, including the steering or executive committee.

In the early years of the project, the local Better Beginnings organizations had great difficulty understanding how to translate the idea of service integration into practice. Over time, less effort was invested in defining service integration as attention turned to creating voluntary partnerships with service agencies in order to increase resources and programming in the Better Beginnings communities.

Service-providers became involved in these voluntary collaborations because they shared objectives similar to those of Better Beginnings, Better Futures, because they saw possibilities of improving their access to resources or improving their services through the partnerships, or both. As the reputation of the Better Beginnings, Better Futures projects improved over the demonstration period, outside agencies saw increased advantages in connecting with a neighbourhood-based participatory project with networks and credibility different from their own.

There is agreement that Better Beginnings is the catalyst for most of these voluntary collaborations. There is general recognition that these partnerships would not have happened if not for the initiative of Better Beginnings personnel and volunteers.

A number of obstacles made these voluntary partnerships more difficult to achieve. Financial cutbacks at participating agencies decreased the resources available for the collaborations. The time required to develop trust, and to overcome of different mandates and self-interests, were common obstacles. Sorting out issues of power and control was a challenge, as was balancing service provider and resident involvement in the projects.

Good interpersonal relationships based on mutual trust and respect were considered essential to the productive partnerships that developed. This trust took a lot of time to develop. Several sites commented that partnerships were easier with agencies that shared similar mandates and had existing commitments to the neighbourhood.

The creation of partnerships has resulted in significant new resources and programming being created in each Better Beginnings community; resources and programming that would not exist without these collaborations. This has come about through joint programming, finding of new sources of funding, encouragement of agencies to locate in the neighbourhoods, and by mutual enrichment of programming between Better Beginnings, Better Futures and partner agencies.

Increased visibility and accessibility for the service of the partner agencies in the Better Beginnings communities is a frequently mentioned benefit from these partnerships. Service providers also comment about changing their attitudes about communities and residents and about the appropriateness of their own programs because of their involvement.

Better working relations between partner agencies, and more positive attitudes towards collaboration, also are reported. In three communities, new structures supporting ongoing dialogue among agencies outside of the auspices of Better Beginnings have resulted from the demonstration project.

There is substantial interest among policy makers, service providers and community leaders in the potential value of local coordination and/or integration of social and educational services; this is particularly true for children and family services in disadvantaged neighbourhoods. Unfortunately, there have been few demonstrations available to guide the development of such initiatives or to provide evidence concerning the value of local service integration. St. Pierre and Layzer (1998) recently concluded that there is little evidence to support the assumption that "To be effective for low-income families, existing services need to be coordinated" (p.13). In fact, the results of the Comprehensive Child Development Project in the U.S. indicated that providing low-income families with a home visitor/case manager, in order to coordinate service had no positive effects on children or families, mainly because families in the control group equally accessed services without the assistance of a home visitor/case manager.

In the Better Beginnings neighbourhoods, however, the focus has been on building partnerships among the service providing organizations themselves as a way of maximizing service accessibility and availability. The Better Beginning projects have demonstrated that these partnerships can be successfully established, and that organizations that were providing services independently of each other or not at all in the neighbourhood, can work effectively together.

There are many examples of these partnerships and details of how they were developed in an RCU technical report entitled *Partnerships and Programs: Service Provider Involvement in Better Beginnings,*

Better Futures (Cameron, Hayward, McKenzie, Hancock & Jeffery, 1999).

A few specific examples are worth noting here. The integration of the Better Beginnings projects with local primary schools in Cornwall and Highfield have yielded positive effects on children's social skills and reductions in emotional and behavioural problems during the early primary school years. In Highfield, the school functions as the hub for all Better Beginnings programs which have also been particularly effective in involving parents and fostering improvements in a wide range of parent and family outcomes. In Guelph, a partnership between the Better Beginnings project and the Children's Aid Society (Wellington County Child and Family Services), the project's sponsoring agency, is unique in the Province. The Executive Director has been actively involved in the Better Beginnings organization from the start of funding in 1991. This partnership has resulted in a CAS satellite office moving into the neighbourhood, sharing space and establishing close day-to-day working relationships with the Better Beginnings project. The Guelph project also has a very active parallel neighbourhood association, Onward Willow.

The experiences of the Better Beginnings projects in fostering these service partnerships serve as valuable examples for other disadvantaged neighbourhoods.

PROGRAM COSTS

Program costs were collected from the quarterly financial reports and audited annual statements submitted by each of the demonstration sites to the Ontario Government. Annual site program budgets have stayed quite stable from 1993/4 through 1997/8. On average, each site receives $570,000 per year from direct government funding. A second cost was the services-in-kind donation from volunteers.

Averaging approximately $300 per child per year, the value of the volunteer services is an important ingredient in the implementation and operation of the programs. Without these services-in-kind, either the sites would have had to scale back or government would have had to increase its direct costs.

Since the intent of Better Beginnings, Better Futures programs is to be available to and potentially accessed by *all* children in the respective site locations, one method of calculating program costs was to relate program expenditures to the total number of children in each of these areas; that is, a "cost per capita" ratio.

Younger Cohort Sites. The 1996 Census was used to calculate a "cost-per-child" of the overall programs in each site. Census data report the number of children age 0 to 4 living in a particular area; this age range directly corresponds to the main programming focus of the younger cohort sites. Since not all children did in fact, participate, this cost figure will be too low.

Therefore, a second way costs were examined was by relating them to the users of, or participants in, the services. Each of the younger cohort sites (with the exception of Walpole Island) collected program participation information from the families in the community attending Better Beginnings programs and meetings for at least one year. For the younger cohort sites, no site collected program participation data on all of their programs: three sites collected participation data on approximately one third of their programs, and one site gathered data on approximately half of its programs. Still, these site-provided program participation data do offer some insight into the degree of contacts families made with the Better Beginnings programs, although they certainly *underestimate* family involvement due to the fact that these data were collected on half or less of all programs offered.

Table 1.3 shows the distribution of program expenditures per child and per family in the five younger cohort sites for 1996/7.

Table 1.3: Total Number of Children in Younger Cohort Sites, and Direct Cost per Child and Family in 1996/7 Year, Ontario Better Beginnings, Better Futures

Sites	Direct Costs 1996/7	Number of Children [1]	Cost/Child	Number of Families [2]	Cost/Family
Guelph	$ 499,992	625	$ 800	279	$1,792
Kingston	$ 723,559	1095	$ 661	533	$1,358
Ottawa	$ 515,979	690	$ 748	585	$ 882
Toronto	$ 710,512	1125	$ 632	365	$1,947
Walpole Island	$ 325,857	250	$1,303	na	na
ALL SITES	$2,775,899	3785	$ 733	1762	$1,390 [3]

Notes:

[1] 1996 Census tract data for areas served by Better Beginnings for children ages 0-4.

[2] This number reflects the number of families participating in Better Beginnings programs/meetings as recorded by the programs. This number is an underestimate of the total number of families participating, as not every program recorded attendance (program attendance was only recorded for approximately 20% to 50% of programs offered at each of the sites). Walpole Island did not collect any program participation information.

[3] This figure was calculated by using the summed budgets for 1996/7 for all the younger cohort sites, excluding Walpole Island as no program participation figures are available ($2,450,042 divided by 1,762 families).

Older Cohort Sites. For the older cohort sites, school records were used to obtain estimates of the number of children from 4 to 8 years old attending schools served by Better Beginnings; Census data were not specific enough because data were reported for the age group 5 to 14 years. In Highfield and Cornwall, many of their programs were classroom-based, so that all children attending school would have access to the programs. In Sudbury, the site-provided program participation data on 3 of their 18 programs revealed that over 80% of the cohort participated in programs, and it is very likely that the bulk of the remaining children would have been involved in one of their school-based programs. Therefore, we are confident that using the school records to estimate the number of children in the sites between 4 to 8 years of age provides a realistic estimate of program participation. Table 1.4 reveals that the cost-per-child in the three sites combined for 1996/7 was $1,130 and ranged from $991 in Highfield to $1,308 in Sudbury.

Table 1.4: Total Number of Children in Older Cohort Sites and Direct Cost-per-child in 1996/7 Year, Ontario Better Beginnings, Better Futures

Sites	Direct Costs 1996/7	Number of Children [1]	Cost / Child
Cornwall	$ 580,938	529	$1,098
Highfield	$ 512,166	517	$ 991
Sudbury	$ 657,942	503	$1,308
ALL SITES	$1,751,046	1549	$1,130

Notes

[1] Based on the school records for areas served by Better Beginnings for children in Junior Kindergarten through to Grade 2 in 1996/7.

Calculations yielded an estimate of the average costs of the Better Beginnings, Better Futures Project of approximately $1,400 per family per year in the younger cohort sites, and approximately $1,100 per family per year in the older cohort sites.

How reasonable are these costs? That is difficult to answer in any absolute sense, but one way to put these estimated annual costs in perspective is to compare them with costs of other prevention programs. Unfortunately, few programs have reported costs, and many that have tend to be the small-scale, U.S.-based programs that were carried out in the 1960s and 1970s. However, comparisons with several other programs are presented in Table 1.5.

Table 1.5: Comparison of Better Beginnings Program Costs with Other Prevention Programs

Programs/Services	Costs in 1997 Canadian Dollars [1]
Better Beginnings, Better Futures	$1,100 - $1,400 /child or family/year
Perry Preschool Project	$8,600 /family/year
Elmira (NY) Home Visiting Project	$4,300 /family/year
U.S. Comprehensive Child Development Project (CCDP: 1989-1994)	$21,000 /family/year
U.S. HeadStart Program	$6,400 /family/year
U.S. Infant Health and Development Program	$14,300 /family/year

Notes:
[1] Canadian dollar worth $0.70 in U.S. dollars in 1997.

These comparisons are instructive. The Elmira Home Visiting Project, which provided an average of nine nurse home visits prenatally and monthly home visits for a maximum of two years postnatally cost $4,300/family/year, and the short-term outcomes of that project yielded no effects on children, while maternal outcomes were limited primarily to a group of 38 very high-risk mothers.

The CCDP Project, which provided low-income families with a home visitor/case manager for up to five years from the birth of a child to school entry, cost an astounding $21,000 per family per year and there were no important project outcome effects on either children or parents.

The Perry Preschool Project, costing $8,600 per family per year for two years, reported short-term improvements on children's IQ performance, but no significant positive short-term effects on children's social, emotional, or health outcomes, nor on outcomes for parents.

From these comparisons, it appears that the annual costs of operating the Better Beginnings projects are extremely modest, particularly when one considers that many of the programs were new to the neighbourhoods, and also that the programs were so broad, i.e., not focused exclusively on either children or parents, but also on the local neighbourhood, on integrating local services, and on involving residents in project management and other community development activities.

CURRENT CONTEXT

This report has commented repeatedly on how different the Better Beginnings, Better Futures program model is from other demonstration projects for young children and their families. The most salient differences are:

- a holistic focus on all aspects of children's development;
- an ecological focus on young children, their mothers, and their neighbourhoods;
- a universal focus on all children and families in the local neighbourhood, rather than focusing programs exclusively on the highest-risk children or mothers;
- a focus on local resident involvement in project decision-making and other neighbourhood activities in order to build community capacity and sustainable local leadership;
- a focus on integrating Better Beginnings programs by establishing partnerships with other local service-providing and educational organizations; and
- supporting on-going research concerning outcomes, costs, and implementation processes of local programs.

A question might be raised as to whether or not a program model as ambitious, complex, and broad as Better Beginnings, initiated 10 years ago in 1990, is relevant to government policy interests in 2000. Two recent government announcements are particularly relevant to this question.

The Canadian National Children's Agenda

The Federal Government, along with the provinces and territories, have identified children as a critical area for developing coordinated social policy in Canada. In the Fall of 1999, the framework for a National Children's Agenda was released for discussion. An important part of the National Children's Agenda involves procedures for sharing effective practices and programs for children. Quoting from the National Children's Agenda framework, "Developing a Shared Vision":

> "Approaches to sharing effective practices could include: Profiling effective practices in the area of "integrated" or "coordinated" services. That is, initiatives that are:
> - holistic;
> - child-centered;
> - focused on outcomes;
> - family-oriented;
> - community-oriented;
> - intersectoral and collaborative in terms of service delivery;
> - balanced in terms of prevention and intervention (with a goal of earliest possible intervention, when necessary); and
> - rigorously evaluated, with an emphasis on outcomes."

The short-term findings from the Better Beginnings, Better Futures Project are in an excellent position to make valuable contributions to the understanding of effective practices in the area of integrated or coordinated services.

The Ontario Early Years Demonstration Projects

Following the release of the Early Years Study in 1994, the Ontario Government announced the funding of five Early Years Demonstration Projects throughout the province "to test and evaluate approaches to supporting good early child development and parenting.

An important focus of these demonstration projects will be to document:

- sustainable leadership;
- community involvement in decision making;
- linkages with other services and supports for children and families;
- successful integration of existing community resources and infrastructure;
- parent/care-giver participation;
- accessibility to all children and parents living in the community/neighbourhood; and
- private-public sector partnerships, including other levels of government."

These program characteristics are very similar to those outlined for the National Children's Agenda. The local Better Beginnings, Better Futures projects have incorporated many of these characteristics into their program model for the past eight years. Thus it appears that the Better Beginnings, Better Futures model is as relevant to current interest with effective programs for young children, their families, and their communities as it was ten years ago.

Lessons learned from the short-term findings of the Better Beginnings programs should be of substantial value to those currently involved in the development of initiatives such as the National Children's Agenda and the Early Years Project.

CHALLENGES AND LIMITATIONS

The broad and complex mandate of Better Beginnings may provide its greatest advantage in terms of opportunities to contribute new knowledge, especially concerning large-scale multi-site initiatives. However, some limitations of the project and the research carried out to evaluate it stem from this same complexity.

Program Quality

One limitation is the lack of formal assessment of the quality of individual programs. Although some sites carried out evaluations for some of their programs, there was no provision in the research contract for systematically evaluating them. Since each site tailored programs to its circumstances, there was substantial variation even in programs which, like home visiting, existed in some form at most sites, so each important program at each site would require separate evaluation. Given the sheer number of programs, such an undertaking would have been extremely expensive.

Reflecting their commitment to resident participation and community economic development, each site emphasized employment of neighbourhood residents as program staff, often relying more on life experience than formal credentials. This is in sharp contrast to "model" programs such as the Abecedarian, Perry Preschool, and Elmira Home-Visiting Projects, which employed highly credentialed staff, who were given explicit procedures to follow and received extensive training and ongoing supervision. No assessment of alternate staffing models could be made.

Program Involvement

Another limitation in this research is the lack of information on program involvement by children and families in either the demonstration or comparison sites. This concern might have been met by a common management information system. In 1995, Ontario attempted to introduce a program participation data collection system, and all eight sites were to employ it in fiscal 1996/7. However, this turned out to be a very demanding undertaking from the point of view of project personnel, and incomplete information is

available for even that one year. The only information on program involvement available over time was that collected in the parent interview, which provides only broad indicators of parent and child participation in major program categories. Extensive exploration of these data for links between intensity or breadth of program involvement and child and parent outcome yielded no systematic patterns in either the demonstration or comparison sites. Interestingly, similar results were recently reported from the Comprehensive Child Development Project (CCDP), a five-year intensive home-visiting/case management project for disadvantaged families with young children in the U.S. Neither data from a standardized management information system nor that from parent interviews revealed consistent relationships between participation data and any child or parent outcomes. Taken together, these findings suggest that program effects may not be best understood from the sheer extent of participation. This issue requires further study.

Selection of Research Outcome Measures Before Specific Programs Were Developed

The research design, together with the organization of the project, required outcome measures to be approved by both government funders and local project sites before programs were in place. This required adoption of a large number of quantitative and qualitative measure, to reflect the broad goals of the Better Beginnings program model. However, as site-specific programs developed, measures to address some unique program goals were weak or absent. For example, the heavy emphasis placed on creating local leadership or broader community/economic development may not have been adequately reflected in the measures collected. Knowledge of specific program emphasis will influence the selection of outcome measures for the proposed follow-up research.

Relating Outcome Effects to Better Beginnings Programs: The Issue of "Signal Versus Noise"

Some of the major challenges in assessing Better Beginnings' effects result from the impossibility of tight experimental design. The "gold standard" for studies which allow for tight experimental controls (e.g., drug trials), is the double blind randomized controlled trial, where participants are randomly assigned to either a drug or a non-drug/placebo condition, and neither participants nor researchers are aware of who received what until after the study is completed. Better Beginnings, by its nature, could not be conducted double blind, and program participation could not be randomized, so that "quasi-experimental" designs were required.

The research employed two major designs: a "before-after" design and a longitudinal comparison group design. In the "before-after" (or "baseline-focal") design, outcome measures were collected in 1992/3 on one group of children and their parents in each Better Beginnings site, before programs were fully implemented, and then again several years later on another group of same-aged children and their families after Better Beginnings had been present for four years. Since changes in outcome measures may have resulted from influences impacting all Ontario children and families, such as changes in economic conditions, health services or welfare practices, one-year birth cohorts of children and their families were studied over time, both in the Better Beginnings sites and in several comparison sites where no Better Beginnings funding was available (the longitudinal-comparison group design). If children and families in the comparison communities were similar to those in the Better Beginnings communities, and if, apart from Better Beginnings, human services were similar as well, outcome differences could be attributed straightforwardly to Better Beginnings.

In the present study, it is difficult to determine precisely the degree to which these conditions were met. First, due to limited funds, only three comparison sites were employed; two comparison sites for the three older cohort demonstration sites, and one comparison site for the five younger cohort demonstration sites. Due to the extensive cultural and socio-economic diversity among the five younger cohort Better

Beginnings sites, the one comparison site in Peterborough provided a poorer match demographically than the older cohort comparison sites. To minimize the effects of any socio-demographic differences between sites, all of the analyses of outcome variables statistically controlled for demographic differences.

Other human service experiences also presented a challenge. It would have been impossible to control other programs and activities for for children and families, either within the Better Beginnings sites or the comparison neighbourhoods. Their influences are background "noise" against which the effects of Better Beginnings programs must be determined. As mentioned previously, information was collected from parents in each interview concerning the type and frequency of programs and services they utilized during the past six months. Two clear differences between demonstration and comparison sites emerged. First, parents in the Peterborough comparison site reported much lower use of home-visiting services than parents in all of the younger cohort Better Beginnings sites. Second, parents in the Etobicoke comparison site reported consistently lower participation in all types of programs on which information was collected than those in the demonstration site at Highfield. Since both sites contained the highest percentages of immigrant and multicultural families of any study sites, it appears that the Highfield Better Beginnings programs may have been particularly effective in involving immigrant families in a wide variety of program activities that did not occur spontaneously in the Etobicoke neighbourhood.

Despite methodological precautions, however, it is difficult to attribute specific outcome differences to specific programs because of the lack of strict experimental control. This is likely the reason why, in the original Request for Proposals, the first research goal was "... not to discover the most efficient or leanest package of prevention services, but to determine how effective a reasonably-financed and community-supported project can be" (Government of Ontario, 1990).

Future prevention studies should explore the feasibility of employing large longitudinal databases, such as the National Longitudinal Survey of Children and Youth, as a means of providing comparison outcome data that can be based on cases with closely matched demographic characteristics, and also that should be less influenced by idiosyncratic program effects than are data from a small number of comparison sites.

Studying the First Cohort of Children and Families

Only one birth cohort in each urban site was studied because of funding limits, and the first wave of children and families to move through the full four years of Better Beginnings programming was chosen so as not to delay the study.

During the first year, however, each Better Beginnings site was adjusting and "fine-tuning" its programs. Since the demonstration was scheduled to end in 1997, the last two years of programming for the longitudinal cohort (1996 and 1997) were characterized by increasing staff uncertainty and stress. There is a definite belief among program staff that the program experiences by the longitudinal research cohort were less stable and of poorer quality than those currently being implemented. To the extent that this is true, the outcome results presented in this report may underestimate the effects that would be expected for those currently involved in programs. The periodic collection of several key outcome results on 4 and 8 year old children and their families in the younger and older cohort sites, respectively, would yield valuable information on the degree to which the outcomes presented in the current report are stable or changing in important ways.

PROJECT DEVELOPMENT CONSIDERATIONS FOR FUTURE PREVENTION INITIATIVES: LESSONS LEARNED FROM BETTER BEGINNINGS, BETTER FUTURES

Project development processes are as important to good outcomes as are credible approaches to helping attain project goals. The following are core considerations in developing programs that will match with original intentions and allow credible evaluation:

- Even moderately complex projects require at least two years of implementation before stable functioning can be expected. Complex projects such as Better Beginnings, Better Futures need a minimum of three years. This time requirement needs to be provided for in the project development and assessment time lines. Formative and process assessments have the potential to provide useful feedback during the start-up stage.

- Prevention projects which rely solely on local development processes to interpret and implement broad and general mandates have been characterized by a number of phenomena. They are: high levels of variation in approaches across demonstration sites, local communities having difficulty figuring out what to do and how, and original project intentions not being clearly tested over the demonstration period.

- Clearer outcomes are more frequently reported in projects when the original mandates are more specific about what is to be demonstrated and where project implementation is supported and monitored.

- Better Beginnings, Better Futures confirms that project relations with sponsor organizations generally are less complicated if they share similar priorities and ways of working. It is helpful if the funding organization, host organization and project negotiate early in the demonstration project how the project will be accountable to the sponsor, how the project's needs for independent functioning and buffering from host agency procedures will be accommodated, and what long-term administrative arrangements are foreseen for the project.

- Demonstration project mandates need to balance breadth and focus. While it is tempting to expand project mandates, doing so greatly increases project complexity and usually introduces priorities which are only partially compatible. It is important to be clear in the beginning about what are the most important elements to be tested in any particular demonstration project and how these elements might fit together.

- There is a deep tension between locally-controlled participatory processes and the implementation of predetermined focused programs. It is critical in project development to be clear about the role of participatory processes. Better Beginnings, Better Futures unequivocally illustrates how passionately commitments to locally-controlled processes can be held. Negotiating a balance with other priorities will not be simple. In community development, participatory processes are the core "definer" of what is to be accomplished. How decisions are made is more valued than what is done. Under such circumstances, community development is the prevention model that is being demonstrated. Participatory processes sometimes are central to program helping processes, as in self-help and mutual aid organizations. Or participatory process can focus on adapting programs to local circumstances without altering elements essential to the model's effectiveness. Involvement in project governance can create valuable opportunities for voluntary leadership and bring useful insights into project development. Difficult as the challenge may be, it is important to be clear in the beginning about the place of participatory processes in any prevention project or program.

- Most of the positive outcomes reported in the literature have been associated with clearly defined focused programs. It is critical in a prevention demonstration to be specific about what focused program model(s) are to be demonstrated and what is required for the potential of this approach to be adequately demonstrated. If particular focused-program models are to be used, their implementation must be carefully supported and monitored, and deviations from effectiveness requirements corrected. If focused programming is to be employed in conjunction with participatory processes and service integration, it is critical in the design phase of the demonstration project to clarify their respective roles and boundaries.

- Resident involvement/community development is not the *sine qua non* nor the heart of effective prevention. Neither is focused programming. Nor is service integration. Rather these are separate processes with different goals and implementation requirements. They produce different kinds of outcomes. Inclusion of any of these development threads represents a choice and, if multiple threads are given importance, their relationship to each other requires consideration.

- Project development requires developers. It is wasteful to have local communities solve major development puzzles by themselves or perhaps not to solve them at all (Schorr, 1997). Reports from many successful multi-site projects and from replications of promising programs have stressed the importance of centrally providing proper training, help with problem solving, and monitoring. Project guidance and overseeing a project (with adequate staff, resources, and authority) area as central an element, albeit a commonly neglected one, for good prevention projects as are credible intervention strategies.

- Hiring the initial complement of staff is a major challenge. Better Beginnings, Better Futures confirms that initial personnel, particularly project coordinators, have a pivotal influence over priorities and ways of working that endure for a long time. Clarity about the traits to be sought in a project coordinator is particularly critical. Informed support to demonstration projects in hiring initial personnel can be especially helpful.

- Demonstration projects often experience a time of turmoil and low functioning as the end of project funding approaches. This needs to be anticipated in project assessment strategies. It generally is useful to have plans in place at an earlier point in project development to facilitate demonstration projects' transition to ongoing funding or to close projects.

KEY SHORT TERM FINDINGS

The Better Beginnings, Better Futures Initiative

The Better Beginnings, Better Futures Project being implemented in eight disadvantaged communities throughout Ontario, is one of the most comprehensive and complex prevention initiatives ever implemented for young children. It is unique in that it attempts to incorporate the following aspects into a *single* program model: a) an ecological view which requires program strategies focusing on individual children, their families, and their neighbourhoods, including childcare and school programs; b) a holistic view of children, including social, emotional, behavioural, and cognitive development; c) programs universally available for all children within a specified age range and their families living in the neighbourhood; d) resident involvement in all aspects of the organization, management, and delivery of

programs; and e) partnerships with local social service, health, and educational organizations.

In the analyses of the operating costs presented in this report, it was concluded that the costs are quite modest when compared to other prevention projects for which comparable financial information is available. Further, these other demonstration projects have typically not been sustained for more than two or three years; have provided a much smaller number of programs to a smaller group of children and/or parents; have not involved local residents in any aspect of program development or implementation; have not attempted to integrate their programs with those of other organizations; and have collected evaluation information on a small number of child or parent measures, with modest short-term outcome effects. When placed in this context, the accomplishments of the Better Beginnings projects to date are encouraging.

Program Development

Better Beginnings, Better Futures has produced many new or improved programs for children and families, parents, schools and communities in the eight participating sites.

- These programs are characterized by high levels of community acceptance and accessibility to groups of differing languages and cultures.

- Many of these child and family support programs are typically found in middle-class neighbourhoods, but were missing or poorly accepted in the Better Beginnings neighbourhoods before the project began.

- The strong involvement of local residents in all aspects of program development and implementation are widely believed to be critical to the acceptance and appropriateness of the Better Beginnings programs.

Resident Involvement

At all program sites, local residents have played a wide variety of key roles in:
- project management and decision-making
- program development and implementation
- program staff (as volunteers and paid staff)
- program advocacy

This involvement has led to:
- enhanced skills and greater employability on the part of involved residents
- reduced program costs
- greater acceptance of programs

Service Integration

Significant partnerships have been established between Better Beginnings and programs in social services, health, and education. This has resulted in:
- sharing of staff and physical resources
- creation of new programs and organizations
- collaboration on other family and child initiatives (e.g., Healthy Babies, Healthy Children)

Child Outcomes

The most frequent and consistent patterns of positive child outcomes were in the area of emotional, behavioural and social functioning. This is encouraging since the major goal of the Better Beginnings project at its inception was the prevention of serious emotional and behavioural problems in young children.

Positive patterns of decreasing children's emotional and behavioural problems and improving social skills arose in three project sites that provided the greatest continuity of child-focused programs across the four-year age span, and that allocated the largest part of their budgets to programs for children in the focal age range (Kingston, Cornwall and Highfield).

Also, these positive patterns were stronger in the Cornwall and Highfield older cohort sites that provided continuous and extensive classroom-based programs for children from four to eight years of age than in the Kingston younger site. These differences may be due to the fact that all children in the older cohort sites participated in classroom programs daily throughout the school year, while child-focused programs for children from birth to four years of age (e.g., home visiting, playgroups, childcare) provided experiences that were substantially lower in frequency and duration.

These results are consistent with previous findings that programs which have been most successful in improving the development of very young children from birth to school entry have provided full or half day centre-based interventions directed at the child over a 2 to 4 year period. None of the younger cohort Better Beginnings projects provided child-focused programs of that intensity.

Parent and Family Outcomes

The strongest pattern of parent outcomes appeared at Highfield, where parents reported fewer tension producing events, less tension juggling child care and other responsibilities, more social support, reduced alcohol consumption and increased exercise. This combination of changes might be expected to reduce illness, particularly stress-related, and parents at this site reported reduced use of prescription drugs for pain, as well as a reduced number of types of prescription.

They also reported improved family relations, reflected in increased marital satisfaction, more consistent and less hostile-ineffective parenting, and increased parenting satisfaction.

Many of these variables could easily affect one another, so that Better Beginnings may well have produced its outcomes by affecting some of them directly, with these in turn influencing the others. This possibility makes it difficult to specify the pathways through which the programs achieved the effects they did, but it is possible to point to a distinctive feature of the Highfield program that could have produced the difference between this site and others.

Highfield made consistent, ongoing, attempts to involve parents in their programs and in school events, and to discuss issues that arose for their children or their families. The site's educational assistants visited all the parents of all focal cohort children regularly for four years, discussing how the children were coming along at school, issues in child rearing, and questions about family living. Parents were encouraged to become involved in parenting programs sponsored by Better Beginnings and other activities at the school, and informed about community resources that could be of assistance. In sum, at Highfield parents of the focal cohort, like their children, were the focus of more frequent, intensive and wide-ranging attention from Better Beginnings than those at any other site.

Neighbourhood Outcomes

There was improvement in general neighbourhood satisfaction, and improvement in housing satisfaction across the older cohort sites. The broadest patterns of change in neighbourhood ratings, however, arose at two younger cohort sites, Guelph and Kingston, where parents reported improvements in community cohesion, decreased levels of deviance (alcohol and drug use, violence and theft), and improvements in several other aspects of neighbourhood life (housing, safety walking on the street at night, and overall quality of life in the neighbourhood).

Guelph's strong emphasis on community development and local capacity building, which began with the creation of its original proposal, could well have led to the improvements seen at that site. Kingston has consistently attempted to incorporate community building into the development and implementation of all programs, including those it has worked on in partnership with other agencies.

School Outcomes

In Highfield, parents showed improved ratings concerning both their children's teacher and school, underscoring the potential value of programs designed to actively forge parent-school connections and involvement.

There were significant reductions in the percentage of special education students reported by schools in the Cornwall and Highfield Better Beginnings sites over the same time period when percentages were increasing in schools in the two comparison sites. The in-classroom supports provided through the Better Beginnings programs from JK to Grade 2 in both Cornwall and Highfield may have contributed to these findings.

The possibility that school-based Better Beginnings programs reduced or replaced the need for special education resources provided by Boards of Education has important implications for the way in which the integration of services for young children can yield potential cost savings.

CONCLUSIONS

- The original Better Beginnings, Better Futures Project model emphasized the ecological nature of child development, which resulted in all project sites developing some programs to support the improvement of child, family and neighbourhood functioning. Analyses of the short-term outcomes support the conclusion that changes were strongest for programs that were intensive, continuous and focused.

  Further, short-term outcomes were greatest in the area of program focus, with child-focused programs effecting child outcomes, parent/family-focused programs effecting parent and family and outcomes, and neighbourhood programs effecting neighbourhood characteristics. These conclusions are consistent with those presented recently in reviews of effective programs. For example, St. Pierre and Layzer (1998) concluded that recent evaluations "call into question the wisdom of relying too heavily on 'indirect' intervention impacts on children, especially when compared with the larger effects of more child-focused, developmental programs. Most researchers conclude that children are best served by programs that provide intensive services to children directly for long periods of time, instead of trying to achieve those effects by delivering parenting education to parents" (p. 18).

- In many ways, the eight "locally owned and operated" Better Beginnings, Better Futures organizations represent the greatest short-term outcome of this Ontario Government initiative. Faced with an extremely broad and complex mandate, high expectations and relatively little explicit direction, each of the eight communities has developed an organization characterized by significant and meaningful local resident involvement in all decisions. This alone represents a tremendous accomplishment in socioeconomically disadvantaged neighbourhoods where ten years ago, many local residents viewed government funded programs and social service organizations with skepticism, suspicion, or hostility.

  In developing their local organization, Better Beginnings projects have not only actively involved many local residents, but also played a major role in forming meaningful partnerships with other service organizations. They developed a wide range of programs, many of which are designed to respond to the locally identified needs of young children and their families, and others to the needs of the neighbourhood and broader community. As they strengthened and stabilized over the seven year demonstration period from 1991 to 1998, each Better Beginnings project increasingly gained the respect and support not only of local residents, service-providers and community leaders, but also of the Provincial Government which, in 1997, transferred all eight projects from demonstration to annualized funding, thus recognizing them as *sustainable*.

  The short-term findings from these projects are encouraging, and provide a unique foundation for determining the extent to which this comprehensive, community-based prevention initiative can promote the longer-term development of some of Ontario's most vulnerable children.

- There is mounting evidence that poverty and other manifestations of socioeconomic disadvantage are becoming increasingly concentrated in specific urban neighbourhoods across Canada (Zeesman, 2000). This "ghettoization" of family poverty is associated with fewer and lower quality child and family health and social services, poorer schools, and increased toxicity for child and family development. It is in exactly these types of neighbourhoods that the Better Beginnings projects are located. The lessons being learned in the eight Better Beginnings communities have much to contribute to other disadvantaged neighbourhoods searching for ways to foster the future well-being of their children and families.

NEXT STEPS FOR RESEARCH AND EVALUATION: DO BETTER BEGINNINGS LEAD TO BETTER FUTURES?

Longitudinal Followup Research

There is still much to be learned from the Better Beginnings, Better Futures initiative. As consistently pointed out in the recent reviews of the prevention and early- intervention programs, there are very few studies on the long-term effects of programs for young children, and those that do exist have involved small numbers of children and narrowly focused program interventions. Only one, the Montreal Longitudinal Experiment, has been carried out in Canada.

Research on the Better Beginnings project is in an excellent position to contribute to knowledge in this field, since the expectation of longitudinal follow-up research was established as an important goal in the original project design.

Therefore, the RCU is carrying out a longitudinal follow-up study of the focal cohort of children and their families to determine longer-term outcomes of the Better Beginnings programs as children develop into

adolescence. Research issues for the longitudinal follow-up study will include the following:

Pathways for Change. Based on results from this report, three models or pathways for change will be examined: child and family social-emotional development; parent health promotion and illness prevention; and neighbourhood/community change. This will provide a test of the hypothesis that these pathways can mediate long-term child outcome effects.

Cost Savings. Are there long-term cost-savings from the Better Beginnings Project? The short-term costs of delivering the Better Beginnings programs will be related to potential longer-term cost-saving outcomes such as secondary school graduation rates, use of health and special education services, employment and use of social assistance, criminal charges and convictions, teen pregnancy, and drug/alcohol abuse.

Ongoing Outcome Evaluation

An *ongoing outcome evaluation* of the local Better Beginnings projects will also be included in the longitudinal follow-up study. The programs in all eight Better Beginnings sites have developed and matured over the past 7 years. The longitudinal research cohort of children and families experienced many of these programs in their early stages of development and refinement. There is a definite belief among program staff that the programs experienced by the longitudinal research cohort were less stable and of poorer quality than those currently being implemented. To the extent that this is true, the outcome results presented in this report underestimate the effects that would be expected from children and families currently involved in the Better Beginnings programs. The periodic collection of several key outcome results on four and eight year old children in the younger and older cohort sites, respectively, would yield valuable information on the degree to which the child outcomes presented in the current report are stable or changing in important ways.

Project Sustainability Research

Very few model demonstration projects survive the end of the demonstration phase. Virtually all of these projects, however, have been "top-down", expert-driven interventions which end when demonstration grants end. Important questions remain to be answered concerning whether or not the community-based nature of the Better Beginnings projects will improve their sustainability and maintain continued resident participation, partnerships with other services, and the delivery of child, family and neighbourhood support programs.

Research on these questions, funded by the Ontario Ministry of Health and Long-Term Care, will provide important information concerning the long-term outcomes as well as the continued viability of the Better Beginnings, Better Futures Project.

Appendix 1.1

SUMMARY OF BETTER BEGINNINGS, BETTER FUTURES EFFECTS

YOUNGER COHORT SITES

SUMMARY OF BETTER BEGINNINGS, BETTER FUTURES EFFECTS YOUNGER COHORT SITES[1]

Measures	Baseline-Focal Analyses[2]					
	Guelph	**Kingston**	**Ottawa**	**Toronto**	**Walpole**	**All**
CHILD EMOTIONAL & BEHAVIOURAL PROBLEMS AND SOCIAL FUNCTIONING						
***Teacher-Rated*:**						
Decreased Emotional Problems	**na** [4]	**0.72** [5] **	**0.23**	**0.25**	**-0.09**	**0.27** [6] **
Decreased Behavioural Problems	na	**0.33**	+ [7]	-	-	+
Increased Prosocial Behaviour	na	**0.12**	+	-	-	+
School Readiness	na	**0.43** **	+	- *	+	+
Parent-Rated:						
Decreased Behavioural Problems	-	+	-	+	+	+ *
Improved Temperament						na
CHILD DEVELOPMENT						
Improved Developmental Quotient:						
• Overall						na
• Expressive Language						na
• Receptive Language						na
• Fine Motor						na
• Gross Motor						na
• Auditory Attention & Memory						na
• Visual Attention & Memory						na
COGNITIVE FUNCTIONING						
Improved Receptive Language (PPVT)	- **	+	+	+	- *	-
Improved Non-Verbal Problem-Solving	-	-	-	-	-	- *
PERINATAL HEALTH						
Reduction of Very Low Birth Weights	+	+	-	-	na	na
Increased Birth Weights						na
Reduction in C-Section Births	na	na	na	na	na	+
Reduction in Use of General Anaesthesia for Normal Births						+
Breast Feeding:						
• Increased Initiation						na
• Longer Duration						na
• Improved Dietary Intake of Breastfeeding Mothers						na

Note:

Explanatory notes for Appendix 1.1 appear at the end of the table.

SUMMARY OF BETTER BEGINNINGS, BETTER FUTURES EFFECTS YOUNGER COHORT SITES

Measures	Longitudinal Analyses[3]					
	Guelph	Kingston	Ottawa	Toronto	Walpole	All
CHILD EMOTIONAL & BEHAVIOURAL PROBLEMS AND SOCIAL FUNCTIONING						
***Teacher-Rated*:**						
Decreased Emotional Problems						na
Decreased Behavioural Problems						na
Increased Prosocial Behaviour						na
School Readiness						na
Parent-Rated:						
Decreased Behavioural Problems						na
Improved Temperament	+	-	+	-	-	-
CHILD DEVELOPMENT						
Improved Developmental Quotient:						
• Overall	-	-	-	-	**0.38**	-
• Expressive Language	-	-	- *	-	**0.57 ** **	-
• Receptive Language	-	+	+ **	+ *	**0.11**	+
• Fine Motor	+	-	+ *	-	**0.41**	+ *
• Gross Motor	+	- **	- **	+	**0.68 ** **	-
• Auditory Attention & Memory	**-0.12**	**0.35**	**0.52 ***	**0.47 ***	**0.47**	**0.36 ***
• Visual Attention & Memory	-	- *	-	+	**0.08**	-
COGNITIVE FUNCTIONING						
Improved Receptive Language (PPVT)						na
Improved Non-Verbal Problem-Solving						na
PERINATAL HEALTH						
Reduction of Very Low Birth Weights						na
Increased Birth Weights	-	-	-	-	-	-
Reduction in C-Section Births						na
Reduction in Use of General Anaesthesia for Normal Births						na
Breast Feeding:						
• Increased Initiation	**-0.55 ** **	**-0.38 ** **	**-0.59 ** **	**-0.42 ** **	**-0.33 ***	**-0.42 ** **
• Longer Duration	-	-	-	+	+	-
• Improved Dietary Intake of Breastfeeding Mothers						na

YOUNGER COHORT SITES (CONTINUED)

Measures	Baseline-Focal Analyses[2]					
	Guelph	Kingston	Ottawa	Toronto	Walpole	All
CHILD NUTRITION						
Height Adjusted for Age	+	+	+	+ *	-	+
Reduction in Weight/Height above the 90th Percentile	+	-	+	-	+	+
Increased Intake of:						
• Calories	-	+	+	**0.59 ****	-	+
• Carbohydrates	-	+	+ **	**0.27**	na	+ *
• Protein	-	-	-	**0.47 ****	-	+
• Vitamin A	+	-	-	**0.18**	- *	-
• Thiamin	-	+	+	**-0.01**	-	-
• Riboflavin	-	+ **	+	**0.08**	-	+
• Niacin	-	+	+	**0.73 ****	-	+ **
• Folate	+	+	+	**0.54 ****	-	+ *
• Vitamin C	-	-	-	**0.42 ****	-	-
• Calcium	-	+	-	**0.30 ***	na	-
• Iron	-	-	+	**0.42 ****	-	+
• Zinc	-	+	+	**0.51 ****	-	+
CHILD HEALTH						
Improved General Health Ratings						na
Fewer Health - Related Limitations						na
Injuries and Poisonings						na
Fewer Hospitalizations for:						
• asthma	+	-	-	+	na	+
• all surgeries						na
• all medical admissions						na
• pneumonia						na
CHILD HEALTH PROMOTION & PREVENTION OF INJURIES & ILLNESS						
Child Immunized on Time at 18 Months						na
Reduced Exposure to Second-Hand Smoke						na
Improved Parent's Sense of Control over Child's Health						na
Greater Parental Encouragement of Bicycle Helmet Use						na
USE OF HEALTH CARE SERVICES FOR CHILDREN						
Increased Doctor Visits	+	+	+	+	-	+
Increased Dentist Visits	+	-	-	- *	+	-
Increased Optometrist Visits	+	-	+	+	-	-
Decreased Trips to Emergency Room						na
Professional Seen When Desired for Child	**0.06**	**0.19 ****	**0.21**	**0.23**	**0.23 ***	**0.17 ***
Getting as Good Service as Others for Child	+	+	+	+	+	+ *

YOUNGER COHORT SITES (CONTINUED)

Measures	Longitudinal Analyses[3]					
	Guelph	Kingston	Ottawa	Toronto	Walpole	All
CHILD NUTRITION						
Height Adjusted for Age	+ *	-	-	+	+	+
Reduced Weight/Height Percentile above the 90th Percentile	+	-	-	-	-	-
Increased Intake of:						
• Calories						na
• Carbohydrates						na
• Protein						na
• Vitamin A						na
• Thiamin						na
• Riboflavin						na
• Niacin						na
• Folate						na
• Vitamin C						na
• Calcium						na
• Iron						na
• Zinc						na
CHILD HEALTH						
Improved General Health Ratings	-	-	-	+	-	-
Fewer Health - Related Limitations	-	-	+	-	-	- *
Injuries and Poisonings						na
Fewer Hospitalizations for:						
• asthma						na
• all surgeries						na
• all medical admissions						na
• pneumonia						na
CHILD HEALTH PROMOTION & PREVENTION OF INJURIES & ILLNESS						
Child Immunized on Time at 18 Months	**0.50 ****	**-0.21**	**0.47 ****	**0.38 ****	**0.03**	**0.18 ***
Reduced Exposure to Second-Hand Smoke	+	+	+	+	+	+
Improved Parent's Sense of Control over Child's Health	+	- *	-	+	+	+
Greater Parental Encouragement of Bicycle Helmet Use	**- 0.35 ***	**-0.56 ****	**-0.01**	**-0.02**	**-0.74 ****	**-0.74 ***
USE OF HEALTH CARE SERVICES FOR CHILDREN						
Increased Doctor Visits	-	+	-	+	-	+
Increased Dentist Visits	+	-	-	- *	+	-
Increased Optometrist Visits	+	-	+	+	-	-
Decreased Trips to Emergency Room	-	+	+	+ **	+	+
Professional Seen When Desired for Child	**0.25**	**0.29 ***	**0.28**	**0.31 ***	**0.34**	**0.24 ***
Getting as Good Service as Others for Child						na

YOUNGER COHORT SITES (CONTINUED)

Measures	Baseline-Focal Analyses[2]					
	Guelph	Kingston	Ottawa	Toronto	Walpole	All
PARENT HEALTH						
Improved Self-Rated Health	-	+	-	+	-	-
Decreased Limitations in Daily Activities from:						
• Physical Health Problems	+ *	+ *	-	+	-	+
• Emotional Problems	- *	+	+	+	+ **	+
• Pain	+	+	-	-	+	+
Decrease in Interference with Caring for Child because of Health Problems	-	-	+	-	+	-
Reduced Types of Prescriptions Use	+	+	-	-	na	-
Reduction in Overweight	+	-	-	+	+ **	+
PARENT HEALTH PROMOTION						
Increased Proportion of Pap Smears within Guidelines						na
More Frequent Breast Self-Exams						na
More Frequent Exercise during Pregnancy						na
More Frequent Exercise after Pregnancy						na
PARENT HEALTH -RISK BEHAVIOURS						
Reduced Smoking During Pregnancy						na
Reduced Smoking between Pregnancy and 3 Months Postnatal						na
Reduced Smoking between 3 and 48 Months Postnatal						na
Reduced Smoking at 48 Months	+ *	+ **	+	+ **	+	+ **
Fewer Smokers in the Home	+ *	+ **	+ **	+ *	+ **	+ **
Reduced Alcohol Consumption During Pregnancy						na
Reduced Alcohol Consumption between Pregnancy and 18 Months Postnatal						na
Reduced Alcohol Consumption between 18 and 48 Months Postnatal						na
Reduced Alcohol Consumption at 48 Months	+	+ *	-	+	-	+ **
Decreased Alcoholism Behaviours						na
PARENTING						
More Consistent Parenting						na
Less Hostile-Ineffective Parenting						na
More Positive Parenting						na
Improved Parent/Child Interaction						na
Improved General Ratings of Parent Quality						na
PARENT SOCIAL ACTIVITIES						
Increased Neighbourhood Activities	-	-	-	+	-	-
More Frequent Get-Togethers with Friends	**0.15**	**-.012**	**-0.17**	**-0.02**	**-0.15**	**-0.06**
More Frequent Get-Togethers with Other Families in the Neighbourhood	+	+	-	+	na	+
Increased Participation in Organized Recreation	-	-	+	+	na	-
Increased Volunteering in the Community	-	-	-	-	na	-
More Frequent Attendance at Meetings of Clubs	-	+	- *	-	na	+
More Frequent Religious Services Attendance	-	+	+	-	+	+

YOUNGER COHORT SITES (CONTINUED)

Measures	Longitudinal Analyses[3]					
	Guelph	Kingston	Ottawa	Toronto	Walpole	All
PARENT HEALTH						
Improved Self-Rated Health	-	-	+	-	-	-
Decreased Limitations in Daily Activities from:						
• Physical Health Problems	+	+	-	+	-	+
• Emotional Problems	-	+	+ **	-	+	+
• Pain	-	+	+	+	+	+
Decrease in Interference with Caring for Child because of Health Problems	-	-	+	-	-	-
Reduced Types of Prescriptions Use	-	+	+	+	+	+
Reduction in Overweight						na
PARENT HEALTH PROMOTION						
Increased Proportion of Pap Smears within Guidelines	+ **	-	+ *	+	-	+
More Frequent Breast Self-Exams	**-0.32**	**-0.48 ****	**-0.19**	**-0.36 ****	**-0.41 ***	**-0.25 ****
More Frequent Exercise during Pregnancy	**0.14 ***	**0.09**	**0.20 ****	**0.12 ****	**0.01**	**0.12 ****
More Frequent Exercise after Pregnancy	**-0.58 ****	**-0.27**	**-0.69 ****	**-0.06**	**-0.44 ****	**-0.33 ****
PARENT HEALTH -RISK BEHAVIOURS						
Reduced Smoking During Pregnancy	-	-	- *	+	+	-
Reduced Smoking between Pregnancy and 3 Months Postnatal	+	-	-	+	-	-
Reduced Smoking between 3 and 48 Months Postnatal	-	- *	- *	-	- **	- **
Reduced Smoking at 48 Months						na
Fewer Smokers in the Home	+	-	-	-	-	-
Reduced Alcohol Consumption During Pregnancy	-	+	-	- **	+	-
Reduced Alcohol Consumption between Pregnancy and 18 Months Postnatal	+	-	-	+	- *	-
Reduced Alcohol Consumption between 18 and 48 Months Postnatal	+	+	+	+	+	+
Reduced Alcohol Consumption at 48 Months						na
Decreased Alcoholism Behaviours						na
PARENTING						
More Consistent Parenting	-	- *	+	+	-	-
Less Hostile-Ineffective Parenting	-	-	-	+	-	-
More Positive Parenting	+	+ *	-	+	+	+
Improved Parent/Child Interaction	na	**-0.65 ****	+	-	**1.01 ****	-
Improved General Ratings of Parent Quality	na	**-0.08**	+	+	**0.35 ****	+
PARENT SOCIAL ACTIVITIES						
Increased Neighbourhood Activities	-	-	+	+	+	-
More Frequent Get-Togethers with Friends	**-0.40**	**-0.74 ****	**-0.91 ****	**-0.36 ***	**-0.72 ****	**-0.61 ****
More Frequent Get-Togethers with Other Families in the Neighbourhood	-	-	-	-	na	-
Increased Participation in Organized Recreation	-	-	+	+	na	+
Increased Volunteering in the Community	-	+	+	+	na	+
More Frequent Attendance at Meetings of Clubs	+	+	-	+	na	+
More Frequent Religious Services Attendance	+	-	+	+	+	+

YOUNGER COHORT SITES (CONTINUED)

Measures	Baseline-Focal Analyses[2]					
	Guelph	Kingston	Ottawa	Toronto	Walpole	All
PARENT AND FAMILY SOCIAL & EMOTIONAL FUNCTIONING						
Decreased Tension Juggling Child Care With Other Responsibilities:						
• As Rated by Employed Parent	-	+	+	**0.83 ****	**-0.12**	+
• As Rated by Unemployed Parent	-	+	+	**0.12**	**0.66**	+
Reduced Stressful Life Events	-	+	+	**-0.05**	**1.02 ****	+
Improved Social Support	-	+	+	+	+	+
Reduced Depression	-	+	+	+	+	+
Improved Intimacy with Partner	+ **	+	-	+	+	+
Improved Marital Satisfaction	+	+	-	+	+	+
Improved Family Functioning	-	+	-	+	-	-
Reduced Violence						
• By Respondent to Partner	**0.48**	**0.14**	**0.27**	**0.40**	**0.04**	**0.22 ***
• By Partner to Respondent	**0.48**	**0.41 ***	**-0.31**	**0.40**	**0.61**	**0.32 ****
USE OF COMMUNITY RESOURCES						
Increased Use of:						
• Toy-Lending Library	+ *	-	+ **	+	+	+
• Library	-	-	+ **	+	- **	-
• Playground or Recreation Programs	-	+ **	+	+	- *	+
• Sports/Clubs	-	-	-	-	-	- *
• Parent/Child Drop-In Centre	+	+	+	+	+	+
• Parent Resource Centre	-	-	+	+	+	+
SENSE OF COMMUNITY COHESION						
Increased:						
Sense of Belonging	**0.62 ****	**-0.10**	+ *	**-0.09**	-	+ **
Willingness to Prevent Negative Change	**-0.14**	**0.53 ****	-	**-0.37 ***	-	-
Sense of Importance to Neighbourhood	**0.21**	**0.08**	+	**-0.01**	-	+
Willingness to Improve Things	**0.11**	**0.44 ***	-	**-0.16**	-	-
Sense of Similarity to Neighbours	**0.54 ***	**0.06**	-	**0.04**	+	+ *
Feeling That Different Cultures/Races Are Accepted	**0.27 ***	**-0.61 ***	+	**-0.04**	-	+
Pride in Being a Community Member	**0.09**	**0.19**	+	**-0.14**	-	+
NEIGHBOURHOOD RATINGS						
Increased Satisfaction with:						
• Condition of Dwelling	**0.32**	**0.24**	-	**-0.19**	+	+ **
• Safety Walking on the Street	**0.25**	**0.77 ****	**0.31**	**0.06**	**na**	**0.40 ****
• General Neighbourhood Satisfaction	**0.24**	**0.30**	+	**-0.19**	na	+

YOUNGER COHORT SITES (CONTINUED)

Measures	Longitudinal Analyses[3]					
	Guelph	Kingston	Ottawa	Toronto	Walpole	All
PARENT AND FAMILY SOCIAL & EMOTIONAL FUNCTIONING						
Decreased Tension Juggling Child Care With Other Responsibilities:						
• As Rated by Employed Parent	-	-	+	**0.27**	**0.05**	+
• As Rated by Unemployed Parent	-	-	+	**0.18**	**0.37**	-
Reduced Stressful Life Events	+	+	-	**0.64 ***	**1.26 ***	+ *
Improved Social Support	+	-	- *	+	-	-
Reduced Depression	+	-	+	-	+	+
Improved Intimacy with Partner	-	-	-	-	-	-
Improved Marital Satisfaction	+	-	-	+	+	+
Improved Family Functioning	-	-	-	+	-	-
Reduced Violence						
• By Respondent to Partner						na
• By Partner to Respondent						na
USE OF COMMUNITY RESOURCES						
Increased Use of:						
• Toy-Lending Library	-	-	-	+	-	+
• Library	-	-	+ *	-	- *	-
• Playground or Recreation Programs	- **	-	+	-	- **	-
• Sports/Clubs						na
• Parent/Child Drop-In Centre	- **	-	-	-	- *	- *
• Parent Resource Centre	-	-	-	+	-	-
SENSE OF COMMUNITY COHESION						
Increased:						
Sense of Belonging	**0.01**	**0.15**	-	**-0.21**	+	-
Willingness to Prevent Negative Change	**-0.04**	**0.18**	+	**-0.61 ****	- *	-
Sense of Importance to Neighbourhood	**0.08**	**0.04**	+	**-0.15**	-	+
Willingness to Improve Things	**0.05**	**-0.04**	+	**-0.20**	-	+
Sense of Similarity to Neighbours	**-0.02**	**0.16**	-	**-0.25**	-	-
Feeling That Different Cultures/Races Are Accepted	**-0.07**	**0.27**	-	**-0.53 ****	-	- **
Pride in Being a Community Member	**0.13**	**-0.11**	+	**0.26**	+	+
NEIGHBOURHOOD RATINGS						
Increased Satisfaction with:						
• Condition of Dwelling	**0.48**	**0.12**	-	**-0.01**	-	+
• Safety Walking on the Street	**0.01**	**0.29**	**-0.18**	**0.19**	**0.07**	**0.18**
• General Neighbourhood Satisfaction	**0.12**	**0.20**	**+**	**-0.05**	**+**	**+**

YOUNGER COHORT SITES (CONTINUED)

Measures	Baseline-Focal Analyses[2]					
	Guelph	Kingston	Ottawa	Toronto	Walpole	All
NEIGHBOURHOOD RATINGS (Continued)						
Reduction in Perceived Prevalence of:						
• Alcohol Use in Neighbourhood	**0.26**	**0.28 ***	+	**-0.19**	-	+
• Marijuana Use in Neighbourhood	**0.67 ****	**0.18**	+	**-0.30**	+	+ **
• Hard Drug Use in Neighbourhood	**0.19**	**0.33 ***	-	**-0.31 ***	+	+
• Violence in Neighbourhood	**0.07**	**0.22**	+	**0.31**	+	-
• Theft in Neighbourhood	**0.17**	**0.06**	+	**-0.25**	-	-
Reduction in Police Statistics:						
• Breaking and Entering						na
• Vandalism						na
Reduction in Child Welfare Services:						
• Number of Open Child Protection/Family Service Cases						na
• Number of Children-in-Care						na

Explanatory Notes for Appendix 1.1

1. **Younger Cohort Sites.** This refers to the five Better Beginnings projects where programs focused on children prenatally to four years of age, and one comparison site. Approximately 800 children and their families participated in the research.

2. **Baseline-Focal Analyses.** Measures from a group of 48-month-old children, their parents and teachers, living in the Better Beginnings communities, were collected before the Better Beginnings programs were created in 1993 in order to get a "baseline" or "pre-Better Beginnings" snapshot. Then in 1998, after programs had been operating in the Better Beginnings sites for five years, measures were collected from another group of 48-month-old children and their parents and teachers, called the "focal cohort". Analyses examined changes between the baseline and focal cohorts.

3. **Longitudinal Analyses.** Measures from children and their families living in the Better Beginnings sites were collected repeatedly, beginning in 1994 when children were 3 months of age to 1998 when children were 48 months of age, to see if there were any changes as a result of living in a Better Beginnings neighbourhood. Because some of the changes that occur in the Better Beginnings communities may have resulted from factors other than the Project itself (e.g., major changes in the economy), measures were also collected from children, their parents and teachers, living in a *comparison* site, Peterborough, over the same period of time.

4. **NA.** This stands for Not Applicable. It means that the measure was not collected or that the response rate was very low and therefore the analyses could not be done, or that there was too little variability in responses to analyze. For this specific variable, JK teacher ratings, none were collected in Guelph because very few schools offer JK.

5. **Effect Sizes.** Effect sizes are intended to provide a sense of how impressive a change is by comparing it to the amount of variation found in a variable in the absence of an attempt to change it. They also provide an indication of the impact of programs in a common form for variables which have been measured in different ways. Here, for non-dichotomous variables, under the baseline-focal design effect, sizes are calculated by dividing each measure of change by the standard deviation of the baseline sample. Under the longitudinal design, they are calculated by taking the predicted difference between the first time of measurement and the last, under the model accepted, and dividing by the standard deviation from the first occasion. By convention, an effect of .20 is referred to as small, one of .50 is spoken of as moderate, and one of .80 is treated as large. (Further details on effect sizes are found in Chapter 6.) Variables with a '-' represent an undesirable or non-beneficial effect. Variables without a sign, represent a desirable or beneficial effect for Better Beginnings.

YOUNGER COHORT SITES (CONTINUED)

Measures	Longitudinal Analyses[3]					
	Guelph	Kingston	Ottawa	Toronto	Walpole	All
NEIGHBOURHOOD RATINGS (Continued)						
Reduction in Perceived Prevalence of:						
• Alcohol Use in Neighbourhood	**0.00**	**-0.16**	-	**-0.32**	-	-
• Marijuana Use in Neighbourhood	**0.34**	**0.35 ****	+	**-0.10**	-	+
• Hard Drug Use in Neighbourhood	**0.23**	**0.18**	-	**-0.34**	- **	-
• Violence in Neighbourhood	**-0.14**	**0.39 ****	+	**-0.26**	- **	-
• Theft in Neighbourhood	**0.11**	**0.13**	+	**-0.40**	- *	-
Reduction in Police Statistics:						
• Breaking and Entering	+	- **	+	+	na	na
• Vandalism	+	+	+	+ **	na	na
Reduction in Child Welfare Services:						
• Number of Open Child Protection/Family Service Cases	- *	- **	+ **	+ *	na	na
• Number of Children-in-Care	+	+ **	na	0	na	na

6. Criteria for Reporting Patterns.

General "Cross Site" Patterns (Horizontal Shading): In a study with two basic designs, sometimes the results will not match. Also, with many dependent variables, sometimes apparently meaningful results will arise by chance, i.e., through random processes. Finally, with programs set up to meet local conditions, results may well differ among sites. To deal with differing results from the two basic designs, with the risk of taking random fluctuations seriously, and with the need to pick up systematic differences among sites, the following criteria were adopted:

(1) If results were available from both designs, statistically significant results from one must be confirmed in direction by the other, or no Better Beginnings effect would be suggested.

(2) If the results for all younger cohort sites, taken together, were significant, but if more than one site showed results in the opposite direction, or one site was significant in the opposite direction, no general Better Beginnings effect would be suggested.

(3) A result for a single site, on a single dependent variable, would need to reach a p-value of .01 to be discussed as evidence of a statistically significant effect for that site. Insisting on a p-value of .01, rather than the more usual .05, is a way to deal with the number of tests possible within a cohort. At the 0-to-4-year-old level, there are five sites, so that to require .01 sets the overall p-value to .05.

Site-Specific Patterns (Vertical Shading): Often variables within a content area yielded consistent results for a site. Such patterns are mentioned frequently in the report. Some of the patterns mentioned include variables which are all individually significant. In other instances, where results are favourable (or unfavourable) for several variables, but not all are individually significant, we have taken a nonparametric approach. At minimum, a sign test must reach .05, and some individual variables must do so as well.

7. **Effects.** Each variable in the table is assigned a '+' or '-' symbol to indicate whether the tested difference favoured Better Beginnings or the control group (either baseline or comparison site). All variables were coded so that a '+' represents a desirable or beneficial effect for Better Beginnings and a '-' represents an undesirable or non-beneficial effect.

If the result was statistically significant, this was indicated with a '**' if the p value was 0.01 or with a '*' if the p value was 0.05. A p value of 0.01 means the result would be expected to occur by chance less than one time in 100; similarly, a p value of 0.05 means the result would be expected to occur by chance less than five times in 100.

Appendix 1.2

SUMMARY OF BETTER BEGINNINGS, BETTER FUTURES EFFECTS

OLDER COHORT SITES

SUMMARY OF BETTER BEGINNINGS, BETTER FUTURES EFFECTS OLDER COHORT SITES [1]

Measures	Baseline-Focal Analyses[2]			
	Cornwall	Highfield	Sudbury	All
CHILD EMOTIONAL & BEHAVIOURAL PROBLEMS AND SOCIAL FUNCTIONING				
***Teacher-Rated*:**				
Decreased Passive Victimization	**0.08** [4]	+ [5]	-	+
Decreased Overanxious Behaviour	**0.16**	**0.16**	**0.01**	**0.03** [6]
Decreased Depression	**0.22**	-	-	-
Decreased Attention-Deficit	**0.23**	+	-	-
Decreased Oppositional Behaviour	**-0.03**	-	+	-
Increased Self-Control	**0.12**	**0.46 ****	**0.08**	**0.18**
Increased Cooperation	-	**0.44 ***	- *	-
Increased Assertiveness	-	**-0.17**	-	-
Parent-Rated:				
Decreased Overanxious Behaviour	+	**0.66 ****	**-0.18**	+
Decreased Depression	-	**0.93 ****	**-0.32**	+
Decreased Attention-Deficit	-	**0.48 ***	**-0.46 ****	-
Decreased Oppositional Behaviour	-	**0.22**	**-0.13**	+
Increased Self-Control	-	**0.34**	-	-
Increased Cooperation	**0.24**	**0.38 ***	**0.16**	**0.26 ****
Increased Assertiveness	+	**0.48 ***	-	+
Child-Rated:				
Social Problem Solving:				
• Improved Social Competence	-	-	-	- *
• Reduced Aggression	+ *	+	-	+
• Improved Self-Perception	+ *	+	-	+
CHILD DEVELOPMENT				
Improved Developmental Quotient				na
COGNITIVE FUNCTIONING				
Improved Receptive Language:				
• For English Speaking Children	na	+	- **	-
• For French Speaking Children	-	na	+ *	+
Improved Non-Verbal Problem-Solving	+	+	-	-
Improved Reading Skills:				
• For English Speaking Children	na	+	- **	-
• For French Speaking Children	+	na	- **	- *
Improved Attitude towards Reading	-	-	+	+
Improved Math Skills	-	+	- **	- **

Note:

Explanatory notes for Appendix 1.2 appear at the end of the table.

SUMMARY OF BETTER BEGINNINGS, BETTER FUTURES EFFECTS OLDER COHORT SITES

Measures	Longitudinal Analyses[3]			
	Cornwall	Highfield	Sudbury	All
CHILD EMOTIONAL & BEHAVIOURAL PROBLEMS AND SOCIAL FUNCTIONING				
***Teacher-Rated*:**				
Decreased Passive Victimization	**0.74 ****	+	+	+ *
Decreased Overanxious Behaviour	**0.74 ****	**0.43**	**0.22**	**0.47 ****
Decreased Depression	**0.36**	+	+	+
Decreased Attention-Deficit	**0.12**	+	-	+
Decreased Oppositional Behaviour	**0.23**	+	+	+
Increased Self-Control	**0.63 ****	**0.55 ***	**0.25**	**0.46 ****
Increased Cooperation	+ **	**1.21 ****	+	+ **
Increased Assertiveness	+	**0.59 ***	+	+ *
Parent-Rated:				+
Decreased Overanxious Behaviour	-	**0.56 ****	**-0.22**	
Decreased Depression	-	**0.63 ****	**-0.02**	+
Decreased Attention-Deficit	-	**0.52 ****	**-0.17**	+
Decreased Oppositional Behaviour	+	**0.58 ****	**-0.09**	+
Increased Self-Control	-	**0.20**	+	+
Increased Cooperation	**-0.11**	**0.23**	**0.04**	**0.02**
Increased Assertiveness	-	**0.09**	-	-
Child-Rated:				
Social Problem Solving:				
• Improved Social Competence				na [7]
• Reduced Aggresstion				na
• Improved Self-Perception	- *	-	+	-
CHILD DEVELOPMENT				
Improved Developmental Quotient	+	- **	+ **	-
COGNITIVE FUNCTIONING				
Improved Receptive Language:				
• For English Speaking Children	na	+	+	+
• For French Speaking Children	+	na	-	+
Improved Non-Verbal Problem-Solving	-	-	+	+
Improved Reading Skills:				
• For English Speaking Children	na	+ *	-	-
• For French Speaking Children				na
Improved Attitude towards Reading	-	+	0	+
Improved Math Skills	-	+	-	+

OLDER COHORT SITES (CONTINUED)

Measures	Baseline-Focal Analyses[2]			
	Cornwall	Highfield	Sudbury	All
CHILD NUTRITION				
Height Adjusted for Age	+	+	- **	+
Reduction in Weight/Height above 90th Percentile	+	+	-	+
Increased Intake of:				
• Calories	+ **	+	+ **	**0.63 ****
• Carbohydrates	+ **	-	+ **	**0.51 ****
• Fat	+ **	+	+ *	**0.69 ****
• Protein	+ **	+ *	+ *	**0.55 ****
• Vitamin A	-	+	+	**0.14**
• Thiamin	+ **	+	+	**0.40 ****
• Riboflavin	+ **	+ **	+ **	**0.67 ****
• Niacin	+ **	+ *	+ **	**0.59 ****
• Folate	+ **	-	+	**0.27 ****
• Vitamin C	+ **	-	-	**0.14**
• Calcium	+	+	+	**0.34 ****
• Iron	+ **	+	+	**0.39 ****
• Zinc	+ **	+ **	+ **	**0.69 ****
CHILD HEALTH				
Improved General Health Ratings				na
Fewer Health-Related Limitations				na
Reduced Asthma				na
Reduced Injuries				na
CHILD HEALTH PROMOTION & PREVENTION OF INJURIES & ILLNESS				
Child Immunized on Time				na
Improved Parent's Sense of Control over Child's Health				na
Greater Parental Encouragement of Bicycle Helmet Use				na
Improved Traffic Safety				na
USE OF HEALTH CARE SERVICES FOR CHILDREN				
Increased Doctor Visits	+	+	-	+
Increased Dentist Visits	+	+	-	+
Increased Optometrist Visits	-	+	- *	-
Decreased Trips to Emergency Room				na
Professional Seen When Desired for Child	+ **	+ **	+	+ **
Getting as Good Service as Others for Child	+	-	+ **	+ **
PARENT HEALTH				
Improved Self-Rated Health	-	**0.02**	- *	-
Decreased Limitations in Daily Activities from:				
• Physical Health Problems	+	**0.59 ****	+	+
• Emotional Problems				na
• Pain				na

OLDER COHORT SITES (CONTINUED)

Measures	Longitudinal Analyses[3]			
	Cornwall	Highfield	Sudbury	All
CHILD NUTRITION				
Height Adjusted for Age	-	+	+	+
Reduction in Weight/Height above 90th Percentile	-	-	- *	- *
Increased Intake of:				
• Calories	+	-	-	-
• Carbohydrates	+	-	-	-
• Fat	+	-	-	+
• Protein	+	+	- *	-
• Vitamin A	+	+	+ *	+
• Thiamin	+	-	- **	- *
• Riboflavin	+ *	-	-	+
• Niacin	+	+	-	-
• Folate	+	-	- *	-
• Vitamin C	+	+	- *	-
• Calcium	+ **	+	-	+
• Iron	+	+	- *	-
• Zinc	+	+	- **	-
CHILD HEALTH				
Improved General Health Ratings	**0.28**	**1.02 ** **	**0.14**	**0.37 ***
Fewer Health-Related Limitations	+	+	-	+
Reduced Asthma	+	-	+	+
Reduced Injuries	+	+	+	+
CHILD HEALTH PROMOTION & PREVENTION OF INJURIES & ILLNESS				
Child Immunized on Time	**0.55 ****	-	**0.06**	+
Improved Parent's Sense of Control over Child's Health	**0.49 ****	- *	**0.48 ****	+ **
Greater Parental Encouragement of Bicycle Helmet Use	**0.24 ****	- *	**0.24 ****	+
Improved Traffic Safety	**0.21**	+	**-0.03**	+
USE OF HEALTH CARE SERVICES FOR CHILDREN				
Increased Doctor Visits	- **	+ **	+	+ **
Increased Dentist Visits	+	+	-	+
Increased Optometrist Visits				na
Decreased Trips to Emergency Room	- **	+	- **	- *
Professional Seen When Desired for Child	-	-	- **	-
Getting as Good Service as Others for Child	+	-	- *	-
PARENT HEALTH				
Improved Self-Rated Health	+	**0.55**	+	+
Decreased Limitations in Daily Activities from:				
• Physical Health Problems				na
• Emotional Problems	+	**0.30**	+ *	-
• Pain	+	**0.05**	-	-

OLDER COHORT SITES (CONTINUED)

Measures	Baseline-Focal Analyses[2]			
	Cornwall	Highfield	Sudbury	All
PARENT HEALTH (Continued)				
Decrease in Interference with Caring for Child because of Health Problems	-	**0.09**	-	-
Reduced Types of Prescriptions Use	-	**-0.16**	+	-
Reduced Amount of Prescription for Pain				na
Reduction in Overweight	+	**-0.05**	+	+
PARENT HEALTH PROMOTION				
Increased Proportion of Pap Smears within Guidelines	+	+	+ *	+ *
More Frequent Breast Self-Exams				na
More Frequent Exercise				na
PARENT HEALTH -RISK BEHAVIOURS				
Reduced Smoking	**0.36 ***	**0.11**	**0.25**	**0.30 ****
Fewer Smokers in the Home	**-0.09**	**0.10**	**0.28 ***	**0.18 ***
Reduced Alcohol Consumption	+	**0.46 ****	+	+ **
Decreased Alcoholism Behaviours				na
PARENTING				
More Consistent Parenting				na
Less Hostile-Ineffective Parenting				na
More Positive Parenting				na
Increased Sense of Parenting Efficacy				na
Increased Sense of Parenting Satisfaction				na
PARENT SOCIAL ACTIVITIES				
Increased Neighbourhood Activities	+	- **	-	-
More Frequent Get-Togethers with Friends	+	+	-	-
More Frequent Get-Togethers with Other Families in the Neighbourhood	+	+	-	-
Increased Participation in Organized Recreation	-	-	-	-
Increased Volunteering in the Community	+	-	+	+
More Frequent Attendance at Meetings of Clubs	+	-	-	-
More Frequent Religious Services Attendance	-	+ **	+	+
PARENT AND FAMILY SOCIAL & EMOTIONAL FUNCTIONING				
Decreased Tension Juggling Child Care with Other Responsibilities:				
• As Rated by Employed Parent	-	**1.09 ****	- *	+
• As Rated by Unemployed Parent	+	**0.70 ***	-	+
Reduced Stressful Life Events	+	**0.48 ****	-	+
Improved Social Support	+	**0.13**	-	+
Reduced Depression	-	**0.12**	-	+
Improved Intimacy with Partner	+	**0.38**	+	+ **
Improved Marital Satisfaction	**0.19**	**0.22**	**0.07**	**0.18**
Improved Family Functioning	-	**0.23**	+	+
Reduced Violence				
• By Respondent to Partner	**-0.02**	**0.17**	**0.00**	**0.18**
• By Partner to Respondent	**0.10**	**0.66 ***	**0.12 ***	**0.44 ****

OLDER COHORT SITES (CONTINUED)

Measures	Longitudinal Analyses[3]			
	Cornwall	Highfield	Sudbury	All
PARENT HEALTH (Continued)				
Decrease in Interference with Caring for Child because of Health Problems				na
Reduced Types of Prescriptions Use	-	**0.48 ****	- **	-
Reduced Amount of Prescription for Pain	+	**0.40 ****	-	+
Reduction in Overweight				na
PARENT HEALTH PROMOTION				
Increased Proportion of Pap Smears within Guidelines	**- ***	**+ ***	**-**	**+**
More Frequent Breast Self-Exams	-	**0.19**	-	-
More Frequent Exercise	-	**0.44 ***	+ *	+ *
PARENT HEALTH -RISK BEHAVIOURS				
Reduced Smoking	**0.50 ****	**-0.05**	**0.15**	**0.19 ***
Fewer Smokers in the Home	**0.86**	**0.71**	**0.29**	**0.57**
Reduced Alcohol Consumption	- *	**0.07**	+	-
Decreased Alcoholism Behaviours				na
PARENTING				
More Consistent Parenting	-	**0.80 ****	+	+
Less Hostile-Ineffective Parenting	-	**1.73 ****	+	+ **
More Positive Parenting	+	**0.30**	+	+
Increased Sense of Parenting Efficacy	+	**0.57**	+	+
Increased Sense of Parenting Satisfaction	-	**0.40 ***	-	+
PARENT SOCIAL ACTIVITIES				
Increased Neighbourhood Activities	-	- *	-	-
More Frequent Get-Togethers with Friends	+	- *	-	-
More Frequent Get-Togethers with Other Families in the Neighbourhood	-	-	-	- *
Increased Participation in Organized Recreation	+	-	+	+
Increased Volunteering in the Community	+	-	+	+
More Frequent Attendance at Meetings of Clubs	-	-	-	-
More Frequent Religious Services Attendance	+	-	-	-
PARENT AND FAMILY SOCIAL & EMOTIONAL FUNCTIONING				
Decreased Tension Juggling Child Care with Other Responsibilities:				
• As Rated by Employed Parent	-	**0.61**	-	+
• As Rated by Unemployed Parent	+	**-0.47**	-	-
Reduced Stressful Life Events	+	**0.59 ****	+	+ *
Improved Social Support	-	**0.61 ***	-	+
Reduced Depression	- *	**0.37**	+	-
Improved Intimacy with Partner	-	**0.36**	- *	-
Improved Marital Satisfaction	**0.44**	**1.60 ****	**0.30**	**0.72 ****
Improved Family Functioning	-	**0.16**	- **	- **
Reduced Violence				
• By Respondent to Partner				na
• By Partner to Respondent				na

OLDER COHORT SITES (CONTINUED)

Measures	Baseline-Focal Analyses[2]			
	Cornwall	Highfield	Sudbury	All
USE OF COMMUNITY RESOURCES				
Increased Use of:				
• Toy-Lending Library	na	+	-	-
• Library	-	- *	-	-
• Playground or Recreation Programs	**0.26**	**0.06**	**0.26**	**0.28 ***
• Sports/Clubs	+	-	- *	-
• Parent/Child Drop-In Centre	+	+ *	+ *	+
• Parent Resource Centre	-	-	-	-
SENSE OF COMMUNITY COHESION				
Increased:				
Sense of Belonging	-	-	+	+
Willingness to Prevent Negative Change	+	-	+	+
Sense of Importance to Neighbourhood	+	+	+	+
Willingness to Improve Things	-	+	-	+
Sense of Similarity to Neighbours	-	+	-	+
Feeling That Different Cultures/Races Are Accepted	+	+	+ *	+ **
Pride in Being a Community Member	+	+	-	+
NEIGHBOURHOOD RATINGS				
Increased Satisfaction with:				
• Condition of Dwelling	**0.25**	**0.48 ***	**-0.01**	**0.25 ***
• General Neighbourhood Satisfaction	**0.16**	**0.14**	**-0.11**	**0.13**
Reduction in Perceived Prevalence of:				
• Alcohol Use in Neighbourhood	-	-	+	+
• Marijuana Use in Neighbourhood	-	-	-	-
• Hard Drug Use in Neighbourhood	-	-	+	-
• Violence in Neighbourhood	-	-	+	+
• Theft in Neighbourhood	+	-	+	+
Reduction in Police Statistics:[8]				
• Breaking and Entering				na
• Vandalism				na
Reduction in Child Welfare Services:				
• Number of Open Child Protection/Family Service Cases				na
• Number of Children-in-Care				na
SCHOOL RATINGS				
Reduced Percentage of Special Education Students[9]				na
Improved Parent Ratings of:				
• Child's School	-	**0.37 ***	+	+
• Relationship with Child's Teacher/Involvement in School	-	**0.56 ****	+	+
Improved Teacher Ratings of School Climate[10]:				
• Children's Social Behaviours	-	-	+	na
• Teaching Climate	-	+	+	na
• Teacher Workload/Parent Support	+	+	-	na
• Parent Involvement	-	0	-	na

OLDER COHORT SITES (CONTINUED)

Measures	Longitudinal Analyses[3]			
	Cornwall	Highfield	Sudbury	All
USE OF COMMUNITY RESOURCES				
Increased Use of:				
• Toy-Lending Library	-	+ **	+	+
• Library	+	+ **	-	+ *
• Playground or Recreation Programs	**-0.13**	**1.55**	**1.81 ***	**1.29 ***
• Sports/Clubs	+ *	+ *	-	+ **
• Parent/Child Drop-In Centre	-	+ **	-	+
• Parent Resource Centre	+	+ **	+	+ **
SENSE OF COMMUNITY COHESION				
Increased:				
Sense of Belonging	+	-	+	+
Willingness to Prevent Negative Change	-	+	-	+
Sense of Importance to Neighbourhood	-	-	-	-
Willingness to Improve Things	-	+	-	-
Sense of Similarity to Neighbours	+	-	+	+
Feeling That Different Cultures/Races Are Accepted	-	+	-	-
Pride in Being a Community Member	-	+	-	-
NEIGHBOURHOOD RATINGS				
Increased Satisfaction with:				
• Condition of Dwelling	**0.39**	**0.63 ***	**0.36**	**0.43 ****
• General Neighbourhood Satisfaction	**0.27**	**0.51**	**0.10**	**0.33 ***
Reduction in Perceived Prevalence of:				
• Alcohol Use in Neighbourhood	-	+	+	+
• Marijuana Use in Neighbourhood	+	+	+	+
• Hard Drug Use in Neighbourhood	+	+	+	+
• Violence in Neighbourhood	-	+	-	+
• Theft in Neighbourhood	-	+	-	+
Reduction in Police Statistics:[8]				
• Breaking and Entering	na	0.02 **	- **	na
• Vandalism	na	0.02 **	+	na
Reduction in Child Welfare Services:				
• Number of Open Child Protection/Family Service Cases	na	0.05 **	na	na
• Number of Children-in-Care	na	0.06 *	na	na
SCHOOL RATINGS				
Reduced Percentage of Special Education Students[9]	**0.35 ****	**0.44 ****	**0.12**	**na**
Improved Parent Ratings of:				
• Child's School	-	**0.22**	-	+
• Relationship with Child's Teacher/Involvement in School	+	**0.47 ***	+	+ *
Improved Teacher Ratings of School Climate[10]:				
• Children's Social Behaviours	-	- **	-	na
• Teaching Climate	+	+	+	na
• Teacher Workload/Parent Support	+	+	+	na
• Parent Involvement	+	+	+	na

OLDER COHORT SITES (CONTINUED)

Explanatory Notes for Appendix 1.2

1. **Older Cohort Sites.** This refers to the three Better Beginnings projects where programs focused on children four to eight years of age, and two comparison sites. Approximately 1000 children and their families participated in the research.

2. **Baseline-Focal Analyses.** Measures from a group of children in Grade 2 and their parents and teachers living in the Better Beginnings communities were collected before the Better Beginnings programs were created in the 1992/3 school year in order to get a "baseline" or "pre-Better Beginnings" snapshot. Then in 1997/8, after programs had been operating in the Better Beginnings sites for four years, measures were collected from another group of children in Grade 2 and their parents and teachers, called the "focal cohort". Analyses examined changes between the baseline and focal cohorts.

3. **Longitudinal Analyses.** Measures from children and their families and teachers living in the Better Beginnings sites were collected repeatedly, beginning in 1993 when children were in Junior Kindergarten to 1997/8 when children were in Grade 3, to see if there were any changes as a result of living in a Better Beginnings neighbourhood. Because some of the changes that occur in the Better Beginnings communities may have resulted from factors other than the Project itself (e.g., major changes in the economy), measures were also collected from children and their parents and teachers living in a *comparison* site over the same period of time. Ottawa Vanier was the comparison site for Cornwall and Sudbury, and Etobicoke was the comparison site for Highfield.

4. **Effect Sizes.** Effect sizes are intended to provide a sense of how impressive a change is by comparing it to the amount of variation found in a variable in the absence of an attempt to change it. They also provide an indication of the impact of programs in a common form for variables which have been measured in different ways. Here, for non-dichotomous variables, under the baseline-focal design, effect sizes are calculated by dividing each measure of change by the standard deviation of the baseline sample. Under the longitudinal design, they are calculated by taking the predicted difference between the first time of measurement and the last, under the model accepted, and dividing by the standard deviation from the first occasion. By convention, an effect of .20 is referred to as small, one of .50 is spoken of as moderate, and one of .80 is treated as large. (Further details on effect sizes are found in Chapter 6.) Variables with a '-' represent an undesirable or non-beneficial effect. Variables without a sign represent a desirable or beneficial effect for Better Beginnings.

5. **Effects.** Each variable in the table is assigned a '+' or '-' symbol to indicate whether the tested difference favoured Better Beginnings or the control group (either baseline or comparison site). All variables were coded so that a '+' represents a desirable or beneficial effect for Better Beginnings and a '-' represents an undesirable or non-beneficial effect. If the result was statistically significant, this was indicated with a '**' if the p value was 0.01 or a '*" if the p value was 0.05. A p value of 0.01 means the result would be expected to occur by chance less than one time in 100; similarly, a p value of 0.05 means the result would be expected to occur by chance less than five times in 100.

OLDER COHORT SITES (CONTINUED)

6. Criteria for Reporting Patterns.

General "Cross Site" Patterns (Horizontal Shading): In a study with two basic designs, sometimes the results will not match. Also, with many dependent variables, sometimes apparently meaningful results will arise by chance, i.e., through random processes. Finally, with programs set up to meet local conditions, results may well differ systematically between sites. To deal with differing results from the two basic designs, with the risk of taking random fluctuations seriously, and with the need to pick up systematic differences among sites, the following criteria were adopted:

(1) If results were available from both designs, statistically significant results from one must be confirmed in direction by the other, or no Better Beginnings effect would be suggested.

(2) If the results for all older or younger cohort sites, taken together, were significant, but if more than one site showed results in the opposite direction, or one site was significant in the opposite direction, no general Better Beginnings effect would be suggested.

(3) A result for a single site, on a single dependent variable, would need to reach a p-value of .01 to be discussed as evidence of a statistically significant effect for that site. Insisting on a p-value of .01, rather than the more usual .05, is a way to deal with the number of tests possible within a cohort. At the 4-to-8-year-old level, there are three sites, so that to require .01 sets the overall p-value to .03.

Site-Specific Patterns (Vertical Shading): Often variables within a content area yielded consistent results for a site. Such patterns are mentioned frequently in the report. Some of the patterns mentioned include variables which are all individually significant. In other instances, where results are favourable (or unfavourable) for several variables, but not all are individually significant, we have taken a nonparametric approach. At minimum, a sign test must reach .05, and some individual variables must do so as well.

7. NA. This stands for Not Applicable. It means that the measure was not collected or that the response rate was very low and therefore the analyses could not be done, or that there was too little variability in responses to analyze.

8. Effect sizes for police and CAS data are based on the proportion of cases from the jurisdiction found in the Better Beginnings neighbourhood at the beginning and the end of the period for which data are available, under a logistic regression model predicting location of cases.

9. Effect sizes for percentages of exceptional students are based on the percentage predicted for a demonstration site and its comparison site in 1997, under a logistic regression model testing for differences in trend.

10. School Climate. The first data collection point for teachers' perceptions of school climate was in 1994/5, which is approximately 1½ years after Better Beginnings programs had been implemented in the sites. So the baseline-focal comparison refers to a comparison of teachers' ratings in 1994/5 and three years later in 1997/8.

Chapter 2

WHAT WE KNOW AND DON T KNOW ABOUT PREVENTION/EARLY INTERVENTION PROGRAMS FOR YOUNG CHILDREN

Within the last 15 years, there has been increased interest in the influence of the early years of life on children's subsequent health and development, readiness to learn, and social-emotional well-being. This interest in the importance of early child development appears to have been spurred by several factors. One is a growing public awareness of the importance of early experience on brain development and the potential long-term value to children and society of promoting healthy development during the period from birth to six years, especially among the most vulnerable children living in impoverished and dysfunctional families and communities (Cowan, 1979; Cynader, 1994; Kolb, 1989; Keating & Mustard, 1996; Purves, 1994; Shore, 1997).

Interest has also derived from longitudinal and epidemiological studies of children's social, emotional and behavioural disorders, which have demonstrated that: a) 15 to 20% of children between the ages of 4 and 16 suffer from one or more serious adjustment difficulties (Bradenberg, Friedman, & Silver, 1990; Costello, 1989; Offord *et al.*, 1987); b) few of these children receive social and mental health services (Offord *et al.*, 1987; Tuma, 1989); and c) children with early social and emotional problems, particularly those in low socio-economic families, are at increased risk for displaying a wide range of adolescent and adult dysfunctions, including school failure/dropout, unemployment, social welfare dependence, and criminal behaviour (Coie, 1996; Campbell, 1995; Lynam, 1996; Loeber & Dishion, 1983; Moffitt *et al.*, 1996; Reid, 1993; Tremblay *et al.*, 1992; Yoshikawa, 1994). A recent review of the literature (Hertzman, 1998) also indicates the strong determining influence of early child development on adult health and disease.

A third influence has been concern over high and increasing rates of child and family poverty in Canada and the U.S. and the long-term effects of low socio-economic status on child development through adolescence into adulthood, with subsequent effects on socialization of the next generation (Duncan & Brooks-Gunn, 1997; Keating & Mustard, 1993; Willms, in press).

This interest in early development has prompted renewed attention to the effects of prevention and early-intervention programs designed to facilitate the healthy development of children and their families, particularly those living in high-risk, socio-economically disadvantaged neighbourhoods.

Questions concerning the long-term effects of these programs are of particular interest to governments, specifically the degree to which investments in prevention and early-intervention programs have later effects on academic, health and social functioning in children and their families, resulting in decreased rates of unemployment, delinquency, welfare participation, and use of health services.

An indication of the importance of these questions is the large number of reviews of prevention and early-intervention programs that have been carried out recently, focusing on the state of knowledge concerning long-term effects on young children at high risk and their families (Barnett, 1995; Benasich, Brooks-Gunn, & Chu Clewell, 1992; Bryant & Maxwell 1997; Durlak & Wells, 1997; Hertzman & Wiens, 1996; Institute for Research on Poverty, 1997a, 1997b; Karoly *et al.*, 1998; Lazar & Darlington, 1982; Mrazek & Brown, 1999; Olds & Kitzman, 1993; Ramey & Ramey, 1998; St. Pierre, Layzer, & Barnes, 1995; Yoshikawa, 1994).

A large number of such programs have been implemented in the U.S. and Canada over the past 30 years, many of which were carried out during the 1960s and 1970s as a consequence of the U.S. government's War on Poverty.

However, as is consistently pointed out in the recent reviews:

- very few studies of the long-term effects of these programs have been adequately designed, implemented and evaluated, particularly for children younger than seven or eight years of age
- most of the programs either have not been evaluated at all, or the evaluations have such serious flaws (e.g., no comparison groups, no follow-up after program completion, very small sample sizes) that no meaningful conclusions can be drawn from them
- few of the well-designed studies have been carried out in Canada (Mrazek & Brown, 1999).

Successful Programs

There are, however, a small number of studies identified in these reviews that incorporated adequate research designs and long-term follow-up. It is the results of these studies that form the current state of knowledge concerning the long-term effects of early-intervention and prevention programs with high-risk young children and their families. The following is a brief description of these successful programs and their findings.

Home visiting starting before or at birth and continuing for two to five years after birth. The best researched home-visiting program is the Elmira (NY) Nurse Home Visitation Program, operated by Olds and colleagues from 1978 to 1982 (Olds, 1997). A total of 116 first-time mothers received an average of nine prenatal home visits and 23 visits for the first two years of their child's life. Home visits were carried out by well-trained public health nurses, and each visit lasted approximately 90 minutes. Thus total home visits averaged approximately 48 hours over the 2-plus years.

The children and mothers have been followed up for 15 years. Nurse home visited mothers have shown lower rates of child abuse than a control group of mothers, over the follow-up period. All other outcome effects have been restricted to a group of 38 single, low socio-economic status (SES) mothers. No consistent effects on the children's cognitive, health and social-emotional behaviour were found until the children were 15 years of age. At that point, arrests, convictions, cigarette smoking, alcohol consumption and behavioural problems related to use of drugs were reduced for the children of the 38 single, low-SES mothers.

Comprehensive centre-based educational daycare programs. The most effective model program of this type is the Carolina Abecedarian Project which was carried out at the University of North Carolina Child Development Center from 1972 to 1977 (Ramey & Campbell, 1984).

A group of 57 very high-risk, African-American newborns were enrolled in a full-day, full-year centre-based day care program by three months of age. The program ran for five years, until the children entered public school. Full-day programs were provided by well-trained early childhood educators on a ratio of three children to one teacher for the first three years and then on a ratio of 6 children to one teacher for years four and five. A home-school resource teacher visited the mothers every two weeks over the five-year period, and the children received medical services at the day care centre. This resulted in nearly 7,000 hours of centre-based day care for the children and 135 hours of home visitation for the mothers over the five-year program. Children in the program showed substantial improvement in standardized IQ test performance until age 12 and improvements in school achievement through age 15, the last period for which data have been reported. There was no effect on a measure of home environment quality, but mothers showed small increases in years of education and employment status over the five years the

children spent in the full-day program. No other effects on children or parents were reported for this extremely intensive, and likely very expensive, intervention.

High-quality, comprehensive educational preschool programs. The High/Scope Perry Preschool Program offered two years of half-day preschool to 58 poor, high-risk African-American three- and four-year-old children in Ypsilanti, Michigan, between1962 and 1967 (Schweinhart *et al.*, 1993). Classes ran from October to May, five half-days per week. Teachers were certified public school teachers who received extensive training and supervision. The teacher-student ratio was 1 to 6, and teachers also visited each child's mother at home for 1 ½ hours each week during the school year. This resulted in over 700 hours of highly enriched preschool for the children and 90 hours of home visiting for their mothers over the two years. Compared with a control group of 65 children, the 58 Perry preschool children showed higher IQ scores at 4, 5, 6 and 7 year of age but no differences at age 8 or later. There were no differences between the groups in children's social or emotional behaviour, or on any measures of parents behaviour. One of the most interesting aspects of this study is that the children have been followed to age 27, i.e., 23 years after completing the Perry Preschool Program, and continue to show superior performance relative to control group children on measures of educational achievement, employment, public assistance, income, and criminal arrests. Calculations of costs saved by these outcomes have indicated a return on the initial program investment of nearly $7 to $1 invested, although most of these savings occurred as program participants became adults. These long-term cost-saving outcomes have made the Perry Preschool Study the single most influential early intervention program to date in terms of public and social policy.

School-based training in social skills and problem-solving. The Montreal Prevention Experiment provided school-based training in social skills and problem-solving to 43 highly disruptive boys for two years (Grades 2 and 3) (Tremblay *et al.*, 1996). The boys attended 19 small group sessions and their parents received an average of 17 in-home training sessions over the two school years. At the end of the two-year program, the boys in the program group showed no beneficial effects on any behavioural outcome measures compared to a control group. No measures were collected from parents. However, the boys were followed into adolescence, and at ages 12 to 14, the boys who had been in the program began to show significant improvements in school achievement and fewer delinquent activities than the control group. These differences have been maintained through 17 years of age.

Parent training, education, and support programs. All four of the above programs included parent education and support. It is not clear how effective parent-only programs are on influencing children's outcomes. For example, the Elmira Nurse Home Visiting program had lasting effects on a small group of the highest-risk mothers, but no demonstrable effects on their children until they were 15 years of age. St. Pierre and Layzer (1998) recently reviewed the available evidence for the assumption that "The best way to improve child outcomes is to focus on improving parents' ability to parent their children rather than providing an educational intervention directed at the child". They concluded that this assumption is not supported by the available research literature, and that there is "extensive research that posits effects on children are best achieved by focusing on children rather than through parenting education" (p.13). Similar conclusions were drawn in a recent review of home-visiting programs. "Several home visiting models produced some benefits in parenting or in the prevention of child abuse and neglect on at least some measures. No model produced large or consistent benefits in child development or in the rates of health-related behaviours such as acquiring immunizations or well-baby check-ups" (Gomby, Culross & Behrman, 1999; Executive Summary, p. 3).

WHAT DO WE KNOW?

Most studies have examined effects on high-risk children *or* on high-risk mothers; few report outcomes on both. This is true despite the fact that many of the programs included components for both children and their parents (typically mothers). Consequently, outcome effects are summarized separately for children and mothers.

Outcomes for High-Risk Children

There is compelling evidence from several studies that early-intervention programs can improve intellectual and cognitive functioning in the short term (at the end of program participation). Although these effects on intelligence typically disappear after several years of primary school, other improvements in educational outcomes are demonstrated, particularly in academic achievement and, in fewer studies, in decreased rates of special education placement, grade retention, and high school dropout.

Evidence for positive long-term outcomes in other child domains is weaker. Although a few studies have demonstrated short-term but inconsistent results on behavioural and emotional problems, few long-term effects have been reported. For example, the Elmira Prenatal/Early Infancy Project (PEIP; Olds *et al.*, 1997) did not find any effects on children until they were 15 years old, and the and the High/Scope Perry Preschool Project (H/S PPP; Schweinhart, Barnes, Weikart, Barnett, & Epstein, 1993) found no short- or long-term outcomes on children s emotional or behaviour problems. However, the High/Scope Preschool Curriculum Study (Schweinhart & Weikert, 1997) found that 47% of children who attended a direct instruction preschool program were later treated for emotional impairment or disturbance, while this was only the case for 6% of children who attended either a High/Scope program or a traditional nursery school program that emphasized child-initiated learning activities.

Reduced rates of crime and delinquency in adolescence (15 years of age) were reported in several studies, while the H/S PPP demonstrated a similar effect at age 27. This latter study is the only one that has reported outcomes for program participants as old as 27 years, and in addition to decreases in criminal outcomes, also reported decreases in welfare participation and higher earnings. No other study reviewed has reported long-term outcome measures on welfare, employment or earnings when the program children became adults.

Physical health outcomes for children were virtually ignored in these studies. The Elmira PEIP reported decreased rates of emergency room visits at four years of age by children who received home visits from nurses, but no other positive child health outcomes were reported. Several studies have examined teen pregnancy rates at 19 years of age, but only the H/S PPP found any positive program effects on this measure (Schweinhart *et al.*, 1993). In their review of the home-visiting literature, Olds and Kitzman (1993) concluded, "Evidence of program effects on child health and behaviour are extremely limited" (p. 88).

Delayed or "sleeper" effects have been reported in several studies. In the Montreal Longitudinal Project (Tremblay *et al.*, 1992), seven year old children at risk received social skills intervention and their parents received parent training over a two-year span. No treatment effects were observed during the first two years following the intervention. However, during the third follow-up year, gains were obtained for children receiving the treatment in contrast with children randomly assigned to receive no treatment. A similar pattern of results was reported by Kellam, Rebok, Ialongo, and Mayer (1994) in a study examining the effectiveness of the "Good Behaviour Game" introduced over a two-year period and followed from Grade 1 to Grade 6. Teacher ratings of aggression were lower for children receiving intervention in the first and sixth grades, but not during the grades in between.

Hertzman (1998) has characterized these effects as consistent with a "latency model" of child

development in which critical experiences early in life, positive and negative, can affect behaviour and physical functioning later in life, especially in later adolescence and early adulthood, without any change being detected earlier. The possibility of such latency effects constitutes a major reason for planning and carrying out long-term outcome research on early-intervention and prevention programs.

Outcomes for High-Risk Mothers

Despite the focus of many intervention studies on improving the life quality of high-risk mothers, very few have actually measured maternal outcomes.[1] The H/S PPP, for example, reported limited information on participating mothers. By far the most frequently collected measures involve the nature and quality of parenting behaviours. Positive outcomes, however, have been found in only about 50% of the studies in which parenting behaviours were reported. The next most frequently reported measure is mother's educational attainment, typically assessed when the program child is entering school. Here again, approximately 50% of studies reporting the outcome measure found positive program effects.

Only one study of long-term follow-up effects on high-risk mothers was identified by Karoly *et al.* (1998), a recent study reporting results from the Elmira PEIP when the children were 15 years of age, i.e., 13 years after exiting the program (Olds *et al.*, 1997). Results were reported separately for the full sample of first-time mothers (N=116 nurse-visited mothers) and for a "higher risk" group of single and poor mothers (N=38 nurse-visited mothers). Official reports of child abuse perpetrated by the mothers showed significantly positive program effects for the full sample and for the higher-risk sample.

None of the other maternal outcome measures showed positive program effects for the full sample of at-risk mothers, including criminal activity, employment, welfare participation, fertility rates, or substance abuse. Thus, for the full sample, the only positive outcome was on child abuse reports, with 29% of the program mothers versus 54% of the control group mothers identified as perpetrators in verified state records (Olds *et al.*, 1997).

For the "highest-risk" subgroup of 38 program mothers, however, there were also significantly positive outcomes on criminal activity (fewer arrests, convictions, and days in jail), welfare participation, fertility (fewer subsequent pregnancies and births than control group mothers and greater spacing between first and second births), and fewer substance use impairments. There were no differences in employment.

Thus, the Elmira PEIP provides the strongest support to date for long-term positive outcomes for high-risk mothers who participated in an early home-visiting intervention, but the effects were found predominantly for single poor mothers. It is possible, of course, that other studies might have shown positive effects, but follow-up measures on mothers are seldom reported.

WHAT DO WE NOT KNOW?

Despite the promising results from a few well-designed studies, Karoly *et al.* (1998) conclude that there is more we do not know about prevention/early-intervention programs than what we do know. The following is a description of the limitations to current knowledge regarding effective intervention programs.

[1] Virtually no data are available on fathers, so we concentrate here on the limited evidence available for mothers.

Narrow Program Focus

There is much rhetoric about the importance of programs being comprehensive and holistic, ecological, community-based, and integrated. However, virtually no well-researched programs for young children have successfully incorporated these characteristics into the program model.

In the U.S. studies, the focus has been on predominantly African-American children's intelligence and cognitive functioning, not on emotional and behavioural problems, social competence, or physical health. So the focus tends *not* to be comprehensive or holistic.

Ecological models of human development emphasize the importance of incorporating a) child, b) parent/family, and c) neighbourhood measures and interventions. Most programs have focused their interventions mainly on children and parents (e.g., the Perry Preschool, the Elmira Home Visiting, and the Abecedarian projects). None of the well-researched demonstration projects for young children has included activities designed to improve the quality of the local neighbourhood for young children and their parents, and outcome measures are restricted to children and mothers.

Local community members have had little or no involvement in the development and implementation of the demonstration programs described above. University-based researchers designed, implemented, and evaluated the demonstration projects, and when their involvement ceased, typically after 2-5 years, the programs ceased to function. There was little sustainability to the projects; they were truly demonstrations, although children and sometimes mothers were followed longitudinally after the project ended.

There has been little attempt to weave the demonstration projects into the local fabric of service providing organizations, either formally or informally. Home visitors and case managers often attempt to refer and connect clients to existing services, but coordination at the agency level has not been a key goal of the projects. St. Pierre and Layzer (1998) reviewed the available evidence for the assumption that "To be effective for low-income families, existing services need to be coordinated". They concluded that there is little evidence to back up this assumption because there has been so little research on the question.

High-Risk versus Universal Programs

Another factor that has varied from project to project is the profile of program participants. Most of the early-intervention projects are focused on "high-risk" children or families, but risk definitions differ substantially among the projects. For example, the Elmira PEIP selected only first-time mothers who were either young (<19 years of age; 48% of the sample) or unmarried (62%) or low-SES (59%). "Highest-risk", low-SES single mothers accounted for approximately 40% of the entire study sample. The Infant Health and Development Project (IHDP, 1990), on the other hand, defined risk on the basis of prematurity and low birth weight, with higher risk being <2000 grams at birth and "lower" risk being between 2,000 and 2,500 grams. Thus, risk was determined on the basis of biological rather than socio-economic factors. The Montreal Prevention Experiment concentrated their programs on highly disruptive and aggressive seven- and eight-year-old-boys.

There is a growing realization, however, that high-risk children and families typically constitute a small overall percentage of those showing emotional, behavioural and academic problems (Lipman, Offord, & Boyle, 1995; McCain & Mustard, 1999; Peters, 1998; Willms, in press).

Although the rates of academic, mental, and physical health problems are often higher for high-risk samples, such as low-SES and low-birth-weight children, the overall low percentage of these children and

families in the general population means that the greatest number of children manifesting such problems are not included in most definitions of high risk. These findings have led to an increased interest in universal programs for young children and their families (McCain & Mustard, 1999; Peters, 1998).

The Better Beginnings, Better Futures strategy is unique in that it defined "high risk" by the characteristics of neighbourhoods: i.e., the neighbourhoods selected for project implementation were characterized by socio-economic disadvantage, but all children in the designated age range living in the neighbourhood, and their families, were "within scope"; that is, were candidates for program involvement. Consequently, the program is seen as a universal intervention in a high-risk environment (see Offord, 1996 and Offord *et al.*, 1998 for discussions of targeted versus universal intervention approaches).

Small- versus Large-Scale Projects

Most of the studies have been carried out on a relatively small scale, with between 15 and 100 program participants. A major issue in the prevention/early-intervention literature is whether small-scale model programs can be "scaled up" for successful implementation with larger numbers of children and families (Gomby, Larner, Stevenson, *et al.*, 1995; Olds, 1997).

One such example is the Comprehensive Child Development Project (CCDP) which evaluated the effectiveness of providing lower-SES parents with a home visitor/case manager for five years, from the birth of a child until he/she entered kindergarten. CCDP was implemented in 24 sites across the U.S., each having approximately 100 program and 100 control families. After five years of program intervention, there were no significant child or parent/family program outcomes on over 100 measures analyzed. This highlights the challenge of taking small demonstration projects such as the Elmira Home Visiting Program and applying them to large numbers and at numerous sites.

Outcome Measures and Generalization of Program Effects

Another question concerns the extent to which program effects can be generalized across nontargeted outcome domains. One of the most compelling findings from several of the early-intervention projects, which followed participants for several years after the program was terminated, is the positive effects on outcomes that were nonspecific to focal program interventions. Thus, the H/S PPP found long-term effects on crime and welfare participation rates, as well as an increase in early adulthood income resulting from a one- or two-year preschool intervention focusing on pre-academic and cognitive skills. The Montreal Prevention Experiment found that a program that emphasized social skills training for children from age seven to nine and included parent training showed beneficial effects on delinquency and educational achievement in middle adolescence. These and other studies suggest that early-intervention programs may have positive long-term outcomes in a variety of developmental domains that were not directly targeted in the program intervention. One of the major limitations of many of these studies, however, is that so few outcome domains were in fact measured. A particular shortcoming, as mentioned above, is in the health domain where measures of child and matemal health during the project, at project exit, and at follow-up, were seldom collected. A major question to be addressed in the proposed follow-up for the Better Beginnings project is the degree to which program involvement affects long-term outcomes on a broad array of child, family, and community measures, a question that reflects the uniquely ecological nature of the Better Beginnings project.

Is Intervention More Effective Early than Later?

Little research has examined whether programs that begin very early in the child's development (e.g., prenatal, at birth, or during infancy) have greater long-term impacts than those starting at late preschool or

school entry (i.e., at three or four years of age). Most programs with adequate designs and follow-up measures have been implemented for one to three years either early in the child's life (e.g., Elmira PEIP: prenatal to two years of age; IHDP: birth to age three); or later at preschool or primary school (e.g., H/S PPP: ages three or four to age five; Montreal Prevention Experiment: ages seven to nine).

Very few studies have directly compared the same developmental outcomes for children who had been involved in a program started at or near birth with children who had been involved in a program starting at preschool or later. One exception is the Carolina Abecedarian Project (Campbell & Ramey, 1994, 1995), which provided five years of full-day, year-round daycare starting within three months of birth for a group of 57 very high-risk children. At school entry, the mothers of half of the program children and the mothers of half of the control-group children were assigned to a three-year parenting program. Outcome results indicated positive long-term effects on intellectual and academic functioning only in the children who had participated in the five years of full-time preschool childcare, and there were no positive effects from the programs which were implemented past the child's age of five.

The overall project design of the Better Beginnings Project provides an excellent opportunity to compare the long-term outcomes of programs focusing on children from birth to age 4 with those focusing on 4 to 8 year olds. By collecting the same follow-up outcome measurements on these children when they are the same age, the relative impact of programs focusing on early versus later development can be examined on a broad array of child, family, and community outcomes.

Cost Savings

Information on long-term cost savings in the reviewed studies is scant. Few studies have collected data adequate to allow for the calculation of potential cost savings. Although there are many challenges to carrying out plausible analyses of cost savings (Barnett, 1993), the Rand Corporation report (Karoly *et al.*, 1998) describes extensive economic analyses that have been carried out by the Elmira PEIP when the children were 15 and the H/S PPP when the children were 27 (Barnett, 1996). These analyses make for very interesting reading for those unfamiliar with cost-savings calculations. Essentially, the analysis consisted of calculating the known costs of implementing a program (information that is not available for many programs), and then calculating long-term cost savings, actual and projected, resulting from (1) increased tax revenue from higher employment rates, (2) decreased criminal activity, and (3) decreased use of welfare and health services. Note that long-term cost savings or recoveries were calculated with regard to government expenditures.

It is also important to note that program costs accrue immediately when programs are being implemented, while benefits accrue only as the years pass and children mature through adolescence to adulthood. However, programs that include outcome measures for parents (and, as in the case of the Better Beginnings Project, outcome measures for communities) may generate cost savings to governments that are as large or larger than savings resulting from improvements in children's outcomes. This point was highlighted in the Elmira PEIP where the cost savings at the latest follow-up, when children were 15 years of age, accrued predominantly from program effects on the highest-risk mothers rather than their children. (There were no cost savings associated with the lower-risk mothers.) Of course, larger effects for children on such outcomes as welfare dependency and employment await a further 10 years of follow-up in that study. Of the cost savings for the higher-risk mothers, 57% resulted from reduced welfare costs, 20% from reduced criminal justice costs, and 23% from taxes on increased income. Cumulative savings exceeded program costs after only three years, due to early changes in the behaviour of the mothers.

The ratio of cost savings to program cost for the H/S PPP was calculated as better than two to one (Karoly *et al.*, 1998) , based on a total program cost of $17,200 (i.e., $8,600/year for 2 years) per child and cost savings by age 27 of $35,000 per child (both figures in 1997 Canadian dollars). As discussed by Karoly *et al.* (1998), Barnett (1996) had previously calculated higher savings. Since this study did not report any outcome information on parents, it is impossible to calculate any cost savings deriving from improved parental well-being. Of the cost savings, 40% resulted from reductions in criminal justice costs, 25% from reductions in education costs, 9% from reduced welfare costs, and 26% from taxes on increased income. Since no measures of mothers' outcomes were included, all of the cost savings accrued to children's outcomes, and it was estimated that the cumulative savings exceeded program costs only after 21 years.

Finally, it is instructive to notice the costs per family of the two programs, both of which lasted approximately two years: $4,300 per year for PEIP and $8,600 per year for the H/S PPP Project (1997 Canadian dollars). Although often not calculated or reported, accurate costs of implementing prevention and early-intervention programs are of interest to government funders and are essential for calculating long-term cost savings.

Current Social Policy Context

The model programs for which adequate follow-up data are available were begun before 1990, many in the 1960s and 1970s. It is unclear how changing social conditions, particularly changes to the social safety net in the U.S. and Canada, have affected prevention programs initiated in the 1990s.

There have been few well-researched early intervention/prevention programs for young children in Canada. Mrazek and Brown (1999) identified 32 well-designed and evaluated studies in this area. Only two were Canadian and both dealt with children at seven or eight years of age.

CONCLUSIONS

Most of the current knowledge about the long-term effects of prevention programs for young children rests on small-scale U.S. demonstration programs carried out 20-30 years ago on extremely disadvantaged, high-risk children or their mothers. These demonstration programs focused primarily on the intellectual and cognitive development of young children or on improving the quality of life for their mothers.

In 1989, a program and literature review carried out in conjunction with planning the Better Beginnings, Better Futures program model (Ontario Ministry of Community and Social Services, 1989), concluded that no adequately evaluated prevention program for young children incorporated a truly ecological model of child development (Bronfenbrenner, 1979): i.e., a program focusing on the child *and* his or her family *and* the neighbourhood. After nearly ten years, this situation has not changed. Not one study in the series of recent reviews cited earlier incorporated all three ecological levels in its program model. Many "two-generation" programs that are focused on the development of children and their mothers have recently appeared (St. Pierre *et al.*, 1995), but none has included community interventions. This is, of course, exactly what characterizes the Better Beginnings model: i.e., fostering child, parent/family, and community development.

Since the initiation of the Better Beginnings program, several other Canadian initiatives have incorporated this ecological perspective in their program design: Growing Together (1996) in Toronto and Halifax, 1,2,3 GO in Montreal (Bouchard, 1997), and the National Community Action Programs for Children

(CAPC). Outcome results from these programs are not yet available. This report describes the development, implementation, and short-term findings from the Better Beginnings, Better Futures Project.

Chapter 3

THE BETTER BEGINNINGS, BETTER FUTURES INITIATIVE

THE ORIGINS OF BETTER BEGINNINGS, BETTER FUTURES

The Better Beginnings, Better Futures Project had its origin in the Ontario Ministry of Community and Social Services (OMCSS). The *1983 Ontario Child Health Study* (Offord *et al.*, 1987) revealed that one in six children has an identifiable emotional or behavioural disorder, and also determined that children living in families who received social assistance or lived in subsidized housing were at much greater risk for these problems. This is not an unusually high percentage of children with emotional and behavioural disorders, and the risk factors are common to other childhood problems such as child welfare and the experiences of young offenders. Other surveys of Western countries (e.g., Costello, 1989) show similar rates of psychiatric problems and similar risk factors. Nonetheless, given the drain on families and public funds caused by attempts to address significant problems after they are fully developed, the Ministry became more committed than ever to prevention.

In 1988 the Ministry released its consultation paper, *Investing in Children: New Directions in Child Treatment and Child and Family Intervention*, which documented the importance of prevention in high-risk populations.

Technical Advisory Group

In the spring of 1988, the Ministry convened a 25-member interdisciplinary Technical Advisory Group to recommend a prevention model with the greatest potential to prevent problems in child development for children living in economically disadvantaged communities or neighbourhoods. The group consisted of program directors and researchers from across the province, well-respected in their area of expertise. They were drawn from fields that included education, public health, social work, psychology, psychiatry, epidemiology, community development, infant development, and childcare. Thus, the Technical Advisory Group brought varied disciplines and perspectives to their task of developing a prevention model. The Group examined the literature and unpublished prevention program reports in three areas: a) perinatal prevention programs such as maternal and infant nutrition supplements and holistic home-visiting, b) preschool/childcare prevention programs such as Head Start and family resource centres, and c) school-based prevention programs such as social skills training and ecological school models.

The Technical Advisory Group examined the literature and unpublished reports on two additional topics: community involvement, including community empowerment and community development, and research, emphasizing the implementation of high-quality, multi-site, longitudinal research and evaluation procedures with prevention programs.

The findings from this review, and the description of the recommended program model, were published in the book *Better Beginnings, Better Futures: Primary Prevention of Emotional and Behavioural Problems in Children* (OMCSS, 1989). In addition to providing a bibliography, the report summarized the literature and outlined the Better Beginnings prevention model.

The model that the Technical Advisory Group recommended as having the greatest promise of preventing problems in child development has seven characteristics:

The model must be based on known effective prevention programs. Infant home-visiting programs, such as the Elmira PEIP (Olds *et al.*, 1997), were identified as being particularly successful in preventing child abuse and also in reducing subsequent unplanned pregnancies and in increasing the self-esteem and employment rate of mothers. The reviewers examined the evidence for the use of both nurse home-visitors and trained lay home-visitors, and found reason to support both approaches.

The reviewers also examined high-quality childcare programs. While the Head Start program and the well-documented H/S PPP model (Schweinhart *et al.*, 1993) were examples of group-based preschool programs that increased cognitive development and physical health, the reviewers also acknowledged that not all families want this type of childcare, or are able to obtain it. Additionally, only 15% of children are in licensed childcare. Thus, to promote prevention at the local level, it was important to support high-quality childcare of various types. The funding for Better Beginnings was not sufficient to support the start-up of additional preschool programs, but was adequate to help existing group-based care to develop to a high-quality level. The funding was also able to support additional high-quality childcare such as drop-in centres, moms and tots groups, toy-lending libraries, increased training and other informal supports, and improved physical facilities and materials for mothers and other home-care providers.

Finally, the reviewers examined the ecological school model, such as that demonstrated by Comer (1985) in low-income urban primary schools, and felt that the key elements of the model would also be successful in Ontario primary schools.

The model must be ecological. Successful prevention programs understand that the child lives in the family and the family in the community, so components of successful programs address the wholeness of the child and environment. Therefore, strategies that focus on individual children must be integrated with strategies that improve each part of the environment within which the children spend their time homes, childcare, neighbourhoods, and schools.

The model must be tailored to meet local needs and desires. Risk factors and protective factors vary from community to community; for example, some communities have high rates of teen pregnancy; some are bedroom communities where parents are employed out of the community from dawn to dusk, thus requiring before-and-after-school programs; in some communities, mothers are isolated and in need of support. Therefore, successful models vary from community to community, depending on local circumstances.

The model must be comprehensive. Most economically disadvantaged communities need a variety of prevention programs to address the needs and strengths of the neighbourhood. Single-focus programs in a multi-risk community cannot prevent poor child development.

The model must be of high quality. Successful programs use high-quality management and administrative techniques. The staff have enough time set aside for planning and preparation, supervision is done effectively, staff are well-trained, people are paid well for the work they do, and there are funds for needed supplies and equipment.

The model must be integrated. Successful prevention programs link with other programs, schools, and community activities. This requires the development of common goals, objectives, and collaborative plans for the sharing of human, financial and material resources.

The model must have meaningful, significant involvement by parents and community residents. This was one of the areas of research most neglected in the study of successful prevention programs. Nonetheless, the concept of empowering the community, family, and parents was strong, and the ecological model of healthy child development certainly supports involvement of parents and community residents. Therefore, the Technical Advisory Group recommended that this become an important part of the Better Beginnings model. They recommended that this involvement be meaningful and significant rather than token, and that it happen during program planning as well as implementation.

It is interesting to note the similarity between these characteristics of successful programs as identified by the Technical Advisory Group and other more recent attempts to summarize major findings in this area (e.g., Durlak & Wells, 1997; Nelson, Laurendeau, Chamberland, & Peirson, 1999; Ounce of Prevention Fund, 1994; Pancer & Nelson, 1990; Schorr, 1988, 1997). It appears that a consensus is emerging on the characteristics of successful prevention and promotion programs for disadvantaged youth and families. The Better Beginnings Project Program Model was designed to incorporate and evaluate many of these characteristics.

THE BETTER BEGINNINGS, BETTER FUTURES MODEL

Two variations of the Better Beginnings model are being implemented and evaluated, depending on the age of children involved. In the first, prenatal/infant development programs integrate with preschool programs for children from conception to age four. In the second variation of the Better Beginnings model, preschool programs integrate with primary school programs for children between the ages of four and eight. In addition, families and community residents have identified other program components thought to be important for healthy child development in their neighbourhoods. Such components include support groups, family planning, child development education, drop-in centres and recreation programs.

A Community-Wide, Ecological Model

In many ways, the Better Beginnings program model is unique because it focuses on child, family, and community factors. No other prevention or early-intervention model is population-wide or community-wide within a geographic area. In the Better Beginnings, Better Futures Project, the neighbourhood or community is considered to be high-risk. All children and families living within a designated neighbourhood or a community are eligible to take part in any of the programs. The purpose of the project is to strengthen children and their families, as well as the local community itself. In this sense, the Project is designed to foster three aspects of human development: child development, family development, and community development. (See Peters & Russell, 1996, for more details.)

Local Responsibility

Another difference between the Better Beginnings Project and other early intervention projects is the degree of shared responsibility for implementing and measuring the effect of the model. The model is decentralized to seven urban neighbourhoods and one First Nation, scattered throughout Ontario.

The government provided a Project Design Coordinator with responsibilities for the overall design and implementation of the programs and research, a Site Supervisor Coordinator responsible for the financial and administrative coordination and implementation of the program model in the eight communities, and an Inter-ministerial Government Committee which reviews the projects regularly. This gave the Government hands-on experience in implementing the model, which could assist in translating the model into policy, if the model proved successful. Additionally, a Research Coordination Unit (described

below) has worked with each community to develop appropriate research methods and tools.

But it is the local Steering Committees and subcommittees that tailor the model to meet local needs and desires. The local Committees worked with local resources to determine what needed to be enhanced, what needed to be added, where duplication could be eliminated, and how services and community members could work more closely together to promote positive development, prevent poor outcomes, and enhance the abilities of the neighbourhoods to provide for their own residents.

Significant Parent/Community Involvement

One of the most salient differences between the Better Beginnings Project and the other models reviewed in Chapter 2 is the requirement for meaningful, significant involvement of parents and community leaders in decision making. During the first year of local development, this characteristic of the model came to mean that the Steering Committee and each major subcommittee of the local project needed to have a membership consisting *at least 50%* of parents or other community residents. It became equally clear that while the requirement for 50% local resident representation was important, what really made this level of participation possible was the transfer of real decision-making power to these committees. The participants on these committees wrote the job descriptions, delegated the hiring committees, decided salary levels, and decided the amount of funding to go to each component of the model (e.g., childcare, home-visiting, or community safety). The transfer of this level of control and responsibility to parents and other community members has the potential of empowering community residents who may individually and collectively have felt little control over their lives and the lives of their children.

In summary, in comparison with other prevention and early-intervention models currently reported in the literature, which often address one or two risk factors intensely, the Better Beginnings Project addresses multiple factors less vigorously. The assumption on which the Better Beginnings model rests is that there are many pathways to health or illness, and people experience the pathways at various intensities and at different times in their lives. The Better Beginnings model assumes that, in addition to the prevention programs that have been shown to be successful in preventing poor outcomes, there are local risk and protective factors that can be addressed to promote healthier children. The programs and approaches developed to address these local factors are equal in importance to the programs that have already demonstrated effectiveness in prevention (e.g., infant home-visiting, high-quality childcare, and ecological school programs).

It is equally clear that existing, effective prevention programs can be brought into harmony with one another and with local needs and desires. This has the advantage of addressing multiple risk factors. At the time of the review of prevention models for Better Beginnings, most early-childhood models lasted only two years at most. By combining the infant home-visiting with the high-quality childcare and the ecological early elementary school model, an overall prevention approach was developed for children from conception through at least early primary school.

By expanding the fundamental tenets of the early successful prevention models to include: a) integration of services; b) high-quality, meaningful significant involvement of parents and community leaders; and c) tailoring of the programs and additional services to meet the needs and desires of the community, the Better Beginnings model has the potential advantage of addressing multiple factors, rather than one or two factors (albeit intensely). In the high-risk neighbourhoods where the Better Beginnings model has been implemented, this may be particularly important. It is clear that forces such as neighbourhood violence, collective demoralization, and welfare dependency can undermine the best programs focusing solely on child and family factors.

PROVINCIAL/FEDERAL FUNDING AND COMMUNITY SELECTION PROCESS

In 1989 the Better Beginnings, Better Futures model was accepted by OMCSS as the model with which to launch its longitudinal prevention policy research demonstration project. The model also came to be financially supported by the Ontario Ministry of Education, to prevent poor school performance; by the Ontario Ministry of Health, to prevent poor physical development in children and poor mental health of mothers; by the Canadian Federal Department of Indian and Northern Affairs, because Native groups had been requesting this type of holistic, community-based prevention model; and by the Canadian Federal Secretary of State, to support the model in a francophone community.

The Ontario Government released a Request for Proposals in the Spring of 1990. The first step in the process of application to the Better Beginnings Project was designed to ensure that potential program sponsors had a minimal level of integration already in place and were prepared to implement the local project in a low-income, high-risk community. Proposal development grants of approximately $5,000 were awarded to 55 initial applicants to offset expenses incurred in gathering information and obtaining expertise, administrative support, and community involvement. The second step was the submission of a full proposal, describing the local model and community plans for meaningful, significant involvement of community residents, integration of services, and high-quality programming.

Forty-eight proposals were submitted in July 1990 and reviewed by a fifteen-member Proposal Review Panel that had expertise in implementing health, education and social service programs in economically disadvantaged communities. The panel met in person with the local groups that submitted the top 25 proposals.

The eight selected communities were announced on January 29, 1991, and the Ontario Government launched a 25-year longitudinal, prevention research initiative, the Better Beginnings, Better Futures Project. The Better Beginnings intervention programs are focused on about 5,000 young children, from birth to age 4 or from 4 to 8 years of age, and their families, living in eight socio-economically disadvantaged neighbourhoods in various parts of Ontario.

The Better Beginnings, Better Futures Project comprises three major partners: a) community projects, involving project coordinators and staff, parents and other community residents, and service providers and educators, established under local sponsorship in eight Ontario communities; b) a government committee, consisting of representatives from the co-funding ministries and departments; and c) the Research Coordination Unit (RCU).

Community Projects

The major responsibilities of the eight Better Beginnings, Better Futures communities are to develop and implement high-quality prevention and promotion programs for young children and their families. These programs are characterized by meaningful, significant involvement of community residents in all aspects of program development and implementation, and integration of existing and new services for children and families.

Five communities have implemented prenatal to preschool programs for children from birth to age 4. These communities are referred to as younger cohort sites. Walpole Island (situated near Wallaceburg) is a First Nation (Aboriginal) community. Urban projects for children in the 0 to 4 age range include the Willow Road neighbourhood in Guelph, the north-end community in Kingston, the Toronto neighbourhood of Regent Park/Moss Park, and the community of Albion-Heatherington-Fairlea-Ledbury in Southeast Ottawa.

Three communities, referred to as older cohort sites, are implementing preschool and primary school programs for 4 to 8 year old children. These include the francophone community in Cornwall, the Highfield Junior School neighbourhood in Etobicoke, and Sudbury 's Flour Mill/le Moulin à Fleur and Donovan neighbourhoods.

The specific Better Beginnings community program activities vary somewhat from community to community, but can be described using the following major categories:

Home Visiting. The younger cohort sites emphasize home visiting to families where the primary strategy is to support families during pregnancy, infancy, and early childhood. Home Visitors are trained lay-professionals who help the families meet basic needs, provide information, answer questions about child development, deal with primary prevention topics such as family nutrition and the child's exposure to second-hand tobacco smoke, and link families with services and community resources.

Classroom Enrichment. Projects for the 4 to 8 year olds include enrichment of the classroom or other formal education experience of the child. This involves components such as social skills training, academic tutoring support, reducing the child/teacher ratio for specific program activities, and multicultural facilitation.

Childcare Enrichment. Most younger project sites supplement childcare resources already in place in the community. Enrichment can take the form of additional staff, drop-in centres for at-home child-care providers, and toy-lending libraries.

Other Child-Focused Programs. These are tailored to each community's needs and desires for healthy child development. Examples include play groups, breakfast programs, and heritage language classes.

Family/Parent-Focused Programs. These are tailored to each community's needs and desires for programs that support parenting and family functioning. These programs include activities such as parent training and parent support groups.

Community-Focused Programs. These focus on creating new resources in the community, providing experiences and activities for community members at large, improving the quality of life in the community, increasing cross-cultural awareness and sensitivity, enhancing cross-cultural relations, and increasing cultural pride. Activities include, for example, working to improve neighbourhood safety, anti-racism workshops, community celebrations, and community theatre.

Community Healing. These approaches are established in the First Nation community to cultivate an understanding and appreciation of Native culture and to address a variety of community issues such as substance abuse and family violence associated with a loss of cultural identity. Activities include traditional healing, Native language classes, naming ceremonies, and sweat lodges.

Government Committee

This committee consists of representatives from the Ontario Office for Integrated Services for Children, as well as the Ontario Ministries of Community and Social Services, Health, and Education and Training.

The committee provides guidance, support, advice, and coordination to the project communities and the RCU on behalf of the co-funding ministries. The committee representatives also report project and research findings to senior management in government.

Research Coordination Unit

To ensure comparable research findings across all sites, the government has funded the Better Beginnings, Better Futures Research Coordination Unit (RCU). To address the range of outcomes and programs to be evaluated for Better Beginnings, the RCU employs a core research team and research director, site research teams, and central support staff.

Core Research Team and Research Director. The core research team, made up of 13 members, has had primary responsibility for developing the research designs and measurement plans, overseeing the implementation of the research, maintaining the database at Queen's University, and analyzing and reporting the research findings. The Core Team contains the key research expertise required by the project, i.e. quantitative and qualitative research expertise; familiarity with childcare, child and family health, primary school, and social service programming; knowledge of key research areas (child, family, and community; costs and cost-effectiveness; program evaluation); and experience with multidisciplinary research. The Research Director is a member of the core research team and is responsible for ensuring that the research for the entire Better Beginnings Project be of high quality, integrating research activities, and maintaining communication with the government committee.

Site Research Teams. Each of the research sites has a designated RCU core team member who functions as a liaison between the RCU and the site. Each research site also has a Site Researcher to help develop and implement research activities and collect research data for the site. The Site Researchers are employed by the RCU and work collaboratively with their Site Liaisons. Research Assistants have also been hired to work with the Site Researchers in several communities. Finally, each project site also has a research committee or research advisory group, composed of residents and service-providers, along with members of the local RCU research team. These groups provide a consistent forum for the discussion of research activities and review of research reports.

Central Support Staff. There are four support staff located in the central RCU offices at Queen's University: Research Coordinator, Programmer Analyst, Research Associate, and Administrative Assistant. The central support staff assist in developing research protocols; training field staff; handling the research budget; receiving, cleaning, and storing research data; drafting reports; and providing administrative, technical, and secretarial support.

RCU Advisors. Given the breadth of content and methodological expertise required to evaluate the Better Beginnings model, the RCU is strengthened by the advice and consultation of Technical and Subject Area Advisors. While the Core Team membership is intentionally small to maximize communication and efficiency, there are more than 30 senior researchers participating as Advisors to the RCU. As members of the academic research community, these Advisors have expressed a keen interest in the Better Beginnings Project and a willingness to contribute their expertise to make possible high-quality social policy research. The Subject Area Advisors represent the areas of maternal/child health, child development, family functioning, community health, community development, education, epidemiology, school organization/performance, childcare/preschool programs, Native research, multicultural research, and poverty research. The Technical Advisors offer expertise in research design, program evaluation, cost accounting/management or organizational development, economic analysis, database design, analysis and management, and research ethics.

OVERVIEW OF RESEARCH OBJECTIVES, DESIGN AND MEASUREMENT

The research has been designed to answer three questions:

- How effective are Better Beginnings programs in producing short-term outcome effects in the prevention of emotional, behavioural, physical, and cognitive/academic problems in young children during the first five years of full program implementation (1993 1998)? What effects have the programs produced during this time on the children's families and the local neighbourhoods as a whole?

- What are the true costs of implementing the local programs, including financial costs and donated services over the first five years?

- How are the local programs organized, and what program models have actually been implemented?

The RCU has been collecting data to provide answers to these research questions since 1992. The research designs, methodology, measures, analytic procedures, and research reporting activities are described below.

Short-Term Outcome Evaluation

Determining program outcome effects across the various communities after the first five years of program implementation is the focus of the current report and has entailed an on-going collection of a wide range of child, family, and community characteristics. Due to the process adopted by the government for selecting project communities, it was not possible or feasible to employ a randomized controlled trial design. This is a common situation in applied research studies, particularly when an ecological or community level model is under investigation (Black & Krishnakumar, 1998). Therefore, several quasi-experimental designs (Cook & Campbell, 1977; Reynolds & Temple, 1995) were incorporated in the research plans: a) a baseline design; b) a comparison site or non-random control group design; c) a program participation or "dose response" design; and d) a comparison design where project site outcome data are compared to other geographical areas or other prevention studies.

Baseline Design. The complete set of outcome measures was collected in 1992 93 on a baseline cohort of children and their families who lived in Better Beginnings neighbourhoods and were at the upper age limit for children on whom programming was to focus (N=530). They provided baseline measures for each community against which the characteristics of children and families have been compared after the first five years of Better Beginnings program implementation. The baseline cohorts were four-year-old children in younger cohort sites and eight-year-old children in older cohort sites in 1992 93.

After the baseline information was collected and community programs were up and running, the RCU began to recruit a group of children in each community who were at the bottom of the program age range in 1994. This meant identifying children in the younger cohort sites as soon as possible after their mothers became pregnant, and in the older cohort sites, children who were 4 years of age.

These groups of children and their families constitute the focal longitudinal research cohorts since they have been involved in the research through the first five years of the Better Beginnings Project. According to the original project design, it is these groups that will be followed for another 20 years to determine long-term effects of the Project.

In the younger cohort sites, the focal longitudinal research cohort consists of children born in 1994. In the older cohort sites, the focal longitudinal research cohort are children who were born in 1989. The decision to focus on these cohorts of children was based on the fact that Better Beginnings programs in each community required some time to become organized and implemented. By the fall of 1993, program components were implemented to the point where it was possible that they were beginning to have effects.

Information on the children and families in the longitudinal research cohorts has been collected periodically since 1993 94 in order to get an indication of change within each of the Project communities. The measures employed are essentially the same as those used at baseline and cover a broad range of child, family, and community characteristics. Of course, the specific measures vary to reflect the age and developmental level of the children. These outcome measures were collected on the focal longitudinal cohorts at 4 and 8 years of age, to compare with the baseline data. The comparisons reflect changes in the project sites over the first five years of project implementation.

Longitudinal Comparison Site Design. Some changes that occur in Better Beginnings communities may result from factors other than Project effects; for example, from major fluctuations in the economy or changes in government funding of services for children and families. In order to differentiate the effects of these more general factors from program effects, the RCU has collected all research measures from children and families living in other communities that are similar to those involved in the Better Beginnings Project but not receiving Project funding. For this type of research design to yield appropriate information, it was important that the comparison communities be as similar as possible to the Better Beginnings project communities such as socio-economic status, size, ethnic and cultural composition.

Three comparison communities were selected based on Statistics Canada 1986 and 1991 Census data. Longitudinal research cohorts of children born in 1989 and 1994 and their families, drawn from these comparison communities, were involved in the research. The type of information collected in these comparison communities is the same as that collected in the Better Beginnings neighbourhoods.

Currently, there are approximately 1,670 children and families involved in the longitudinal research groups, 1,100 in project sites and 570 in comparison sites. More information on the longitudinal research cohorts is presented later in this report.

Longitudinal data have been collected in the younger cohort project and comparison sites when the children were 3 months, 18 months, and 33 months old, and finally at 48 months of age. In the older cohort project and comparison sites, data were collected annually from 4 to 8 years of age (JK to Grade 3). This comparison site design allows for a determination of how developmental changes in children, families and communities involved in the Better Beginnings Project differ from those not involved in the Project yet living under similar general economic and societal conditions.

Program Participation ("Dose Response") Effects. The third research design involved comparing changes in outcome measures for groups of children and families with varying degrees of program participation in the Better Beginnings communities.

The programs are open to all 0 to 4 or 4 to 8 year old children and their families living in designated Better Beginnings neighbourhoods. Some families choose to participate in many of the available program activities, some in only a few, and some not at all.

Program participation analyses related changes in children and families over time to their participation in various aspects of the local Better Beginnings, Better Futures programs. It was expected that children and

families who were more involved in Better Beginnings programs would show more positive changes than those who were less involved.

Comparing Data from Better Beginnings Children, Families, and Neighbourhoods with Data from Surrounding Areas and the Rest of the Province Using Other Databases. The RCU has accessed several existing databases, which are geocoded in such a way as to allow for comparisons of data from Better Beginnings neighbourhoods with surrounding geographical areas (for example, a site's surrounding metropolitan area) or the Province of Ontario as a whole.

There are four major sources of these community indicator databases:

- hospitalization records collected by the Canadian Institute of Health Information (CIHI), which yield information on birth weights and primary reasons for all hospitalizations;
- local Children's Aid Society records, which provide annual information on the number of children in care and the number of case openings;
- local police department uniform crime reports of charges for wilful damage (vandalism) and for breaking and entering; and
- primary school principals' annual reports collected by the Ontario Ministry of Education and Training, from which data on the number of children requiring specialized school services were analyzed.

These community indicator data were collected as early as available records would allow, in some cases several years before the project was initiated in 1991.

Indicators for the Better Beginnings neighbourhoods were compared with those for surrounding areas, with the comparison communities or with the province as a whole. This allowed for an examination of relative changes on a variety of community-wide characteristics relevant to overall project goals.

Another source of data for examining changing neighbourhood characteristics is Statistics Canada Census data, which are collected every five years (the years relevant to the Better Beginnings study are 1986, 1991, and 1996). Mapping has been carried out using the Geographic Information System at Queen's University, presenting data for each project and comparison neighbourhood for census enumeration areas. Census data allow us to monitor changing demographic patterns in Better Beginnings project and comparison neighbourhoods relative to provincial patterns. The demographic factors examined include income and employment, family composition (e.g., proportion of one-parent families), housing type, ethnicity, and family mobility.

Finally, we plan to compare several child and family measures collected from our longitudinal research groups, to results for the same measures collected by Statistics Canada for the National Longitudinal Survey of Children and Youth (NLSCY) on 22,000 children throughout Canada from birth to age 14. These data are being collected every two years, beginning in 1994, via in-home parent interviews and teacher ratings. Several measures in the NLSCY are the same as those collected from the children and families in the Better Beginnings longitudinal research groups. These include measures of vocabulary, infant temperament, child behavioural and emotional problems, parenting behaviour, parental depression, social support, and family conflict. These common measures will allow us to place developmental changes and short-term outcomes of the Better Beginnings Project in a provincial and national perspective. We are proposing, for the long-term follow-up research, to coordinate our measures more closely with the NLSCY protocols.

Since the Better Beginnings, Better Futures program model is a very broad, ecological model, it has been necessary to collect research information on many different aspects of developmental changes in children,

their families and their communities. Many of these measures are designed to be collected not only for the current short-term outcome evaluation, but also for the proposed 20-year follow-up in order to document the longer-term effects of the Better Beginnings Project on child, family, and community development. A complete listing of all the measures employed in the baseline and longitudinal data collections appears in Appendix B at the end of this report.

Economic Analysis

A major inadequacy of public policy research in general, and prevention research in particular, has been the lack of attention to program costs. Often the issue has been ignored. When addressed, costs have almost always been computed retrospectively. This has required use of broad assumptions, resulting in less trustworthy estimates than could be obtained through prospective studies. Therefore, the second research objective has been to investigate the costs of the Better Beginnings, Better Futures Model from the commencement of funding and throughout the program and longitudinal follow-up.

To monitor Project costs in a way that minimizes the amount of financial accounting required, while at the same time permitting an accurate description of real costs in each site, the RCU worked closely with the Government Committee and site representatives in developing a cost accounting format. Costs were collected using a common accounting system and software at each site.

Program costs include both direct dollar expenditures and also the indirect costs of operating the programs, particularly volunteer time (so-called "services in kind" or "opportunity costs"). Indirect costs typically are not measured in projects of this sort.

Both direct and indirect costs were broken down by the major components of the program model. The titles and descriptions of these program components were described earlier in this chapter: a) Home Visiting, b) Classroom Enrichment, c) Childcare Enrichment, d) Other Child-Focused, e) Family/Parent-Focused, f) Community-Focused, and g) Community Healing.

The ongoing collection of these cost data has yielded information relevant to questions concerning how costly the Better Beginnings, Better Futures Model would be to replicate in other communities.

Project Development and Program Model Qualitative Research

In many demonstration projects, there has been little documentation of the structure, processes, activities and organization of programs for children. However, in the Better Beginnings Project the generation of extensive descriptions of all aspects of project development and program implementation at the local site level is an important research objective.

In order to document the process of project development and the program models at each of the sites, a qualitative or naturalistic research methodology was employed, organized within a multiple case-study framework (Yin, 1988). A qualitative approach involves the collection of data by means of direct observation, interviews (either individual or group), and the examination of written documents (Patton, 1990). The individual who was assigned primary responsibility for data-gathering at each of the sites was the Site Researcher. The Site Researcher was often assisted in this task by a Site Liaison, who provided a link between the site and the Core Research Team, and by one or more research assistants.

Field Notes. The major source of information was the set of field notes compiled at each of the eight Better Beginnings, Better Futures sites. These notes consisted of a semi-verbatim account (i.e., using participants' own words) of what had transpired during meetings of the site's main decision-making group,

summary notes of what had gone on at other meetings and events (e.g., visits to the site by government representatives), and summaries of major documents such as proposals, minutes of meetings, and interviews. The field notes also contained analytic comments that summarized the researcher's personal impressions and reflections about meetings, discussions and documents. The field notes gathered at each site were entered into a computer database via "The Ethnograph" software package (Seidel, Kjolseth, & Seymour, 1988). This package allows for the coding of field notes into major categories (e.g., resident involvement, project management), and the quick extraction of all notes relevant to particular codes or topics.

Interviews. A number of the aspects of project development that were of interest were often not available from the information contained in the field notes. For example, one issue of concern was what had motivated residents to get involved in Better Beginnings in the first place. This was not often a topic discussed at meetings, and so it was necessary to ask residents about issues such as these in either an individual or group interview, in order to supplement the information contained in the field notes. In most of the sites, both individual and group interviews were conducted. These interviews used an interview guide approach (Patton, 1990), in which a set of topics or subject areas was provided for the researchers to cover in the interview, but the interviewers were free to "explore, probe, and ask questions that will elucidate that particular subject" (Patton, 1990, p. 283).

Report Framework. Information from the field notes and interviews were used to write a series of reports from each of the sites. In writing their individual site reports, the Site Researchers followed a report framework that had been developed collaboratively by themselves and the Core Research Team. This report framework ensured that a core of relevant information was gathered and reported in all the sites in a consistent format. In writing their individual Site Reports, Site Researchers were asked to ensure they had answered all the questions in the framework. An emphasis was placed on including as much detailed description and as many direct quotes as possible. Site Researchers were also encouraged to include their own analysis and interpretation, ensuring, however, that there was a clear distinction between description and analysis.

These individual local site reports were then summarized in comprehensive cross-site reports in which similarities and differences across the various project sites are discussed. Topics of these cross-site reports include: project development; resident involvement; service-provider involvement; program model; project organization and management; and residents experiences.

STAGES/TIMELINES OF THE BETTER BEGINNINGS PROJECT DEVELOPMENT

New projects typically progress through stages of development, each of which has its own tasks and challenges. Generally, projects progress from earlier stages characterized by informality and trial and error towards more clarity, structure, and stability in their core operations. It is important to describe these stages and their timelines so that readers will have a better understanding of what the sites were focussing on while the research was being implemented.

The project development cycle is divided into three stages. The start-up stage combines the design and implementation stages suggested by Patti (1983), and the second stage is his stabilization stage. However, because of unique funding termination experiences for demonstration projects, a transition stage completes our project developmental cycle. The data for this report does not allow a consideration of developments after the transition to permanent funding.

Start-up. A unique aspect of Better Beginnings, Better Futures Project was having proposal development and initial project design prior to, and separated by about a year from, the start of project funding. Our estimation is that the start-up phase lasted from three to four years (1990 to 1994) before basic organizational structures, procedures and core programming were relatively stable. For a project so complex, combining multiple organizational processes in innovative ways with participants learning as they proceeded, this time frame is consistent with the start-up experiences described in the literature.

Start-up of Better Beginnings, Better Futures sites, like that of other complex projects, was a time of high enthusiasm, but also of learning, experimentation, and frustration along with pride in accomplishment. It was several years before most sites regularly maintained at least 50% resident membership in project governance. Sites went through a long process, with little external guidance, of modifying committee procedures to support resident involvement and working out relations between professional and resident participants. Struggling to understand what was meant by service integration and what was within their power to accomplish was common at every site. Hiring the initial group of management and program staff was demanding at every site. Educating new personnel for their particular jobs and also about Better Beginnings, Better Futures and the principles and ways of working of their site took a great deal of effort and time. Training and supervision represented unusual challenges with the large numbers of local residents employed at most sites.

Stabilization. If the challenges of the start-up stage have been successfully negotiated, a project should be at the peak of its organizational and program capacity during the stabilization phase. It is at this point that assessments of program effectiveness should take place. Stabilization is characterized by greater clarity about how things are done and more detailed specification of roles and procedures. Usually, there is a cadre of experienced staff, and authority distinctions often become more evident. There is a focus on "doing what we do as efficiently and as effectively as possible" as well as on organization and staff development and maintenance. Under optimal circumstances, assessment of project effectiveness would begin at the point when a relatively stable project organization and programming existed.

Better Beginnings, Better Futures had a relatively short period of stabilization for the demonstration sites. There were from one to two years (1994 to 1996) of functioning with relatively well-defined and stable core organizational and programming elements. In permanently funded projects, this period of stable operations, barring unanticipated crises, would be expected to continue for at least several more years, providing an ongoing opportunity to assess project and program effectiveness.

Transition. The fate faced by many promising projects once the funded demonstration period ends is not encouraging. Lerner (1995) reports that about fifty percent of the programs described by Schorr (1988) as effective did not exist one year after she visited them. The stress and uncertainty about future prospects faced by project personnel as the end of demonstration funding approaches are substantial, inevitably diverting attention from normal work preoccupations and making morale hard to sustain.

For Better Beginnings, Better Futures, this transition period (which included both preparing for the possible end of project funding and adjusting to acquiring ongoing base funding) extended from 1996 until the end of our data collection period in 1998. While there were clear differences, many sites reported high levels of anxiety and lower morale prior to the acquisition of ongoing funding. Transition from demonstration project to permanent funding was particularly tumultuous at three sites. At Highfield, the approach of the end of demonstration funding was characterized by low morale and high stress among project personnel. Ten staff members left the Guelph program in 1997-1998, primarily in anticipation of the end of project funding. Reportedly, most moved on to other employment or to continue their education. This was a time of low staff morale and conflict in the project. Transition at the Toronto site was a time of high anxiety as staff felt pressured to justify the continuance of their programs. Additional

stress was caused by a proposed merger with a host agency no longer willing to be legally responsible for a quasi-autonomous project. The uncertainty and stress of transition were less dramatic at the other demonstration sties.

Several sites used the anticipated end of funding to begin a process of reviewing project priorities and programming. This rethinking process continued after the announcement of ongoing funding. For some sites, this was also a time of reviewing relations with host organizations. On a very positive note, none of the Better Beginnings, Better Futures demonstration sites experienced the radical changes to their basic operating principles and programs at the end of the demonstration period so commonly experienced by demonstration projects elsewhere.

To summarize, the project sites were in a start-up phase from 1990 to 1994, then experienced stabilization for approximately two years, followed by a transitional phase from 1996 to 1997 until permanent funding was announced.

SUMMARY OF THE BETTER BEGINNINGS, BETTER FUTURES INITIATIVE

The Better Beginnings, Better Futures Project, being implemented in eight disadvantaged communities throughout Ontario, is, in many ways, the most comprehensive and complex prevention initiative ever implemented for young children, their families and their local neighbourhoods.

The differences between the Better Beginnings Project and others in the literature are numerous.

Most programs for disadvantaged young children focus on only one or two domains of children s development (e.g., intelligence/cognition, or social-emotional functioning, or physical health), and collect information on a small number of outcome measures. The Better Beginnings program model, however, focuses on all aspects of children s development.

Most programs focus predominantly on the children, predominantly on parents, or, in fewer cases, on both children and their parents. The Better Beginnings model, based on an ecological view of human development, focuses on children and their parents/families and their local neighbourhood and schools.

Most prevention programs for disadvantaged young children and their parents are targeted to those that are considered highest risk; for example, those with very low socioeconomic status or high levels of behavioural problems. Better Beginnings, on the other hand, is a universal program; that is, it is intended to include all children in a particular age range and their families living in a geographically disadvantaged neighbourhood.

Most program models are designed and implemented according to tightly prescribed protocols developed by experts outside the program site, and if more than one site exists, all sites implement exactly the same program protocol. In the Better Beginnings model, on the other hand, neighbourhood residents at each site are actively involved in all decisions regarding program development and implementation, and each site has developed the type and number of programs considered to best meet local needs.

Most programs for young children operate as independently funded operations with little or no interest or mandate to coordinate intervention activities with other service providing organizations in the community. The Better Beginnings model, on the other hand, actively encourages coordination, collaboration and integration of Better Beginnings programs with other social service, health and educational organizations in each neighbourhood site.

Most programs for young children provide prescribed interventions for a maximum of one or two years, and few collect any followup measures after the intervention ceases in order to determine whether short-term outcome effects are maintained, or if other longer term benefits develop. The Better Beginnings model, on the other hand, was designed to provide program support for four years of children s development (prenatal to 4, or 4 to 8 years of age), and to follow a group of children into adolescence to determine longer term outcomes and potential cost savings.

Most programs provide no description of the procedures and processes involved in the development and implementation of these programs or the organizational and decision-making structure. The Better Beginnings initiative, on the other hand, has emphasized the importance of collecting ongoing information to allow thorough descriptions concerning how each local site developed its organization and decision-making structures, including the participation of neighbourhood residents and the involvement of service providers in this process.

Few programs for young children systematically collect and report information about program costs. The Better Beginnings program, on the other hand, required the collection and reporting of both direct and indirect costs at each site to provide information relevant to policymakers and government representatives who are responsible for the prudent expenditure of public funds.

Although the Better Beginnings Project is not unique with regard to any one of these aspects, it is unique in attempting to incorporate all of them in one program model being implemented in relatively autonomous, disadvantaged communities.

Since the project was funded as a research demonstration project , collecting, analyzing and reporting data on all aspects of the program model in eight demonstration communities as well as three comparison sites has required a great deal of time given the range of research activities and data collection involved. The research is as complex, comprehensive and unique as the program model being evaluated, and has necessitated a broad, multidisciplinary effort to collect, analyze and report a) qualitative/descriptive data on local project development, b) quantitative outcome data on over one hundred measures of child, parent, family and neighbourhood outcomes, and c) economic analysis of program costs.

Chapter 4

PROGRAMS FOR BETTER BEGINNINGS

This chapter will begin with a description of the major programming activities offered at the Better Beginnings sites, followed by an overview of the sites program models, and a comparison of their similarities and differences. Next will be a description of how some programs changed over time. The chapter will conclude with an examination of influences on programming such as: culture/ethnicity; government; leadership; and the relationship with the host agency.

MAJOR PROGRAM ACTIVITIES

In the reports on the program models used at their sites, Site Researchers were asked to describe each of the major Better Beginnings programs operating in their communities. Appendix A at the end of this report presents a brief summary of all of the programs that were listed in these reports. Well over one hundred major programs are described. These have been grouped into four main categories: programs that focus primarily on children and families; programs primarily for parents; school-based programs; and programs for the entire community. These groupings are somewhat artificial; because of the integrated nature of programming in each of the sites, many of the programs could have been listed in two or more categories. The following is a brief overview of these major programming categories.

Child- and Family-Focused Programs

Younger Cohort Sites. The home or family visitor program was an important program in the five demonstration sites. While there are variations in the way this visiting occurs from site to site, and in who conducts the visits, the kinds of things that happen during the visits are similar from one site to another. Home or family visitors engage in a number of activities with the parents whom they visit such as:

- discuss with the parents about child growth and development and nutrition
- help solve problems and deal with crises
- inform parents about Better Beginnings programs and other programs/services available in the community
- make referrals to outside agencies, and advocate on behalf of the families with those agencies with regard to issues such as housing or immigration.

While most of the visits occur in the family's home, the visitors will occasionally accompany the parent or child, or both, on a visit to a doctor, community program, or social service appointment. The home visits are designed to achieve a number of important project goals. Among other things, the visits are intended:

- to reduce the isolation of parents who have little social contact because they have young children at home
- to increase parents knowledge about child development and their ability to protect and nurture their children
- to strengthen the parent child relationship
- to promote empowerment in the parents and enhance their self-confidence and self-esteem
- to reduce parents feelings of stress
- to reduce levels of child abuse in the community
- to enhance the health and the social and cognitive development of children.

In order to provide for children at the upper end of the 0 to 4 year age range, the younger cohort sites have established a variety of playgroup and childcare programs. A number of the childcare programs are designed to provide care for the child while the parent participates in one of the site programs or attends Better Beginnings meetings, and so children participate without their parents being present. Other programs, particularly those referred to as "drop-ins," involve both parents or caregivers and children. All provide a variety of activities and toys, and a nutritious snack for the children who attend. The objective of these programs is to enhance the health and the cognitive and social development of the child. In addition, the program staff hope to enhance the parenting skills of participating parents, reduce those parents feelings of stress and isolation, and promote social interaction among families in the community.

Older Cohort Sites. Many of the programs for children and families in the older cohort sites parallel programs offered in the younger cohort communities. For example, all three of the projects conduct home visits. Home-visitors provide information about Better Beginnings and other community programs and services; help deal with problems and crises faced by the families; talk about the kinds of things the parents can do to ensure optimal growth and development of their children; provide emotional support; and advocate on behalf of the families. In one of the sites, the home visitors also spend a half-day each week in the Junior Kindergarten classroom, which many of the project children attend. This allows the home visitor to provide a link between the school and the home she can keep the parents informed about how the child is progressing in school.

Because of the age of the children involved in the older cohort projects, these projects typically stage many more programs in which children get together for a variety of activities without their parents. Since the children are in school most of the day, these programs often run before and after school and on weekends. They provide a safe place for the children to play and involve a variety of activities, including sports and games, arts and crafts, music, and cooking. Another important aspect of these programs is that they try to keep the activities educational.

School-Based Programs

In the older cohort communities, much of the focus in programming for children centres on the school. Each of the three older cohort projects has staff working with teachers and children to enhance the kind of educational and/or social experience children have in school. Better Beginnings staff working in the school are involved in a wide range of activities. For example, they:

- assist in the preparation of instructional materials
- help supervise students in the classroom, schoolyard, and on school outings
- help the children with reading and language activities
- guide story-telling and drama activities
- participate in problem-solving and social skills programs
- lead cooperative games.

These activities are designed to improve children's academic and language skills, improve their self-esteem and self-confidence, reduce behaviour and academic problems that can give rise to the need for assessment and treatment, increase school attendance, improve children's social skills, and help them establish supportive relationships with others (both children and adults).

One of the key elements in programming within the schools is nutrition. In each of the older cohort communities, there were concerns that children were coming to school hungry or that they were not eating nutritious foods, and that this made it difficult for children to learn in school, as well as being detrimental to their health. The sites therefore established a program to provide children with snacks or meals.

Parent-Focused Programs

In developing programs at the various Better Beginnings sites, there has been a recognition of the key role that parents play in the well-being of their children. Consequently, many of the projects have developed programs that focus primarily on parents.

In the younger cohort sites, a number of these programs are for parents who are expecting a child. Discussions focus on issues such as preparations for childbirth, life with a new baby, breast-feeding, budgeting, tours of hospital maternity wards, links to others services within the community, and the effect a new baby has on marital relations. There are also discussion and education groups for parents after their babies are born. These focus on issues such as child development, time management, discipline, and self-esteem. Some of these programs also provide food, breast pumps, formula, diapers, milk coupons, and so on if the participants need them. The goals of these groups and workshops are to help prepare the family for the new baby; to increase parents knowledge about child health, care and development; and to increase parents confidence and feelings of being supported.

A second type of parent-focused program is designed primarily to give parents a break from parenting and to engage in activities that are more social and recreational. The need for some relief from isolation and the constant demands of caring for a new baby is evident in the names given to some of these programs for example, the "Parent Take-a-Break" program and the "Take-a-Break Parent Discussion Group." While the discussion in these groups often relates to parenting issues, many of the activities are designed to give parents a break from childcare. The primary goals of such programs are to reduce parents' feelings of isolation and stress, to enhance their social and support networks, and to build feelings of competence and self-esteem.

Community-Focused Programs

There is perhaps nothing that better represents the creativity, ingenuity, and unique nature of the Better Beginnings, Better Futures initiative than the many and diverse programs that have been developed to enhance the life of the entire communities in which these projects are based. Some of the more specific goals of this part of the initiative, as outlined in the various site reports on their program models, are to:

- develop community leaders
- build community spirit
- support and strengthen cultural understanding and sensitivity
- establish and maintain strong, active, representative community organizations
- increase social and recreational opportunities
- develop attractive, safe, and accessible places for children to play
- increase the skills, knowledge, and education of community members.

Community leadership is developed by programs such as the "leadership group" in one of the sites, which encourages people to take a leadership role in publicizing the project, organizing events, and lobbying for resources. Community spirit is built by people working together in programs such as the community gardens or kitchens and bulk food-buying cooperatives established in a number of Better Beginnings communities. Such programs help achieve a number of goals, in that they address the nutritional needs of community members (at reduced cost), while building a sense of community. Community spirit is also enhanced by the many celebrations and special events that Better Beginnings projects have sponsored and organized in their communities. Many of these events have featured different ethnic and cultural groups in the communities and have thereby served to strengthen the community's cultural understanding and sensitivity and to reduce racism.

Not surprisingly, several of the community-focused programs are concerned with the safety and well-being of children. One community held a Child Identification Day in which a community celebration was combined with the photographing and fingerprinting of children. Another Better Beginnings site held forums to identify and address safety problems within their neighbourhood. In one of the communities, neighbourhood youth get together with police in an attempt to promote safe and healthy neighbourhoods. A site focused on providing a safe community runs a program called Project HOW, which plans and implements violence-prevention programs in the neighbourhood, including running a safety audit, focus groups, a women s training group, a men s group, and children s activities.

PROGRAM MODEL SUMMARIES FOR THE EIGHT DEMONSTRATION SITES

The information in this section supplements the overview of the Better Beginnings, Better Futures projects presented in Chapter 1. A more detailed summary of the program model at each demonstration site is presented. These are intended to provide a context for the interpretation of outcomes which follow later.

Younger Cohort Sites

Guelph

Onward Willow Better Beginnings, Better Futures places a strong emphasis on community development and empowering residents to assume greater control of their community. A guiding principle behind the project is that everyone should have a voice. As well, there is a high value placed on partnerships between the project and other agencies and organizations, and between residents and service providers.

Most of Onward Willow programs and activities take place in two centres located in the Willow Road neighbourhood: Onward Willow Centre and the Family Gateway Centre. In addition, the local public school is the site for many youth programs and neighbourhood events. Both Better Beginnings centres have community kitchens and multi-purpose office or meeting areas. Both places are used for socializing with neighbours and obtaining information. The programming at the project is quite diverse and there is comparatively less concentration of resources in particular program areas. In fact, there is a total of 40 different programs or activities described at this site. Family visiting uses approximately one-third of the Better Beginnings core government budget. The family visiting program has one full-time supervisor and four part-time visitors. The program is available for parents with children under 4, and the focus of the visits is on playing with the children, identifying family needs and providing information and support to meet those needs, encouraging participation in project and community activities, and accompanying parents to appointments. Approximately 120 families are visited in a year, with about 70 families receiving regular visits.

Programs for preschoolers and parents is another main area of programming. Included in this area are a large number of different activities including a playgroup for children 2 ½ to 5 years of age (approximately 25 children attend), a parent and child drop-in which is run two mornings a week (approximately 30-35 children attend), Books for Birthdays which provides books for children from infancy to grade 1, kindergarten readiness which focuses on school readiness skills (approximately 8 children participate, most of whom are English as a second language students), a toy/book lending library (approximately 150 children have used the library), and a variety of parent workshops (e.g., PS - I Love You, 1-2-3 Magic, Nobody s Perfect, Keep it Cool, Anger Management, Make it and Take it, and Get Along with Your child). The workshops have ranged from 1 to 8 sessions, and are offered 40 weeks out of each year (approximately 80 parents have attended various workshops).

Community development processes and values have been central to developing the project and deciding on programming priorities. The recruitment and training of community leaders also has been an important component of the project. Onward Willow Better Beginnings is the only site with an independent residents association which influences program development. This site also had a very high number of resident volunteer hours; for example, approximately 55,000 resident volunteer hours were documented at the Guelph site between 1994 and 1997.

Onward Willow Better Beginnings also had a strong investment in broader community development efforts that resulted in the creation of resources outside of their official Better Beginnings mandate, and in a broad range of activities inside and outside of their neighbourhood. This has increased the diversity of programs and activities offered at this site. A fundraising committee was developed to raise the funds necessary to run additional activities. Approximately $90,000 per year is raised. Additional activities offered by the site include programs for school-aged children and youth including after school programs, camps and drop-ins, special interest groups (e.g., karate, cooking club, Vietnamese group for parents and children), employment readiness and skills workshops, adult education, clothing program, emergency food supplies, and legal clinic. The project also raised $120,000 for a Stay in School program.

Kingston

Better Beginnings for Kingston Children is committed to the development of primary prevention programs and community ownership. One of the guiding values is that partnerships among agencies, and between agencies and community residents, should be developed.

The strongest concentration of programming resources is on the family visitor program. Over one-half of the Better Beginnings core government budget is devoted to this program. It is modelled after the Parents Helping Parents program and strives to provide information on all phases of healthy infant and child development. The family visitor is responsible for assisting parents by providing information on good prenatal care, child development, infant stimulation and care, nutrition, modelling parenting skills, and providing information about, as well as facilitating access to, the parent support programs of Better Beginnings for Kingston Children. Participants are parents (usually biological mothers) with at least one child four years of age or younger, as well as expectant mothers. Most participants are low income, white single mothers between the ages of 14 and 35. In 1997, 205 families were visited a total of 3137 times. The frequency of visits ranged from 1 to 59, with an average of 15.3 one-hour visits.

Perinatal and postnatal support is another significant component of the project. This includes a weekly prenatal group consisting of nine sessions, covering healthy lifestyles, nutrition, labour and birth preparation, care of the family postpartum, and baby care and feeding. An optional breastfeeding class is also available. The program is run by a family visitor and a health educator. In 1997, 43 women participated in this program. Prenatal support also includes extensive information dissemination to public and medical practitioners promoting the programs available at Better Beginnings for Kingston Children. Infant groups, consisting of weekly or bi-weekly meetings, give new parents an opportunity for parent-to-parent support, informal education, role modelling, and contact with professional staff. The groups are offered to parents with infants aged 0 to 9 months. In 1997, 70 women participated in the infant group. Parenting workshops, particularly the Nobody s Perfect sessions, have also been offered by this site. Nobody s Perfect is a parenting program designed for single women with low incomes and low literacy levels who are parenting children from 0 to 5 years of age. The series of sessions lasts six weeks, and are two hours in length. In 1997, two Nobody s Perfect series were run and a total of 22 parents attended.

Child care provision is another important component of Better Beginnings programming at this site. This includes child care provision during meetings and program participation (in 1997, 105 families used

childcare during meetings or programs for a total of 1694 visits) and parent relief (in 1997, 155 families used parent relief a total of 1538 times). Better Beginnings for Kingston Children also provides child care quality enhancement to existing preschool groups in the community. Child care assistants from Better Beginnings (1.3 FTE) provide extra support to seven different day cares and nurseries in the Better Beginnings community. All work done by the child care assistants must be work enhancing the daily functioning of the program. In 1997, 157 children from the Better Beginnings neighbourhood had child care assistants in their preschool programs.

Additional activities or programs offered at Better Beginnings for Kingston Children include a parent support group (in 1997, 9 women participated a total of 64 times), a drop-in toddler group offered once a week for two hours (in 1997, 47 families participated), eight playgroups offered in four separate locations three times a week (in 1997, a total of 75 families participated with a total of 1632 visits), a one-hour outdoor playgroup offered during the summer in eight local parks (in 1997, 356 children participated a total of 1267 times), a good food box, hot meal program, playground equipment fundraising committee, food buying club, a nutrition newsletter, Christmas referrals, a low income needs coalition, and special events.

At this site, there is only a very modest emphasis on broader community development efforts. In 1997, only 9% of the Better Beginnings core government budget was devoted to community development efforts. As well, there has been very little additional fundraising and expansion of programs and activities beyond the Better Beginnings mandate in Kingston.

Ottawa

One of the guiding philosophies for the South-East Ottawa site has been a holistic and ecological approach to supporting children and families from prenatal to preschool years. There is an emphasis on community development, parent and service provider collaboration, and inter-agency coordination.

Approximately 60% of the Better Beginnings core government budget is devoted to the family visitor program. The emphasis is on providing support and information, linking the parent with necessary resources (e.g., playgroups, therapy, educational institutions), intervention in crisis situations, and on practical/concrete assistance (e.g., accompanying participants to court or the grocery store) and advocacy. Participants include parents with children aged 0 to 5 who live in the Better Beginnings neighbourhood, many of whom receive social assistance. Home visits last approximately 60 to 90 minutes. On average, there are approximately 75-80 active files monthly and between 110-120 families are visited annually.

A playgroup for children aged 0 to 4 and their parents, offered four days a week, is another major component of this site s programming. Approximately 20% of the Better Beginnings core government budget is devoted to this activity. Children have the opportunity to socialize with other children and caregivers, play games, and have snacks. Caregivers are required to supervise the children they bring, in order to encourage interactions between caregiver and child. There is no formal teaching, only needs-based offering of support by staff. Attendance is very high for this group; in 1996-97 over 450 families participated with over 3000 visits by parents and over 6000 visits by children. In 1998, there were 3700 visits by parents and 8000 visits by children.

This site also has a community nurse (.6 FTE) who conducts two morning groups on site (as well as occasional groups off-site) designed to educate family visitors, pregnant women, new mothers, and mothers with young children on health-related topics (e.g., breastfeeding, adjusting to a new lifestyle, self-care, nutrition and care of babies, etc.). She also regularly visits people s homes. The Community Nurse helps people assert their needs in the health care system.

Other activities or programs offered by South-East Ottawa include a mobile toy lending library, subsidizing existing child care in a local nursery school, parent workshops, and respite for parents. Better Beginnings is located in a community house and is very visible in the neighbourhood. The house is open to all residents and is very welcoming in nature. The project also has its own school bus (the magic bus , brightly painted by neighbourhood children, that offers necessary transportation to families in the community. Other community-oriented activities include a clothing exchange, a sewing crafts group, a women s group, and a food buying club.

The project has expanded beyond the Better Beginnings mandate to involve teens in the community. The project was instrumental in the creation of a multi-faceted park in the heart of the Better Beginnings neighbourhood. As well, the project supports the Kids in the Hood program, a weekly drop-in for kids aged 10 to 14. Teens are also involved as volunteers and grants have been received to provide summer employment for anywhere from 1 to 4 teens. The project raises from $20,000 to $70,000 annually to fund additional activities.

Toronto

Parents for Better Beginnings believes that the approach to be taken to prevention programming should be ecological and holistic. There is a belief in the capacities of individuals, and that those strengths and capacities should be nurtured and supported in an empowering fashion. Programs should be community-driven, and there is an emphasis on inclusiveness and flexibility.

Over one-half of the Better Beginnings core government budget has been devoted to the community visitor program. The program is modelled upon the Parents Helping Parents program and involves one-to-one visits with expectant moms, and families with children aged 0 to 5. The community visiting team represents West Indian, Black-Canadian, Hispanic, and Southeast Asian cultures. The focus of the intervention involves prenatal and child development information and support, family planning and support, advocacy, referrals, and crisis intervention. Frequency of contact depends upon the age of the child and the wishes of the family. In general, families with children up to 1 year old are supposed to be visited weekly; biweekly visits are intended for 1 to 2 year olds, a visit every three weeks for 2-3 year olds, and a monthly visit for 3-4 year olds. During 1996-97 the active caseload consisted of 151 families with a total of 208 children in the 0-4 age range. Families from 19 ethno-racial groups were visited.

Education and support for parents also constitutes a major component of programming. A perinatal nutrition and support group is offered to pregnant women and their partners, coaches or friends and also to parents/caregivers with infants up to 6 months of age. The group meets weekly for 1 ½ hours, the format is informal and topics covered include nutrition, fetal development, breastfeeding, labour and delivery, exercises, and culture as it relates to pregnancy and parenthood. While the adults participate in this group, their older children take part in a playgroup in an adjacent room. In 1996-97, approximately 50 to 80 adults attended the group. In addition to this group, parenting groups also are available. Different workshops have been offered including You Make the Difference, a parent-child communication program for children who have or are at risk of developing language delays, and Nobody s Perfect, a parent education program for children up to 5 years of age. Less structured and informal groups have also been offered. These different groups typically involve 6-12 adults.

Additional activities and programs include parent relief available two days a week (in 1997, 60 children were registered), playgroups offering structured learning through play activities (approximately 70-110 children have been involved in various playgroups), and a play and learn resource centre open one-half day a week offering a variety of resources to parents of children of all ages (average number of materials loaned per month is approximately 80). Community-oriented activities have included special events,

community clean-up and barbeque, a women s group, Kindergarten registration package, outreach, and community organizing and advocacy.

Parents for Better Beginnings has developed partnerships beyond the scope of the Better Beginnings mandate. They worked on an extensive review process of the local police division, and have partnered with Parks and Recreation and the Housing Authority to provide a youth and community drop-in and community garden. The site also was able to secure funding to run an anti-racism education training program in which project staff, committee members, staff and board members from eight local agencies, and community residents were involved. The project was also successful in fundraising with a private company. That company raised money to send 42 children to a 10-day summer camp and to purchase a school bus for the project. Fundraising efforts also resulted in a nutritional component being added to the perinatal group.

Walpole Island

Two visions guide programming at the Walpole Island site: healthy child development is crucial for the future; and community ownership is critical. The philosophies and values of the Native community, some that differ considerably from non-Native communities, also guide the project. For example, the importance of kinship patterns, group work patterns, and teaching methods that include elders as teachers and involve learning by observation.

Community development and community healing programming constitutes approximately 60% of the Better Beginnings core government budget. Native language instruction is an important component of this type of programming. Two-hour weekly Native language classes are offered to children and adults for approximately 50 weeks of the year. Approximately 30-40 community members attend each class. A Community Outreach Facilitator also visits the playgroup twice a week for 15-minute sessions to teach Ojibway words, stories and songs. In addition to the Native language classes, cultural and community enrichment has also been offered. This has involved Women s Time Out, community enrichment sessions, and Native learning circles and craft teachings. The Native learning circles are offered approximately four times a year, and involve four weekly sessions. Recruiting volunteers has also been an important element of community development. In addition, Better Beginnings produces a Boozhoo Niijii newsletter, a monthly publication providing information about events/activities and includes Native language content.

Another main component of the project is child and family-focussed programming. Three family support workers conduct home visits and provide other child and family activities and programs through the Parent/Child Support Program and the Bkejwanong Children s Centre. Home visiting constitutes approximately 20% of the Better Beginnings core government budget. The purpose of the home visits is to provide support and resources to expectant mothers and families with young children. No information on the number of families visited, or the number of times visited, is available.

Other family and parent-focussed programming also constitutes approximately 20% of the Better Beginnings core government budget. The family resource drop-in centre runs playgroups, a drop-in day, and parent workshops and information sessions. The playgroups run twice a week, morning and afternoons, and offer structured activities for parents and their preschool children. A drop-in day also runs one day a week and offers a clothing exchange, weighing and measuring of babies, breastfeeding support, a toy lending library, and socialization and networking for mothers, children, and staff. Approximately 30 parents and 20 children participate in both of these activities per month. A monthly parent information session covering topics related to child development and parenting, as well as monthly prenatal nutrition workshops, are also offered. Parent workshops have also been available and have included You Make

the Difference, a parent-child communication program, offered twice per year consisting of 10 weekly 2-hour sessions (no information on number of participants is available) and Nobody s Perfect, a parenting program, consisting of two 6-week sessions per year or one-on-one as requested (approximately 9 adults and 6 children participate).

Other activities and programs offered by Walpole Island Better Beginnings include an outdoor playgroup where children are brought to different parks on the island (offered only during the summer months), and a monthly food box draw for seniors and community members on social assistance. Previously, a monthly community potluck was also run, but was discontinued in 1997 due to lack of interest and cost. The monthly food box draw actually evolved out of the monthly potluck.

At the Walpole Island site, there is very little mention of additional fundraising and only one activity is reported as serving children outside of the mandated 0 to 4 age range: the blanket program, an outdoor playgroup is open to all children, not just those aged 0 to 4.

Older Cohort Sites

Cornwall

Partir d un bon pas values a comprehensive approach to child development. There is a strong emphasis on resident participation and partnerships with different agencies and services. This project strives to facilitate active participation at all levels.

A substantial proportion of the Partir d un bon pas core government budget is devoted to school-based activities including one full-time school/community animators in each of four schools, who provide classroom enrichment in the JK to Grade 2 classes. In addition, there is a fifth school/community animator who floats between two schools. In the four schools, the number of classes enriched range from 4 to 7, and the animators spend equal amounts of time in each class. The school/community animators spend anywhere from one-half to one full day in each classroom per week. The school/community animators help the teachers provide language, cultural and other education activities to the children. Children often work in small groups on these activities, which are designed to improve cognitive and academic functioning, promote social skills and reduce behaviour problems, and enhance French language skills and cultural identity. All children in the class are involved, although additional time is spent with children who are progressing more slowly.

A breakfast program, offered every morning, is also available in the four schools. Approximately one-half of the children in these schools participate in the breakfast program. Homework help and summer tutoring also is provided by Partir d un bon pas; approximately 40 children participate. In addition to these school-based activities, other major activities or services provided by Partir d un bon pas include a toy library, which has approximately 200 members, and holiday programming. A vacation family camp experience is offered to project families during the summer and school breaks and involves approximately 72 families, and a summer playground program operates with approximately 60 participants.

Additional project activities include family visiting, holiday activities (175 participants), playgroups for children, welcome baskets and home visits to new families, and local Francophone initiatives/activities for the community.

Community development has received increasing attention by Partir d un bon pas. The allocation of the Partir d un bon pas core government budget devoted to community development has increased from 17% to 36% over the years. At the Cornwall site, there seems to be a dual emphasis on a concentration of

resources for prevention programming for children aged 4 to 8 and broader community development efforts. In addition, there has been an evolution in Partir d un bon pas toward greater partnerships with other organizations and efforts have been made to provide programming initiatives that fall outside of the Better Beginnings mandate. For example, Partir d un bon pas was instrumental in the creation of the incorporated Community Action Group (CAG) which helps to create prevention initiatives beyond the Better Beginnings mandate (e.g., a youth centre for teens, a municipal skate park for teens, the development of a disposal of toxic waste education program). The CAG is linked with the project but functions as a separate organization with its own board, advisory group and funding sources.. There are also several examples of the Partir d un bon pas s success in securing additional funding for programs outside of their mandate (e.g., $20,000 annually for a part-time Family Animator position for the Family Animation Centre, currently operated by the CAG; $50,000 from a corporation for supporting prevention initiatives for teens).

Highfield

The Highfield Community Enrichment Project places considerable value on an ecological approach to child development. There is a philosophy to address a child s major environments: the family, the school, and the community. There is also an emphasis on resident involvement, and a respect for the various ethno-cultural groups represented in the community.

There are two unique programming aspects of this project: the focussing of much of the in-school programming resources directly on the research focal cohort and the creation of a strong relationship with a single school. The boundaries for the school constituted the Better Beginnings community. This relatively small geographic area, having programs and project offices directly on school grounds, and having only one school where programs were initiated were all advantages for developing school-based programming. All programs are provided on school premises. Classroom enrichment was a strong focus at this site: approximately one-third of the Better Beginnings core government budget is devoted to school-based activities. The research focal cohort had educational assistants in the classrooms from JK to grade 2 (currently, the assistants focus exclusively on the JK classes). In JK and SK, two and one-half full-time educational assistants were funded by the Better Beginnings core government budget. At the same time, three full-time teaching assistants were funded by the Board of Education. Thus, all JK and SK classes had an assistant in the classroom full-time, reducing the adult-student ratio to about 1:10. The educational assistants also conducted home visits with the focal cohort families. In grade 1 there were three full-time educational assistants, spending at least one-half of every school day in each of the grade 1 classes. In the summer prior to Grade 2, the role of educational assistant and family visitor were merged into one position child and family enrichment worker. When the focal cohort children were in grade 2, the four enrichment workers spent approximately 15 hours in class that is, approximately one-half of each school day, and the remaining hours were spent in playgroups, parent groups, training parent volunteers as assistants in the classroom, and conducting home visits.

The focal cohort children also received summer enrichment programming for each summer from JK to Grade 2. Approximately 45 children participated each summer in this programming. In addition to the above, another major component of the classroom enrichment was the initiation of the Lion s Quest social skills programming in the classroom when the focal cohort children were in Grade 1. At that time, all teachers were trained in this program, funded by the Better Beginnings core government budget.

Health and nutrition programming also is a strong focus at this site. Initially, this involved a snack program, delivered to all students in the school three times a week. A hot lunch program was added in later years, where hot soup and pasta was available at minimal cost to all students in the school, two times per week. Approximately 100 children take advantage of this service. And, most recently (implemented

in Spring 1998), a breakfast program has been added.

In addition to all of the above activities, programs for parents and children also constitute approximately one-third of the Better Beginnings core government budget. This includes a parent-child drop-in for children aged 0 to 4, which operates four mornings a week and is usually full to capacity (30+ children), parent relief (one morning a week), before and after school programs, operated every morning and afternoon for up to 30 children, a toy lending library (200+ families registered), and programs during school breaks and summer holidays that are usually filled to capacity.

Additional program activities include home visiting, professional development activities for teachers, educational activities about nutrition and healthy eating, physical fitness activities for the children in the school (e.g., having a physical fitness entertainer come for the day), playgroups for children, parent groups, ethno-cultural activities, community celebrations, neighbourhood safety activities, and a number of smaller programs for children and parents that responded to the community s wishes (e.g., fitness classes for parents, ballet classes for children, bus trips to the US).

At the Highfield site, the project has placed considerable emphasis on concentrating programming resources on the focal cohort children. Comparatively, less emphasis has been placed on broader community development efforts and resident participation/ownership in project governance. In addition, the project has been successful in building a very strong partnership with its local school, as well as with other agencies serving the community. The project also has been involved with initiatives outside of the Better Beginnings mandate. They have participated with eight other local agencies in securing a $40,000 grant for developing a coordinated community service initiative, and have collaborated with other agencies in the Brighter Futures initiative. As well, they have participated in the Community Action Program for Children to secure funding from the city with over 20 partner agencies that has led to per annum funding of about $180,000 for city agencies. In addition, they have been involved with additional fund raising to provide programming that falls outside the original mandate. For example, in order to provide nutrition programming to all students in the school, additional funds and donations have been sought. The project also received a grant from the Children s Aid Foundation to provide a recreation program for pre-teens. Many of these additional resources have been invested in additional programming for the school population.

Sudbury

The Better Beginnings site in Sudbury strives to promote a healthy environment for families. They place a very strong emphasis on community involvement and ownership in the project, and in building community leadership. Their philosophy is to provide integrated and universal services to all groups within the community.

More than one-half of Sudbury s Better Beginnings core government budget is devoted to before and after school and holiday programs. The programs include cooperative games, craft activities, outings, and the provision of nutritious snacks. The before school programs operate in four schools every morning from 7 a.m. to 9 a.m. and are very well attended, with approximately 200 children participating. The after-school programs, in three separate low-cost locations in the community (e.g., a church basement), each have approximately 30 participants a day. The summer recreation program is in three locations and attracts approximately 100 children per day. The focus on broader community development efforts in this project is also very strong. Community kitchens, community gardens, environmental enhancement, as well as other community initiatives are all components of this focus. The site also strongly encourages resident involvement in project organization and management. In fact, the management board for the Better Beginnings project is now composed solely of community residents.

At the Sudbury site, the before-school program is the main school-based activity. Other school-based programs have much less concentration of programming resources. Only 8% of the Better Beginnings core government budget is devoted to additional school programming. These additional school-based programs include a peaceful playground program, a Native cultural program and a multi-cultural program in Francophone schools. The peaceful playground program is devoted to the prevention of bullying and aggressive behaviour and is run by part-time Better Beginnings staff members during school hours. The Native cultural program, run by a full-time Better Beginnings Native community worker, focuses on teaching Native children traditional stories and doing traditional crafts. The multicultural program, operated informally by a part-time Better Beginnings staff person, focuses on teaching children positive aspects of other cultures. Parent and child-based programs including a parent and tot drop-in, organized parenting workshops, play group activities, and family visiting are also provided.

At the Sudbury site, there is a comparatively modest concentration of programming resources on prevention programs for children aged 4 to 8. The evolution of the project has progressed toward greater community ownership, broader community development efforts, and securing additional funds for programs and activities that fall outside of the Better Beginnings mandate. To this end, the project has been very successful in raising additional money through its own incorporated Education Fund. The Education Fund raises more than $100,000 annually. Because of these additional funds, several self-sustaining projects have been created including a community economic development project and Myths and Mirrors, a community arts program.

PROGRAMMING PROFILE DIFFERENCES AMONG SITES

Younger Cohort Sites

The Kingston, Ottawa and Toronto younger cohort demonstration sites have somewhat similar programming profiles in terms of their investment of over half of their base government funding in family/home visitor programs as well as by their investments in child care and playgroup supports. However, within these general similarities, are important variations in how each of these three sites implements these activities which could affect program outcomes. Kingston is unique in investing almost all of its programming efforts directly into family visitor, perinatal and postnatal support and child care programming. Toronto and Ottawa have greater investments in programming activities which fall outside of their government mandate.

The Guelph and Walpole Island younger cohort sites present very different programming profiles. Guelph has a very high level of diversity in its reported programming activities. It devoted about half as much of its core government budget to family visiting as the above younger cohort sites and has more variety in its programming strategies for preschoolers and children. Community development as a core project and program development process has been strongly emphasized at Guelph and there has been substantial investments in broader community development efforts and programming beyond their government mandate. There has also been a high emphasis on local leadership development as a prevention vehicle. Walpole Island invested about 60% of their base budget in community development and community healing activities. They also reported very little activity outside of their government mandate.

Older Cohort Sites

There are substantial programming differences across the three older cohort demonstration sites. Cornwall had a substantial investment in in-school programming activities including classroom enrichment, homework help and a breakfast program. Cornwall also has been increasingly successful in its broader

community development efforts including many activities beyond their core mandate. Highfield is unique in concentrating a significant proportion of their programming resources directly on the children in the research cohort for the duration of the demonstration period and by focussing most of their programming around a single host school. They had the highest investment in classroom enrichment activities and all of their programming took place on the school premises. Even additional resources raised by Highfield went in good measure to support additional in-school programming. Sudbury had comparatively very little classroom enrichment activities and has been quite successful in raising money to support activities beyond their core mandate. It had the lowest proportion of its programming resources focussed on the 4 to 8 age group among the other older cohort sites.

It is clear that there is substantial variation in programming attributes across these demonstration sites. While there are similarities in broad emphases across some younger cohort sites, it will be important to consider each site s outcomes in light of its particular programming investments, development emphases and community context.

CHANGES IN PROGRAMS AND ACTIVITIES OVER TIME

While many programs and activities remained essentially the same over the first years of the project, several changes occurred: some programs were discontinued, others were introduced, and many were changed to better meet the needs of the community. The following describes some of the key changes that occurred in programming and offers some explanations for their occurrence.

Greater Focus on Outreach and Activism

Over the years, the nature of community development, as well as its breadth, underwent change. There was much greater focus on reaching out to community members and on getting residents involved in activism and advocacy activities.

> A change in programs and activities included increased community outreach to the broader community beyond the [Better Beginnings] neighbourhood. The development of the Employment Training Program is an example of a program that was started by residents, and which reaches and includes residents who had no involvement or limited involvement in the project before. Another trend that can be observed is an increase in neighbourhood outreach and activism by neighbourhood residents and project staff beyond their own neighbourhood and into the wider community.
>
> During the last several years there has been an increase in the amount of outreach, presentations, and activism by both community residents and project staff. . . . In 1997, there were seven different presentations to politicians, including Ministry of Community and Social Service officials, ministers and deputy ministers, MPPs, and a policy forum at Queen s Park.

Re-focus on Mandated Child Group

The increased emphasis on community outreach and activism, coupled with the desire to help parents, appeared to reduce, to some extent, the sites original focus on children. Consequently, a number of projects made an effort to re-focus their programming and activities on children within the age group that they had been mandated to serve.

> The other thing that needed to happen was that we need to . . . re-clarify our focus and what we're funded for. We're funded for young children . . . [;] we were drifting into [other] areas . . . but it's not what we are funded for. And the message that we're getting from the Ministry was very clearly that we need to make sure that we're not drifting into other areas . . . . [When] it comes down to it . . . you have to make some choices.

Provision of More Parenting Groups and Corresponding Playgroups

At least two of the younger cohort sites experienced an increased demand for parenting groups and workshops. This increased demand was attributed, at least in part, to parents becoming more vocal and confident in expressing their needs.

> [The provision of more parenting groups and corresponding playgroups with a child development focus was one of] the major changes in Better Beginnings approach to prevention. . . . some cultures have been more vocal about their desire for parenting groups. . . . People begin to maybe open up more about their needs around parenting; whereas I think when we started here nobody was working with this age group, except in daycares .

> An increase in the number of parenting workshops came about because of the expressed needs by parents for learning and support around parenting issues. The Coordinator notes that this was a readiness issue. Early in the project, parents were hesitant to talk about their struggles with parenting. Over the past year, parents were ready to take the risk to talk about more painful issues. . . . Consequently, the last year (1997) saw a dramatic increase in the number of workshops available for parents.

Programming for a Wider Age Range

The original Better Beginnings mandate called for projects to focus on children from either 0 to 4 years of age or 4 to 8 years of age. Several of the projects found it difficult to limit their programs to these age groups; if they were to engage in true community development, they felt they needed to provide activities and programs for older children and youth as well. Consequently, a number of project sites looked for ways to provide programs and activities for children outside the mandated age groups.

> With the help of other community organizations, a karate program was started in the neighbourhood for children and youth over 5. . . . The young women s group was started by a group of teen women who wanted to meet to talk about issues that were meaningful and relevant to their lives, and consequently became a scheduled program activity. These new programs have come about as a result of the staff and residents identifying needs for children and youth and developing a program to meet those needs. . . .Inclusivity of all neighbourhood residents in the project, and not only children under 5, has always been a guiding principle of the project.

Increased Participation by Culturally Diverse Groups

With outreach increasing in many of the communities, more residents from various cultures were coming into contact with Better Beginnings projects. This created a demand for programs geared to the language and culture of these individuals and groups.

A very significant change in programs has been an increased response to cultural groups living in the neighbourhood. This has been reflected in the creation of programs for parents and children from different cultural backgrounds; for example, Friends Circle for Chinese-speaking parents, Ban Viet for Vietnamese-speaking parents, and the El Grupos Las Alegres for Spanish-speaking parents. The development of culturally specific groups for Vietnamese-, Chinese- and Spanish-speaking families developed out of a need to link home-visited families to other programs and to each other for peer support, and to maintain contact with families after they were no longer receiving home visits (Program Summary, April 95 Sept. 95). These parents were also expressing a need for informal opportunities to learn everyday English that was accessible and located in the neighbourhood.

Lack of Demand, Unsuccessful Programs

Each of the Better Beginnings sites experienced its share of programs that were discontinued for one reason or another. In many instances, the programs were discontinued because they did not attract many participants; in some cases, it was decided that the programs could not be effectively implemented due to insufficient resources or staff training.

PROGRAM INFLUENCES

The Impact of Culture and Ethnicity

Culture and ethnicity were fundamental considerations in many of the Better Beginnings sites, and had a profound influence on the kinds of programs developed. In the Highfield and Toronto Better Beginnings sites, for example, program developers had to tailor programs to communities in which residents spoke many different languages and came from a wide range of countries and cultures that inevitably had different ways of looking at issues such as child-rearing and the role of women. In the Sudbury site, the primary elements in the ethnic and cultural mix were Native, anglophone, and francophone. The Cornwall project, while dealing with a cultural context that was somewhat more homogeneous in that most residents spoke the same language (French), had to take into consideration the fact that francophones are a minority language group in the province. The Walpole Island site also provided some challenges to program developers because of the different traditions and cultural expectations of the Native residents at the site.

Cultural considerations influenced a number of aspects of the programs:

- **Who provided the program services**

The individuals providing services or coordinating activities had to be sensitive to the needs of the cultural groups with whom they worked, and preferably would be able to speak to program participants in their own language. For this reason, a number of the sites hired ethnically diverse individuals as front-line staff.

- **The importance of language in programming**

A number of the projects supported residents and their children in learning English; for example, by providing childcare for parents taking ESL classes or by providing classroom assistants to help children with their reading. At the same time, sites tried to reach out to the various cultures in their communities

by providing written materials and programs in their own language or by having interpreters available for meetings and programs.

" **Programs that Focused on Developing and Sustaining Cultural Identity**

Several programs were developed to appeal to community members within a specific culture and to enhance cultural identity. These included programs such as the playgroup that centred on East Indian dance, the summer camping program that featured Native culture, and the resource and toy library that provided a wide variety of French games, books, and videos for the francophone community. Such measures were especially important at the Walpole Island site, where programs such as Community Enrichment Sessions, Native Language Classes, and Native Learning Circles were developed to aid in/contribute to the survival of the Native traditions.

" **Programs that promote positive cultural relations and reduce racism**

Several sites developed programs to promote positive relations among cultural and ethnic groups by bringing them together for celebrations and cultural events, by educating school children about cultural groups in their community, and by providing anti-racism training and events.

Government and the Better Beginnings Model

The government representatives have been active in fulfilling their responsibility to ensure that the Better Beginnings model was implemented as planned. Their actions in this regard, however, were at times seen by the various sites as being unnecessarily controlling and intrusive. One of the key features of the Better Beginnings initiative from the outset was that the individual projects would be truly community-based that members of the community, working as partners with local service providers, would decide what kinds of programs would be developed in their communities. When government representatives attempted to influence the kinds of programs that were developed, or who the programs would be offered to, in an attempt to ensure that the basic principles of the Better Beginnings model were being adhered to, this was often seen as contrary to the principle of community ownership of programs.

The tension between government influence and community control was evident in a number of areas:

" **Programs for children outside the mandated age group**

The government stipulated that 85 percent of all funding in each of the project communities be directly focused on programs and activities for families of children within a specified age range (either 0 to 4 or 4 to 8 years of age). A number of communities, however, felt the need to provide programs for children in other age groups as well. This was resolved, to some extent, by these communities seeking funding for such programs from agencies outside of Better Beginnings. Nevertheless, government influence did, as one report put it, "force the community away from some of its priorities."

" **Primary health care**

As part of Better Beginnings programming, some of the sites wanted to provide primary health care (i.e., medical services delivered by a doctor or nurse) in the neighbourhood. Because this kind of service was felt to be more treatment-oriented than preventive, funding by Better Beginnings was not allowed. One community resolved this by finding alternative funding for a satellite community health centre in the neighbourhood.

" **The pace of program hiring and development**

A number of the communities felt pressured by government deadlines to recruit neighbourhood participants, design programs, and hire staff. For example, all sites were to have prepared their program plans and designs for the government early in 1992 in order to receive permanent funding. Many of the sites felt rushed in this process. As one site report described the situation:

> This meant being able to define clearly what programs were being offered. While on the one hand, this gave the site a push to come to decisions around programming, personnel believed decisions were made under a time constraint with less reflection and consultation than desired.

" **Program staffing and operations**

Government representatives made a number of specific program-related recommendations that at times did not sit well with project members. For example, at one site they made recommendations about the number of hours per week that family visitors should spend with each family, the hiring of a community developer rather than having community development be a part of every staff member's job description, and the salary levels of family visitors. Site personnel considered this to be overly intrusive in a domain that should have been under their control.

Disagreements between sites and government representatives were almost invariably worked out through a process of negotiation, which left both sides reasonably satisfied, despite the fact that there remained, at times, a residue of confusion or discontent. One site report described the process of developing a program model at their site in the following way:

> From the experience of developing the program model in this project, it seems clear that the government and project participants had different expectations and interpretations about how they would develop prevention programs. This resulted in a process of negotiation which was arduous and frustrating at times, but eventually led to a program plan that had widespread approval among project participants and which the government could eagerly support.

Active Leadership

The importance of identifying and supporting credible local leadership is highlighted in the literature on project/program creation and replication (Commins & Elias, 1991; Dryfoos, 1993). A consistent finding from the project/program development research is the pivotal role that project coordinators play not only in orchestrating project evolution, but in shaping its basic characteristics.

A little talked about aspect of Better Beginnings, Better Futures project development is the determining influence of the initial project coordinator at many demonstration sites. The hiring of the project coordinator is linked repeatedly in site reports with the beginning of rapid project development. In addition, it is clear that the personality, priorities, values and ways of working of the project coordinator coloured many core aspects of project development. For example, at the Guelph site, the Project Coordinator s strong valuing of community development and empowering resident participation undoubtedly contributed to these being dominant organizational themes. In Sudbury, the project coordinator s commitment to alternative approaches to project organization and management was a basic element in this site s having the clearest articulation of these organizational traits of all the demonstration sites. Reports from Ottawa credit the project manager with a dominant influence over their style of

management.

Executive directors from host agencies have also been influential champions and supporters at several sites. For example, in Guelph the executive director of a large public agency is one of the founders of the project, serves on its steering committee and is a powerful champion for the project within his own agency and the broader community. In Kingston, the host executive director assumed direct responsibility for supervising project staff during a particularly difficult time for the project.

Selecting and Negotiating Host Settings

Not every organization nor every neighbourhood is an appropriate host for a new approach to helping children and families. The general lesson is that innovative projects do not prosper in hostile environments. Investments in selecting a welcoming setting, in creating receptive conditions for the initiative as well as in sustaining this support over time are critical components of sound program creation and dissemination strategies (Schorr, 1997).

Better Beginnings, Better Futures has been blessed with markedly positive and productive relations between the projects and their host organizations at six of the seven demonstration sites. It is particularly encouraging that none of the sites experienced the dramatic transformations in how they work once demonstration project funding ended that is so common in the literature. However, it is too soon to understand what the long term influences of the host organizations will be, particularly when core leadership in the projects and host organizations move on.

The Better Beginnings, Better Futures experience confirms the advantages of selecting host organizations with mandates and operating procedures similar to those anticipated for the demonstration project. This demonstration project also supports choosing hosts with good relations with other service organizations and with the potential to be accepted by community residents. It also is important to be clear in the beginning about how much independence the project will require in its work, how this will be achieved, and whether the long-term goal is integration with the host agency or some other outcome. Letters of agreement between the project, its host and, perhaps, funders can help to avoid complications.

LESSONS LEARNED

In attempting to meet the considerable challenges to the development and implementation of high quality prevention programs for their communities, project teams learned a number of lessons about strategies that were helpful in enabling them to develop the kinds of programs their communities needed:

Programming

- Programs must be accessible, well-promoted and visible in the community.
- Programs that are offered free of charge, and without the requirement of any formal commitments from parents or children, result in a more spontaneous, active and pleasurable participation.
- Families prefer environments that are cosy and home-like to ones that are more "agency"-like.
- Tangible markers of change, such as the building of a park or playground, provide project participants with a visible symbol of the changes that can be made in their communities.
- By incorporating principles of self-help and adult learning into prevention programs, the residents are encouraged to become self-reliant.
- Prevention efforts should focus on the family rather than on specific high-risk individuals. This approach avoids the stigmatization of individuals and strengthens the family unit while

supporting the parents.

" Constant community outreach is essential in order to reach isolated families and maintain participation levels.

Connections with Other Service Providers and Agencies

" By working collaboratively with other agencies in the community, Better Beginnings can gain access to physical and human resources that would not be available to the project on its own.

" Ongoing communication with government representatives is necessary in order to build a supportive relationship with government and to convey to them the needs of the project.

" Paying attention to the political context and advocacy is also important to the making of long-term changes in the community. However, this process can be time-consuming and controversial because some people feel that it diverts a lot of energy that could be devoted to other programs for the community.

Staffing Issues

" Community workers are an important link between community residents and the project.

" Staff who are familiar with cultural groups in the community and can speak their language are needed in order to provide programs that are sensitive to the needs of those groups.

" Staff retreats and the use of external consultants have been effective strategies for team-building and for problem solving regarding programming issues.

" Consistency of program staff, schedules and location is important in maintaining high rates of participation. This enables participants to form a connection with the staff and the program.

Funding Issues

" Limits to funding require that projects priorize which programs are most crucial and needed by the community, and acknowledge that not all of the community's needs can be emphasized at all times.

" Secure funding is necessary to the planning and implementation of high quality prevention programs.

Chapter 5

SOCIO-DEMOGRAPHIC CHARACTERISTICS

In this chapter, the basic socio-demographic characteristics of the sample are reviewed. Within each cohort, tables are presented showing characteristics of the baseline sample, and of the focal, longitudinal, sample for the wave at which the children were of comparable age. While it would be possible to present data for the focal cohort at each wave, the resulting presentation would be tedious, and would typically show only modest variation from wave to wave. In the one instance in which there is notable variation, that of income for the younger cohort sites, the change will be discussed in the text.

Data were not gathered for the comparison sites at baseline, so that tables for the baseline cohort are less complex than those for the focal, and the table totals are based on different sets of sites. Where it is of interest, in discussing results for the focal samples, figures for only those cases from the demonstration sites will be presented in the text.

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE YOUNGER COHORT SAMPLES

In two-parent households, an attempt was made to interview the parent most familiar with the focal child. In the vast majority of such cases the mother was interviewed. Of the one-parent households involved in the study, over 90% were headed by a woman. Thus, the vast preponderance of respondents, 93.3% of the baseline sample and 96.1% of the focal, were female. As shown in Table 5.1, the variation from site to site was modest.

Table 5.1 Female Respondents, by Site (%)

Site	JK Baseline Sample		48-Month Focal Cohort Sample	
	n	%	n	%
Guelph	43	90.7	55	98.2
Kingston	110	93.6	107	92.5
Ottawa	69	97.1	62	96.8
Toronto	103	91.3	95	96.8
Walpole	35	93.9	48	97.9
Peterborough Comparison	na	na	192	96.4
All Sites	358	93.3	559	96.1

As shown in Table 5.2, at baseline the mean year of birth for the respondent was 1961, while for the focal cohort it was 1996. Since all those interviewed were parents of children in Junior Kindergarten, but those in the focal cohort were interviewed four years later than those in the baseline, the focal cohort might be expected to have more recent birth years.

Table 5.2 Mean Year of Birth for Respondents, by Site

Site	JK Baseline Sample			48-Month Focal Cohort Sample		
	n	Mean	sd	n	Mean	sd
Guelph	43	1961.49	5.04	53	1966.73	6.31
Kingston	110	1961.67	5.59	101	1967.79	5.79
Ottawa	69	1961.54	5.46	60	1961.54	6.12
Toronto	103	1959.42	7.11	87	1964.80	7.41
Walpole	33	1964.41	5.98	45	1965.83	7.16
Peterborough Comparison	na	na	na	190	1966.30	5.89
All Sites	358	1961.22	6.15	536	1966.30	6.42

As shown in Table 5.3, at baseline the proportion of immigrant respondents at Guelph, Kingston and Walpole Island was under 25%, while at Ottawa it was 50.7% and at Toronto 71.8%. In the focal cohort, Kingston and Walpole were below 10%, as was Peterborough. Guelph increased to 49.1%, Ottawa declined to 26.7%, and Toronto remained in the same neighbourhood, at 79.3%. The increase in Guelph and the decline in Ottawa reflect the reality that low-income areas are often immigrant-reception areas because of low rent levels, but also that neither site has been an established immigrant-reception area.

Immigrant parents had come from many places, including, for example, Hong Kong, Jamaica, Somalia, Vietnam and several Central American countries. There were too few from any one location to permit useful analysis of how they were faring compared to those born in Canada.

Classification by cultural group (see Table 5.4) began with responses to the question How would you describe your ethnic identity? Because many Canadian-born Anglophones did not identify themselves with any cultural group, stated identify could not be readily used to define an Anglophone category. It was decided to include in this category those who grew up in Canada, the U.S., or Great Britain, and who preferred to be interviewed in English, unless some other characteristic placed them in another category. Those who identified themselves as Chinese or spoke Chinese at home were placed in their own group, as were those who identified themselves as Vietnamese or spoke the language at home. Those who identified themselves with a Native culture, or in reply to a question about Native status indicated Native ancestry, were placed in the Native category. The remaining members of the sample were put in the Other category, as there were too few in any well-defined group for effective analysis.

Reflecting differences in the proportion of immigrants, the sites vary considerably in cultural composition. In the baseline sample, while Guelph and Kingston differ in only minor ways, the differences between these two sites and the others are great. At Guelph, 74.4% were anglophone, at Kingston 79.1%. At Ottawa, the percentage dropped to 46.4% and at Toronto, to 41.4%. At the reserve on Walpole Island, the proportion reached its lowest level, at 8.8%. At Toronto, 18.4% were Chinese and 25.2% Vietnamese, while neither group made up more than 6.4% of the sample at any of the other sites.

In the focal sample, the relative character of the sites remained much the same, although the increase in Vietnamese from 2.3% to 25.5% at Guelph is worth noting. Peterborough, for which there are no baseline data, is the most anglophone of the sites, with 90.8% of the sample falling in that category.

Table 5.3 Respondent s Place of Birth, by Site (%)

JK Baseline Sample						
Site	**n**	**Ontario**	**Elsewhere in Canada**	**Vietnam**	**Elsewhere**	**Total**
Guelph	43	67.4	9.3	2.3	20.9	99.9
Kingston	110	68.2	13.6	0.0	18.2	100.0
Ottawa	69	42.0	7.2	1.4	49.3	99.9
Toronto	103	23.3	4.9	33.0	38.8	100.0
Walpole	33	87.9	0.0	0.0	12.1	100.0
Peterborough Comparison	na	na	na	na	na	na
All Sites	358	52.0	8.1	10.1	29.9	100.1
48-Month Focal Cohort Sample						
Site	**n**	**Ontario**	**Elsewhere in Canada**	**Vietnam**	**Other**	**Total**
Guelph	53	45.3	5.7	28.3	20.8	100.1
Kingston	101	79.2	12.9	0.0	7.9	100.0
Ottawa	60	65.0	8.3	0.0	26.7	100.0
Toronto	87	16.1	4.6	17.2	62.1	100.0
Walpole	45	91.1	0.0	0.0	8.9	100.0
Peterborough Comparison	190	85.8	7.9	0.0	6.3	100.0
All Sites	536	67.4	7.5	5.6	19.6	100.1

Table 5.4 Respondent s Cultural Group, by Site (%)

JK Baseline Sample							
Site	***Cultural Group***						
	n	**Anglophone**	**Chinese**	**Vietnamese**	**Native**	**Other**	**Total**
Guelph	43	74.4	0.0	2.3	4.7	18.6	100.0
Kingston	110	77.3	6.4	0.0	5.5	10.9	100.1
Ottawa	69	46.4	4.3	2.9	2.9	43.5	100.0
Toronto	103	21.4	18.4	25.2	6.8	28.2	100.0
Walpole	33	8.8	0.0	0.0	91.2	0.0	100.0
Peterborough Comparison	na	na	na	na	na	na	na
All Sites	358	48.5	8.1	8.1	13.4	22.0	100.1
48-Month Focal Cohort Sample							
	Cultural Group						
	n	**Anglophone**	**Chinese**	**Vietnamese**	**Native**	**Other**	**Total**
Guelph	55	47.3	7.3	25.5	3.6	16.4	100.1
Kingston	108	77.3	6.4	0.0	5.5	10.9	100.1
Ottawa	66	56.1	0.0	0.0	9.1	34.8	100.0
Toronto	98	14.3	9.2	14.3	4.1	58.2	100.1
Walpole	48	6.3	0.0	0.0	93.8	0.0	100.1
Peterborough Comparison	196	90.3	0.0	0.0	5.1	4.6	100.1
All Sites	571	59.9	2.6	4.9	13.7	18.9	100.0

Marital Status

As shown in Table 5.5, with the exception of Walpole, the bulk of respondents at each site had been married. In the focal sample, Walpole again is the only site where a minority of respondents had been married, although its proportion had risen slightly. Overall, the proportion who had been married is a little lower in the focal sample, at 67.0%, compared to 72.3% for the baseline.

Table 5.5 Respondents Ever Married, by Site (%)

Site	JK Baseline Sample		48-Month Focal Cohort Sample	
	n	%	n	%
Guelph	43	72.1	55	72.7
Kingston	110	77.3	107	57.9
Ottawa	69	81.2	62	74.2
Toronto	103	71.8	95	63.2
Walpole	33	39.4	48	47.9
Peterborough Comparison	na	na	196	74.5
All Sites	358	72.3	563	67.0

As shown in Table 5.6, the proportion currently living with a husband or wife displays the same pattern as was seen in Table 5.5: the bulk of those who have been married are living with their spouse, with the exception of Walpole Island.

Table 5.6 Respondents Living With Husband/Wife, by Site (%)

Site	JK Baseline Sample		48-Month Focal Cohort Sample	
	n	%	n	%
Guelph	31	67.7	40	80.0
Kingston	85	67.1	69	62.3
Ottawa	56	69.6	43	74.4
Toronto	74	78.4	65	60.0
Walpole	32	39.4	27	40.7
Peterborough Comparison	na	na	147	79.6
All Sites	278	72.3	391	70.1

Table 5.7, which presents data on single parenthood, also shows only modest site-to-site and between-sample differences. For the baseline sample, 36.9% of households were led by a single parent. For the focal sample 35.7% were headed by single parents.

Table 5.7 Single Parents, by Site (%)

Site	JK Baseline Sample		48-Month Focal Cohort Sample	
	n	%	n	%
Guelph	43	46.5	55	25.5
Kingston	110	34.5	108	41.7
Ottawa	69	33.3	66	37.9
Toronto	103	36.9	98	45.9
Walpole	33	39.3	48	39.6
Peterborough Comparison	na	na	196	28.6
All Sites	358	36.9	571	35.7

Education and Employment

The formal education of respondents ranged from none at all to the postgraduate level. While there was some variation from site to site, the percentage differences shown in Table 5.8 are not always very reliable because of the small numbers involved. Attention will therefore be focused on the characteristics of the full sample. Of our baseline respondents, 21.5% had gone no further than Grade 9, another 22.1% had completed Grade 10 or 11, and another 28.4% Grade 12 or 13. The remaining 28.1% had some form of post-secondary training. Degrees were held by 8.9%. Toronto showed far the highest proportion with Grade 9 or less, at 46.5%, more than double the percentage for any other site. Kingston had far the highest proportion with post-secondary training, at 44.5%, 18.9 percentage points higher than its runner-up, Guelph, at 25.6%.

In the focal sample, among sites for which data were gathered on both occasions, Toronto is distinctive. At that site, the proportion reporting no more than Grade 9 dropped from 46.5% to 16.8%, and the proportion with post-secondary training increased from 19.8% to 28.4%. At Ottawa, the proportion with post-secondary training rose from 15.6% to 37.7%. At other sites, changes were relatively modest. As mentioned in the methodology chapter, one reason for consistent use of education as a covariate in our analyses of Better Beginnings effects was the presence of changes between samples at some of the sites.

Table 5.8 Level of Education of Respondents, by Site (%)

JK Baseline Sample							
Site	**n**	**Gr 9 or Less**	**Gr 10-11**	**Gr 12-13**	**College**	**Degree**	**Total**
Guelph	43	16.3	14.0	44.2	16.3	9.3	100.1
Kingston	110	7.3	27.3	20.9	30.9	13.6	100.0
Ottawa	64	21.9	31.3	31.3	10.9	4.7	100.1
Toronto	101	46.5	16.8	16.8	11.9	7.9	99.9
Walpole	47	16.1	32.3	25.8	22.6	3.2	100.0
Peterborough Comparison	na	na	na	na	na	na	na
All Sites	349	21.5	22.1	28.4	19.2	8.9	100.1
48-Month Focal Cohort Sample							
Site	**n**	**Gr 9 or Less**	**Gr 10-11**	**Gr 12-13**	**College**	**Degree**	**Total**
Guelph	55	20.0	7.3	47.3	16.4	9.1	100.1
Kingston	107	4.7	13.1	37.4	36.4	8.4	100.0
Ottawa	61	14.8	21.3	26.2	34.4	3.3	100.1
Toronto	95	16.8	5.3	49.5	24.2	4.2	100.1
Walpole	48	22.9	41.7	14.6	16.7	4.2	100.0
Peterborough Comparison	196	2.0	11.7	22.4	49.5	14.3	100.1
All Sites	562	10.0	14.1	32.0	35.1	8.9	100.0

The respondents, and their partners, included a high proportion without paid employment. Table 5.9 shows the employment status of the women, by site. Of the full baseline sample, 15.5% had full-time paid employment, another had 14.1% part-time work, and 17.2% were seeking work. In the focal sample, at the sites for which baseline data are available, the proportion with full-time work goes up, although modestly, and the proportion not seeking work goes down.

We can calculate an unemployment rate by taking those seeking work as a percentage of the labour force those holding or seeking employment. Using data from the four sites for which baseline data are available, the rate comes out at 36.1 at baseline and 24.9 for the focal sample. For the full focal sample, the rate is 26.1. Although these rates may not fully reflect desire for employment some people do not seek work because they do not think it is available and some working part-time might prefer to work full-time these are high figures in their own right.

Table 5.9 Employment Status of Females (Respondents or Partners), by Site (%)

JK Baseline Sample						
Site	**n**	**Full Time**	**Part Time**	**None, Seeking Work**	**None, Not Seeking Work**	**Total**
Guelph	40	30.0	12.5	17.5	40.0	100.0
Kingston	109	21.1	19.3	6.4	53.2	100.0
Ottawa	68	11.8	14.7	20.6	52.9	100.0
Toronto	102	5.9	8.8	26.5	58.8	100.0
Walpole	na	na	na	na	na	na
Peterborough Comparison	na	na	na	na	na	na
All Sites	311	15.4	14.1	17.2	53.3	100.0
48-Month Focal Cohort Sample						
Site	**n**	**Full Time**	**Part Time**	**None, Seeking Work**	**None, Not Seeking Work**	**Total**
Guelph	54	31.5	18.5	22.2	27.8	100.0
Kingston	104	26.0	15.4	24.0	34.6	100.0
Ottawa	60	21.7	15.0	18.3	45.0	100.0
Toronto	94	11.7	18.1	20.2	50.0	100.0
Walpole	48	20.8	16.7	6.3	56.3	100.1
Peterborough Comparison	191	41.4	23.0	11.5	24.1	100.0
All Sites	551	28.5	18.9	16.7	35.9	100.0

Table 5.10 shows the employment status of the men. In the baseline sample, 41.7% were working full-time, and 14.1% part-time. Those without paid work and actively seeking it made up 30.6% of the group. Using data from Guelph, Kingston, Ottawa, and Toronto, the baseline unemployment rate comes to 35.4. For the same sites, the rate in the focal sample comes to 21.8. The decline for this set of sites primarily results from changes at Ottawa, which dropped from 34.8 to 9.5, and Toronto, which dropped from 44.6 to 31.2. For the full focal sample it is 9.3. The decline between the four-site rate and the overall rate for the focal sample reflects the quite low rate for Peterborough. (As pointed out in the methodology chapter, site differences in employment caused us to use whether the respondent's partner held a full-time job as a control variable in examining Better Beginnings' longitudinal effects.)

Table 5.10 Employment Status of Males (Respondents or Partners), by Site (%)

JK Baseline Sample						
Site	**n**	**Full Time**	**Part Time**	**None, Seeking Work**	**None, Not Seeking Work**	**Total**
Guelph	26	57.7	19.2	19.2	3.8	99.9
Kingston	69	53.6	15.9	18.8	11.6	99.9
Ottawa	46	37.0	13.0	34.8	15.2	100.0
Toronto	65	26.2	10.8	44.6	18.5	100.1
Walpole	21	38.1	28.6	28.6	4.8	100.1
Peterborough Comparison	na	na	na	na	na	na
All Sites	206	41.7	14.1	30.6	13.6	100.0
48-Month Focal Cohort Sample						
Site	**n**	**Full Time**	**Part Time**	**None, Seeking Work**	**None, Not Seeking Work**	**Total**
Guelph	41	82.9	4.9	4.9	7.3	100.0
Kingston	64	60.9	14.1	15.6	9.4	100.0
Ottawa	42	64.3	9.5	9.5	16.7	100.0
Toronto	53	56.6	17.0	13.2	13.2	100.0
Walpole	29	44.8	10.3	20.7	24.1	99.9
Peterborough Comparison	138	85.5	8.7	1.4	4.3	99.9
All Sites	367	71.1	10.6	8.4	9.8	99.9

Income

For the full sample at baseline, the mean monthly income was $1,783. As shown in Table 5.11, Guelph ranked highest, with a mean of $2,087, Kingston came next at $1,972, Walpole third at $1,722, Ottawa a short distance below at $1,666, and Toronto fifth at $1,560. There is little difference between samples for Toronto or Walpole, but Guelph, Kingston, and Ottawa showed increases ranging from $381 for Kingston to $678 for Guelph. For the sites on which data are available for both samples, the mean increased from $1,783 to $2,091, while for the full focal sample, it was $2,522.

Income is one variable on which it is necessary to point out differences in sample characteristics over time. The longitudinal data indicate that incomes moved up over time, particularly between the 18-month and 33-month interviews. For those interviewed on all four occasions, the mean incomes were: at 3 months $2,054; at 18 months $2,178; at 33 months $2,479; at 48 months $2,587. The largest change took place between the 18-month interviews and the 33-month interviews, which began in October of 1996

and continued through October of 1997. The precise reasons for the relatively sharp rise are not readily determined from our data.

Table 5.11 Mean Monthly Income, by Site ($)

Site	JK Baseline Sample			48-Month Focal Cohort Sample		
	n	Mean	sd	n	Mean	sd
Guelph	42	2,087	1452	55	2,765	1,665
Kingston	105	1,972	1,097	108	2,353	1,849
Ottawa	68	1,666	754	66	2,195	1,322
Toronto	102	1,560	763	98	1,489	763
Walpole	30	1,722	1,256	48	1,717	892
Peterborough Comparison	na	na	na	189	3,328	1,898
All Sites	347	1,783	1,031	571	2,522	1,733

The impact of a low income depends heavily on the number who must be supported by it. Table 5.12 shows the proportions below Statistics Canada s Low Income Cut-offs (LICOs), which reflect income, family size, and size of community of residence. Although Statistics Canada, having no official definition of poverty, does not refer to them as such, they are widely treated as poverty lines.

In keeping with the change income data just reported, there was a modest decline in the percentage below the LICOs between the baseline and the focal samples at each site. However, for the demonstration sites 74.2% were still below them. As with income, Peterborough fared better than the other sites with 34.4% below the LICOs.

Table 5.12 Families Below Low Income Cut-offs, by Site (%)

Site	JK Baseline Sample		48-Month Focal Cohort Sample	
	n	%	n	%
Guelph	42	66.7	55	52.7
Kingston	105	72.4	102	69.6
Ottawa	68	89.7	61	75.4
Toronto	102	95.1	87	92.0
Walpole	28	82.1	48	75.0
Peterborough Comparison	na	na	189	34.4
All Sites	345	82.6	542	60.3

SUMMARY OF YOUNGER COHORT SITE CHARACTERISTICS

The first major section of this chapter reviewed the socio-demographic characteristics of respondents and households at the younger cohort sites.

- 93.3% of respondents in the baseline sample, and 96.1% in the focal sample, were female;
- 60.1% of the baseline sample, and 74.9% of the focal sample were born in Canada (but the proportion varied considerably from site to site);
-

In the baseline sample	in the focal sample
48.5% were Anglophone,	59.9% were Anglophone,
8.1% Chinese,	2.6% Chinese,
13.4% Native,	13.7% Native,
8.1% Vietnamese,	4.9% Vietnamese,
22.0% from other cultural backgrounds	18.9% from other cultural backgrounds

- 28.1% of the baseline sample had some form of post-secondary education; in the focal sample, the proportion rose to 44.0%;
- for males in baseline sample households, the unemployment rate was 35.4; for females, it was 36.1;
- in focal sample households, at the same sites, the rates were down to 24.9 for females and 21.8 for males;
- 36.9% of households in the baseline sample, and 35.7% in the focal sample, were headed by a single parent;
- mean monthly household income for the baseline sample was $1,783; for the same sites, the mean for the focal sample was $2,091; for the full focal sample, it was $2,522.
- in the baseline sample 82.6% were below Statistics Canada s Low Income Cut-offs; for the same sites, in the focal sample, 74.2% fell below them; for the full focal sample 60.3% were below the LICOs.

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE OLDER COHORT SAMPLES

In two-parent households, an attempt was made to interview the parent most familiar with the focal child. In the vast majority of such cases, the mother was interviewed. Of the one-parent households involved in the study, over 90% in each sample, were headed by a woman. Thus the vast preponderance of respondents, 87.4% of the baseline older cohort sample and 88.4% of the focal cohort sample, were female. As shown in Table 5.13, the variation from site to site was modest.

Table 5.13 Female Respondents, by Site (%)

Site	Grade 2 Baseline Sample		Grade 2 Focal Sample	
	n	%	n	%
Cornwall	45	88.9	66	98.5
Highfield	43	76.7	79	81.0
Sudbury	118	90.7	112	91.1
Etobicoke Comparison	na	na	118	87.3
Ottawa-Vanier Comparison	na	na	161	87.0
All Sites	206	87.4	560	88.4

Table 5.14 provides mean year of birth by site. Since parents in the focal sample were interviewed four years later than those in the baseline sample, yet had children of comparable ages, it might be expected that parents in the focal sample would have been born a few years later. The mean years of birth, for the two samples, were (rounded) 1957 and 1962. There was only minor variation from site to site.

Table 5.14 Mean Year of Birth for Respondent, by Site

Site	Grade 2 Baseline Sample			Grade 2 Focal Sample		
	n	Mean	sd	n	Mean	sd
Cornwall	45	1956.53	5.58	66	1962.61	3.75
Highfield	43	1958.14	6.38	77	1961.47	6.47
Sudbury	118	1958.15	5.56	112	1963.97	6.15
Etobicoke Comparison	na	na	na	117	1961.72	4.95
Ottawa-Vanier Comparison	na	na	na	182	1961.28	5.64
All Sites	206	1957.18	5.81	553	1962.10	5.62

Across sites there were great differences in country of birth (see Table 5.15). The demonstration site at Highfield and its comparison site in Etobicoke are located in immigrant-reception areas. In both samples, 88% (rounded) of the parents interviewed at Highfield were born outside Canada, and in the focal sample, 83.5% of those at the comparison site were immigrants. At the other sites (Cornwall, Sudbury, and their comparison site, Ottawa-Vanier), the vast bulk of respondents were native-born.

Table 5.15 Respondent s Place of Birth, by Site (%)

Grade 2 Baseline Sample					
Site	**n**	***Place of Birth***			
		Ontario	**Elsewhere in Canada**	**Outside Canada**	**Total**
Cornwall	45	75.6	20.0	4.4	100.0
Highfield	43	7.0	4.7	88.4	100.1
Sudbury	118	84.7	8.5	6.8	100.0
Etobicoke Comparison	na	na	na	na	na
Ottawa-Vanier Comparison	na	na	na	na	na
All Sites	206	66.5	10.2	23.3	100.0
Grade 2 Focal Sample					
Site	**n**	***Place of Birth***			
		Ontario	**Elsewhere in Canada**	**Outside Canada**	**Total**
Cornwall	65	81.5	16.9	1.5	99.9
Highfield	75	12.0	0.0	88.0	100.0
Sudbury	110	88.2	9.1	2.7	100.0
Etobicoke Comparison	115	13.0	3.5	83.5	100.0
Ottawa-Vanier Comparison	182	58.8	19.2	22.0	100.0
All Sites	547	51.4	11.0	37.7	100.1

Immigrant parents had come from many places, including, for example, Hong Kong, India, Jamaica, and several Central American countries. There were too few from any one location to permit useful analysis of how they were faring compared to those born in Canada. Thus, in Table 5.16, the breakdown of cultural groups by site shows only four broad categories: Anglophone, Francophone, Native, and Other.

Classification by cultural group began with responses to the question How would you describe your ethnic identity? Those who gave replies such as Franco-Ontarian , French-Canadian , Québecois , and the like were placed in the Francophone category. Among those who did not identify themselves with any cultural group, those who preferred to be interviewed in French were also placed in the Francophone category.[1] Those who identified themselves with a Native culture (usually Ojibwa) or indicated, in response to a question about Native status, that they had Native ancestry were placed in the Native category. Because many Canadian-born Anglophones did not identify themselves with any cultural group, stated identity could not be readily used to define an Anglophone category. It was decided that those who grew up in Canada, the U.S., or Great Britain, and who preferred to be interviewed in English, would be counted as Anglophone unless some other characteristic placed them in the Francophone or Native category. The remaining members of the sample were put in the Other category.

Table 5.16 Respondent s Cultural Group, by Site (%)

Grade 2 Baseline Sample						
Site	**n**	***Cultural Group***				
		Anglophone	**Francophone**	**Native**	**Other**	**Total**
Cornwall	45	31.1	68.9	0.0	0.0	100.0
Highfield	43	7.0	2.3	0.0	90.7	100.0
Sudbury	118	28.8	39.0	27.1	5.1	100.0
Etobicoke Comparison	na	na	na	na	na	na
Ottawa-Vanier Comparison	na	na	na	na	na	na
All Sites	206	24.8	37.9	15.5	21.8	100.0
Grade 2 Focal Sample						
Site	**n**	***Cultural Group***				
		Anglophone	**Francophone**	**Native**	**Other**	**Total**
Cornwall	66	30.3	68.2	1.5	0.0	100.0
Highfield	79	11.4	1.3	0.0	87.3	100.0
Sudbury	112	43.8	37.5	14.3	4.5	100.1
Etobicoke Comparison	118	17.8	0.8	0.0	81.4	100.0
Ottawa-Vanier Comparison	185	25.9	62.7	0.5	10.8	99.9
All Sites	560	26.3	36.6	3.2	33.9	100.0

The differences among sites are very clear. At Cornwall, in both samples, just over two thirds were Francophone and the remainder were almost all Anglophone. At Highfield, over 90% of the baseline sample and almost as many in the focal sample were newcomers to Canada, who were placed in the Other category. Sudbury was more diverse, with substantial representations of Anglophones, Francophones, and Natives, each making up over 25% of the baseline sample.

Like its paired demonstration site at Highfield, the comparison site in Etobicoke was largely composed of immigrants: 81.4% of the focal sample at Etobicoke were placed in the Other category. Ottawa-Vanier, like its paired demonstration sites in Cornwall and Sudbury, had solid representation of both Anglophones and Francophones, with the latter predominating.

Marital Status

As shown in Table 5.17, variations in the proportion of respondents who had been married were modest. In the baseline sample, 83.4% had been married, and in the focal sample 78.6%. The only notable change seen was for Sudbury, where the percentage dropped from 88.4% to 62.5% ($p<.5$), the lowest in the study.

Table 5.17 Respondents Ever Married, by Site (%)

Site	Grade 2 Baseline Sample		Grade 2 Focal Sample	
	n	%	n	%
Cornwall	44	97.7	66	90.9
Highfield	43	76.3	79	82.3
Sudbury	118	88.4	112	62.5
Etobicoke Comparison	na	na	118	84.7
Ottawa-Vanier Comparison	na	na	185	78.4
All Sites	205	83.4	560	78.6

Among those who had married, the proportion currently living with a husband or wife was notably lower for Sudbury than for the other two sites. As shown in Table 5.18, for Cornwall the figure was 79.5% and for Highfield it was 76.3%, while for Sudbury it was 57.3%.

Table 5.18 Respondents Living With Husband/Wife, by Sites (%)

Site	Grade 2 Baseline Sample		Grade 2 Focal Sample	
	n	%	n	%
Cornwall	39	79.5	61	80.3
Highfield	38	76.3	66	90.9
Sudbury	89	57.3	73	56.2
Etobicoke Comparison	na	na	105	71.4
Ottawa-Vanier Comparison	na	na	147	70.7
All Sites	166	66.9	452	72.8

Those not living with a legal marriage partner were often living with someone without having married, so that single parenthood might be distributed across site and sample in ways unpredictable from the preceding variables. In fact, Table 5.19 shows only modest variation in the proportion of single parents. In the baseline sample, 36.0% of respondents were single parents, and in the focal sample, 30.5% were in this category. For individual sites, fluctuations were a little greater, as might be expected because of smaller sample sizes, but were modest.

Table 5.19 Single Parents, by Site (%)

Site	Grade 2 Baseline Sample		Grade 2 Focal Sample	
	n	%	n	%
Cornwall	41	24.5	66	15.2
Highfield	43	34.9	79	22.8
Sudbury	116	40.5	112	48.2
Etobicoke Comparison	na	na	118	31.4
Ottawa-Vanier Comparison	na	na	185	28.1
All Sites	200	36.0	560	30.5

Education and Employment

The formal education of respondents ranged from none at all to the postgraduate level. While there was some variation between samples, and from site to site, the percentage differences shown in Table 5.20 are not very reliable because of the small numbers involved. Attention will therefore be focused on the characteristics of the full samples. Of the baseline respondents, 15.6% had gone no further than Grade 9, another 20.0% had completed Grade 10 or 11, and a further 27.8% Grade 12 or 13. The remaining 36.6% had some form of post-secondary training. Degrees were held by 11.2%. In the focal sample, the proportions with less than Grade 9 and with Grade 10 or 11 went down, and the proportion at higher levels went up, so that 44.6% had some post-secondary education.

Table 5.20 Level of Education of Respondents, by Site (%)

Grade 2 Baseline Sample							
Site	**n**	**Gr 9 or Less**	**Gr 10-11**	**Gr 12-13**	**College, Some University**	**University Degree**	**Total**
Cornwall	45	11.1	13.3	31.1	28.9	15.6	100.0
Highfield	43	23.3	23.3	34.9	7.0	11.6	100.1
Sudbury	117	14.5	21.4	23.9	30.8	9.4	100.0
Etobicoke Comparison	na	na	na	na	na	na	na
Ottawa-Vanier Comparison	na	na	na	na	na	na	na
All Sites	205	15.6	20.0	27.8	25.4	11.2	100.0
Grade 2 Focal Sample							
Site	**n**	**Gr 9 or Less**	**Gr 10-11**	**Gr 12-13**	**College, Some University**	**University Degree**	**Total**
Cornwall	66	1.5	18.2	39.4	30.3	10.6	100.0
Highfield	76	9.2	14.5	23.7	28.9	23.7	100.0
Sudbury	112	15.2	17.0	33.0	34.8	0.0	100.0
Etobicoke Comparison	116	5.2	12.1	36.2	32.8	13.8	100.1
Ottawa-Vanier Comparison	182	7.1	19.8	25.8	31.9	15.4	99.9
All Sites	552	8.0	16.7	30.8	32.1	12.5	100.1

For their age range, the respondents, and their partners, included a high proportion without paid employment. Table 5.21 shows the employment status of the women. For the full baseline sample, 31.7% had full-time paid employment, another had 21.6% part-time work, and 16.1% were seeking work. The most notable difference across the sites is that at Highfield the bulk of those without paid work reported that they were seeking it, while in the other two sites the reverse was true. However, in the focal sample, Highfield is not very different from the other sites in the proportion seeking work. Although Highfield changes in this way, the overall figures (not shown) for the three demonstration sites differ only trivially from those for the baseline sample. For example, the percentage with full-time work is 33.6%, compared to 31.7% for the baseline sample.

Table 5.21 Employment Status of Females (Respondents or Partners), By Site (%)

Grade 2 Baseline Sample						
Site	**n**	**Full-Time**	**Part-Time**	**None, Seeking Work**	**None, Not Seeking Work**	**Total**
Cornwall	45	37.8	33.3	2.2	26.7	100.0
Highfield	43	37.2	16.3	37.2	9.3	100.0
Sudbury	111	27.0	18.9	13.5	40.5	99.9
Etobicoke Comparison	na	na	na	na	na	na
Ottawa-Vanier Comparison	na	na	na	na	na	na
All Sites	199	31.7	21.6	16.1	30.7	100.1
Grade 2 Focal Sample						
Site	**n**	**Full-Time**	**Part-Time**	**None, Seeking Work**	**None, Not Seeking Work**	**Total**
Cornwall	65	40.0	27.7	10.8	21.5	100.0
Highfield	78	50.0	10.3	15.4	24.4	100.1
Sudbury	107	17.6	19.6	20.6	42.1	99.9
Etobicoke Comparison	114	42.1	15.8	22.8	19.3	100.0
Ottawa-Vanier Comparison	181	45.9	17.7	16.6	19.9	100.1
All Sites	545	39.4	17.8	17.8	25.0	100.0

Table 5.22 shows the employment status of the men. In the baseline sample, 69.7% were working full-time, and 6.8% part-time. Those without paid work and actively seeking in made up 13.6% of the group. The figures for the three demonstration sites, taken together, in the focal sample, (not shown) are little different. For example, the proportion working full-time is 75.8%, compared to 69.7% in the baseline sample.

Table 5.22 Employment Status of Males (Respondents or Partners), By Site (%)

Grade 2 Baseline Sample						
Site	**n**	**Full-Time**	**Part-Time**	**None, Seeking Work**	**None, Not Seeking Work**	**Total**
Cornwall	35	74.3	8.6	11.4	5.7	100.0
Highfield	27	74.1	7.4	14.8	3.7	100.0
Sudbury	70	65.7	5.7	14.3	14.3	99.9
Etobicoke Comparison	na	na	na	na	na	na
Ottawa-Vanier Comparison	na	na	na	na	na	na
All Sites	132	69.7	6.8	13.6	9.8	99.9
Grade 2 Focal Sample						
Site	**n**	**Full-Time**	**Part-Time**	**None, Seeking Work**	**None, Not Seeking Work**	**Total**
Cornwall	56	89.3	1.8	5.4	3.6	100.1
Highfield	61	78.7	6.6	9.8	4.9	100.0
Sudbury	63	55.6	7.9	12.7	23.8	100.0
Etobicoke Comparison	83	81.9	9.6	7.2	1.2	99.9
Ottawa-Vanier Comparison	133	74.4	6.0	11.3	8.3	100.0
All Sites	396	75.8	6.6	9.6	8.1	100.1

Unemployment rates can be arrived at by omitting those who are not seeking work and then comparing the number seeking work to those who have paid employment. For the baseline sample, the resulting rate for males is 15.1 and for females 23.2. For the focal sample, the respective rates are 10.4 and 23.8. While these figures may not fully reflect desire for employment — some people do not seek work only because they do not think it is available, and some who are working part-time might prefer to work full-time — these are high figures in their own right.

Income

For the full baseline sample, the mean monthly income was $2,422. As shown in Table 5.23, there was noticeable variation from site to site. Cornwall stood at the top, with a mean of $2,997, Highfield at the bottom, with a mean of $2,205, and Sudbury a bit above Highfield at $2,287. In the focal sample, interviewed four years later, Cornwall had risen to $3,517 and Highfield to $2,490, while Sudbury dropped to $1,892. Because of the differing experiences of the three demonstration sites, there was no significant difference in incomes for the three taken together.

The Etobicoke comparison site, at $2,465, was within $25 of its paired comparison site at Highfield. Ottawa-Vanier was within the range between Cornwall and Sudbury, but was clearly closer to Cornwall.

Table 5.23 Mean Monthly Income, by Site

Site	Grade 2 Baseline Sample			Grade 2 Focal Sample		
	n	Mean	s.d.	n	Mean	s.d.
Cornwall	44	2,997	1,408	62	3,517	2,028
Highfield	43	2,205	1,222	58	2,490	1,743
Sudbury	118	2,287	1,386	64	1,892	1,156
Etobicoke Comparison	na	na	na	118	2,465	1,701
Ottawa-Vanier Comparison	na	na	na	185	3,314	2,417
All Sites	205	2,422	1,385	560	2,784	2,054

As shown in Table 5.24, there is considerable variation in the percentage below the LICOs at the older cohort sites. At baseline the proportion varied from 40.9% at Cornwall to 86.0% at Highfield. The diversity is only a little less in the focal sample, although Sudbury has the highest proportion of the demonstration sites, at 75.9%.

Table 5.24 Families Below Low Income Cut-offs, by Site (%)

Site	Grade 2 Baseline Sample		Grade 2 Focal Sample	
	n	%	n	%
Cornwall	44	40.9	66	42.4
Highfield	43	86.0	79	72.2
Sudbury	118	64.4	112	75.9
Etobicoke Comparison	na	na	118	70.3
Ottawa-Vanier Comparison	na	na	185	53.0
All Sites	205	63.9	560	62.7

SUMMARY OF OLDER COHORT SITE CHARACTERISTICS

The second major section of this chapter has reviewed the socio-demographic characteristics of respondents and their households:

" 87.4% of respondents in the baseline sample and 88.4% in the focal sample were female;

" 76.7% of the baseline sample and 62.4% of the focal sample were born in Canada (but the proportion was much lower at the Highfield site and its comparison site in Etobicoke, which are immigrant-reception areas);

"

in the baseline sample	in the focal sample
24.8% were Anglophone,	26.3% were Anglophone,
37.9% Francophone,	36.6% Francophone,
15.5% Native,	3.2% Native,
21.8% from other cultural backgrounds	33.9% from other cultural backgrounds;

(The decline in the proportion of Natives results primarily from the addition of two sites with small Native populations.)

" 36.6% of the baseline sample and 44.6% of the focal sample had some form of post-secondary education;

" for males in baseline sample households, the unemployment rate was 15.1; for females, it was 23.2;

" for focal sample households, the unemployment rate for males at the same sites was 10.4; for females, it was 23.8;

" 36.0% of households in the baseline sample and 30.5% in the focal sample were headed by a single parent;

" the mean income for the baseline sample was $2,422/month; for the same sites, the focal sample mean was $2,628; for the full focal sample, it was $2,784.

" in the baseline sample 63.9% were below Statistics Canada s LICOs; for the same sites, the focal sample percentage was 66.1%; for the full focal sample it was 62.7%.

Notes:

1. A more stringent definition of the Francophone category has also been tried. It excludes those who identify themselves with a French-language cultural category if they neither preferred to be interviewed in French, nor speak French at home, nor send their children to a French-language school. Those not included in the Francophone category by the more stringent definition almost all move into the Anglophone category. Here we have followed what appears to be local practice at the sites in accepting the broader definition.

   To see how much difference a change in definition might make in analyzing data, more than 80 tabulations with other variables have been done. In the vast majority of cases, the placement of the cases who shift from Francophone to Anglophone made little difference. Basically, the stably placed members of the two groups did not differ on many of the variables checked, and those who moved from one category to the other did not differ greatly from either.

Chapter 6

METHODOLOGY

This chapter reviews major methodological elements of the analysis conducted on the first six years of Better Beginnings data. In turn it discusses issues related to the samples, steps taken to assess and ensure the quality of data, the approach taken to examine data from the baseline-focal design, and the approach taken to examine change in the longitudinal design.

THE SAMPLES

Comparison Sites

Since, as explained earlier in this report, the demonstration sites were chosen by competition, comparison sites could be selected only after the demonstration sites had been announced. Older cohort demonstration sites were located in Cornwall, Highfield, and Sudbury. The Cornwall program was focused on four francophone schools, located in an area with both francophones and anglophones well represented. The Highfield program was operated out of a single school, named Highfield Junior School, in an immigrant reception area. In Sudbury, programs were set up by a process of community development, in an area with four sizable groups, for each of which programs were developed: anglophones, francophones, Native Canadians (usually Ojibwa), and immigrants from a variety of countries.

The urban younger cohort demonstration sites were located in Guelph, Kingston, Ottawa, and Toronto. In Guelph and Kingston the programs were based in largely anglophone areas. In Ottawa, the population was mainly anglophone, with some francophones and with a sizable minority of refugees from Somalia. The site in Toronto was at Regent Park, one of the oldest and largest public housing complexes in Canada. At this site, the population could be broken down into four major groups: anglophones, Caribbean immigrants, Chinese (refugees from Southeast Asia), and Vietnamese (also refugees). There was also a First Nation demonstration site (predominantly Ojibwa and Pottawatomi), at Walpole Island, situated on the St. Clair River.

Some other characteristics of the demonstration sites, as they have been reflected in the samples, may be seen in Chapter 5. Descriptions of individual sites are found in Appendix C.

For comparative purposes, sites were required:

- that were similar to their demonstration counterparts on risk factors that could be assessed from available data, such as average family income and percentage of single parents;
- that were similar to their demonstration counterparts in cultural composition;
- that were not undergoing redevelopment and in which there were no apparent plans for redevelopment;
- that could provide an adequate number of children for a comparison sample;
- that were not involved in other demonstration projects; and
- in which the community service system did not appear to be unusually well or poorly developed.

Also, an attempt was made to find sites for which movement to and from a demonstration site would be uncommon.

Initially, 1986 Census data were screened for all urban centres in Ontario with populations of over 30,000 in search of areas large enough to provide comparison samples of 100 or more, where the median family income was below $25,000 in 1986 dollars and where at least 20 per cent of family households were headed by a single parent. For each promising site, knowledgeable professionals were contacted to determine whether substantial changes in the located areas might have taken place since the Census, in particular to see whether the cultural mix in the neighbourhoods of interest had changed, and to learn about the current state of community services. At each potential site, two RCU members conducted windshield surveys to see if there were apparent changes in the housing stock from 1986, or if there were apparent differences in the housing stock of a demonstration site and its potential comparison site. As a final check, teachers of Junior Kindergarten (JK) children at the younger cohort sites, and of Grade 2 children at the older cohort sites, were asked to rate their children on a series of scales, to allow comparisons between the ratings given to children in the demonstration sites and their potential comparison sites.

In the end, comparison sites were selected for all but one of the urban demonstration sites. The exception was the site at Regent Park in downtown Toronto. It could not be matched, in part because of its unusual proportion of single parents (over 40%), in part because of its high unemployment rates (over 50%), and in part because of its cultural mix. No serious attempt was made to match the site at Walpole Island. There are few reserves in a comparable economic situation and large enough to provide a good comparison sample. As well, it was agreed by everyone with experience in doing research with Native populations that there was essentially no chance that another reserve would agree to participate in research unless there was some tangible gain to be received. For the two sites without comparison sites, it was felt that the baseline-focal comparison design, using historical controls, might well be the strongest available. Changes taking place over time at these sites would be compared to what was happening at other sites, but always with the awareness that cultural mismatching must be considered as an explanation for any differences that might appear between sites.

Although comparison sites were selected for the other demonstration sites, there was a limited range of choice. Only one site could be found that seemed a reasonable match for the two older cohort demonstration sites in Cornwall and Sudbury, an area in the city of Vanier and one in an adjacent section of the city of Ottawa that reasonably resembled the other two sites in its balance of anglophone and francophone populations; this comparison site is referred to in this report as Ottawa-Vanier.

In the search for a comparison site for the demonstration site at the Highfield Junior School in Etobicoke, a single choice was available, a combination of schools found elsewhere in Etobicoke. Highfield Junior School is located in an immigrant-reception area where people come on arrival to Canada, and once they can afford to, they often move from this area. Consequently, it tends to have many people from very recently arrived immigrant groups. A site of this kind can be matched only with other immigrant-reception areas, and even these often have different cultural mixes.

For the younger cohort sites in Guelph and Kingston, there was a very obvious place to look for a comparison site: Peterborough, a city of about the same size, like the other two a university city, and like the other two predominantly inhabited by native-born anglophones. However, apart from Peterborough, no other site was identified that was large enough to deliver a solid comparison sample that offered a good demographic match with Guelph and Kingston.

Peterborough appeared to be a reasonable match for the demonstration site in Ottawa as well, with one exception. The native-born population at the Ottawa site seemed comparable to that in Peterborough, but in Ottawa there was also a group of recent refugees from Somalia, who could not be matched in Peterborough. After searches in other cities and in other locations in Ottawa, no site could be found

where the native-born population resembled that of Ottawa and there was also a meaningful Somali population. Our conclusion was that, if the number of Somalis in the sample allowed it, we would control for the differences statistically, while using the Peterborough site as the best available match for the one in Ottawa.

Given that there was no list of eligible sites from which demonstration sites could be taken, and no random allocation of sites to treatment conditions, there is no straightforward way to generalize statistically beyond the sites from which we have data. The approach to statistical inference employed in response to this situation is explained below.

Checking Comparison Sites against Census Data

In selecting comparison sites, 1986 Census data were used to get an initial sense of suitability because the relevant 1991 data were not yet available. Interviews and observation were employed as safeguards against changes that might have taken place since the 1986 data were gathered. When 1991 and 1996 data became available, they were examined to see whether the sites appeared reasonably matched when compared on data gathered just before and during the demonstration period. In 1997/8 the series of interviews was repeated to see whether knowledgeable professionals could identify any changes taking place in their communities of which we needed to be aware. The ongoing review of the characteristics of these sites suggests that they, like the demonstration sites, have individual idiosyncrasies, but that they continue to serve as valuable sources of comparative data.

Two key demographic variables, mean family income and percentage of single parents, will be presented for each of the urban sites, on each occasion. Data from the older cohort sites in 1991 appear in Table 6.1.

Table 6.1 Some Key Site Characteristics, 1991
Older Cohort Sites

Site	% Single Parent Families	Mean Family Income
Cornwall	16.8	44778
Sudbury	26.6	36191
Ottawa-Vanier Comparison	22.4	41417
Highfield	22.8	43841
Etobicoke Comparison	23.1	48938

As one might have hoped, Ottawa-Vanier lies between the two demonstration sites with which it is paired, on both variables. The two Etobicoke sites differ trivially on single parenthood. Highfield is below its comparison site on mean family income, differing by about the same amount as Sudbury and Ottawa-Vanier.

The figures for the younger cohort sites, based on 1991 Census data, appear in Table 6.2.

Table 6.2 Some Key Site Characteristics, 1991
Younger Cohort Sites

Site	% Single Parent Families	Mean Family Income
Guelph	21.2	40360
Kingston	24.5	36190
Ottawa	31.9	33618
Peterborough Comparison	18.8	36195
Toronto	41.6	26389

As in the 1986 data, the Toronto Better Beginnings site is well below the other sites in mean family income, and well above in its proportion of single-parent families. Although published Census data are not available on ethnocultural composition, knowledgeable informants at the sites indicate that it differs greatly from the other sites in this respect as well.

When compared to the remaining three younger cohort sites, Peterborough, as might be hoped, lies between the lowest income site, Ottawa, and the highest, Guelph, with a mean family income almost identical to that of Kingston. Peterborough is a bit below Guelph and Kingston in its proportion of single-parent families, but the site differing most from the others on this variable is the Ottawa Better Beginnings site. Interview data revealed that those from Somalia are more likely than others at the site to be single parents, but since published Census data do not break family structure down by country of birth, it cannot be determined to what extent the relatively high proportion of single-parent families at the Ottawa Better Beginnings site results from the unusual circumstances of this group.

The 1996 Census data for single parents and mean family income are presented in Tables 6.3 and 6.4 for the older and younger cohort sites, respectively. While individual site characteristics inevitably shifted between 1991 and 1996, the observed changes have not sharply affected the comparability of sites.

Table 6.3 Some Key Site Characteristics, 1996
Older Cohort Sites

Site	% Single Parent Families	Mean Family Income
Cornwall	20.8	45309
Sudbury	29.3	36539
Ottawa-Vanier Comparison	26.4	43841
Highfield	20.7	36054
Etobicoke Comparison	21.4	48378

While the percentage of single parents rose at Cornwall, Sudbury, and Ottawa-Vanier, with Ottawa-Vanier between the other two, as in 1991. It remained between them in mean family income as well. Annual income for Ottawa-Vanier rose by about $2,000 relative to the mean of the other two sites, but it was still well within their range.

As in 1991, the Better Beginnings site at Highfield and its comparison site differed trivially in percentage

of single parents. The mean family income for the comparison site was quite stable, remaining within $600 of its value in 1991, but the demonstration site fell more sharply. Since Highfield is a relatively small site, comprising a single Census Tract, and since family income estimates are based on 20 per cent samples, income estimates could not be expected to be as stable here as elsewhere or to be as stable as those for family composition. Nonetheless, it is important to remain aware of the size of this apparent shift in assessing the outcome data.

Table 6.4 Some Key Site Characteristics, 1996
Younger Cohort Sites

Site	% Single Parent Families	Mean Family Income
Guelph	24.7	42874
Kingston	27.4	36067
Ottawa	35.3	34893
Peterborough Comparison	21.1	42258
Toronto	42.2	20686

The percentage of single parents rose at all of the younger cohort sites. However, as before, Ottawa was noticeably above Guelph, Kingston and Peterborough. Although family income at the Peterborough comparison site rose relative to that at the other sites, it remained within the range enclosed by them. Toronto remained well above the other sites in single parenthood and well below them in family income.

Potential Sample Bias

Having attempted to select the best comparison sites available, it was necessary to deal with the possibility of bias in the samples drawn at either the comparison or demonstration sites. The basic data source for this purpose is the ratings of children made by teachers each spring [1]. Since children outside the research cohorts are not identifiable, school boards have ordinarily decided either that they do not need parental consent to release data on entire classrooms or that only passive consent is needed; that is, that they can release the data unless a parent objects. Consequently, data have been collected on almost all the children in each classroom within the study sites to determine whether there is a significant difference between the ratings given to those who are part of the research sample and those who are not.

This method can be used for the baseline samples at both the older and younger cohort sites and for the longitudinal samples at the older cohort sites. (At the younger cohort sites, the longitudinal samples cannot be checked this way because the children entered JK only at the end of the study period.)

In Tables 6.5 through 6.8, differences are presented between the means for children whose parents were interviewed and the means for children whose parents were not. Since the latter have been subtracted from the former, positive differences imply higher mean scores for the children whose parents were interviewed. To provide comparability from one variable to the next, the differences have been

[1] It had been hoped that checks for income bias could be made with data from the Small Area Analysis (SAA) program, which uses income tax files to generate figures for user-designated areas. However, these data proved non-comparable. At several sites our sample contained more families with annual incomes below $15,000 than the SAA data. Either their coverage of families at low incomes is not as good as ours, or people answer income questions differently in the two contexts. In either case, we cannot readily use their data as a check on bias.

standardized (by dividing by the standard deviations for the full sample). The differences shown are thus equivalent to what are sometimes called effect sizes : each gives the difference between the two groups in terms of standard deviation units. Here and in later tables of the same form, differences significant at .05 are indicated by a single asterisk, those at .01 by a double asterisk.

For children in Grade 1 through Grade 3, teacher ratings are available for a set of seven scales reflecting social skills and behavioural problems, as well as 11 single items. On the seven scales, neither the baseline nor the focal sample shows any significant differences. Table 6.5 shows the results for the Grade 2 baseline sample and the focal sample at the same grade level. In the baseline data, on the 11 single-item ratings, the children whose parents were interviewed differ from those whose parents were not interviewed at .05 in the teachers' ratings of their writing and their level of effort. In the Grade 2 focal data, children whose parents were interviewed received higher ratings in français and science. Altogether, 34 comparisons are shown in Table 6.5, for which, by chance alone, 1.7 differences would be expected to be significant at .05. In fact, there were only four significant differences, all of them from single-item ratings, each appearing in only one sample.

Table 6.5 Differences in Teacher Ratings between Children Whose Parents Were Interviewed and Children Whose Parents Were Not, at Grade 2, in Standard Deviations

Scale	Grade 2 Baseline	Grade 2 Focal
Depression	0.057	0.086
Anxiety	0.078	0.094
Oppositional-defiant	-0.05	0.141
Attention deficit	-0.112	-0.005
Cooperation	-0.144	-0.064
Assertion	0.037	-0.003
Self-control	0.082	-0.176
Differences on Single-Item Ratings		
Reading	0.033	0.021
Mathematics	0.047	0.126
Writing	0.371 *	-0.029
Spelling	0.174	0.018
Français	-0.175	0.271**
Science	0.152	0.293*
Physical education	0.344	0.143
Learning	0.105	-0.017
Behaviour	0.277	-0.056
Work level	0.234 *	-0.034
Happiness	0.109	0.054

Since the children rated in Grades 1 and 3 are largely the same as those in the Grade 2 focal sample, few major differences might be expected at Grade 1 or at Grade 3. As may be seen in Table 6.6, no significant differences were found on the scales. The single-item ratings showed two differences at .05 for the Grade 3 sample, but seven at Grade 1.

Table 6.6 Differences in Teacher Ratings between Children Whose Parents Were Interviewed and Children Whose Parents Were Not, at Grade 1 and Grade 3, in Standard Deviations

Scale	Grade 1 Focal	Grade 3 Focal
Depression	-0.153	0.099
Anxiety	0.007	0.145
Oppositional-defiant	-0.052	0.025
Attention deficit	-0.046	0.07
Cooperation	0.105	0.008
Assertion	0.165	0.001
Self-control	0.065	0.006
Differences on Single-Item Ratings		
Reading	0.195 **	-0.145
Mathematics	0.203 **	0.188
Writing	0.043	-0.092
Spelling	0.12	0.266
Français	0.236 *	0.146 *
Science	0.232 *	0.172 *
Physical education	0.236 *	0.047
Learning	0.263 **	-0.005
Behaviour	0.103	0.009
Work level	0.143	0.026
Happiness	0.094 **	-0.001

Of the single-item measures on which there were differences at Grade 1, two, français and science, were significant at Grades 2 and 3, but none of the others were significant on other occasions, and no additional variables showed significant differences on other occasions. It appears, then, that the focal sample was biased on these two variables, but not consistently on others. For the two variables in question, the bias is modest, ranging from 0.146 standard deviations to 0.293, but these two variables have not been employed as outcome variables in our analyses.

It does appear that the differences between groups on the single-item comparisons tend to slightly favour those whose parents were interviewed: 25 of the 33 for the focal sample and 10 of 11 for the baseline sample show positive signs. The differences are not great: the median for the baseline sample is 0.152, and for the focal sample 0.103. Nonetheless, it will be wise to remember that, in these data, teachers have tended to rate one group of children a bit higher than the other. At the same time, it should be remembered that no differences were found for scales intended to measure social skills and behaviour problems.

For the older cohort focal sample, a less elaborate set of checks can be made at Senior Kindergarten, where the children were rated on scales for school readiness, disruptiveness, anxiety and helpfulness. As shown in Table 6.7, consistent with the results for social skills and behaviour problems seen above, no significant differences were apparent.

Table 6.7 Differences in Teacher Ratings between Children Whose Parents Were Interviewed and Children Whose Parents Were Not, at Senior Kindergarten, in Standard Deviations

Scale	Difference
ABC (school readiness)	0.08
Disruptiveness	0.066
Anxiety	0.033
Prosocial	0.056

For the younger cohort sites, we can only use teacher ratings to check for bias at JK. For the baseline sample, the same measures are available as have been presented in Table 6.7. None, as may be seen in Table 6.8, shows a significant difference. For the focal sample, seven measures are available, including a wider range of scales for social skills and behavioural problems. Again, none shows a significant difference.

Table 6.8 Differences in Teacher Ratings between Children Whose Parents Were Interviewed and Children Whose Parents Were Not, at Junior Kindergarten, in Standard Deviations

Scale	JK Baseline Sample	Focal Sample
ABC (school readiness)	0.082	0.227
Prosocial (PSBQ)	0.19	0.203
Disruptiveness	0.015	
Anxiety	0.141	
Hyperactivity		0.058
Prosocial (NLSCY)		0.032
Emotional disorder		-0.049
Physical aggression		-0.035
Indirect aggression		-0.004

Recruiting and Attrition

Recruiting methods differed sharply between the younger cohort longitudinal sample and the others because the school system could not be used to assist in recruiting children before they had entered JK. For the younger cohort longitudinal sample, the most widely used method involved the support of hospitals at which mothers from our study areas were likely to give birth. With consent from the mother, records department staff passed on the names of new mothers to Better Beginnings staff, who could then explain the study and, with the mother s agreement, arrange an interview. If Better Beginnings did not have enough staff to cover all the hospitals at which mothers at a site were likely to give birth, arrangements were made with Public Health Units to send material about the study to those who were eligible from their lists of new mothers, who could then contact Better Beginnings for more information, or send in a consent form directly. Some site research groups also found it useful to visit prenatal classes or to leave the same type of information sent out by Public Health Units with organizations likely to be in contact with mothers of young children, who could let the mothers know about the research and, with consent, pass their names to the Better Beginnings site researchers.

The older cohort samples and the younger cohort baseline sample were recruited largely through the school system.[2] While parents could sometime be asked to participate through personal contacts, for example, at parent-teacher nights, often they could only be reached through notes sent home with their children. Each letter was accompanied by documents explaining the research. A parent who was willing returned a consent form to the school with the child.

When a consent form was not returned, we do not know whether the parent actually received the letter, whether the parent just did not return it, or whether the parent did not want to participate; therefore, we cannot break down the reasons for non-participation. Because of the need to send information to mothers by mail at younger cohort sites, we are limited in the same way in providing an overall picture of reasons for non-participation.

We can compare participation levels to the estimated number of eligible families. For the younger cohorts, we can employ 1996 Census data to estimate the number of children aged 0-4, then divide by 5 to estimate the number in a single-year cohort. For the older cohort sites, and for the younger cohort sites once the children have reached school age, annual principals reports provide the number of children enroled for each school in the study area. In the vast bulk of cases, if we have interviewed a parent, we have also done any child testing that is part of our protocol for that wave. For the sake of simplicity, then, any family in which either has been done will be treated here as a participant.

In the baseline years, at the younger cohort sites, our overall participation rate has been estimated at 61.0, while at the older cohort sites it came to 67.4. In the first year of data gathering for the longitudinal samples, the rates were 57.9 for the younger cohort sites, and for the older 44.6. The number participating at the older cohort sites increased substantially, from 413 to 555 the following year, when children were in Senior Kindergarten, then remained relatively stable.

At the comparison sites, the numbers interviewed have been held roughly constant because we have budgeted to interview a specific number at each. (Recruitment of new cases has approximately balanced attrition.) At the demonstration sites, there was no specific figure beyond which interviewing expenses would not be incurred, but budgetary realities inevitably worked to keep the numbers in the same range

[2] This could not be done for the younger cohort baseline sample at the site in Guelph, because there was no Junior Kindergarten there. Recruitment had to be carried out through contacts made by the Better Beginnings programs and the site researchers.

over time.

In the younger cohort sites, 777 children and their families participated in the longitudinal research over the first four years, 570 in the demonstration sites and 207 in the comparison community. Of this total of 777, 82 had been lost at the time of the last data collection completed when children were 48 months old, yielding an attrition rate of 10.6%.

In the older cohort sites, a total of 759 children and families participated in the research during the five years of longitudinal data collection, 362 in the project sites and 397 in the comparison sites. Over the five periods of data collection from JK in 1993/4 to Grade 3 in 1997/8, 59 families have been lost, yielding an attrition rate of 7.8%. Due to the relatively small sample size in the older project sites, we recruited a second birth cohort at the demonstration sites; this "following" cohort of children were born in 1990 and increased the sample size available for the 20-year follow-up to 609 in the older cohort project sites.

Samples sizes and attrition figures are summarized in Table 6.9. Note that the definition here includes those who have stated clearly that they do not with to be (re)interviewed, those who have died, and those whom we were unable to trace using all available methods. It does not include those whom we did not interview on a particular occasion because they were away, those who could not schedule an interview before the deadline, or those who for some reason did not want to do an interview in a particular wave but were willing to be contacted at the next wave.

Table 6.9 Sample Sizes and Attrition

Sites	Total Research Participants	Number Lost	Attrition %	Number Available for Follow-up
YOUNGER COHORT SITES:				
Demonstration	570	73	12.8	497
Comparison	207	9	4.3	198
Combined	777	82	10.6	695
OLDER COHORT SITES:				
Demonstration	362	34	9.4	328 plus following cohort of 281 = 609
Comparison	397	25	6.3	372
Combined	759	59	7.8	981
GRAND TOTAL	1,536	141	9.2	1,676

We have analyzed the attrition figures in terms of the number of waves the family participated in before being lost. (See Table 6.10.) These figures show that the attrition rates drop considerably with increased number of data collection periods.

Attrition in longitudinal research is a major concern. Farrington *et al.* (1990), in reviewing longitudinal studies of crime and delinquency, note that attrition rates have varied widely, from 5% to 60%. Capaldi & Patterson (1987) found in a review of major American surveys, with follow-up periods of 4-10 years, that the average attrition rate was 47%. Recently, Statistics Canada reported non-trace rates for the first two waves (1994 and 1996) of longitudinal data collection in the NLSCY of 2.8%. That is, 2.8% of the families interviewed in 1994 could not be found 2 years later. Further, in the Self-Sufficiency Project being carried out by Statistics Canada in lower SES samples in New Brunswick (N=2,955) and British Columbia (N=3,023), the non-trace rate over a 3 year period was 12%. Browne *et al.* (1998) recently reported an attrition rate over 2 years of 55% in a study of single, welfare mothers in Hamilton, Ontario. The attrition figures reported for the Better Beginnings, Better Futures Project are therefore impressive when compared to many of these studies.

Minimizing attrition in longitudinal studies seems to be a result of good planning, adequate resources to implement a wide range of tracking strategies, perseverance and hard work (Stouthamer-Loeber, van Kammen & Loeber, 1990; Farrington *et al.*, 1990). The Better Beginnings RCU has incorporated a number of strategies to meet the challenges of family retention which, by the fourth wave, resulted in an attrition rate of only 0.2%.

Table 6.10 Attrition Rate as a Function of Number of Interviews Completed before Being Lost

Number of Interviews	Number of Families Lost	Percent Attrition
1 interview	73	4.753 %
2 interviews	50	3.255 %
3 interviews	15	0.977 %
4 interviews	3	0.195 %
TOTAL	141	9.180 %

However well balanced the samples may appear at any moment, gradual loss of cases may create an imbalance. Most commonly, the effects of attrition are examined through changes in sociodemographic variables. Differences between cases retained and cases lost on 24 sociodemographic variables have been examined and are presented in Table 6.11. The mean scores for those lost have been subtracted from the means for those retained, so that a positive difference implies a higher mean score for those retained. As in Tables 6.5 through 6.8 above, differences have been standardized by dividing by the full sample standard deviation.

For the older cohort, only two of these variables, respondent's year of birth and number of siblings at home, show a statistically significant difference. In multivariate predictions of dropout, no other predictors become significant; in fact, respondent s year of birth drops below significance with N of siblings controlled. In tests for differences between baseline and focal samples, or between demonstration and comparison sites, the impact of these two variables as covariates was routinely checked. For the younger cohort, only full-time employment of the partner was significant. It has been used routinely as a covariate.

One method of controlling for possible attrition bias is by developing an equation predicting propensity to drop out, using variables associated with attrition, but not themselves outcome variables. The predicted

propensities are used as control variables in assessing the effects of programs on outcomes. Since the analyses revealed so few predictors of dropout, this strategy could not be helpful. Fortunately, since, in demographic terms, attrition fails to show any major departure from a random process, a strategy of this kind is much less necessary than might otherwise be the case.

In longitudinal analyses, there is a possibility that, for any given dependent variable, cases whose trajectories would have differed from those included in the analysis will drop out of the sample. Under the growth curve modeling strategy employed here, cases are included only if they have full data for three occasions (for linear models) or four (for quadratic models). When data were gathered for more occasions, we have always used covariates to indicate the number of waves of data available for each case, and the first wave for which we have data. These covariates have rarely been significant but, in the few instances in which they have been, have provided a control for effects of differential dropout.

Table 6.11 Differences in Sociodemographic Variables between Cases Retained and Cases Lost, in Standard Deviations

Variable	Older Cohort Difference	Younger Cohort Difference
Sex of respondent	0.015	0.3
Respondent s year of birth	0.248 **	-0.311
Respondent s parents divorced	-0.027	-0.198
Sex of child	-0.69	-0.057
N of siblings at home	0.319 **	0.012
Single parent throughout	0.13	-0.098
Two-parent household throughout	0.31	-0.259
N of moves in past 5 years	-0.219	-0.373
N of years in neighbourhood	0.136	0.187
Respondent's education	0.64	0.392
Monthly income	0.199	0.516
Monthly food costs	0.145	-0.106
Monthly housing costs	0.61	0.414
In public housing	0.13	-0.37
N of rooms in dwelling	-0.001	0.535
Respondent works full-time	0.09	0.354
Partner works full-time	-0.015	0.713 **
Respondent seeking work	0.057	0.031
Partner seeking work	-0.023	0.011
Cultural group:		
Anglophone	-0.137	0.3
Francophone	0.274	
Native	0.254	
Chinese		-0.333
Vietnamese		-0.045
Immigrant	-0.042	-0.033

PREPARING FOR ANALYSES

Before the commencement of the analysis, the standard steps of data checking and cleaning were performed. For psychological scales and for income, missing data have been replaced with imputed values. The stability of factor structure within psychological scales has been tested over time and place. Methods of imputation and of checking factor structure are explained here.

Imputation

The median percentage of missing data on variables on which imputation has been considered is 0.2. In such a situation, there is little to be gained by multiple imputation, so we have relied on single imputations carried out by hot deck and regression methods. Before considering alternatives, the project methodologist examined the data closely, sorting cases by a sequential hot deck method so as to see whether those with missing data appeared to be outliers, whose likely responses would be difficult to predict plausibly on the basis of responses made by run-of-the-mill respondents.

Imputation for Psychological Scales. For psychological scales, a variation of the nearest-neighbour hot deck was chosen. In this form of hot decking, a measure of dissimilarity between cases is constructed, and the potential donor cases for a given recipient are those whose dissimilarity score takes the smallest value found in the sample. If more than one potential donor has the same score, the one to be employed is chosen at random. Often researchers using this strategy sum the squared or the absolute differences between cases on the items from a scale on which data are not missing.

One problem with this approach is that potential donors who obtain the same score may differ in the average level of their item responses. Suppose we have nine items, rated on a scale from 1 to 5, and a case with one missing value has the following set of responses:

3 3 3 3 3 3 3 3 M .

Suppose a potential donor, for the eight items on which the distance score is to be calculated, has the following responses:

4 4 4 4 3 3 3 3 .

Suppose a second potential donor has the following:

4 2 4 2 3 3 3 3 .

The two will obtain the same distance score, but we might well suspect that the first might provide an imputed value on the high side, and we would not have the same suspicion about the second, because the sum of its observed scores is the same as the sum for the potential recipient.

Such cases were not infrequent, so it was decided that potential donors should be penalized for differences between the sum of their item scores and the sum for the potential recipient. For psychological scales, we have adopted a dissimilarity function consisting of two terms: the sum of absolute differences across items on which both cases have observed values, and the absolute difference between the item sums.

Imputations for Income. Appropriate donor cases for income could be obtained only through a more complex process. For households with at least one parent employed full-time, monthly income has been regressed on a set of predictors, including site, age (including a quadratic term), education, number of parents employed full-time, number of parents in professional, technical and managerial jobs, and monthly expenses for food and shelter. Separate regressions have been run for households with no one employed full time, using the same predictors except for those dealing with employment. The resulting equations have been used to obtain predicted incomes for those with missing data. Each case with missing data has been assigned the residual of the case closest to it in predicted income.

We have flagged cases with imputed values on income, so that anyone can see whether those with imputed data differ from others in any other respect. Our intention has been to flag cases with missing data on any other variable with 2.0 percent of observations missing, but no other such variables have been found.

Assessment of Psychometric Properties of Scales

For assessment of program effects to be meaningful, the same construct must be measured by the same scale, in the same metric, across sites and occasions. Stability of scale behaviour has been assessed through Confirmatory Factor Analysis, using methods described in detail by Meredith (1993). For an example of its application, see Eizenman *et al.* (1997). Comparisons of scale behaviour were made across sites and occasions in accordance with our designs. That is, before comparing the baseline cohorts with the focal longitudinal cohorts when they had reached the same age, it was necessary to compare the behaviour of the scales between the baseline and focal cohorts. Similarly, before comparing demonstration and comparison sites, we needed to assess how similarly scales behave in the two sets of sites. Again, before examining change, we had to compare the behaviour of scales early in the study with their behaviour after several years.

For the vast bulk of the scales examined, there has been little difficulty in specifying the number of factors and the variables that ought to load on each. In all but a few cases, prior information could be used to define an initial (hypothesised) measurement model for a scale. If not, substantive criteria could be employed. In the next crucial step, we defined baseline models, which have had to be substantively meaningful and at the same time to fit the data reasonably well.

One rarely expects a hypothesized model to fit the data well across several different samples, so modifications are ordinarily made. Where necessary, models were modified by removing non-significant factor loadings, introducing secondary-factor loadings, allowing correlated error terms, and/or removing observed variables from the model. Such changes have been applied very carefully, however. Ideally, each model modification should improve the fit of the model in each sample, and it must have a meaningful substantive justification.

When the fit of a baseline model is acceptable across the samples of interest, we have reached configural equivalence. To assess the fit of our models we have used the likelihood ratio chi-square test, the Adjusted Goodness-of-Fit Index (AGFI) (Jöreskog & Sörbom, 1989), the Non-Normed Fit Index (NNFI) (Tucker & Lewis, 1973), and the Root Means Square Error of Approximation (RMSEA) (Steiger, 1990). The AGFI measures how much better the model is as compared to no model at all, adjusted for degrees of freedom. The NNFI measures how much better the model fits as compared to a null model (the independence model). AGFI and NNFI values equal to or greater than .80, within a range from .00 to 1.00, have been taken to indicate a good fit. The lower bound of the RMSEA is zero, a value obtained only when a model fits perfectly. Values of about .05, or perhaps .10, are usually considered to correspond to a reasonable model fit.

Metric Equivalence. Given configural invariance, we next examined the hypothesis of full measurement equivalence by simultaneously testing the equality of all factor loadings across the two site categories or waves of data collection. If the hypothesis of full metric equivalence could not be sustained, we tested to identify the factor loadings that were not invariant across the samples of interest.

Descriptive Indices of Factor Reliability and Equivalence. Once an acceptable version of each scale had been reached, Cronbach's coefficient alpha, and Tucker's coefficient of congruence (Tucker, 1951) were obtained for each scale. Coefficient alpha, a measure of internal consistency of the scale scores, can be viewed as the expected correlation between a test and another test of the same length drawn from the same domain. It is also widely used as a measure of the scale's reliability. Tucker's "coefficient of congruence," on the other hand, quantifies the degree of factor similarity across the two site categories or waves of data collection. The appeal of the two coefficients is that they give readily interpretable descriptive summaries of the quality of the measurement models derived from our confirmatory factor analyses. Of the scales examined to date, all, in their final versions, have average coefficients of congruence of at least 0.90 across the comparisons we have made.

ANALYTIC STRATEGIES

In assessing the solidity of findings reported here, it will be essential for readers to know how likely it is that any apparent effects of Better Beginnings were produced by random fluctuations, whether due to measurement error, sampling, or the haphazard effects of small, unmeasured causes.

Estimating Effects in the Baseline-Focal Design

An understanding of the methods employed in this study to estimate standard errors requires a picture of the analytic methods to be employed. For a comparison of baseline and focal cohorts, the analysis we require can be represented as a straightforward regression model. Let us suppose that we are interested in assessing differences in general family functioning, and that we want only the most basic covariates. In writing the appropriate equation, let us use the following abbreviations:

GFF = estimated score on the General Family Functioning scale
INT = intercept (the constant term in the equation)
DEM = demonstration site focal cohort
COM = comparison site focal cohort
INC = family income in dollars
IMM = immigrant status

Then the equation can be written:

GFF = INT + b1(DEM) + b2(COM) + b3(INC) + b4(IMM) .

The coefficients for DEM and COM provide the mean differences between these two samples and the baseline sample, with income and immigrant status controlled. The difference between the two sets of sites could be presented graphically in a report aimed at those who want to understand our findings without working through all of the technical details.

Such equations can readily be fitted within any of the standard production packages, which will calculate standard errors on the assumption that we have sampled randomly with replacement, taking a relatively small sample from a very large population. In this case, however, the program sites were chosen by competition and hence differ systematically from others in the competition on the criteria by which winners were selected, and there is no list of sites resembling them to generalize to.

Obtaining Meaningful Standard Errors. In some fields, non-random selection of sites is not regarded as seriously as in others. In pharmacology, researchers are usually prepared to assume that an experimental drug will have the same effects on the human organism in one site as in another, so that sites chosen for convenience may safely be treated as though drawn at random. Often it can be assumed that the effects of a drug will not be influenced by the clustering of cases within cities. In such circumstances, it is often felt that standard significance tests are appropriate.

The situation here differs sharply because one of the fundamental assumptions underlying Better Beginnings is that community context matters. One of the stated program objectives is to improve the ability of families *and communities* to care for their children. Sites chosen were rated on the level of risk for children growing up there, and the likely ability of the proposal writers to deliver solid programs, that is, on characteristics that suggest that communities are likely to influence child development differently. Within the sites, children of school age are clustered within classrooms, where they are likely to influence each other and are subject to the common influence of teachers. Outside the school, they are clustered within sub-neighbourhoods that often differ considerably in cultural composition and economic level. Therefore, an analysis of Better Beginnings effects should allow for the specific context in which children are growing up.

To define standard errors that allow for the fact that sites were not chosen randomly, and that clustering of cases matters, standard "production package" statistical software cannot be used. We could proceed in two basic ways: a) by employing programs that differ from standard packages in not attempting to generalize beyond the study sites, and in allowing for clustering within sites; or b) by employing programs that would not attempt to generalize outside the sample itself.

Under option b), we would attempt only to sort out meaningful effects for cases in our sample, against a background of random measurement error and myriads of minor unmeasured causes. We could shuffle values of our dependent variables many times, run our analyses, and save the results. The distributions of our analytic statistics would indicate how they would vary if only random fluctuations affected them. If our observed results fell in the tails of these distributions, we could say they were unlikely to have arisen randomly. This approach is implemented in programs such as RESAMPLING STATS (Simon & Bruce, 1987).

Unfortunately, by shuffling the scores on the dependent variable, we would estimate the distribution of coefficients that we would get if the entire range of scores on the dependent variable was produced by random fluctuation. To the extent that this is not true, the standard errors it provides are inflated. On this account, we did not wish to use a shuffling strategy as our basic approach. It can, however, be used in tandem with other programs that will give us a better reading on the effects of covariates.

In the approach we have adopted, SUPERCARP (Hidiroglou *et al.*, 1980) and its descendants (PC-CARP, PC-CARPL and EV-CARP) provide standard errors for covariates, in WLS or logistic regression equations. These programs can calculate standard errors that reflect the clustering of cases, on the principle that we only wish to generalize to the sites from which we have gathered cases. Unfortunately, they will not provide standard errors for variables identifying the sites because sites correspond to strata, and they estimate the effects of all variables within strata en route to obtaining their final results. Fortunately, they can be used in tandem with a program that will do this. We have only to write out the residuals, then put them into a program, like RESAMPLING STATS, which will do a post-randomization test on them.

Within-Site Clustering. When examining teacher ratings, it is desirable to obtain standard errors that take account of the clustering of children within classrooms, particularly since all the children in a classroom will have been rated by the same teacher. Doing so presents no problem for programs in the CARP series, each of which can allow for clustering below the level of the sites.

Using Growth Curve Models in the Comparison Site Design

Our primary analytic strategy within the comparison site design will be to fit growth curves, and then determine whether these differ between demonstration and comparison sites. Growth curve models are based on the assumption that individuals (or other units of analysis) have their own trajectories of change. If, for example, we are studying physical growth, we will find that children of a given age are of different heights, and if we gather data at a later point we will discover that they have grown at different rates. The trajectory of change for a given child might be fit by a straight line, a quadratic, or a higher-order curve.

If a quadratic works well, then we can represent the trajectory of change for a given child by a straightforward equation.[3] Using the abbreviations

HT = estimated height of the child, and
INT = value of the intercept term in the equation

we can write:

$$HT = INT + b1(AGE) + b2(AGE^2) \ .$$

Having fit curves for all cases in a sample, we must see what accounts for the variation among the individual equations: that is, what accounts for variations in the intercepts and the slopes. Here we might expect, on genetic grounds, that both the intercepts and the slopes might be predictable from data on the heights of parents. We could get an estimate of the effects of Better Beginnings, controlling for the height of the respondent by estimating two equations, one predicting the value of the intercept term from the equation above and the other predicting the value of the regression weights for the equation above.

However complex the models developed, they will allow us to plot mean growth curves for the demonstration and the comparison sites. In this way, whatever difference there may be can be readily presented to those not wishing to examine the details of our analysis. These, of course, will be made available in our technical report.

Growth curves can readily be fitted in programs written specifically to estimate hierarchical models; that is, models in which observations or cases are nested within categories of higher-level variables. Here observations are nested within cases, which are themselves nested within sites. It will be spelled out below why we will have to go beyond what is done by hierarchical modelling programs to obtain solid standard errors.

Statistical Inference with Growth Curve Models. As pointed out above, the demonstration sites were not drawn randomly, but were chosen on the basis of competition. Because of this purposeful selection, we cannot legitimately draw statistical inferences about any population broader than those with children of the right age living at our sites. In the comparison site design, we have to work with observations nested within individuals, who are themselves nested within sites. We will also have to deal with nesting of

[3] For simplicity, we will avoid the more complex notation ordinarily employed for equations in hierarchical modelling.

children within schools[4] and families within sub-neighbourhoods.

There are two basic approaches to nesting of cases. In the first, we use a program that allows us to identify cases found in specific clusters and that calculates standard errors taking clustering into account. This is the approach taken by programs in the CARP series, which would allow us to define children in a particular classroom as being nested in a cluster within their site. The second approach uses cluster membership as a predictor of the dependent variable of interest, then tries, with a second equation, to predict the effect coefficients for membership in different clusters. For example, in predicting reading scores, classroom membership would be used as a predictor. The effect attributed to a classroom would then become the dependent variable in a second equation. Characteristics of the classroom, the families of the children in it, the school, etc., could be used to try to predict classroom effects. This is the approach taken in hierarchical modelling programs such as HLM and MlWin.

It is often appealing to use information about a cluster of cases to understand what has happened to those within it, rather than simply taking cluster effects out of the picture. The difficulty is that hierarchical modelling programs do not allow for deliberately non-random selection of sites in calculating their standard errors. Since they assume that there has been random selection of second-, third- and fourth-level observations, their standard errors, in effect, attempt to generalize to a large population of observations. To deal with the reality that no random selection was done at the site level, we must move to other programs.

Programs in the CARP series are not written to handle growth models directly. To deal with them, the equations describing growth for individuals have to be written to disk in ASCII by another program. (We have done this through an SPSS Matrix routine.) We could then predict the values of the coefficients, case by case, obtaining standard errors that take account both of nesting and of the non-random selection of sites. Residuals from this analysis were then read into RESAMPLING STATS to check the effects of site.

Change Score Analysis. Some variables were gathered only twice, usually because a scale was intended for children in a specific age range and was replaced by another. Such variables could not be analyzed by growth curve modelling; rather, we have examined the change between the occasions on which the measure was administered. The change observed at a demonstration site has been compared to the change at its comparison site, and the difference has been tested for significance. As with the baseline-focal analyses and growth curve analyses, the effects of covariates have been checked in PC-CARP and the covariate adjusted difference scores have been tested for significance in RESAMPLING STATS.

Covariates

Effects of covariates have been tested in all analyses. In each of these, a set of standard covariates has been employed. These include well recognized risk factors, such as income and single parenthood, and variables on which the sites clearly differed, such as immigrant status. The standard covariates are:

- respondent's year of birth;
- sex of respondent;
- single parenthood;
- education of respondent;
- monthly family income;

[4] The nesting of children within classrooms often has other important effects. However, in our data children do not typically remain with the same classmates from year to year, so that we found it impossible to deal with clustering at a level below that of the school.

" cultural group (at the older cohort sites represented by the dummy variables Anglophone, Francophone, and Native, and at the younger cohort sites by the dummies Anglophone, Chinese, Native and Vietnamese); and immigrant status.

Other covariates were tested routinely over large numbers of variables. For example, sex of child was used regularly when the child's growth, academic performance, social skills, or behaviour was examined. Other covariates have been used with other (sets of) dependent variables, depending on what have been found in the literature to be useful covariates. For example, in examining cognitive development, the number of siblings has routinely been tested.

Covariates not suggested by the literature have been tested in response to differences found between sites or between cases retained and lost in the course of the analysis. Hence, number of siblings at home was checked for the older cohort, and whether the respondent s partner had a full-time job was tested for the younger cohort because, as shown above in Table 6.11, there were differences between cases retained in the samples and those that were lost.

Because so many covariates were tested, with so many dependent variables, to hold down Type I errors covariates were tested at a p-value of .01.

As was shown in Chapter 5, the comparison site in Peterborough, which was used for the younger cohort demonstration sites, yielded a sample higher in socio-economic standing than the other sites. Since the baseline-focal analysis is focused on comparisons within the demonstration sites, demographic idiosyncrasies of comparison sites are not of concern under that design. In the longitudinal analyses, of course, education, family income, and the employment of the partner have been tested as covariates in all analyses. These social class indicators have proved much more likely to affect the intercepts of growth curves, with which we have not been concerned, than to affect the slopes, with which we have been concerned. Of 68 variables for which slopes or difference scores were obtained for the younger cohort, education was a significant covariate for three, income for three, and full-time employment of the partner for one. While there may be unmeasured class differences not controlled for, at least these key class variables do not seem to be widely influential on the slopes or difference scores, and have been controlled where they have appeared to be so.

As the focus of this report is on the impact of Better Beginnings, not that of variables used as statistical controls, the influence of covariates on the outcome variables is not reported. However, all figures display covariate-adjusted results, as do all comparisons between groups in the text, unless stated otherwise.

Criteria for Reporting Patterns

General Cross Site Patterns : In a study with two basic designs, sometimes the results will not match. Also, with many dependent variables, sometimes apparently meaningful results will arise by chance, i.e., through random processes. Finally, with programs set up to meet local conditions, results may well differ among sites. To deal with differing results from the two basic designs, with the risk of taking random fluctuations seriously, and with the need to pick up systematic differences among sites, the following criteria were adopted:

· ← If results were available from both designs, statistically significant results from one must be confirmed in direction by the other, or no Better Beginnings effect would be suggested.

· ← If the results for all older or younger cohort sites, taken together, were significant, but if more than one site showed results in the opposite direction, or one site was significant in the opposite direction, no general Better Beginnings effect would be suggested.

- A result for a single site, on a single dependent variable, would need to reach a p-value of .01 to be discussed as evidence of a statistically significant effect for that site. Insisting on a p-value of .01, rather than the more usual .05, is a way to deal with the number of tests possible within a cohort. At the 0-to-4-year-old level, there are five sites, so that to require .01 sets the overall p-value to .05. At the 4-to-8-year-old level, there are three sites, so that to require .01 sets the overall p-value at .03.

Site-Specific Patterns : Often variables within a content area yielded consistent results for a given site, but not for others. Such patterns are mentioned frequently in the report. Some of the patterns mentioned include variables which are all individually significant. In other instances, where results are favourable (or unfavourable) for several variables, but not all are individually significant, we have taken a nonparametric approach. At minimum, a sign test must reach .05, and some individual variables must do so as well.

Effect Size

When many variables are analyzed, measured on differing scales or in different units, readers are often aided by conversion of the results into a common measure of effect size. Following Cohen's (1977) recommendations, the tables in Chapter 1 provide effect sizes for all variables on which clear patterns of change have emerged.

Under the baseline-focal design, for non-dichotomous variables, the effect size is just the focal cohort score minus the baseline cohort score, divided by the standard deviation for the baseline sample. For dichotomous variables, where we are interested in changing percentages, they are transformed by the formula

$$\phi = 2 \arcsin p^{5},$$

where p is the percentage of interest. The difference between ϕ for the focal cohort and ϕ for the baseline cohort is then taken.

Under the longitudinal design, the difference between a score on the final administration of a measure and its first administration, under the accepted model, is taken. It is divided by the standard deviation of the variable on its first administration.

In some cases, data gathered on a longitudinal cohort could be obtained only once. For example, whether a mother had begun breast feeding was asked only at the first interview after birth. In this situation, the proportion at a demonstration site was compared with the proportion at its comparison site, using the transformation above. Where a variables was gathered only once, but was non-dichotomous, the difference between demonstration and comparison sites was divided by the sample standard deviation.

In some other situations, the numbers giving a particular response to a yes-no question were too low, or change was too irregular, for a trend to be examined, but it still appeared reasonable to compare the proportion of yeses received over time at the demonstration sites to those from the comparison sites. Here the phi transformation above was applied.

Although Cohen (1977) pointed out that to call an effect large or small was somewhat arbitrary, and that the use of terms of this kind should vary from topic to topic, the conventions he suggested are widely used, and will be employed here. Cohen's threshold effect sizes, and their labels, are as follows:

.20 - small;
.50 - moderate; and
.80 - large.

Exploring Program Participation Effects

Although, as pointed out in Chapter 1, this study was not originally intended to define the impact of specific programs conducted at Better Beginnings sites, but rather the overall effects of the project, it appeared possible that specific programs might have effects which could be detected by examining differences among those who participated to varying degrees. In the simplest case, the greater the participation, the greater the effect one might detect. Clearly such analysis would not be possible for programs experienced by everyone, such as those provided to all children through the schools. Nor would it be workable for programs designed to meet the needs of small groups. But for other programs it might be possible.

A search for such effects could be carried out with most confidence if based on a Management Information System which could provide precise information on the extent of program participation over time. However, a mandated MIS was present for only one year, and, as pointed out in Chapter 1, provided information on less than half the programs at the sites. Thus any examination of program effects would have to rely on data from the parent interviews. Each interview included questions about whether parents and children had been involved in a set of programs, and if they had, how often they had participated. Since these questions asked about the previous six months, leaving out much of the year, and the answers relied on fallible long-term recall, MIS data would have clearly been preferable, but were not available.

Another difficulty in assessing the effects of participation in specific programs is that we have no data on reasons for involvement. In the case of family visiting, for example, Better Beginnings staff might well choose to devote time to a family that seemed to be developing serious problems, in hopes of heading them off. If they were partly successful, such a family might still show negative changes on our measures. Without knowledge of where families seemed to be heading, and what Better Beginnings hoped to achieve, it could be difficult to interpret observed changes.

In view of the difficulties, examination of the correlates of parent-reported program involvement was carried out in exploratory fashion. Controlling for the usual covariates, observed changes in the longitudinal data have been correlated with two types of measures: 1) the proportion of programs in which people reported involvement, averaged over the number of interviews completed; and 2) the number of times programs were participated in, averaged over the number of interviews.

These two types of measure were defined globally (that is, over all major programs or program categories available in our data), and for four categories of programs: family visiting, other child-focused, parent/family focused, and community focused.

In the case of family visiting, some additional analyses were carried out, in which dependent variables showing significant changes in the younger cohort were checked, in the 3 month, 18 month and 33 month data separately, to see if the amount of home visiting carried out to that point was linked to outcomes.

Finally, in case indirect exposure to Better Beginnings, through living in a project site, made a difference, length of time in the neighbourhood after the start of Better Beginnings and movement out of the neighbourhood were checked for correlations with the dependent variables, controlling as always for the standard covariates.

Although these exploratory analyses were extensive, no clear, readily interpretable patterns were found. Since this is the case, results from the exploration will not be presented here. It is possible that the lack of clear results reflects the reality that the data on parent-reported participation are not as strong as would be desirable, or the absence of information on why families were involved.

Chapter 7

EFFECTS ON CHILDREN

The chapter presents findings about the impacts of Better Beginnings, Better Futures on the development of children. To reflect the holistic view of the child emphasized in the Better Beginnings model, a wide variety of assessment measures were administered (annually in the older cohort sites from Junior Kindergarten through to Grade 3, and every 15 months in the younger cohort sites, beginning at 3 months of age through to 48 months).

The instruments assessed emotional and behavioural problems and social functioning, general child development, cognitive functioning and academic achievement, perinatal health, nutrition, general health and health promotion/prevention (see Appendix B for a complete listing of measures, socio-demographic variables and data collection points).

In this chapter, first the measures within each domain are described followed by the patterns of results. One type of pattern involves outcomes that are similar across younger or older cohort sites. A second type involves outcomes on a series of related measures within a site (termed site-specific findings). Both patterns are important in understanding the short-term effects of Better Beginnings programs on children. Readers are referred to Chapter 1 for a complete summary of these patterns, a description of the criteria applied to identifying overall and site-specific patterns, and a table of effect sizes.

MEASURES OF CHILD EMOTIONAL PROBLEMS, BEHAVIOURAL PROBLEMS, AND SOCIAL FUNCTIONING

Reducing the occurrence of emotional and behavioural problems in young children was the Ontario Government s primary motivating goal for developing and initiating the Better Beginnings, Better Futures Project in the early 1990s. In fact, the first major goal of the project was to "reduce the incidence of serious, long-term emotional and behavioural problems in children" (Ontario Ministry of Community and Social Services, 1989).

An important factor contributing to the interest in these problems was the report of the Province-wide epidemiological survey of children's mental health problems (the Ontario Child Health Study, OCHS: Offord *et al.*, 1987) which suggested that 18% of Ontario children between the ages of four and 16 suffered from a serious behavioural or emotional disorder. Further, it was reported that only one child in six who was experiencing such a disorder had received professional help from a mental health or social service agency in the previous six months. The Better Beginnings demonstration project was initiated to test the effectiveness of early intervention approaches in reducing behavioural and emotional problems in young children. Measures of these mental health problems are very important outcomes for assessing the effectiveness of the Better Beginnings Project.

The development of appropriate prosocial behaviours and social skills (i.e., learning how to relate effectively with adults and other children) is one of the most critical developmental tasks for preschool and primary school children. Developing prosocial behaviour is also an important protective factor in preventing behavioural and emotional problems in early school-aged children (Eisenberg & Fabes, 1998). Consequently, fostering the development of prosocial behaviour in young children was another key objective of Better Beginnings.

Indicators of child emotional and behavioural problems and social functioning examined in the analyses included measures of: (1) emotional problems, (2) behavioural problems, (3) prosocial behaviour, (4) school readiness, (5) temperament, and (6) self-perception.

Emotional Problems

Emotional problems are widely recognized as the most common of all child and adolescent mental health problems (Albano, Chorpita & Barlow, 1996). These emotional problems are expressed in two major forms: anxiety disorders and depression (Craig & Dobson, 1995). Childhood anxiety is associated with severe impairment in functioning expressed in its most disabling form through children's avoidance of important socializing and developmental activities, including child/classroom participation, peer involvement, and autonomous functioning (Albano *et al.*, 1996; Kendall *et al.*, 1992). Childhood depression has received increased research and clinical attention during the past two decades (Birmaher *et al.*, 1996; Cicchetti & Toth, 1998; Hammen & Rudolph, 1996). Results of this research indicate that childhood depression tends to continue into adulthood and is typically associated with poor psychosocial and academic outcomes and increased risk for substance abuse (Birmaher *et al.*, 1996).

Parents ratings of their children s behaviour often differ substantially from those of teachers (Achenbach, McConaughty & Howell, 1987; Kohen, Brooks-Gunn, McCormick & Graber, 1997; Kolko & Kazdin, 1993, Offord *et al.*, 1987). This may be because children's behaviour is different at school than at home and/or because parents may consider certain behaviours as more or less appropriate than teachers. For these reasons, it is common to collect both parent and teacher ratings on children's behaviour, and this was done in the Better Beginnings research for emotional and behavioural problems, as well as social skills.

Four-year-old children in JK in the younger cohort sites were rated by their parents and teachers on the Preschool Social Behaviour Questionnaire (PSBQ; Tremblay *et al.*, 1987; 1992), which contains subscales for rating emotional problems, behavioural problems, and prosocial behaviours. (Behavioural problems and prosocial behaviour are discussed later.) Examples of emotional problem items on the PSBQ are "Appears miserable, unhappy, tearful or upset", "Is worried. Worries about many things", and "Cries easily". Each behaviour is rated 0 (never or not true), 1 (sometimes or somewhat true), or 2 (often or very true).

For children in Grades 1 to 3 in the older cohort sites, parent and teacher ratings on the overanxious and depression subscales of the Ontario Child Health Study (OCHS) revised checklist (Boyle *et al.*, 1993) were analyzed. Examples of overanxious items from the OCHS subscale are "Self-conscious or easily embarrassed", "Nervous, highstrung or tense", and "Worries about doing better at things". Depression items included "Unhappy, sad or depressed", "Feels too guilty", and "Feels worthless or inferior". Finally, eight items forming a passive victimization subscale from the OCHS rating scale (Boyle *et al.*, in press) were also included for teachers only; several exemplar items for this subscale are "Fails to stand up for self", "Is teased", "Gives in to peers", and "Bullied by others". As in the PSBQ, each item is rated 0 (never or not true), 1 (sometimes or somewhat true) or 2 (often or very true).

Behavioural Problems

Behavioural problems in children include aggressive, oppositional/defiant, and hyperactive behaviours. These behavioural problems impose a substantial burden of suffering on parents and teachers, cause rejection by peers, and are the most frequently occurring basis for childhood referrals for mental health treatment (Campbell, 1995; Hinshaw & Anderson, 1996). Also, the existence of these behavioural

problems in childhood leads in many instances to a lifetime of serious psychological and social difficulties and criminality (Coie, 1996; Hinshaw & Anderson, 1996; Loeber & Farrington, 1998; Offord & Lipman, 1996; Patterson, 1993; Robins & Rutter, 1990). Along with emotional problems, reducing children's behavioural problems is a major goal of the Better Beginnings Project.

The PSBQ measured teacher perceptions of behavioural problems in JK children in the younger cohort sites. Examples of behavioural problem items from the PSBQ scale include: "bullies other children", "disobeys", and "squirmy, fidgety child". The Ontario Child Health Study (OCHS) revised scales, used with parents and teachers of children in Grades 1, 2 and 3, contain two behavioural problem subscales: oppositional/defiant behavioural problems and attention-deficit hyperactivity problems. Examples of behavioural problem items from the OCHS oppositional/defiant scale include "angry and resentful", and "argues a lot with adults". Examples from the attention-deficit hyperactivity scale include: "can't concentrate, can't pay attention for long", "fidgets", and "interrupts or butts in on others".

Prosocial Behaviours

In order to assess a variety of prosocial skills, several measures were employed, involving ratings of social behaviour by parents, teachers and, in Grade 2, by the children themselves. The PSBQ was employed with teachers and parents for JK children in the younger cohort sites. The prosocial scale consists of 10 items (e.g., "shows sympathy for a child who has made a mistake", "invites a shy child to join in a play group", and "tries to stop a quarrel or dispute between friends, brothers or sisters").

For older cohort children, the Social Skills Rating Scale (SSRS) (Gresham & Elliott, 1990) was administered to their teachers and parents when the children were in Grades 1, 2 and 3. The SSRS consists of descriptions of a wide variety of prosocial skills and behaviours (e.g. "the child makes friends easily", "the child controls his or her temper when arguing with other children", and "the child is self-confident in social situations such as parties or group outings"). Each behaviour is rated on a 3-point scale with a score of 0 (never), 1 (sometimes), or 2 (very often). The SSRS yielded three subscale scores: cooperation, assertiveness, and self-control.

A third source of information concerning prosocial behaviour was collected from Grade 2 children themselves using the Social Problem Solving (SPS) measure (Valente, 1995). The SPS measure consists of a structured interview in which children are asked what they would say and do in eight different situations involving interactions with peers. The interviewer shows the child a series of eight drawings that depict two types of social situations and reads a brief description of the situation. Half of the situations require the child to resolve a conflict with a peer and half require the child to initiate social involvement with other children. Children s responses were subsequently coded as socially competent or aggressive according to procedures outlined by Valente (1995). Trained interviewers administered the SPS in French or English, depending on the child's language of instruction in school.

School Readiness

School boards across the province have established programs to identify at an early stage the needs of kindergarten children and to assess their school readiness. In order to determine any effects of Better Beginnings programs on school readiness, teachers completed the ABC School Readiness measure (Toronto Board of Education, 1990) when children were in JK in the younger cohort sites, except in Guelph since very few schools in that neighbourhood offer JK. Analyses of the ABC test results indicated a strong correlation with teacher ratings of behavioural problems. Therefore, the school readiness measure is included in this section of the chapter.

Temperament

Child temperament was rated by parents when their children were 3, 18, and 33 months old using a measure based on the Infant Characteristics Questionnaire (ICQ; Bates, Bennett & Lounsbury, 1979). Examples of items from the ICQ are How easily does your child get upset? , How changeable is your child s mood? and How does your child generally respond to being in a new place? Each item is rated on a scale from 1 to 7.

Self-Perception

Self-perception is an important dimension of child development. The way in which the child describes himself or herself is thought to influence his or her behaviour. Since one of the objectives of the Better Beginnings project was to improve the socio-emotional health of children, it was important to assess that dimension. Because of the age of the children, a selection of items from the Self-Description Questionnaire-I was used. It was administered only in Grade 2 (baseline and focal).

Results for Emotional Problems, Behavioural Problems, and Social Functioning

Younger Cohort. Confirmatory factor analyses of the PSBQ ratings for our sample yielded a reliable emotional problems factor for teachers, but not for parents. Therefore, only the teacher ratings were analyzed for emotional problems. Teachers completed the PSBQ on every child in their classroom in May 1993 (Baseline), and this was repeated five years later in the spring of 1999, when the focal cohort of children was completing JK. The teacher ratings of emotional problems at these two points in time are presented for the younger cohort sites in Figure 7.1. There are no ratings for the Guelph site, since very few schools in that neighbourhood offer JK. For the three largest younger cohort Better Beginnings sites, in Kingston, Ottawa, and Toronto, the average teacher ratings of emotional problems show substantial decreases from Baseline (1993) to 1999, after programs have been in place for five years. These decreases are statistically significant for Kingston ($p<.01$, es=.72) and for the ratings from all four younger cohort sites combined ($p<.01$, es=.27)[1]. These results indicate that the JK teachers in Kingston, Ottawa, and Toronto rated their students as showing decreased levels of emotional problems after five years of Better Beginnings programming.

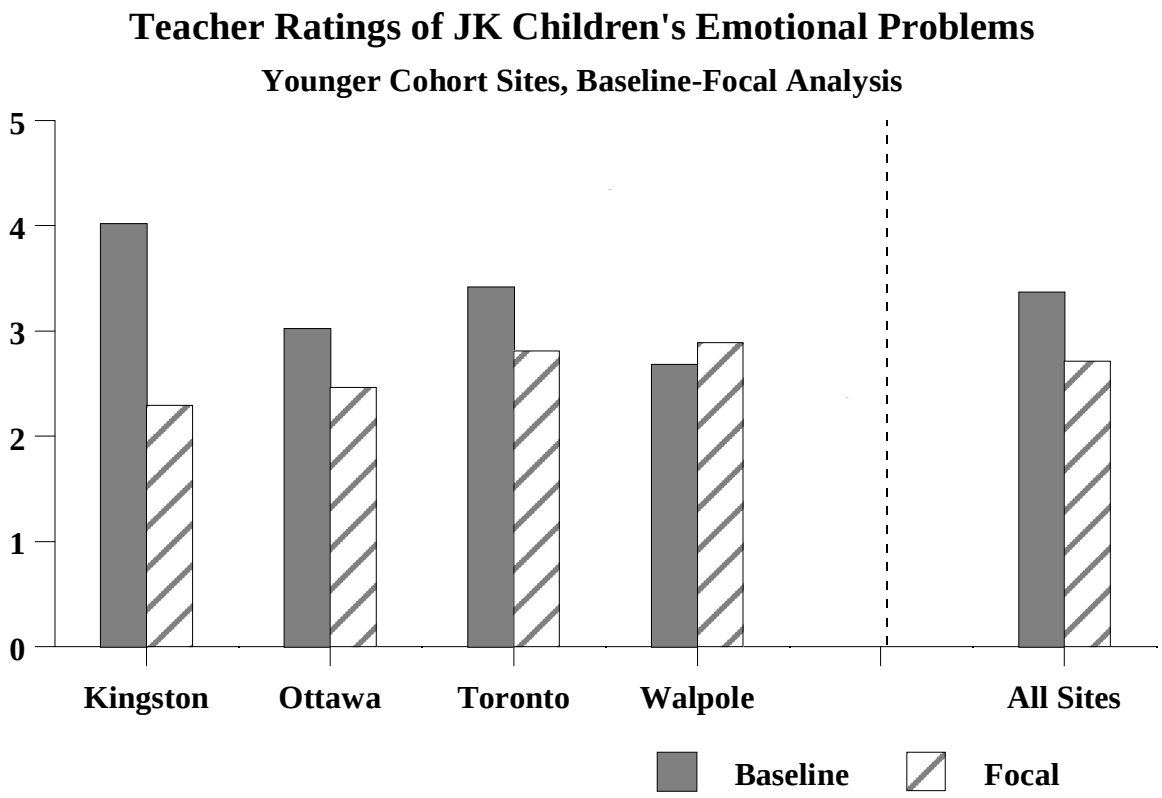
No overall significant differences on the baseline-focal comparisons were found for parent and teacher reports of JK children s behavioural problems or for teacher reports of children s prosocial behaviour. The parent ratings of children s prosocial behaviour were not analyzed as the factor structure was unstable for our sample.

Also, there were no consistent improvements on children s school readiness in the younger cohort sites from baseline in 1993 to five years later. Finally, no significant differences were found between parent ratings of focal cohort children s temperament in the Better Beginnings program sites and the comparison site.

Older Cohort. Of the three subscales of emotional problems of the OCHS (overanxious, depression and passive victimization) measured in children in Grades 1 through 3, results indicated an overall significant reduction in teacher ratings of overanxious behaviours in the three demonstration sites compared to the comparison sites longitudinally ($p<.01$, es=.47; see Figure 7.2). This result was primarily due to a decrease in Cornwall, while the comparison sites showed increases in teacher ratings of overanxious

[1] For an explanation of how effect sizes were calculated, see page 6-21.

Figure 7.1



Junior kindergarten teachers rated four-year-old children in the Kingston, Ottawa, and Toronto Better Beginnings neighbourhoods as showing lower scores on emotional problems after five years of project implementation.

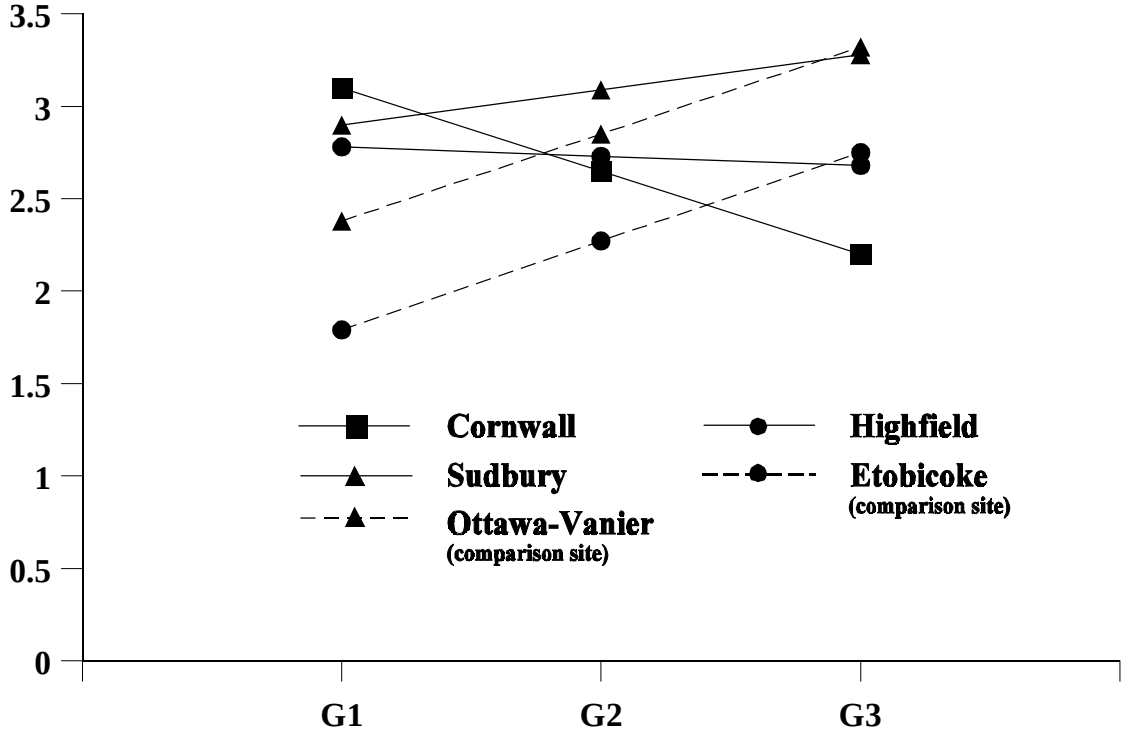
	Baseline			Focal			Effect Size
Site	**Mean**	**s.d.**	**N**	**Mean**	**s.d.**	**N**	
Kingston	4.02	2.57	51	2.29**	2.29	48	.72
Ottawa	3.02	2.34	56	2.46	2.34	24	.23
Toronto	3.42	2.43	48	2.81	1.86	62	.25
Walpole	2.68	1.86	22	2.89	2.92	28	-.09
All Sites	3.37	2.41	177	2.71**	2.20	162	.27

** Difference in means is significant at $p < .01$.

Figure 7.2

Teacher Ratings of Children's Overanxious Problems

Older Cohort Sites, Grade 1 to Grade 3



From Grades 1 to 3, children in Cornwall decreased in overanxious problems; Highfield children remained stable, while those in Sudbury and the two comparison sites increased.

Overall, Better Beginnings Program teachers reported significantly greater decreases in child overanxious problems over time compared to non-program site teachers.

Site	Change/ Year	s.d.	N	Effect Size
Cornwall	-0.45**	1.79	50	.74
Sudbury	0.19	1.54	52	.22
Ottawa-Vanier	0.47	1.88	100	na
Highfield	-0.05	1.58	24	.43
Etobicoke	0.48	1.63	62	na
Demonstration-Comparison	-0.59**	1.61	288	.47

** Difference of demonstration from comparison sites is significant at $p < .01$.

behaviours. A similar pattern was seen in the baseline-focal comparisons in that there were small decreases in overanxious behaviours in the 1993 baseline versus 1997 comparisons of Grade 2 teacher ratings (these changes were non-significant).

For the behavioural problems subscale of the OCHS, no overall significant effects were found for parent or teacher ratings, either in the baseline-focal or longitudinal analyses.

For prosocial behaviour, teacher ratings of the SSRS items revealed a consistent pattern of improvement in self-control for children in the Better Beginnings sites. The Better Beginnings program children showed steadily increasing ratings of self-control for Grades 1 to 3, while the children in the comparison sites showed steadily decreasing self-control behaviour ($p<.01$, es=.46; Figure 7.3). A similar pattern was found in the baseline-focal comparisons in that there were small increases of self-control in the 1993 baselines versus 1997 comparisons of Grade 2 teacher ratings. (These increases were non-significant.) The other two teacher-rated subscales of the SSRS, cooperation and assertiveness, did not show any overall consistent significant effects.

Parent ratings of the SSRS items revealed significantly higher ratings of children s cooperation in 1997 compared to baseline ratings in 1993 ($p<.01$, es=.26; Figure 7.4). This same pattern of improved cooperation was also found in the focal cohort group of children living in the Better Beginnings programs from Grades 1 to 3, although the overall effect was non-significant. The other two parent-rated subscales of the SSRS, self-control and assertiveness, did not show any significant changes either baseline-focal or longitudinally.

Child responses on the Social Problem Solving (SPS) and self-perception measures indicated no significant changes for Grade 2 children from 1993 (baseline) to 1997 in any of the three Better Beginnings sites. This was the only age at which these measures were administered, so no longitudinal analyses were possible.

Site-Specific Findings for Child Emotional Problems, Behavioural Problems, and Social Functioning

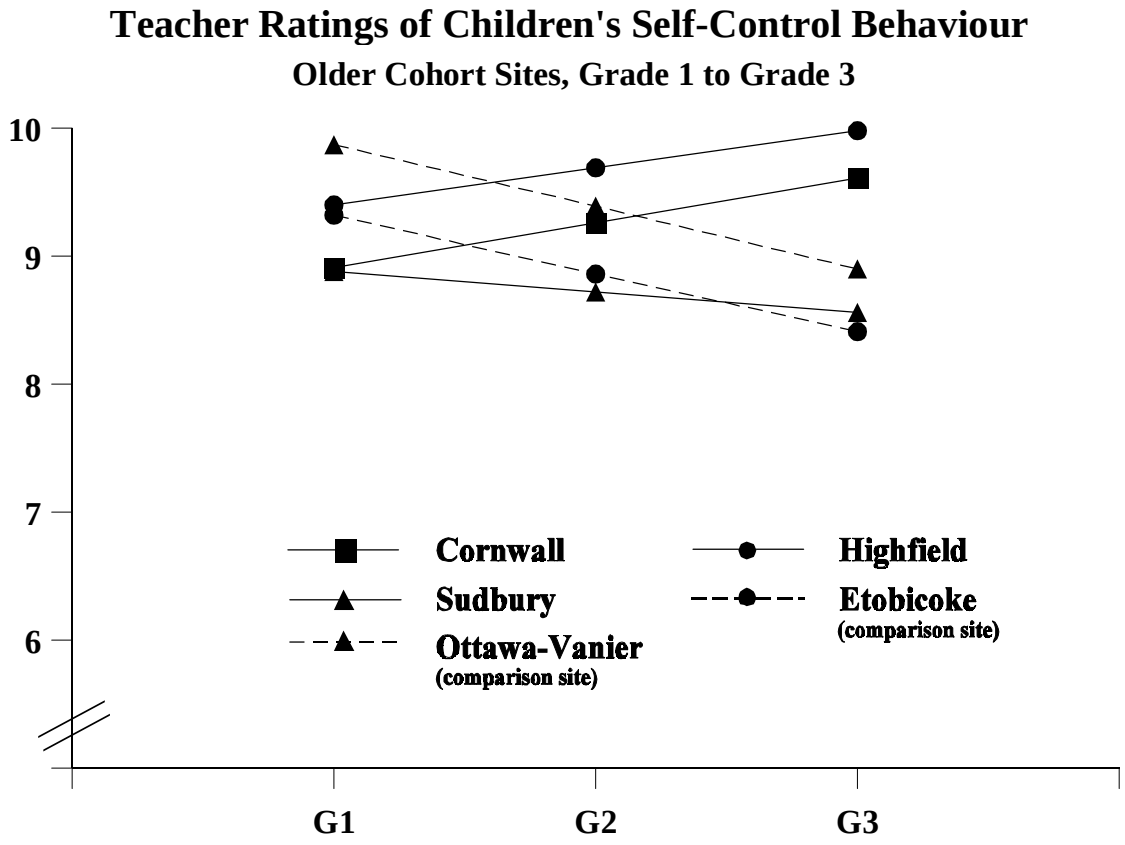
Cornwall: Fewer emotional and behavioural problems were reported by teachers. Based on teacher ratings of the OCHS subscales, children in the Cornwall Better Beginnings site showed significantly less overanxious and passive-victimization behaviour (for each scale, $p<.01$ and es=.74). Teacher ratings on the other three subscales, oppositional, attention-deficit, and depression, also showed small but non-significant reductions.

Highfield: Both parents and teachers rated focal cohort children living in the Highfield Better Beginnings site as more socially skilled in both the baseline-focal and longitudinal comparisons. Seven of the 12 statistical tests for parent and teacher ratings of children s social skills were significant at either $p<.05$ or $p<.01$. Parents at the Highfield program site also rated their children as having significantly fewer emotional and behavioural problems; six of the eight statistical tests were significant at $p<.01$.

***Kingston*:** Fewer emotional and behavioural problems were reported by teachers. Emotional problems were significantly reduced ($p<.01$, es=.27), and there were also small but non-significant increases in prosocial behaviour and decreases in disruptive behaviour. Also, statistical analyses indicate that focal cohort JK children scored higher on school readiness than JK children at baseline ($p<.01$, es=.43).

Sudbury: Parents at the Sudbury Better Beginnings site rated focal cohort children as having more

Figure 7.3



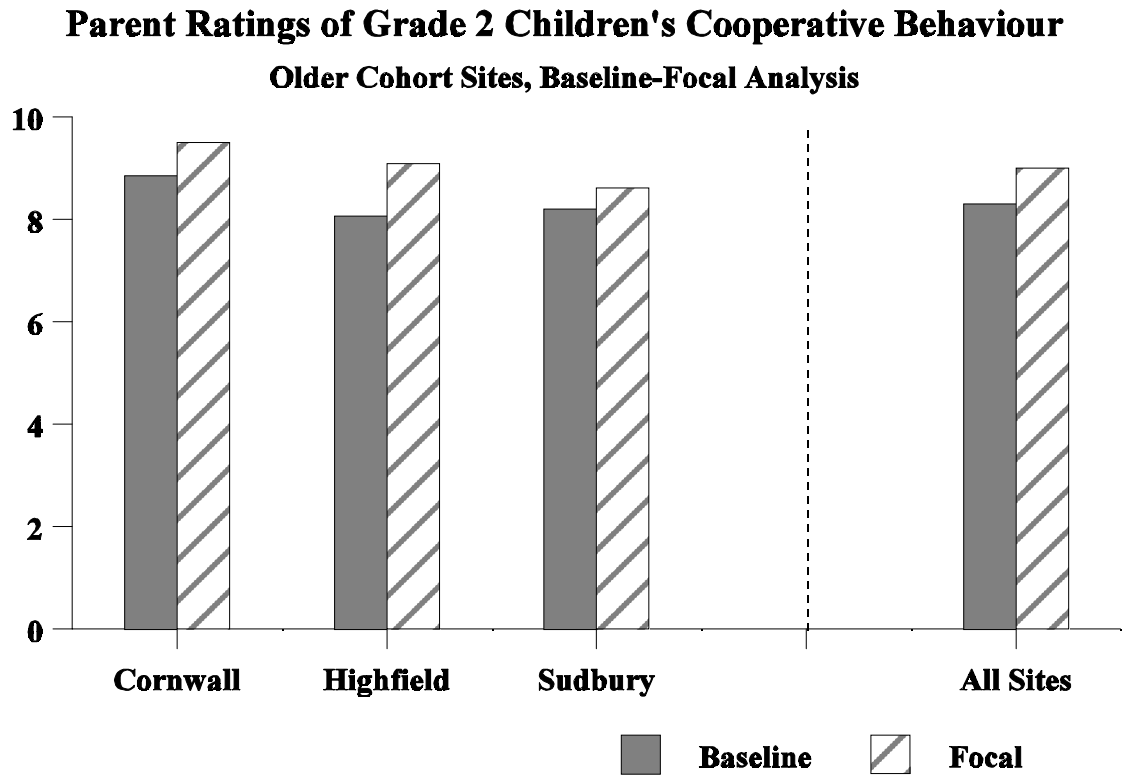
From Grades 1 to 3, children in Cornwall and Highfield showed steadily increasing ratings of self-control. Sudbury children remained stable and the two comparison sites decreased.

Overall, the teacher ratings of self-control steadily increased for the Better Beginnings Program children and steadily decreased for the comparison site children.

Site	Change/ Year	s.d.	N	Effect Size
Cornwall	0.35**	1.01	51	.63
Sudbury	-0.16	1.24	51	.25
Ottawa-Vanier	-0.22	1.39	99	na
Highfield	0.29*	1.37	24	.55
Etobicoke	-0.45	1.58	62	na
Demonstration-Comparison	0.61**	1.38	287	.46

* Difference of demonstration from comparison sites is significant at $p < .05$.
** Difference from comparison sites is significant at $p < .01$.

Figure 7.4



The small increases in parent ratings of cooperative behaviour in their Grade 2 children over the first four years of program implementation was significant for Highfield and for the combined scores from all three Better Beginnings sites.

	Baseline			Focal			Effect Size
Site	**Mean**	**s.d.**	**N**	**Mean**	**s.d.**	**N**	
Cornwall	8.85	3.03	43	9.50	2.28	65	.24
Highfield	8.07	2.40	43	9.09*	2.75	68	.38
Sudbury	8.20	2.42	117	8.62	2.90	101	.16
All Sites	8.31	2.56	203	9.00**	2.71	234	.26

* Difference in means is significant at $p < .05$.
** Difference in means is significant at $p < .01$.

emotional and behavioural problems. All eight of the statistical tests showed increases in these types of problems, and one was significant at $p<.01$.

GENERAL CHILD DEVELOPMENT

Because children are developing rapidly, the effects of optimal or negative circumstances can be reflected in general development. Two measures of general child development were used with the Better Beginnings research children: in the younger cohort sites, the Diagnostic Inventory for Screening Children (DISC; Amdur, Mainland & Parker, 1990), and in the older cohort sites, the Scales of Independent Behavior (SIB; Bruininks, Woodcock, Weatherman & Hill, 1985).

From 18 months to 48 months, children s developmental skills were described using a research version of the DISC developed for the Better Beginnings, Better Futures research project. Trained interviewers asked the children to do a play interview with them. The children did things like kicking a ball, repeating words, and drawing figures. The subscales describe child development in several areas of function, including gross motor (e.g., running, jumping), fine motor (e.g., drawing), auditory attention and memory (e.g., hearing and following directions), visual attention and memory (e.g., matching colours, reconstructing cube designs), and expressive language (e.g., answering questions, completing sentences).

The Scales of Independent Behaviour were used to assess skills needed to function independently in home, social, and community settings from JK through to Grade 3. The short form of SIB was used. It consists of 32 items and covers gross motor skills, fine motor skills, social interaction, language comprehension, language expression, eating and meal preparation, toileting, dressing, and personal self-care.

Results for General Child Development

For the younger cohort children, auditory attention and memory improved in comparison to Peterborough ($p<.05$, es=.36). Children improved in their ability to hear, process, and act on simple instructions or repeat increasingly complex words and numbers in sequence as measured by the DISC. The other five areas of general development using the DISC had mixed results. For the older cohort children, no consistent pattern of effects was found for general child development (SIB).

Site-Specific Findings for General Child Development

Walpole Island: Of the 7 statistical tests for the overall scale and subscales of the DISC, children on Walpole Island showed statistically significant improvements on two of the tests and change in a positive direction on all comparisons.

COGNITIVE FUNCTIONING AND ACADEMIC ACHIEVEMENT

In order to address the Better Beginnings goal of promoting optimal development in children, it was important to include the domain of cognitive development. The research documented the level of children s cognitive functioning in both the younger and older cohort sites. Once the older cohort children reached Grade 1, academic achievement measures for reading and mathematics were also collected.

Cognitive Development

The cognitive development of the children was assessed through their receptive language and non-verbal problem-solving skills.

Receptive Language. The Peabody Picture Vocabulary Test - Revised (PPVT-R; Dunn & Dunn, 1981) was used to assess children s receptive vocabulary, beginning at 4 years of age. The PPVT-R is an individually administered test consisting of 175 vocabulary items of increasing difficulty. When younger cohort children were 4 years old, the PPVT-R was used for the English-speaking children and its new French version of the PPVT-R, the Échelle de vocabulaire en images (Dunn, Thériault-Whalen & Dunn, 1993), was used for French-speaking children.

For the older cohort children, different versions of the PPVT-R were used during the project. The PPVT-R was used for the English-speaking children from JK through to Grade 3; the French version of the PPVT-R, proposed by Dudley-Delage (1980), was used for French-speaking Grade 2 baseline and Grade 2 focal cohorts. The Échelle de vocabulaire en images was used for French-speaking focal cohort children in JK, Senior Kindergarten (SK), Grade 1, and Grade 3.

Non-Verbal Problem-Solving Skills. Because cognitive development implies not only language development, but also problem-solving skills, it was important to assess the children's skills in that domain. For the younger cohort children, non-verbal problem-solving skills of 4 year old children were evaluated using the Block Design subtest of the Wechsler Preschool and Primary Scale of Intelligence for Children (WPPSI) (Wechsler, 1967). For the older cohort children, these skills were evaluated using Block Design subtest of the Wechsler Intelligence Scale for Children-Revised (WISC-R) (Wechsler, 1974) in Grades 2 and 3.

Academic Achievement

Academic achievement was evaluated using measures of reading and mathematics skills obtained directly from children in the older cohort sites in Grades 1 and 2. Children s attitudes towards reading were rated by their teachers.

Reading. The children s reading skills were evaluated using standardized tests. The WRAT-R (Jastak & Wilkinson, 1984) was administered in Grades 1 and 2 (English schools) and the Test de lecture (Commission scolaire des écoles catholiques de Québec, 1990) was administered in Grade 2 (French schools), to baseline and focal groups. Children s attitudes towards reading were evaluated by their teachers in Grades 1, 2 and 3 using the Attitude Towards Reading Scale (Rowell, 1972).

Mathematics. Children's mathematical skills were evaluated using the KeyMath (Connolly, 1991) in Grades 1 and 2. Subtests from the KeyMath include numeration, addition, subtraction, problem-solving, and time and money.

Results for Cognitive Development and Academic Achievement

For children s receptive language and problem-solving skills, the analyses revealed no significant differences between children assessed before the implementation of the Better Beginnings Project compared to those children who were in the Better Beginnings Project four years later in both the younger and older cohort sites; there were also no significant differences on the longitudinal analyses in the older cohort sites.

There were no consistent patterns of overall significant effects across the baseline-focal or longitudinal designs on any of the measures of academic achievement in the older cohort sites.

PERINATAL HEALTH

Given that almost all of the younger cohort sites had prenatal classes for pregnant women, programs were expected to affect pregnancy and births. Newborn health indicators and delivery indicators were examined using Canadian Institute of Health Information (CIHI) data. All the urban younger cohort Better Beginnings program sites were compared to the rest of their surrounding areas before (1990 - 1992) and after (1994 - 1997) programs were well established; 1993 was omitted, as immediate program effects on hospitalizations were not expected. Also, parents were asked questions about their newborn and breastfeeding experiences.

Delivery Outcomes

Two indicators of delivery outcomes examined from the CIHI data were percentage of deliveries that were Cesarean sections and percentage of normal deliveries that used general anaesthesia. These two delivery events have some degree of parent control, although both can be unarguably necessary at times. Unnecessary Cesarean sections and general anesthesia with normal deliveries can increase the risks to mothers and newborns.

Birth Weight

When infants were 3 months of age, parents were asked to recall their child s weight at birth. CIHI data were also examined. Low birth weights are associated with poor perinatal outcomes and long-term health and learning problems.

Breastfeeding

When infants were 3 months of age, mothers were asked how they fed their baby at birth, and if they breastfed, for how many weeks/months. When children were 18 months of age, mothers were again asked how long they breastfed their children.

Breastfeeding is the optimal method of infant feeding; however, it does increase nutrient requirements for the mother. The nutrient adequacy of maternal diet was seen as an important issue, especially among low income women. Therefore, as part of the perinatal interviews, 24 hour dietary recalls were completed with women who were breastfeeding.

Results for Perinatal Health

The percentage of Cesarean sections dropped more in the Better Beginnings sites over time, compared to surrounding areas; however, this drop was not statistically significant. General anaesthesia for normal deliveries also decreased more in the Better Beginnings sites compared to the surrounding areas, but again this decrease was non-significant. Also, no significant difference was found between program and comparison sites in parent-reported or hospital-reported birth weights.

Women in the Peterborough sample were significantly more likely to initiate breastfeeding compared to women in the Better Beginnings demonstration sites ($p<.01$, es= -.42). The initiation rate in the

demonstration communities was 70.5%; Peterborough had a higher rate (91.4%). The rate of initiation of breastfeeding in the Better Beginning sites is close to national figures; initiation rates range from a low of 43% in Newfoundland (Matthews *et al.*, 1995) to 83% in Vancouver (Williams & Innis, 1996). In the Ontario Health Survey, the rate was 69% across all income groups (Nolan & Goel, 1995).

Among women who initiated breastfeeding, there was no significant difference between the demonstration sites (61.6%) and the comparison site (57.2%) in the proportion who continued for at least 3 months. The proportion of women who continued breastfeeding for at least 3 months was slightly higher than the rate shown in other Canadian data. In Quebec, for example, 52% of women continued breastfeeding for 3 months (Carceller *et al.*, 1995).

The 24-hour dietary recalls of breastfeeding women in the demonstration and comparison sites were used to compare nutrition intakes in the Canadian Recommended Nutrient Intakes (RNIs) (Health and Welfare Canada, 1990) for women aged 25 to 49 years during lactation. None of the women in any site met the RNI for zinc. Only women in Toronto and Peterborough met the RNI for folate. And, only women in Guelph met the RNI for calcium. Those in Toronto did not meet the RNI for iron. Thus, nutrient inadequacies were common among women who were breastfeeding.

MEASURES OF CHILD NUTRITIONAL HEALTH

Better Beginnings, Better Futures provides the first population-based information on the dietary intake and anthropometric status of Canadian children since the Nutrition Canada Survey (1973). The nutritional health of children was assessed using anthropometric measurements and a 24-hour dietary recall (for children aged 4 and over).

Anthropometric Measurements

The protocols for measuring height (or length) and weight follow the recommendations of Lohman *et al.* (1988). Each measurement was taken at least twice, as follows:

- length at 3 and 18 months to the nearest 0.1 cm using an infant length board (Pediatric Length Board, Ellard Instrumentation Ltd, Seattle, WA);
- weight at 3 and 18 months to the nearest 0.05 kg using the portable Health-o-Meter Infant Weigh Scale (Health-o-Meter Inc., Bridgeview, IL);
- height from 33 months to Grade 3 to the nearest 0.1 cm using a modified tape measure (Microtoise, CMS Weighing Equipment, London, UK);
- weight from 33 months to Grade 3 to the nearest 0.5 pound with a strain-gauge digital scale (Wonderscale™, Health-o-meter, Inc., Bridgeview, IL).

Percentile values for height-for-age (HAP) and weight-for-height (WHP) were compared to the distribution of age- and sex-specific National Center for Health Statistics (NCHS) reference data (Frisancho, 1990) to determine the proportion of children at or below the 10th percentile and at or above 90th percentile. A value for WHP at or above the 90th percentile reference data is considered overweight, and at or below the 10th percentile is defined as underweight. HAP values at or below the 10th percentile reference data may indicate stunting. If the proportion exceeds 10% in these extreme categories in any population of children, this indicates a nutritional concern.

Results for Anthropometric Measurements

Younger cohort. There were no overall significant differences between the baseline and focal cohorts or longitudinally for HAP or WHP. The proportion below the 10th percentile HAP was consistent with the reference data (12.1% at baseline and 10.4% in the focal cohort). Only 3.5% at baseline and 4.4% in the focal cohort were underweight (below the 10th percentile WHP). However, approximately one child in five (23.7% of baseline, and 21.7% of focal) was overweight (Figure 7.5). The proportion of children at or above the 90th percentile for WHP is well above 10% at each measurement point. For younger children, it is inappropriate to regard a high value for WHP as a cause for concern because they are in a period of rapid growth. It must be stressed that the only implication of these findings is that physical activity should be encouraged for 48-month-old children. To summarize, few children were underweight; overweight is a concern among children aged 48 months, and there was no change in the prevalence of overweight over time.

Older cohort. There were no differences between the baseline and focal cohort, or in the longitudinal analysis for either HAP or WHP. There were few children below the 10th percentile for HAP (2.8% at baseline and 7.8% in the focal cohort). This suggests that long-term undernutrition has not occurred. There was little evidence of underweight, with only 8.5% below the 10th percentile WHP at baseline and 8.3 % in the focal cohort. As with the younger cohort, approximately 22 % of both cohorts were above the 90th percentile for WHP (Figure 7.5). To summarize, underweight is not a problem, but at least one child in five was overweight and this did not change significantly over time.

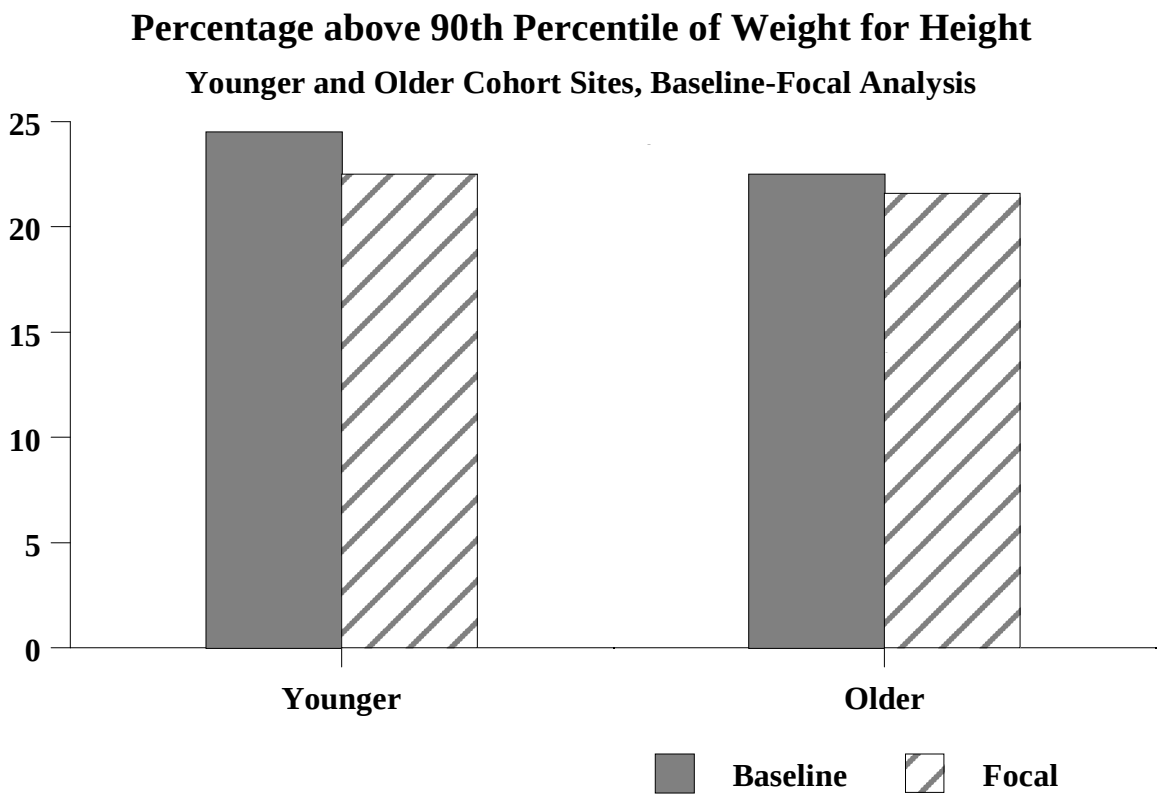
24-Hour Dietary Recall

Information on the intake of energy and selected nutrients was obtained with a 24-hour dietary recall. For JK and SK children, the interviewer asked the parent to recall what the child ate during the previous day. To ensure that the information was complete, the parent s permission was obtained to contact caregivers if the child had been away from home for any part of the day. This interview was conducted according to a standardized protocol, asking additional questions (snacks, type of milk, cereal, use of butter or margarine, etc.) to obtain as complete a description as possible. Food models (similar to those used in the Nutrition Canada Survey; Nutrition Canada, 1973) and calibrated utensils were used to assist the parent with recall of portion sizes. The interviews took place randomly throughout the month, usually within two weeks of the child s fourth birthday.

For children in Grade 2, the interviewer asked each child to recall what s/he had eaten during the previous day. The interviews took place, usually in school, randomly throughout the month, Monday to Friday. To ensure that the information was complete, whenever possible the parent was also asked to recall what the child ate.

The 24-hour dietary recall data were analyzed using the Candat Nutrient Calculation System (Godin London Inc., 1993). In addition to determining whether there have been positive program effects on the energy and nutrient intake of children, it is also necessary to evaluate the nutritional adequacy at baseline and at the focal interview. Mean intakes are compared to the Canadian Recommended Nutrient Intakes (RNIs) (Health and Welfare Canada, 1990).

Figure 7.5



The prevalence of overweight children is well above expected levels for both the baseline and focal cohorts in all sites. Approximately one child in four or five is overweight.

	Baseline		Focal	
Cohort	**%**	**N**	**%**	**N**
Younger	24.5	273	22.5	316
Older	22.5	160	21.6	157

Results for 24-Hour Dietary Recall

Younger cohort baseline-focal. There were significant overall increases from the baseline to the focal cohorts for intakes of carbohydrate ($p<.05$, es= -.65), niacin ($p<.01$, es=.73) and folate ($p<.05$, es=.54). There was no evidence of dietary inadequacies despite a mean energy intake below the RNI for both the baseline and focal cohorts because intakes of all nutrients were at or above the RNIs.

Younger cohort longitudinal analysis. The Dietary Recall was conducted only at 48 months, so no longitudinal comparisons were possible. Within the longitudinal cohort at 48 months, mean intakes of all nutrients were at or above the RNIs for the demonstration sites and Peterborough; therefore, no further analyses were conducted. Energy was below recommended levels, but this is not a concern because of the tendency to overweight and the fact that diets were nutritionally adequate.

Older cohort baseline-focal. There were significant increases, all at .01, for energy (es=.63), protein (es=.55), carbohydrate (es=.51), fat (es=.69), niacin (es=.59), riboflavin (es=.67), thiamine (es=.40), folate (es=.27), calcium (es=.34), iron (es=.39), and zinc (es=.69). At baseline, the mean intakes of energy and zinc were below the RNIs for boys. In addition to these inadequacies, the vitamin A and calcium intakes of girls did not meet recommended values. Although major improvements in dietary intake were observed in the focal cohort, energy still did not meet the RNIs for either boys or girls, and zinc was still marginal for girls. There is growing evidence that energy intake tends to be under-reported, largely because fat consumption is underestimated (Champagne *et al.*,1998). Thus, energy intake below the RNI is not a concern, especially since the intakes of most nutrients appear to be adequate.

Older cohort longitudinal. The longitudinal analysis indicated no improvements in energy and nutrient intakes from SK to Grade 2. This is in contrast to the increases in the intakes of energy and almost all nutrients found in the baseline-focal analysis. Once the results from the baseline data collection were reported back to the sites, a number of food and nutrition programs were developed to address the dietary inadequacies, and this is reflected in the higher intakes in the focal cohort. By SK, the programs were in place, and these were ongoing at the time of the Grade 2 data collection. Among children in SK, energy was below the RNI overall, but the intake of all nutrients met the RNIs.

Site-Specific Findings for Child Nutritional Health

Toronto: Child nutrition clearly improved. From baseline in 1993 to 1998, there were significant increases in children s consumption of calories, carbohydrates, protein and significant increases on 8 of 9 nutrients.

CHILD HEALTH

Parents are a good source of information on the health of their children. However, each parent s concept of what constitutes being healthy, injured, or sick is different. In addition, there is variation among parents in their ability to assess the health of each of their children. A parent s view of the child thus depends on how well they read the child s degree of pain, inconvenience or fatigue. What is ignored or seems acceptable to one parent for one child could seem very distressing or limiting for another child. For these reasons, health researchers ask questions about a child from several perspectives: in the Better Beginnings study, child health was assessed by parents overall perceptions of their children s health, the degree to which children s health problems interfere with daily activities, presence of medical conditions, injuries and poisonings, and rates of hospitalizations.

Provincial data on the study indicators are presented wherever possible to provide a context within which to interpret the effects of Better Beginnings on child health. The primary sources of these comparison figures were the National Longitudinal Survey of Children and Youth (NLSCY, 1997) and the Canadian Institute for Health Information (CIHI).

Parent Ratings of Child Health

Each parent in the comparison and program sites was asked, "In general, compared to other children the same age, would you say your child s health is excellent, very good, good, fair or poor?" The question was repeated from 3 months to 48 months in the younger cohort sites, and from JK through Grade 3 in the older cohort sites.

Results for Parent Ratings of Child Health

Younger Cohort. No consistent significant improvements were found in parents ratings of their children s health in the Better Beginnings program sites compared to the comparison site. When the Better Beginnings parent ratings were compared to those of Ontario parents (based on data from the NLSCY, 1997), children s health was generally poorer.

Older Cohort. There is evidence for Better Beginnings having a positive effect on the parent ratings of their children s health over time (Figure 7.6). A significant improvement in program site parents health ratings was found in relation to the ratings of parents in the comparison sites ($p<.05$, es=.37). Highfield parents ratings showed the greatest improvement versus their comparison site ($p<.01$, es=1.02).

When comparing Better Beginnings parent ratings to those of Ontario parents, from JK through Grade 2, the children at both the Better Beginnings program communities and comparison communities were less apt to be rated by their parents as having excellent health compared to Ontario children in general between the ages of 5 and 9 years (NLSCY, 1997): across the four years, 42% of the parents in the Better Beginnings program and comparison sites rated their children as having excellent health compared to 61% of Ontario parents with children aged 5 to 9 years. However, by Grade 3, Better Beginnings parent ratings of child health were similar to Ontario parent ratings (NLSCY, 1997).

Health Problems

Parents were asked if their children had a condition or health problem which prevented or limited participation in school, at play, or in other activities. Parents were also asked if their children had a chronic health condition. These questions were asked in the younger cohort sites when the children were 33 months and 48 months of age, and in the older cohort sites when the children were in JK through Grade 3.

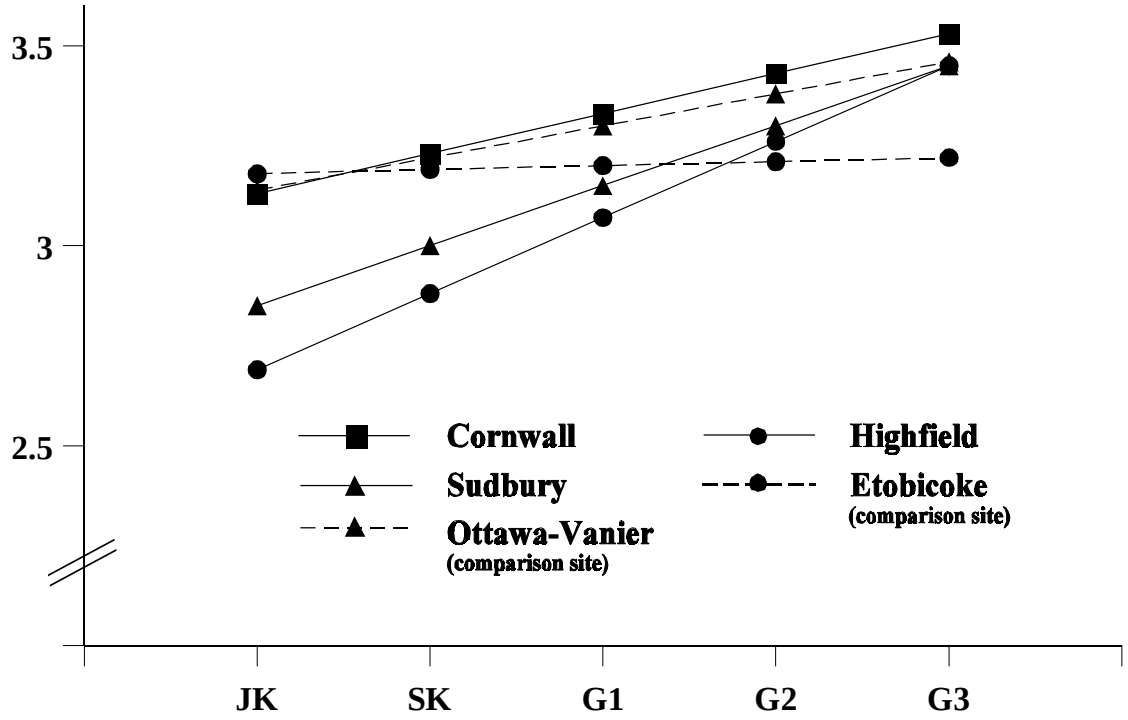
Results for Health Problems

Younger Cohort. Parents in the demonstration sites rated their children as having slightly more health limitations than children in the comparison site ($p<.01$). Also, children in the program sites had more health-related limitations in their daily activities than Ontario children in general. While only 3% of parents province-wide report that their 0 to 4 year old children have health-related limitations, the rates in the Better Beginnings sites range from 4% to 18%.

Figure 7.6

Parent Ratings of Children's Health, JK to Grade 3

Older Cohort Sites



Parents rated their children's health on a 4 point scale: 1 = fair or poor, 2 = good, 3 = very good, 4 = excellent child health.

Better Beginnings Program parents reported slightly greater gains in child health over time compared to non-program site parents.

Site	Change/ Year	s.d.	N	Effect Size
Cornwall	0.10	0.22	35	.28
Sudbury	0.15	0.26	51	.14
Ottawa-Vanier	0.08	0.20	92	na
Highfield	0.19**	0.24	29	1.02
Etobicoke	0.01	0.23	38	na
Demonstration-Comparison	0.09*	0.24	245	.37

* Difference of demonstration from comparison sites is significant at $p < .05$.
** Difference from comparison sites is significant at $p < .01$.

Older Cohort. There were no significant differences between program or comparison sites parent reports of child limitations on activities of daily living. However, it is important to note that children in both the program and comparisons sites have more health-related limitations on their daily activities than do Ontario children in general (based on NLSCY data). Province-wide, only 4% of parents report their 5 to 9 year olds have limitations. In the Better Beginnings program sites, the rates of parent-reported health-related limitations are about double that of Ontario as a whole, ranging from 7% to 11%.

Asthma

The most common health problem among children at all ages in the older and younger cohort sites was asthma. There was no evidence that rates of asthma were affected by Better Beginnings programs or that there was a reduction in hospitalization for asthma (based on CIHI data). However, the rates are so high that some detail and discussion is provided. Across the eight Better Beginnings project sites, parents report that between 9% and 33% of children have been diagnosed with asthma by a doctor. These rates are very high. While asthma is the most common chronic illness among children, in the general population it affects only 7% to 10% of children (Dekker, Dales, Bartlett, Brunekreff, & Zwanenburg, 1991; Betz, Hunsberger, & Wright, 1994). These rates are of serious concern because asthma accounts for more missed school days then any other childhood illness (Winkelstein, Tarizian, & Wood, 1997). It was expected that the rates would be somewhat higher, because low-income families are known to be more apt to have children who have asthma, and their children are more apt to have more severe asthma (Taylor & Newacheck, 1992; Winkelstein *et al.*, 1997). Although death is uncommon, the rates are rising, especially among children from low-income families (Winkelstein *et al.*, 1997).

Injuries and Poisoning/Hospitalizations

Parents in the younger cohort sites were asked if their child had been injured or poisoned in the past twelve months; these questions were asked for children at 33 months and 48 months. Parents in the older cohort sites were asked about their children s injuries for all data collection points except when children were in Grade 1.

Using the CIHI database, child hospitalizations for the following conditions were examined for children 0 to 4 years of age: asthma; all surgeries; all medical admissions; and pneumonia. Because hospitalizations were too infrequent among 0 to 4 year olds, no site-specific analyses were possible. Also, the frequency was too low to examine for children aged 5 to 9.

Hospitalization rates in the younger cohort urban Better Beginnings sites were compared to the rest of their surrounding areas before programs (1990-92) and after programs were well established (1994-97).

Results for Injuries and Poisoning/Hospitalizations

Poisonings and injuries were reported very rarely, so analyses of a possible effect in the younger cohort sites were not possible. In the older cohort sites, there were no significant results.

In the younger cohort sites, hospitalizations for asthma were slightly lower in the years after Better Beginnings in comparison to their surrounding areas and the comparison site. The drop was from 2.8% to 2.3% and this result was non-significant. Also, surgeries, medical admissions and pneumonia hospitalizations did not show an effect.

HEALTH PROMOTION/PREVENTION OF INJURY AND ILLNESS

Promotion of Child Health

This aspect of child health was examined in parent reports of: child s immunization status at 18 and 33 months, at SK, and at Grade 1; and number of hours children were exposed to tobacco smoke per week when children were 33 and 48 months of age. Also, parents were asked six questions adapted from Tinsley and Holtgrave (1989) that measured their perceived ability to positively influence their child s health; for example, I can do lots of things to keep my child from getting sick. Parents could rate whether they strongly agreed (1) to strongly disagreed (6) with each of the six statements. This measure was used when children were 3, 33, and 48 months old in the younger cohort sites, and from Grades 1 to 3 in the older cohort sites.

Child Injury Prevention

This was explored in three ways: use of car seats, use of bicycle helmets, and traffic safety. Each of these could prevent child injuries and is under some degree of parental control. Each could have changed as a result of broader Better Beginnings health promotion efforts. When children were 18 months of age, parents were asked whether they used a car seat for their children in a vehicle. When the children were 48 months of age in the younger cohort sites and in SK in the older cohort sites, parents were asked, When your child rides a bicycle, how often do you try to see that he/she wears a helmet? Finally, when the children were in Grade 3 in the older cohort sites, parents were asked how consistently they thought their child looked both ways before crossing a street.

Results for Child Health Promotion/Injury Prevention

Younger Cohort. As shown in Table 7.1, at 18-months, children in the program sites were more likely to be up to date with immunizations than children in the comparison site ($p<.05$, es=.18); Guelph, Ottawa, and Toronto were significant at $p<.01$ compared to Peterborough, with respective effect sizes of .50, .47 and .38.

Almost all parents in the projects sites and comparison site reported appropriate use of car seats; therefore, no statistical analyses were done. For bicycle helmet use, there were significantly lower rates of parental encouragement at the program sites versus the comparison site ($p<.05$, es= -.74). However, program sites were not focusing on bicycle safety at this early age.

Neither children s exposure to second-hand smoke nor parents perceived ability to positively influence their children s health showed any significant effect compared to Peterborough.

Older Cohort. There were no overall consistent significant differences between the program and comparison sites on measures of children s immunization, parents perceived ability to positively influence their child s health, children s use of bicycle helmets, or children s traffic safety.

Site-Specific Findings for Health Promotion/Injury Prevention

Cornwall: Three of the four health promotion/injury prevention measures were significant at $p<.01$ (increased sense of parent control over child s health, more timely immunizations and increased parental encouragement to wear a bicycle helmet, with respective effect sizes of .49, .55 and .24). The parents living in the Better Beginnings Cornwall site also reported children more likely to look both ways before

crossing the street, although this change was not statistically significant.

Sudbury: Of the four health promotion/injury prevention measures, two were statistically significant at p<.01 (parents control over child s health (es=.48) and parental encouragement to use a bicycle helmet (es=.24)). Children having more timely immunizations showed a slight non-significant improvement as well.

Table 7.1 Rate of Children s 18-Month Immunizations
Younger Cohort Sites

Site	% of Children Immunized on Time at 18 Months
Guelph	66.7 **
Kingston	30.0
Ottawa	62.5 **
Toronto	60.0 **
Walpole Island	50.6
ALL DEMONSTRATION SITES	49.9 *
Peterborough Comparison	35.0

* Difference is significant at p<.05. ** Difference is significant at p<.01.

USE OF HEALTH CARE SERVICES FOR CHILDREN

Improved health promotion often requires access to professionals, for example, to obtain immunizations. If Better Beginnings can affect child health and parent s perceptions about how best to keep their children well, then some changes in the use of health care services might also be expected. It might also be reasonable to expect changes in how satisfied parents were with the care they could get for their child. However, opposing factors can affect service use. For example, the positive factor of health promotion should increase use. On the other hand, the negative factor of illness should also increase use. Finally, local availability will affect usage rates.

To assess health care use, parents were asked if their child had used various types of services or professionals over the last six months. The questions were whether or not the parent used the service for the child. Parents in the longitudinal sample were asked about services at several points in time. For example, parents of JK, SK and Grade 2 children were asked how often they had visited an emergency room for their child in the last six months. In the younger cohort sites, parents of 33 and 48 month olds were asked similar questions.

To assess general access to health care services, parents were asked if there was ever a time during the last 12 months when you wanted to see a professional for your child but didn t? Parents were also asked Did you ever feel you were not getting as good service as other people?

Results for Access to Professionals for the Child

The professionals most often not seen were psychologists, followed by physicians and dentists. The most frequently mentioned reason for not seeing a professional for the child was the cost. This was followed by not being able to get an appointment in time, not knowing who to see, where to go or who to call and the parent being too busy with other things. The frequencies of each type of professional and each type of reason were too low to allow statistical analysis.

Younger Cohort. Overall, parents at Better Beginnings program sites felt they had improved access to professionals after programs began compared to before programs ($p<.05$, es=.17); all sites were in the same direction and two of the five were significantly improved. Before programs, 21% reported they had not seen a professional when they thought they needed it for their child. This dropped to only 10% after programs were in place. In comparison to Peterborough, the same significant overall trend ($p<.05$, es=.24) repeated; all sites were in the same direction and two of these were statistically significant. At the comparison site, 36% of the parents reported not being able to see a professional when they thought they needed it for the child. The lower rates of access problems for the Better Beginnings sites ranged from 15 to 32%.

Older Cohort. There is no consistent patterned effect of Better Beginnings on access to professionals for children in the older cohort sites.

Results for Quality of Service Obtained

Younger Cohort. Better Beginnings parents in the baseline-focal comparison tended to think that they were receiving better service than before programs began ($p<.05$). All sites were in the same direction, but taken individually, none showed significant change.

Older Cohort. There is no consistent patterned effect of Better Beginnings on quality of service obtained.

Results for Health Care Visits

Younger Cohort. No overall changes in visits to a doctor, emergency room, optometrist or dentist for the child were found in the younger cohort sites.

Older Cohort. For visits to an optometrist or dentist, there were no changes in parent reports of child visits. There were significantly more emergency room visits among children at the older cohort program sites versus their comparison sites ($p<.05$). Across all sites, 61% of the children had visited an emergency room. Of these, 37% had visited only once, 29% twice and 34% had visited three or more times in the time sampled. Cornwall and Sudbury had significantly increased usage ($p<.01$). There was no consistent pattern effect of Better Beginnings on visits to a doctor.

SUMMARY OF SIGNIFICANT CHILD FINDINGS

CHILD EMOTIONAL PROBLEMS, BEHAVIOURAL PROBLEMS, AND SOCIAL FUNCTIONING

General Findings

- In both the younger and older cohort Better Beginnings sites, there were significant decreases in teacher reports of children s overanxious emotional problems.
- In the older cohort Better Beginnings sites, children show significantly improved self-control as reported by their teachers and significantly improved cooperation as rated by their parents.

Site-Specific Findings

Cornwall: Fewer emotional and behavioural problems were reported by teachers. Based on teacher ratings of the OCHS subscales, children in the Cornwall Better Beginnings site showed significantly less overanxious and passive-victimization behaviour ($p<.01$). Teacher reports on the other 3 subscales, oppositional, attention-deficit, and depression, showed small but non-significant reductions.

Highfield: Both parents and teachers rated children living in the Highfield Better Beginnings site as more socially skilled in both the baseline-focal and longitudinal comparisons; seven of the 12 statistical tests were significant at either $p<.05$ or $p<.01$. Parents living in the Highfield program site also rated their children as having significantly fewer emotional and behavioural problems; six of the eight statistical tests were significant at $p<.01$.

***Kingston*:** Fewer behavioural-social-emotional problems were reported by teachers. Of the three subscales of the PSBQ, a reduction in emotional problems was significant at $p<.01$, and there were also small non-significant increases in prosocial behaviour and small decreases in disruptive behaviour. Also, children were rated by their teachers as improving in school readiness ($p<.01$).

Sudbury: Parents living in the Sudbury Better Beginnings site rated their focal cohort children as having more emotional and behavioural problems. All eight of the statistical tests showed increases in these types of problems, and one was significant at $p<.01$.

GENERAL CHILD DEVELOPMENT

General Findings

- Auditory attention and memory significantly improved among the younger cohort in comparison to Peterborough ($p<.05$).

Site-Specific Findings

Walpole Island: Improved general development was clear. Of the 7 statistical comparisons for the DISC, children on Walpole Island showed statistically significant improvements on two of the tests and change in a positive direction on all of the comparisons.

PERINATAL HEALTH

General Findings

- Women at the Better Beginnings sites had lower initiation rates for breastfeeding compared to Peterborough ($p<.01$). The initiation rates for breastfeeding at the demonstration sites are close to national figures.

CHILD NUTRITIONAL HEALTH

General Findings

- In the younger cohort sites, very few children were underweight. There was a tendency to overweight among 4 year olds.
- In the older cohort Better Beginnings sites, there were significant improvements on 10 of the 12 indices of children s nutrition from baseline 1993 to 1997.
- In the older cohort sites, more than one child in five was overweight. This reflects a North American trend to pediatric obesity (Freedman *et al.*, 1997; Yip *et al.*, 1993). This is an issue for all sites; there was no decrease in the prevalence of overweight in either the baseline-focal or the longitudinal analyses.

Site-Specific Findings

Toronto: Improvement in child nutrition was clear. From baseline in 1993 to 1998, there were significant increases in children s consumption of calories, carbohydrates, and protein and significant increases on eight of nine nutrients.

CHILD HEALTH AND HEALTH PROMOTION/PREVENTION OF INJURY AND ILLNESS

General Findings

- For the older cohort Better Beginnings sites, there was a significant improvement in parents overall ratings of their children s health, and by Grade 3 the ratings were similar to those for other children living in Ontario.
- In the younger cohort Better Beginnings sites, program children were more likely to be up to date with immunizations. Program parents were less likely to encourage their children to wear bicycle helmets than comparison site parents.

Site-Specific Findings

Cornwall: Increased health promotion/injury prevention was shown. Three of the four measures were significant at $p<.01$ (increased sense of parent control over child s health, more timely immunizations, and increased parental encouragement to wear a bicycle helmet).

Sudbury: Increased health promotion/injury prevention was apparent. Of the four measures, two were statistically significant at $p<.01$ (parent s control over child s health and parental encouragement to use a bicycle helmet).

USE OF HEALTH SERVICES FOR CHILDREN

General Findings

" Parents at the younger cohort Better Beginnings program sites report having improved access to professionals after programs began compared to before programs ($p<.05$) and compared to Peterborough ($p<.05$).

Chapter 8

EFFECTS ON PARENTS AND FAMILIES

Parents are the first and most important people in children's lives (Haveman & Wolfe, 1995; Landy & Tam, 1996; Rutter, 1985). One of the major goals of the Better Beginnings Project was to support and strengthen parents in their role of fostering their children's development, and, to this end, a wide range of program activities for parents and children were implemented.

This chapter addresses the extent to which the Better Beginnings goal of improving parents and families abilities to foster healthy development in their children was achieved within the short-term research period. Parent health, parent social activities, parenting behaviours, and parent and family social and emotional functioning are areas of concern in this chapter. Measures used to examine these various topics will be described followed by results (both overall and site-specific when applicable).

In a few instances, comparisons will be made to other sources of data in which the parents are exclusively female. As described in Chapter 5, approximately 90% of the Better Beginnings respondents are female. Male/female differences for the outcome variables in question were checked, and none were significant.

PARENT HEALTH

People differ in their self-referential definitions of health. The same degree of pain or inconvenience or fatigue is ignored or is acceptable to some, but very distressing and limiting to others. Consequently, health researchers usually ask questions related to health from several perspectives (Collins, Rowland, Salganicoff & Chait, 1994; Stephens, 1988).

Better Beginnings parents were asked, "In general, compared to other persons your age, would you say that your health is excellent, very good, good, fair, or poor?" Parents also reported use of recent prescription medications and answered a series of questions to determine whether health problems limited them in their daily activities: "Are you currently limited at all in the kind or amount of work you do or other activities because of (a) physical health problems, (b) emotions, nerves or mental health, or (c) physical pain or discomfort?" (Charette, 1988; Statistics Canada, 1988). Parents with limitations were asked to describe their health problems in greater detail. To explore parental health as it affects their children, parents were asked, Does the condition of your health interfere with caring for your child?

In addition, the prevalence of overweight and underweight in parents and any change in weight status between the two measurement points was examined. Height and weight were self-reported. Overweight is defined as a value for the Body Mass Index (BMI) [1] greater than 25.0. This is the level associated with an increasing risk of developing health problems (Health and Welfare Canada, 1988). A BMI of 20 to 25 is considered a good weight for most individuals. An individual with a BMI less than 20 is considered underweight.

[1] BMI is calculated as: weight in kilograms/(height in metres)^2.

Results for Parent Health

The parents were generally healthy. Those with health problems primarily had physical problems that were often chronic and frequently associated with mental or emotional health problems. The most common conditions that limited parents activities were back problems, joint or muscle problems, asthma, pregnancy, and arthritis. This is similar to findings in other studies of women in similar age groups (Fogel & Woods, 1995).

There were no overall significant differences in the proportion of parents in each of the BMI categories between the baseline and focal cohorts for either sex. None of the males had a BMI below 20, and only a small proportion of females can be considered underweight. The proportions with BMIs greater than 25 (which indicates overweight) for the focal cohorts are considerably higher for both males (varying from 52% to 76% by site) and females (42% to 57%) compared to the 1990 Ontario Health Survey (48% for males aged 20 to 44 years; 28% for females) (Hedley *et al.*, 1995).

Younger Cohort. Across Ontario, women in this age group usually rate their health as excellent or very good (National Population Health Survey (NPHS), 1994-95). Younger cohort parents were most apt to rate their health somewhat less positively, as very good or good. Over twice as many parents in the younger cohort, 17% versus 7% in Ontario, rated their health as only fair or poor. No consistent pattern of effects of Better Beginnings programs on parents general health ratings was found. Similarly, there were no differences in the number or types of prescription drugs the parents used before or after programs or in comparison to the Peterborough comparison site.

No consistent pattern of effects on physical or mental health or pain limitations was found. Fourteen per cent reported limitations due to physical health. Of these, two thirds had a chronic limitation (lasting more than one year). Sixteen per cent reported either emotional or mental health limitations. Eighteen per cent of parents had experienced physical and mental health problems when these conditions were combined. Pain or discomfort limited 14% of the parents. About one parent in eight felt limited in their ability to care for their children because of their health limitations, and this did not significantly change after programs or in contrast to the comparison site.

Older Cohort. Overall, older cohort parents reported their health as very good. Their ratings were about the same as those for the rest of the Province (NPHS, 1994-95). No consistent pattern of effects of Better Beginnings programs on parents general health ratings was seen. No consistent pattern of differences was found in the number or types of prescription drugs the parents used over time. The most common type of prescription drug used was for pain, but no differences were seen over time.

For limitations related to physical health, the pattern was not significantly different in the same communities before and after programs. Fourteen per cent reported limitations due to physical health. Of these, two thirds had a chronic limitation (lasting more than one year). Only 5% reported emotional or mental health limitations. When the mental and physical health limitations were combined, 17% of parents report limitations. In the longitudinal data, the rates per year were similar, and there were no significant differences between groups. About one parent in 10 felt limited in the ability to care for children because of health limitations, and this did not significantly change after programs or in contrast to the comparison sites.

PARENT HEALTH PROMOTION, ILLNESS PREVENTION, AND HEALTH RISK BEHAVIOURS

Parental health promotion involves actions taken to increase levels of good health (health enhancement), to prevent problems from occurring (risk avoidance), and to decrease the chances of developing health problems (risk reduction) (Ontario Ministry of Health, 1990). Parents behaviours act as models for children s future health promotion behaviours. Better parental health promotion means that more parents will be healthier in the future and therefore better able to provide optimal care for their children. Some health risks, such as parental smoking, can be harmful to the health of their children.

Parent were asked questions about selected health promotion and illness prevention behaviours. Indicators were selected from among behaviours known to be related to better parent health outcomes and for which at least some personal choice is possible (Garceau, 1988; Mitchell, 1995) [2]. Certain behaviours carry widely understood risks to health and, for parents, secondary risks to the health and safety of their children. Health promotion and illness prevention data were collected on exercise, Pap smears, and breast self-examinations. Health risk data were collected on use of tobacco and alcohol among parents.

Exercise

Improvements in exercise suggest a commitment to a healthier lifestyle. Exercise and attention to nutrition are the primary health promotion behaviours that individuals can change. Mothers in the younger cohort were asked how frequently they exercised before, during, and following pregnancy. Parents in the older cohort site reported on their exercise over the last month when their children were in SK through Grade 3.

Pap Smears

Timely use of Papanicolaou (Pap) smears for the detection of cervical cancer is a means of identifying treatable cancer early (Gold & Richards, 1994). Since Pap smears are done by physicians, this is an indicator of use of the health care system for early identification of a treatable health problem. Women reported the timing of their last Pap smear, and responses were coded as within the guidelines or not at the 33-month interview for the younger cohort sites and at JK, Grades 1 and 2 interviews for the older cohort sites.

Breast Self-Examination

Monthly breast self-examinations can aid the early diagnosis of breast cancer, which is more likely to be treatable when caught early. This question was asked at the 18-month and 33-month interviews in the younger cohort sites, and at SK, Grades 1 and 3 in the older cohort sites.

Cigarette Smoking

Smoking is a very difficult habit to change. Associated with the major killers heart disease, lung cancer and cerebrovascular disease smoking is also linked to osteoporosis, cervical cancer and, among pregnant women, to low birth weight and miscarriage (Costello & Stone, 1994). Importantly, secondhand smoke is a direct risk to children (Youngkin & Davis, 1994). Smoking was measured by parents report

[2] Over-reporting of health promotion behaviours has been documented in other studies. An example is higher reported rates of Pap smears compared to medical record reports of the test (Ontario Ministry of Health, 1990). So change in rates rather than the absolute rate is most notable.

of the number of cigarettes and/or packs of cigarettes smoked per day. These data were categorized on a scale of 0 (no smoking), 1 (less than ½ pack a day), 2 (more than ½ to 1 pack a day), and 3 (more than 1 pack a day). As a rough indication of the study children s exposure to smoke in the home, parents were asked how many smokers are there in the home. Taken together with whether or not the parent smoked, the number of smokers in the home was calculated. The scale was 0 to 2 (two or more smokers). Questions about cigarette smoking were asked at every data collection point.

Alcohol Use

Excessive alcohol use is a direct risk to parents and has indirect risks to the children. Regular, heavy alcohol consumption is related to strained social relations, legal difficulties and acute and chronic health problems (Fogel & Woods, 1995). Parents were asked, "In the past 12 months, how often did you drink alcoholic beverages?". Mothers reported on alcohol use before, during and following pregnancy in the younger cohort sites; in the older cohort sites, parents reported on alcohol use at every interview. Results for those who became pregnant during the study period were also checked. The scale ranged from 0 (never) to 3 (once a week to daily); questions were also included on binge drinking. As indicators of serious alcohol use, the four CAGE questions (Ewing, 1984) were asked at three data collection points in both the younger and older cohort sites.

Results for Parent Health Promotion, Illness Prevention, and Health Risk Behaviours

Younger Cohort. Regarding health promotion, parents at Better Beginnings sites had significantly better rates of exercise during the first seven months of pregnancy, in comparison to Peterborough ($p<.01$, $es=.12$) [3]; three sites had significantly higher levels and the other two were in the same direction. When parents rates of exercise after pregnancy were examined, significantly more parents in the comparison site exercised than in the project sites ($p<.01$, $es= -.33$); three sites were significantly lower, and the other two were in the same direction.

Regarding illness prevention, all sites except one had more mothers within the Pap smear guidelines than the provincial rate, which is approximately three out of four Ontario women of the same age (NPHS, 1994). Overall, no significant difference for Pap smears within guidelines was found in Better Beginnings sites compared to Peterborough.

Women in Peterborough reported more frequent monthly breast self-examinations compared to women in the five demonstration sites ($p<.01$, $es= -.25$); three of the five sites showed significant results as well.

The analyses for cigarette smoking were quite detailed; results for the baseline-focal comparison will be presented first, followed by the longitudinal comparison. Parents in the Better Beginnings communities did significantly less smoking after programs than before ($p< .01$). Three of five sites had significant decreases in smoking after programs began; the two remaining sites were in the same direction. Before Better Beginnings, when their study children were four years old, almost half (45%) of the parents smoked. This is a very high rate compared with only about a quarter of Ontario women of the same age. After Better Beginnings, the percentage of parents smoking dropped from 45% to 35% . Even with this significant drop, overall the parents still smoked more than Ontario women 35% compared to 28% (National Longitudinal Survey of Children and Youth; NLSCY, 1997). The relatively greatest drop in smoking was among the heaviest smokers.

[3] For an explanation of how effect sizes were calculated, see page 6-21.

The longitudinal data included the parents' recall of the amount smoked before, during, and following pregnancy. The longitudinal analysis needs to be interpreted with the understanding that cigarette smoking is addicting and that relapse is common. The following overall pattern in smoking is seen at most sites. First there is a drop in smoking during pregnancy. Next is a rebound. Figures were relatively stable from 18 to 48 months. Parents at all sites rebound to about the same or higher level of smoking as before pregnancy. So the higher the rate of pre-pregnancy smoking, the greater the drop in smoking during pregnancy and the greater the rebound.

Three separate analyses were done: of the decline from before to during pregnancy; of the rise from pregnancy to 3 months after; and of the period from 3 to 48 months. The first two analyses showed no consistent pattern favourable or unfavourable to the Better Beginnings sites. For the period from 3 to 48 months, parents in the comparison site reported a decline in smoking relative to the demonstration sites ($p<.01$); three of the sites showed a significant difference and the other two sites were in the same direction.

To summarize, cigarette smoking was very heavy in Better Beginnings communities. This concurs with other surveys, which report higher rates among those with lower incomes and less education (Ontario Ministry of Health, 1990; Lamarche, 1988; Fogel & Woods, 1995). Although the baseline-focal results were significant ($p<.01$), the longitudinal results were mixed, so it was concluded that there was no consistent pattern of a Better Beginnings effect on cigarette smoking in the younger cohort sites.

Better Beginnings children were often in homes with many smokers. Although the baseline-focal results were positive ($p<.01$), the longitudinal results did not show a consistent pattern. The average number of smokers in a home for the baseline-focal children was high, approximately one smoker per home. After Better Beginnings, all of the program communities had a significant overall drop in number of smokers in homes. However, the longitudinal analyses showed no consistent, significant pattern.

As with the cigarette smoking analyses, analyses for alcohol use were also quite detailed. Results for the baseline-focal analyses reveal that the overall average was about one drink a month. Reports of alcohol consumption among Better Beginnings community parents were much lower than that of women in Ontario of the same age: 63% of the parents used alcohol before Better Beginnings versus 80% in Ontario (NPHS, 1994-95). This gap was widened slightly but significantly after Better Beginnings, with only 59% of the parents reporting the use of alcohol ($p <.01$). The drop in alcohol consumption was significant for one site.

Three separate analyses were done for alcohol use for the longitudinal comparisons: of the period from before to during pregnancy; from pregnancy to 18 months after; and of the period from 18 to 48 months. The three analyses showed no consistent pattern of effects.

CAGE scores showed no one in the alcoholism range. Binge drinking reports were rare. Alcohol use data were collected for those who were pregnant during the study period, but too few were pregnant for analysis.

To summarize, heavy alcohol use was rare among the study parents. Given strong baseline-focal significant results, but a lack of significant differences in the longitudinal data, the evidence for a Better Beginnings effect on alcohol use among parents in the younger cohort sites is inconclusive.

Older Cohort. Better Beginnings appears to help reduce cigarette smoking. The parents were very heavy smokers, and this is a very difficult habit to change. Nearly half (46%) of the parents in the older cohort Better Beginnings communities smoked before programs began, compared to only about a quarter of Ontario women of the same age (28%, NLSCY, 1997). For the focal cohort, the rate almost halved to 26% ($p<.01$, es=.30; Figure 8.1). This significant drop brought the Better Beginnings parents in line with Ontario women: 74% compared to 72% nonsmokers (NLSCY, 1997). The drop was most evident among the heaviest smokers. The same picture emerges in the longitudinal analyses; overall, there was a significant difference in the Better Beginnings sites versus their comparison sites in smoking ($p<.05$, es=.19).

The number of smokers in children s homes shows a consistent pattern of falling. There were fewer smokers after Better Beginnings in the baseline-focal analysis ($p<.05$, es=.18); one site was significant and another in the same direction. In the longitudinal analysis, the same pattern of a reduction in smokers in the homes was seen overall and at all sites, but these results were not statistically significant.

Self-reported alcohol use was low among the study parents. Reports of alcohol consumption among Better Beginnings community parents were slightly lower than among women in Ontario of the same age (NPHS, 1994-1995). Binge drinking was rare. Similarly, a measure of alcoholism, the CAGE questionnaire, found none of the parents scored in the serious alcoholism range. Nevertheless, in the baseline-focal analysis, a significant drop in alcohol use was found ($p<.01$). All sites were in the same direction, and one was significant. The overall longitudinal result was showing a small but non-significant increase in alcohol consumption. Therefore, there is inconclusive evidence for a Better Beginnings effect on parental alcohol consumption in the older cohort sites.

For all other measures of parent health (e.g., breast self-examinations, timely Pap smears, exercise), no consistent effects were found.

Site-Specific Findings for Parent Health Promotion, Illness Prevention and Health Risk Behaviours

Highfield. In Highfield, a pattern of improved health promotion and illness prevention behaviour emerges. Parents report more timely Pap smears, more frequent breast self-examinations, more frequent exercise, fewer smokers in the home, less alcohol use, improved ratings of health, fewer health limitations, and less use of prescriptions for pain. Of the 18 comparisons, 6 were significant and 15 were in a favourable direction.

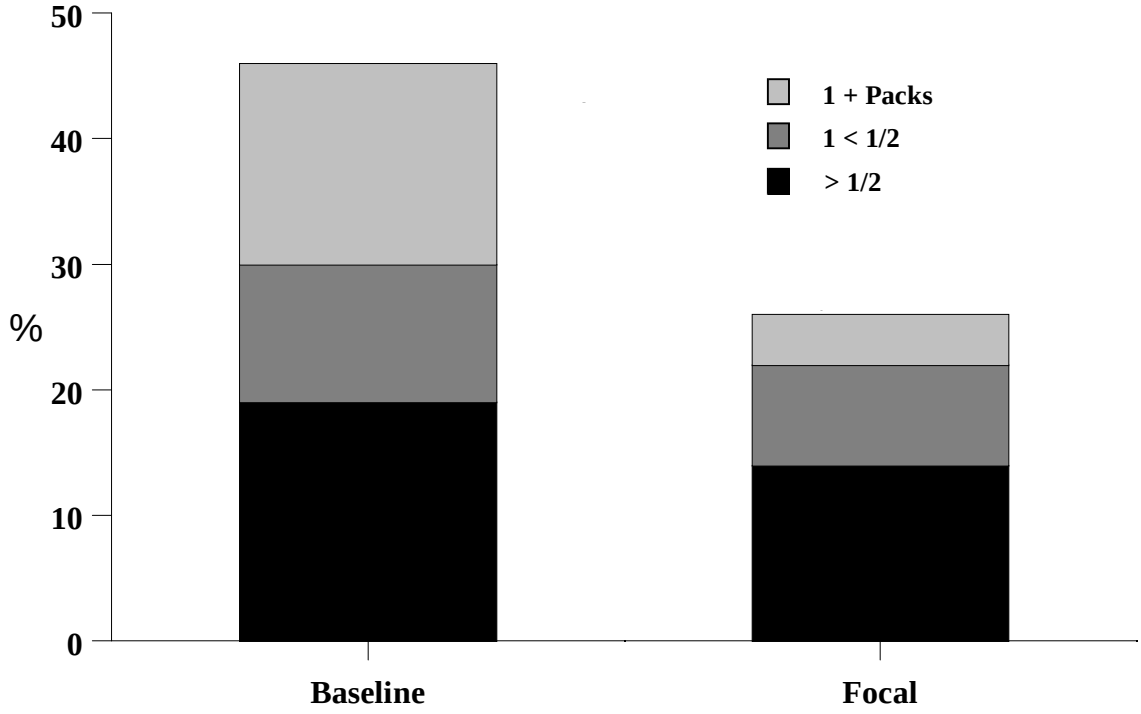
PARENT SOCIAL ACTIVITIES

To get a sense of the extent to which parents in Better Beginnings communities got involved in the life of their communities, they were asked to indicate how much they engaged in a number of community-based activities over the previous month, including getting together with friends, getting together with other families in their communities, taking part in organized recreational activities such as fitness classes or softball, giving time to help with community activities such as Cub-Scouts or hockey teams, attending meetings of community clubs or organizations, and attending religious services at a church, mosque, synagogue, or temple. Another index of neighbourhood involvement (the neighbourhood activities index) was computed by summing individuals responses to a series of five questions asking how often over the previous year they had engaged in activities such as community recreational events, working with a children s group, or neighbourhood social events.

Figure 8.1

Percentage of Smoking Parents of Grade 2 Children

Older Cohort Sites, Baseline-Focal Analysis



In 1993 (baseline), nearly half (46%) of the parents in the three older cohort sites smoked. The rate of smoking dropped to 26% by 1997 ($p < .01$). The drop was most evident among the heaviest smokers.

Results for Parent Social Activities

Younger Cohort Sites. Results of the baseline-focal and longitudinal analyses revealed only one significant effect: parents in the demonstration communities had a greater reduction in getting together with friends over time than did parents in the comparison community ($p<.01$, es= -.61).

Older Cohort Sites. There were no consistent significant effects for the older cohort sites.

PARENTING

Because of the importance placed on parents and the parenting role in the Better Beginnings programs, a number of measures of parenting behaviours and attitudes, as well as parents interactions and activities with their children, were included as outcomes.

Parent/Child Interaction

In order to assess the quality of interactions between parents and their children at 18, 33 and 48 months, the Parent/Caregiver Involvement Scale (PCIS; Farran, Kasari, Comfort & Jay, 1986) was completed by the researchers while carrying out the in-home parent interviews and child assessments. The researchers were trained in the use of the PCIS using procedures developed for use in the Better Beginnings Project by Dr. Marilee Comfort from Thomas Jefferson University in Philadelphia. Scores yielded by the PCIS were: 1) play interaction quality: a rating of the quality of parent-child interactions during a five-minute free-play period in the home, and 2) general parent-child interaction quality: a rating of the quality of five different aspects of parent-child interactions (availability, acceptance, atmosphere, enjoyment, and learning environment) during the entire time the researcher was in the home.

Parenting Behaviours

Another measure of parenting behaviour, the Iowa Parent Behaviour Inventory (Crase, Clark & Pease, 1978) was employed for the baseline data collection in the younger and older cohort sites and also for the first wave of longitudinal data collected in the older cohort sites in 1994. This scale is designed to measure various aspects of parents behaviour toward their child, including involvement, limit setting, and responsiveness. Unfortunately, this measure proved unacceptable psychometrically for our sample, yielding unreliable indices of parenting behaviour, possibly because of the complex language in many of the items.

As a result, subsequent parent interviews employed three parenting subscales used in the first wave of the NLSCY in 1994. These questions were adapted from Strayhorn and Weidman s (1988) Parent Practices Scale. Parents are asked to indicate how often they engage in various behaviours toward their child, ranging from "never" to "many times a day". The three resulting subscales are labelled hostile/ineffective parenting (e.g., "How often do you get angry when you punish your child? How often do you feel you are having problems managing your child in general?"), consistent parenting (e.g., "How often does your child get away with things that you feel should have been punished? How often when you discipline your child does he/she ignore the punishment?"), and positive interactions (e.g., "How often do you and your child talk or play with each other, focusing attention on each other for five minutes or more, just for fun? How often do you do something special with your child that he/she enjoys?").

These parenting behaviour questions were part of the 18, 33, and 48 month parent interviews in the younger cohort sites and included in the SK to Grade 3 parent interviews in the older cohort sites.

Parent Sense of Competence

Parents feelings of satisfaction and competence as parents at the older cohort sites (SK, Grade 1 and 3 interviews) was measured with the version of the Parenting Sense of Competence Scale developed by Gibaud-Wallston and Wandersman (1978; see also Johnston & Mash, 1989) and revised by the FAST-Track Project (Conduct Problems Prevention Research Group, 1992). (The length of the existing parent interview precluded its administration to younger cohort parents.) The revised scale consists of two 6-item subscales: parenting satisfaction and parenting efficacy. Parenting satisfaction is an affective dimension reflecting low levels of anxiety and frustration concerning the parenting role (e.g., "Parenting leaves you feeling drained and exhausted", "It s really difficult to decide how to parent your child", and "Being a parent makes you tense and anxious"). Parenting efficacy is seen to be a behavioural dimension reflecting competence, problem-solving ability, and capability in the parenting role (e.g., "You feel you are doing a good job as a parent"; "You know what you need to do to be a good parent"; "Being a parent is as satisfying as you expected"; and "If something is troubling your child, you can figure out what it is"). Parents rate how strongly they agree or disagree with the 12 statements.

Results for Parenting

Younger Cohort. No overall significant differences were found between program and comparison site parents on either of the PCIS ratings, or on the three subscales of the NLSCY parenting measure. However, there were two significant site effects for the PCIS, so the results of the researchers ratings of the parent-child interactions during the five-minute free-play period using the PCIS are presented in Figure 8.2 for all sites except Guelph, where there were too few observations for analysis.

Older Cohort. Results of the longitudinal analysis for the three subscales of the NLSCY parenting measure reveal an overall significant decrease in hostile-ineffective parenting behaviours in the program sites compared to the comparison sites ($p<.01$). However, this is not considered to be a general trend because the only site to evidence any significant change was the Highfield Better Beginnings site, which began in SK with the highest mean for hostile/ineffective parenting and decreased to become the lowest by Grade 3 ($p<.01$, es=1.73). The other two program sites showed little change in mean ratings over the four years. The other two subscales (consistent parenting and positive interactions) revealed no overall significant differences between the program and comparison sites.

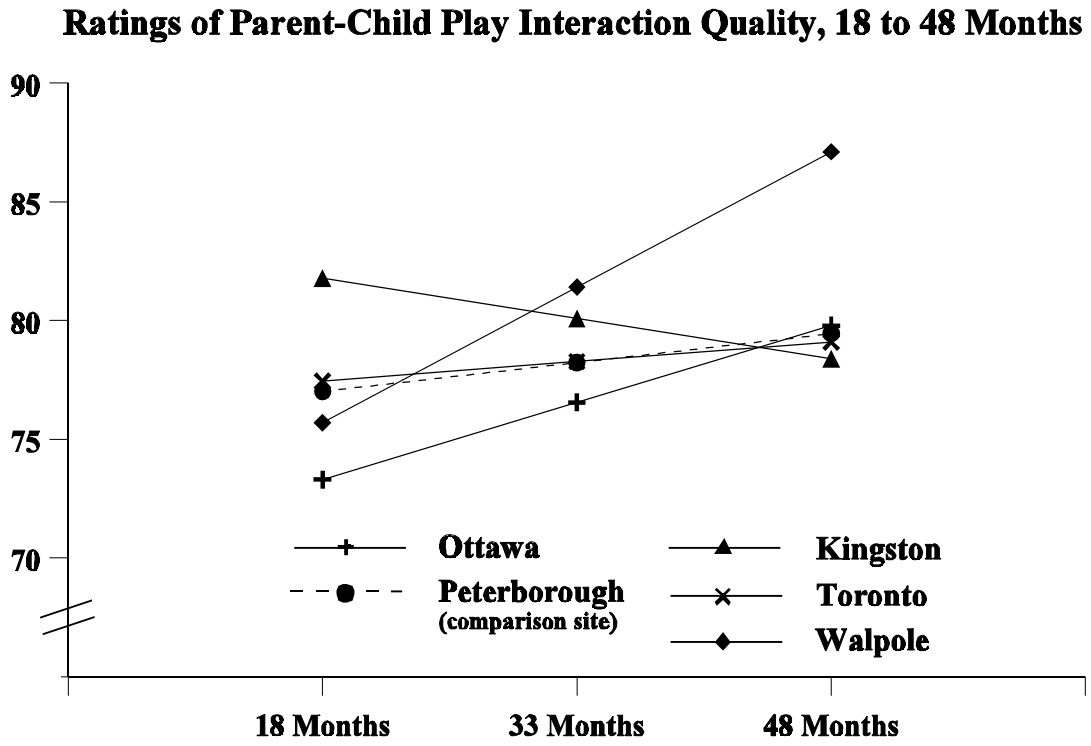
For the Parenting Sense of Competence scale, longitudinal analyses revealed no differences among the sites on either the parenting-satisfaction or the parenting efficacy subscales.

Site-Specific Findings for Parenting

Highfield. As mentioned earlier, parents in the Highfield Better Beginnings site showed a significant decrease in hostile-ineffective parenting behaviours compared to parents in Etobicoke ($p<.01$, es=1.73). Parents in Highfield also showed significantly more consistent parenting behaviours ($p<.01$, es=.80) and more satisfaction with their parenting role ($p<.05$, es=.40).

Kingston. Ratings of the quality of parent-child play interactions in the Kingston project site, while the highest of all sites when children were 18 months, decreased to the level of the other sites by the 48-month ratings ($p<.01$, es= -.65).

Figure 8.2



Ratings of the quality of parent-child interactions during a five minute free-play period showed a significant increase from 18 to 48 months in Walpole and a significant decrease in Kingston.

Site	Change/ Interview	s.d.	N	Effect Size
Kingston	-1.70**	5.79	56	-.65
Ottawa	3.24	7.46	27	ns
Toronto	.83	7.75	44	ns
Walpole	5.71**	7.34	19	1.01
Peterborough	1.28	5.29	150	na
Demonstration-Comparison	-.28	6.38	296	ns

** Difference from comparison site is significant at $p < .01$.

Walpole Island. The quality of parent-child play interactions increased significantly from 18 to 48 months compared to the Peterborough comparison site ($p<.01$, es=1.01). The increase in Walpole Island ratings is particularly noteworthy, since they were the lowest at 18 months, becoming higher than any of the other sites at 48 months. There were also significant improvements in the PCIS rating of general parent-child interaction quality ($p<.01$, es=.35).

PARENT AND FAMILY SOCIAL AND EMOTIONAL FUNCTIONING

Better Beginnings program initiatives have been developed to have positive effects on the child s home environment. To determine what changes were produced, a number of measures were collected regarding parental depression, life stress, social support, marital satisfaction, quality of family functioning, and conjugal violence.

Social Support

In coping with stressors, people may draw on support from others to varying degrees. Parents perceived social support was assessed with a briefer (six item), more simply worded version of the 24-item Social Provisions Scale (Cutrona & Russell, 1987). Parents responded on a four-point scale to items including: I have family and friends who help me feel safe, secure, and happy and If something went wrong, no one would help me . Parents were asked about their perceived social support when their children were 3, 18, and 48 months old in the younger cohort and in JK, Grades 1 and 3 in the older cohort.

Depression

Parental depression was assessed through the Centre of Epidemiological Studies Depression scale (Radloff, 1977), a 20-item scale covering depressive symptoms, each rated for its prevalence in the parent s life and scored on a four-point scale. Scale scores can range from a low of 20 to a high of 80, with higher scores indicating greater prevalence of depressive symptoms. Parental depression was assessed at every home interview, from baseline (1993) through to 1998.

Life Stress

Across all data collection points (except at 33 months, due to the length of the interview), parents were asked whether a set of 14 potentially stressful events had occurred in the past year. These items were chosen on the basis of frequency of endorsement, from a larger pool of questions that were asked as part of the Social Change in Canada Series (SCCS) (Institute of Social Research; 1977; 1979; 1981). That is, items with very low response rates in the SCCS sample were not included in the Better Beginnings protocol. Parents were asked to indicate whether they had experienced such stresses as losing a job or being unemployed, financial problems, separation from a spouse or partner, or a serious illness.

Parents were also asked how much tension they felt in juggling their job or studies, housework, family and child rearing, and other factors, on a scale where 0 means no tension and 10 means a great deal of tension. The phrasing of the question was slightly different for employed and unemployed parents, so the analyses were done separately for these two groups.

Intimacy/Marital Satisfaction

As a measure of intimacy/marital satisfaction, Better Beginnings used seven items on marital relations taken from the Quality of Life Survey (Institute of Social Research, 1977). Six items form an intimacy

satisfaction scale, and the seventh item is a measure of overall marital satisfaction. With minor wording changes, the items were used for both legally married and common-law couples.

This set of questions was used across all data collection points (except at 18 months in the younger cohort and at SK in the older cohort). Examples from the intimacy satisfaction scale include the level of interest their husband/wife/partner shows in their work and in what they have to say, and the amount of love and affection their husband/wife/partner shows for them. Replies to these items are scored from extremely satisfied to not very satisfied . Parents were also asked, To what extent does your (marriage/ relationship) satisfy your needs for friendship and understanding? Replies are scored from all your needs to none of them . The overall marital satisfaction question is, All things considered, how satisfied or dissatisfied are you with your (marriage/relationship)? Replies are placed on a scale from 0 to 10, with a lower number indicating less satisfaction and a higher number indicating more.

Family Functioning

The 12-item General Functioning Scale of the Family Assessment Device (FAD) originally designed for use in a clinical setting (Epstein, Baldwin & Bishop, 1983) was used to measure family functioning. Parents rate the entire family (which may include the extended family if the parents think it appropriate) on items such as, In times of crisis we can turn to each other for support , We express feelings to each other , We can t talk to each other about sadness we feel , and Making decisions is a problem for our family . Parents rate how strongly they agree or disagree with the 12 statements. The FAD was used for all data collection points except at 18 months in the younger cohort and SK in the older cohort.

Domestic Violence

In the version of the Conflict Tactics Scale (Straus, 1990) used in this study, parents were asked about methods they and their partners had used, in the previous year, to deal with conflict between them. These included such non-violent methods as talking things over and bringing in a third party to try to work things out. Then questions were asked about throwing things at each other, pushing, grabbing or shoving, slapping, kicking, biting or hitting with a fist, hitting or trying to hit the other with an object, and beating the other up. These questions were asked at 18 months and at 48 months in the younger cohort, and at SK and Grade 2 in the older cohort.

Results for Parent and Family Social and Emotional Functioning

For social support, depression, life stress, intimacy with partner, and family functioning, there was no consistent pattern of effects in either the younger and older cohort sites across both baseline-focal and longitudinal comparisons.

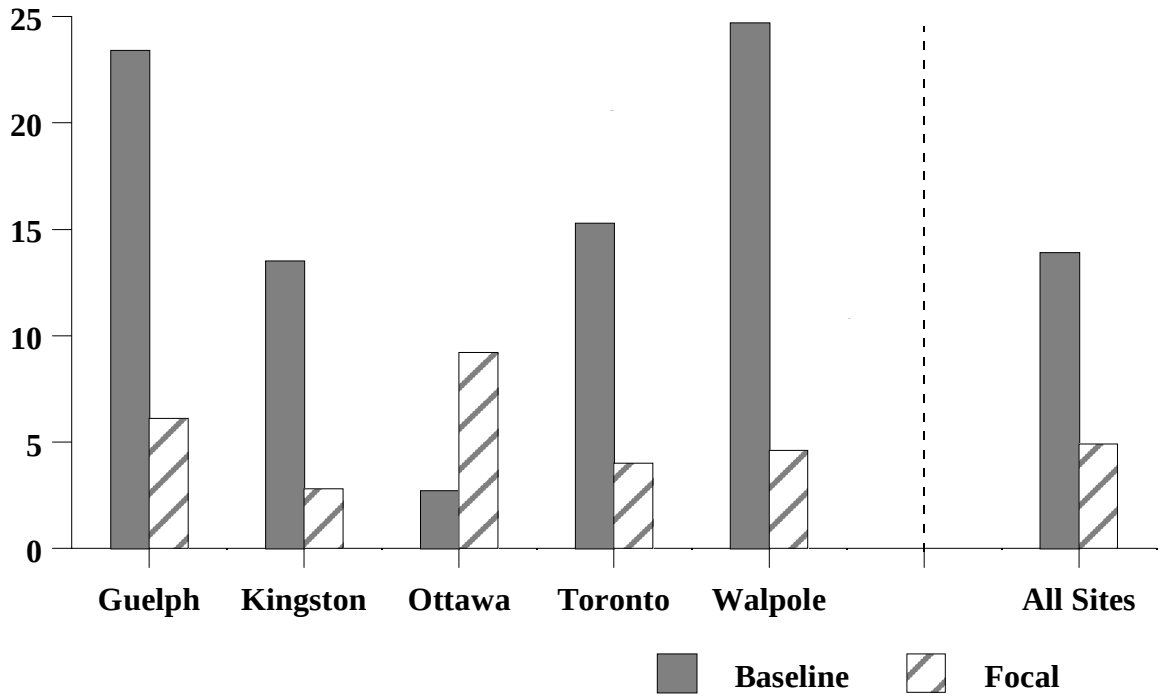
There was a significant increase in marital satisfaction ratings for parents in the older cohort demonstration sites compared to parents in the comparison sites ($p<.01$, $es=.72$). There were also slight but non-significant increases in marital satisfaction ratings from baseline (1993) to 1997/1998.

For domestic violence, the proportion of parents who reported that they had been recipients of violence declined sharply under the baseline-focal design for both the younger and older cohort sites. For the younger cohort sites, $p<.01$ and $es=.32$; for the older cohort sites, $p<.01$ and $es=.44$.(Figures 8.3 and 8.4). The proportion of parents reporting that they had been violent themselves declined as well: for the younger cohort sites, $p<.05$ and $es=.22$; but for the older cohort sites, the decline was not significant.

Figure 8.3

Percentage of Respondents Reporting Partner-to-Respondent Violence

Younger Cohort Sites, Baseline-Focal Analysis



The percentage reporting partner-to-respondent violence declined at 4 of the 5 younger cohort demonstration sites between the baseline interviews and those conducted with the focal cohort 4 years later. For the sites combined, the decline was from 13.9 per cent to 4.9 per cent ($p<.01$). Percentages for the individual sites, which should be treated with caution in view of the small Ns on which they are sometimes based, are presented below.

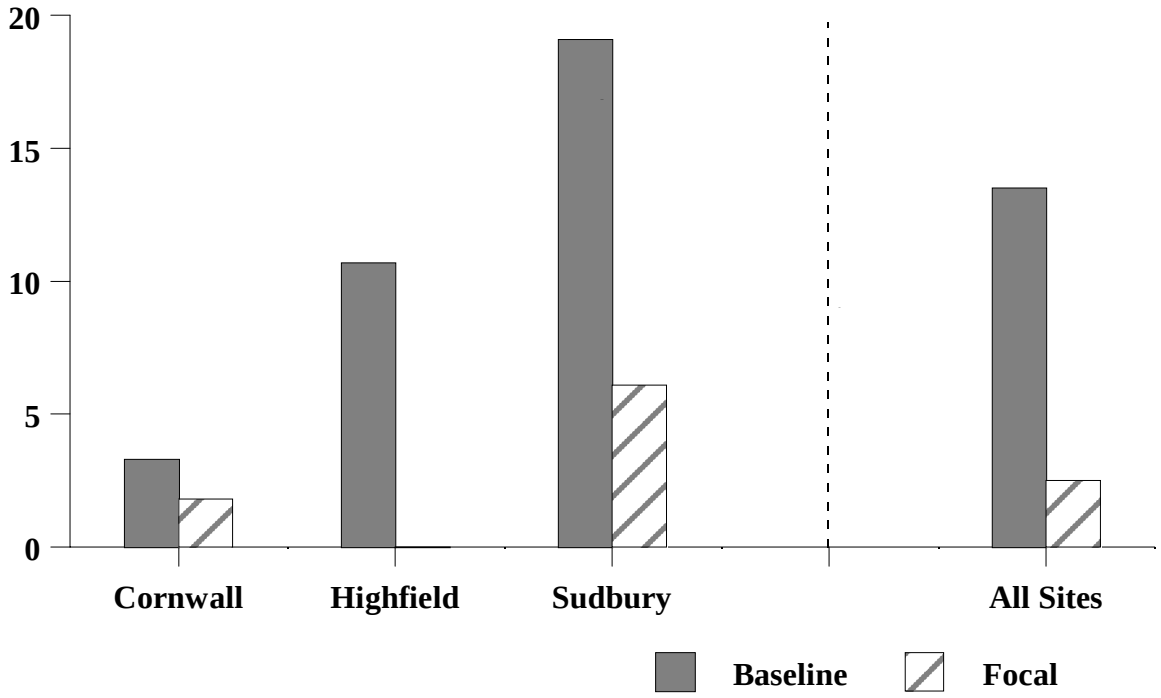
	Baseline			Focal			Effect Size
Site	**%**	**s.d.**	**N**	**%**	**s.d.**	**N**	
Guelph	23.4	41.6	19	6.1	26.2	39	.48
Kingston	13.5	32.0	68	2.8*	17.7	60	.41
Ottawa	2.7	15.9	35	9.2	30.2	30	-.31
Toronto	15.3	37.7	60	4.0	20.4	41	.40
Walpole	24.7	41.1	15	4.6	27.6	22	.61
All Sites	13.9	33.8	197	4.9**	23.4	192	.32

* Difference from baseline significant at $p < .05$.
** Difference from baseline significant at $p < .01$.

Figure 8.4

Percentage of Respondents Reporting Partner-to-Respondent Violence

Older Cohort Sites, Baseline-Focal Analysis



The percentage reporting partner-to-respondent violence declined at all 3 older cohort demonstration sites between the baseline interviews and those conducted with the focal cohort four years later. For the sites combined, the decline was from 13.5 per cent to 2.5 per cent ($p < .01$). Percentages for the individual sites are presented below.

	Baseline			Focal			Effect Size
Site	**Mean**	**s.d.**	**N**	**Mean**	**s.d.**	**N**	
Cornwall	3.3	18.9	30	1.8	13.4	56	.10
Highfield	10.7	31.5	28	0.0*	0.0	55	.66
Sudbury	19.1	39.6	68	6.1*	19.1	49	.12
All Sites	13.5	34.3	126	2.5**	15.7	160	.44

* Difference from baseline significant at $p < .05$.
** Difference from baseline significant at $p < .01$.

These changes from baseline to focal are striking; however, the longitudinal data present a picture of minimal change too little, in fact, for any detailed analysis. At the older cohort sites, data were gathered at SK and at Grade 2. For respondent-to-partner violence, of the 269 families interviewed, across the older cohort sites, only 12 families shifted from reporting violence to not reporting it, and only 11 in the other direction. For partner-to-respondent violence, of 265 families interviewed only 11 shifted altogether, 7 reporting an increase and 4 a decrease. At the younger cohort sites, data were gathered when children were 18 and at 48 months of age. The questions on family violence at 18 months are not strictly comparable with those at 48 months. If, making due allowance for the risks involved, the comparison is made, only 25 out of 259 families reported shifts in partner-to-respondent violence, 15 reporting a decrease and 10 an increase.

What remains striking is the sharp decline from baseline. If the apparent effect does not result from a difference between cohorts, it must have taken place between the baseline-data-gathering period and the times in which the SK data, for the older cohort, and the 18-month data, for the younger cohort, were gathered. That is, the decline must have taken place in a period of not more than two years.

Although Better Beginnings sponsored events such as weekend workshops on family relations, no site made reduction of domestic violence a consistent major theme of programming (although Guelph emphasized it for a time), so the causal mechanism that might produce such a sharp decline in violence over a relatively brief period is unclear. Nor is it clear what mechanisms might have produced similarly low levels in comparison sites.

A possibility that must be acknowledged is that the low levels obtained from the longitudinal cohort result from the timing of the interviews. The Ontario government s advertising campaign, emphasizing that violence toward wives is a criminal offense, might have influenced reports of violence either by curbing it or by reducing the likelihood that it would be reported. It is a commonplace among survey researchers that underreporting is liable to take place on sensitive topics. By increasing the sensitivity of the topic, the advertising campaign may well also have lowered respondents willingness to report conjugal violence.

So we are left with three possible explanations, not mutually exclusive: an effect of Better Beginnings, due to unknown causal mechanisms; an effect of provincial initiatives; or a result of increased unwillingness to report family violence. There is a clear change in the data, but interpretations must be drawn cautiously.

Site-Specific Findings for Parent and Family Social and Emotional Functioning

Highfield. Parents in this site showed a general pattern of improvement for parent and family social and emotional functioning:

- reduced tension/stress,
- less depression and more social support,
- improved intimacy with partner, and
- improved general family functioning plus more marital satisfaction and less domestic violence.

Of the 18 comparisons, seven were significant, and 17 comparisons were in the favourable direction.

Toronto **and** ***Walpole Island*** showed significant reductions in stressful life events and tension in juggling job/studies, housework, family, and child rearing across both designs (baseline-focal and longitudinal). Each site had 2 out of 6 significant effects, and 5 out of the 6 analyses showed reductions.

SUMMARY OF SIGNIFICANT FINDINGS FOR PARENTS AND FAMILIES

PARENT HEALTH

General Findings

- The prevalence of overweight in parents (BMI>25) was considerably higher for both males (varying from 52 to 76% by site) and females (42 to 57%) compared to the 1990 Ontario Health Survey (48% for males; 28% for females).

- In the younger cohort Better Beginnings demonstration sites, results for women s health promotion/illness prevention are mixed: they report less frequent breast self-examinations, less frequent exercise after pregnancy, but more frequent exercise during pregnancy when compared to women in Peterborough, the comparison site.

- Parents in the older cohort Better Beginnings demonstration sites report reduced smoking and fewer smokers in the home.

Site-Specific Findings

Highfield. Parents at the Highfield Better Beginnings site had improved health outcomes: they report more timely Pap smears, more frequent breast self-examinations, more frequent exercise, fewer smokers in the home, less alcohol use, improved ratings of health, fewer health limitations, and less use of prescriptions for pain. Of the 18 comparisons, 6 were significant and 15 were in a favourable direction.

PARENT SOCIAL ACTIVITIES

General Findings

- Parents in the 5 younger cohort demonstration sites report less frequent get-togethers with friends compared to Peterborough ($p<.01$).

PARENTING

Site-Specific Findings

Highfield. Parents at the Highfield Better Beginnings site show positive improvements in their parenting role. They showed a significant decrease in hostile-ineffective parenting behaviours ($p<.01$), more consistent parenting ($p<.01$), and more satisfaction with their parenting role ($p<.05$).

Kingston. Ratings of the quality of parent-child play interactions in the Kingston project site, while the highest of all sites when children were 18 months, decreased to the level of the other sites by the 48-month ratings ($p<.01$).

Walpole Island. The quality of parent-child play interactions increased significantly from 18 to 48 months compared to the Peterborough comparison site ($p<.01$). The increase in Walpole Island ratings

are particularly noteworthy, since they were the lowest at 18 months, becoming higher than any of the other sites at 48 months. There were also significant improvements in the PCIS rating of general parent-child interaction quality ($p<.01$).

PARENT AND FAMILY SOCIAL AND EMOTIONAL FUNCTIONING

General Findings

- Reduced domestic violence between parents and their partners in both the younger and older cohort demonstration sites.

- Parents in the three older cohort demonstration sites report increased marital satisfaction compared to parents in the two comparison sites.

Site-Specific Findings

Highfield. Parents in this site showed a general pattern of improvement for parent and family social and emotional functioning:

- reduced tension/stress,
- less depression and more social support,
- improved intimacy with partner, and
- improved general family functioning plus more marital satisfaction and less domestic violence.

Of the 18 comparisons, seven were significant, and 17 comparisons were in the favourable direction.

Toronto* and *Walpole Island showed significant reductions in stressful life events and tension in juggling job/studies, housework, family, and child rearing across both designs (baseline-focal and longitudinal). Each site had 2 significant effects out of 6, and 5 out of the 6 analyses showed reductions.

Chapter 9

EFFECTS ON NEIGHBOURHOODS AND SCHOOLS

Better Beginnings sites worked towards improving the milieu in which their children and families lived that included the local neighbourhood. In the older cohort communities, initiatives and program activities in the schools were also part of their mandate. In this chapter, as in others, first the measures or questions are described, then the results (both overall and site-specific, when applicable).

NEIGHBOURHOOD RATINGS

Improving the quality of the local neighbourhoods in which children and their families live and increasing parents feelings of involvement in and cohesion with their communities are important Better Beginnings goals. Parents were asked a series of questions about their use of community resources, sense of community cohesion, and perceptions of their neighbourhood. In addition, statistics from local police and local Children s Aid Societies were gathered to compare the Better Beginnings communities with the surrounding areas.

Parent Ratings of the Neighbourhood

To examine their use of community resources, parents were asked at every data collection point except when their child was 3 months old, Have you or your child participated in any of the following activities in the past 12 months: toy-lending library; library; playground or recreation program; sports, crafts or clubs; parent/child drop-in centre; or a parent resource centre?

Parents were also asked a series of questions about the degree of involvement shown by people in their neighbourhoods. These seven items were drawn from a larger measure devised by Buckner (1986). Examples include their sense of belonging to the neighbourhood, their willingness to get involved to improve the neighbourhood, feelings of pride in being a community member, and feelings that different races and cultures were accepted in their neighbourhood. Each item is rated 1 (strongly agree) to 4 (strongly disagree). These questions about community cohesion were asked at every data collection point except for one, at 18 months in the younger cohort sites.

Third, parents were asked to rate their satisfaction with: their own housing; the number of parks and playgrounds in their neighbourhood; and safety walking on the street at night. Also included was a general neighbourhood satisfaction scale consisting of five questions (e.g., How would you describe the other people who live around here as neighbours? How about safety from crime in your home or building?) The fifth question rated on a scale from 0 to 10 is, All things considered, how satisfied or dissatisfied are you with this neighbourhood as a place to live? These questions were drawn from the Quality of Urban Life surveys conducted by the Institute for Social Research at York University (1977, 1979 & 1981).

A final set of questions consisted of parents perceptions of the prevalence of alcohol and drug use, violence, and theft in the neighbourhood. Parents were asked these five questions when their children were 3 and 48 months old in the younger cohort sites and when children were in SK and Grade 2 in the older cohort sites.

Results of Parent Ratings of the Neighbourhood

Younger Cohort. No significant consistent pattern of change was found in the younger cohort sites for parents use of community resources, community cohesion, or perceived deviance in the neighbourhood. However, there was a significant improvement in ratings of the safety of walking in the neighbourhood in the baseline-focal comparison ($p<.01$, es=.40).[1] Results from the longitudinal analysis were consistent in direction. One negative finding, decreased contact with friends, resulted from very large increases reported by a few parents in Peterborough.

Older Cohort. For use of community resources, parents reported greater use of playground or recreation programs in both the baseline-focal and longitudinal comparisons ($p<.05$ for each design, es=.28 for the baseline-focal, 1.29 for the longitudinal design). On the community cohesion items, there were no significant findings. Parents ratings of their satisfaction with their dwelling showed significant increases for both baseline-focal ($p<.05$, es=.25) and longitudinal comparisons ($p<.01$, es=.43). Also, ratings on the general neighbourhood satisfaction scale rose longitudinally ($p<.05$, es=.33), with baseline-focal results consistent in direction. There were no overall consistent changes in parents perceptions of deviance in the neighbourhood.

Site-Specific Findings for Parent Ratings of the Neighbourhood

Parent reports for Guelph, Kingston and Toronto showed broad patterns of change, running across perceptions of deviance (alcohol and drug use, violence and theft) in the neighbourhood, community cohesion, and other conditions (the condition of homes, safety walking on the street at night, and the general quality of the neighbourhood).

Guelph. At Guelph, parent reports showed a pattern of improvement, running across this broad set of ratings. Of the 30 statistical tests, 24 were positive, 5 negative, and one showed no difference in the first two decimal places. Four tests were individually significant, all positive.

Kingston. At Kingston a similar broad pattern of improvement appeared, with 25 of 30 statistical tests positive, against 5 negative. Eight tests were individually significant, 7 of them positive.

Toronto. At Toronto, a broad pattern appeared, but showing unfavourable changes. Of the 30 statistical tests, 26 were negative, and 4 positive. Four tests were individually significant, all of them negative. Explanations for the negative pattern at Toronto are not apparent from its programming. This site has the greatest multicultural diversity, and the highest percentage of single-parent families, and the lowest mean incomes of the urban Better Beginnings sites. Combined with major revisions to welfare support, these factors may have overwhelmed any ability of Better Beginnings to improve residents' perceptions of their neighbourhood.

Police Statistics

For another view of the neighbourhood, police statistics were obtained on vandalism (more technically, on wilful damage) and on breaking and entering. Of course, apparent changes in levels of crime can take place because of changes in the frequency with which events are reported to the police and recorded in their database, so it is wise to approach such statistics with care. Still, they provide the only readily available source of information on crime levels, and both vandalism and breaking and entering are

[1] For an explanation of how effect sizes were calculated, see page 6-21.

common enough to avoid concerns about small numbers producing great instability in the figures from year to year. For most of the Better Beginnings sites, data from the Better Beginnings area were compared to data for of the surrounding area for the years 1990 to 1998.

Results for Police Statistics

For each urban site, vandalism (wilful damage) and break-and-enter figures were obtained over the course of the study, and as far back as computerized records were available. Results for a demonstration site were compared with those for the rest of the jurisdiction within which they were located. The numbers involved, over several years, ranged from a minimum of just over 4,300 for breaking-and-entering at Guelph to a maximum of over 235,000 at Highfield and Toronto for vandalism. With numbers so large, statistical significance could be achieved with very modest effects.

In the case of vandalism, two sites (Highfield and Toronto) where the numbers were at a maximum, showed favourable differences significant at .01. The other sites showed favourable differences, but even with the numbers involved these were not significant. Although, overall, these results appear favourable, they are not of great magnitude. The largest effect, at Highfield, was .02.

For breaking-and-entering, Highfield again showed a significant favourable difference, but Kingston and Sudbury showed significant unfavourable differences. Since there are inconsistent results for breaking-and-entering, no clear Better Beginnings effect can be defined.

Involvement with the Local Children s Aid Society (CAS)

One of the interests in Better Beginnings, Better Futures is the extent to which it can lessen participants reliance on help from formal service providers. The literature suggests that several of the prevention program models present at various Better Beginnings, Better Futures demonstration sites have the potential to reduce reliance on formal child welfare services - for example, home health visitors (Olds, 1997), in-home supports (Cameron & Vanderwoerd, 1997), child care (Consortium for Longitudinal Studies, 1983; Weikart & Schweinhart, 1997) and mutual aid/community support networks (Cameron, Hayward, & Mamatis, 1992). There is also considerable evidence that providing high levels of multiple supports to families often reduces the need for more intrusive and expensive child welfare interventions (Cameron & Vanderwoerd, 1997). Many of these programs have focused on families where the risk of breakdown and child abuse or neglect was considered to be high (Cameron, O Reilly, Laurendeau, & Chamberland, 1999a; Nelson, Laurendeau, Chamberland, & Peirson, 1999). The evidence is less clear as to whether programs involving general populations attract participants for whom the risk of entry to the formal child welfare system is imminent.

This discussion examines: 1) the number of open child protection/family service cases in a year from the demonstration community; and 2) the number of children-in-care. A child protection/family service case is opened when, after an initial review, an ongoing case is given to a family service/child protection worker in a Children s Aid Society. This does not indicate the level of service received, but is a measure of whether entry to formal child welfare is increasing or decreasing. The number of children-in-care in a given year does not measure the amount of time in care, nor the type of placement setting. Child placements are of interest because they indicate family breakdowns requiring more intrusive intervention and are very expensive. In our analysis, the open child protection/family service case measure is generally more useful because the larger sample in each community allows clearer definition of trends.

In some communities, the catchment area for the project is quite large in relation to project resources. Cornwall has been excluded from our discussion since this demonstration project is open to families of

francophone primary school students from across the city. In Kingston, child protection/family service cases from the demonstration community represent about 38% to 48% of all the child welfare cases from Frontenac County, the society s catchment area. We wonder if a modest demonstration project should be expected to influence neighbourhood indicators for this large a geographic area and population.

When impacts from prevention programs have been found on child welfare service use, they have generally been linked with level and duration of program participation. Data available to us include all families involved with the child welfare system, inevitably including many who have had minimal or no involvement with Better Beginnings, Better Futures.

Since we cannot control for level and quality of program involvement, it is not possible to conclusively attribute any observed changes to Better Beginnings, Better Futures rather than other explanations.

Figures 9.1 and 9.2 show how the proportion of total open child protection/family service cases and children-in-care placements in the demonstration communities changed over time. They indicate whether use of child welfare services changed in these communities after the creation of Better Beginnings, Better Futures in comparison with other areas served by the same child welfare agencies. If Better Beginnings, Better Futures lessened reliance on formal child welfare services, then a smaller proportion of total agency cases and placements would be from the demonstration communities.

Results for Involvement With Local CAS

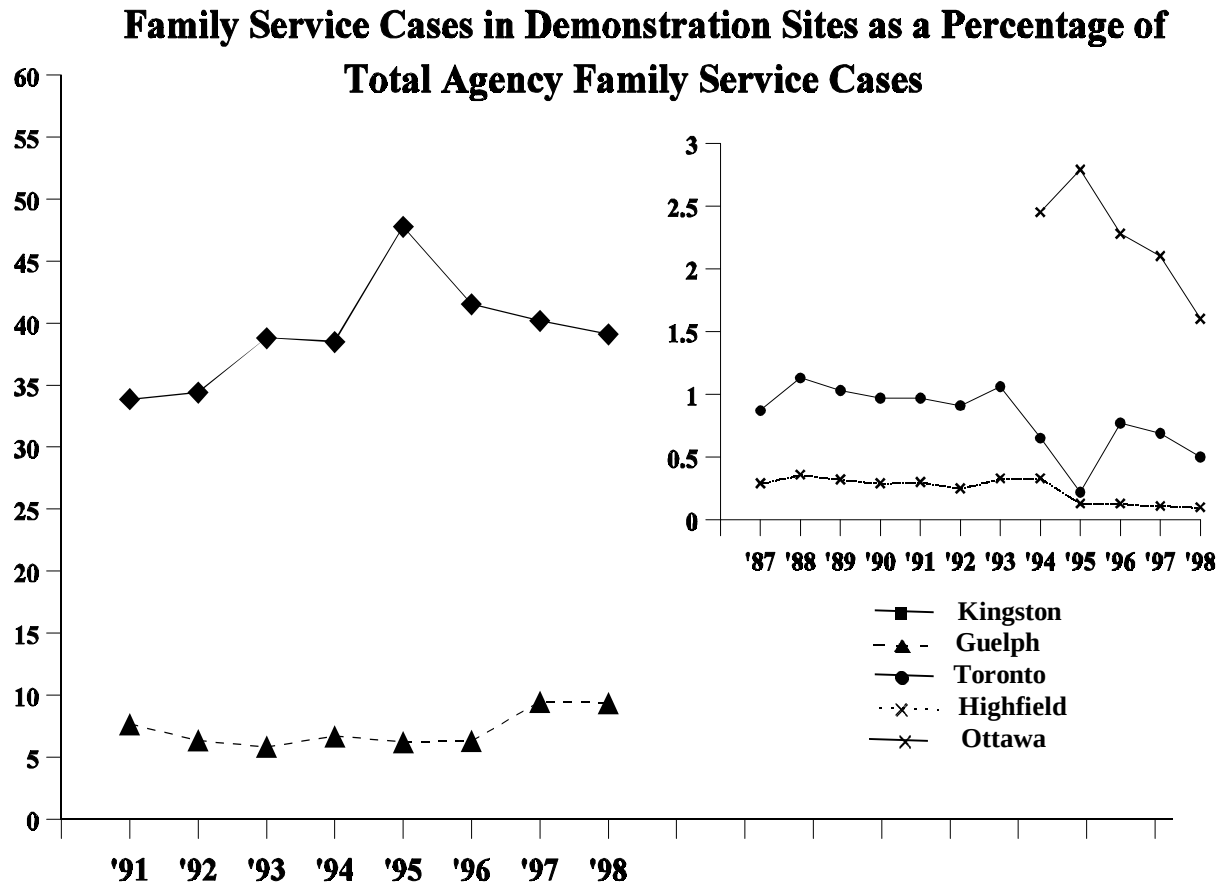
As shown in Figure 9.1, for family services case openings, the Highfield and Toronto Better Beginnings sites show declines in relation to the rest of Toronto. The drop at Highfield between 1994 and 1995 is sharp at $p<.01$, but the effect size is modest at .05. For Toronto, after a relatively stable period prior to Better Beginnings, there is a drop after 1993, so that all later years fall below the earlier plateau ($p<.01$). At Ottawa, after a one-year rise, there is a steady decline ($p<.01$). For Guelph and Kingston, logistic regression models show upward significant trends because of the large numbers involved, but the graph shows relatively modest increases.

In the case of children-in-care, shown in Figure 9.2, for Toronto the graph shows no clear trend. For Guelph and Kingston, after a one-year rise, there is a downward trend, but with the small number of children-in-care, the trend at Guelph is not statistically significant. For Kingston, however, the decline is significant at $p<.01$. At Highfield, the numbers in care are small enough that the graph moves about a good bit from year to year. If we calculate a trend line for 1987 to 1993, and another for 1993 to 1998, the two differ significantly at $p<.01$, suggesting that Better Beginnings may have moderated what had been a rising number of children-in-care, but the effect size is modest at .06.

SCHOOL RATINGS

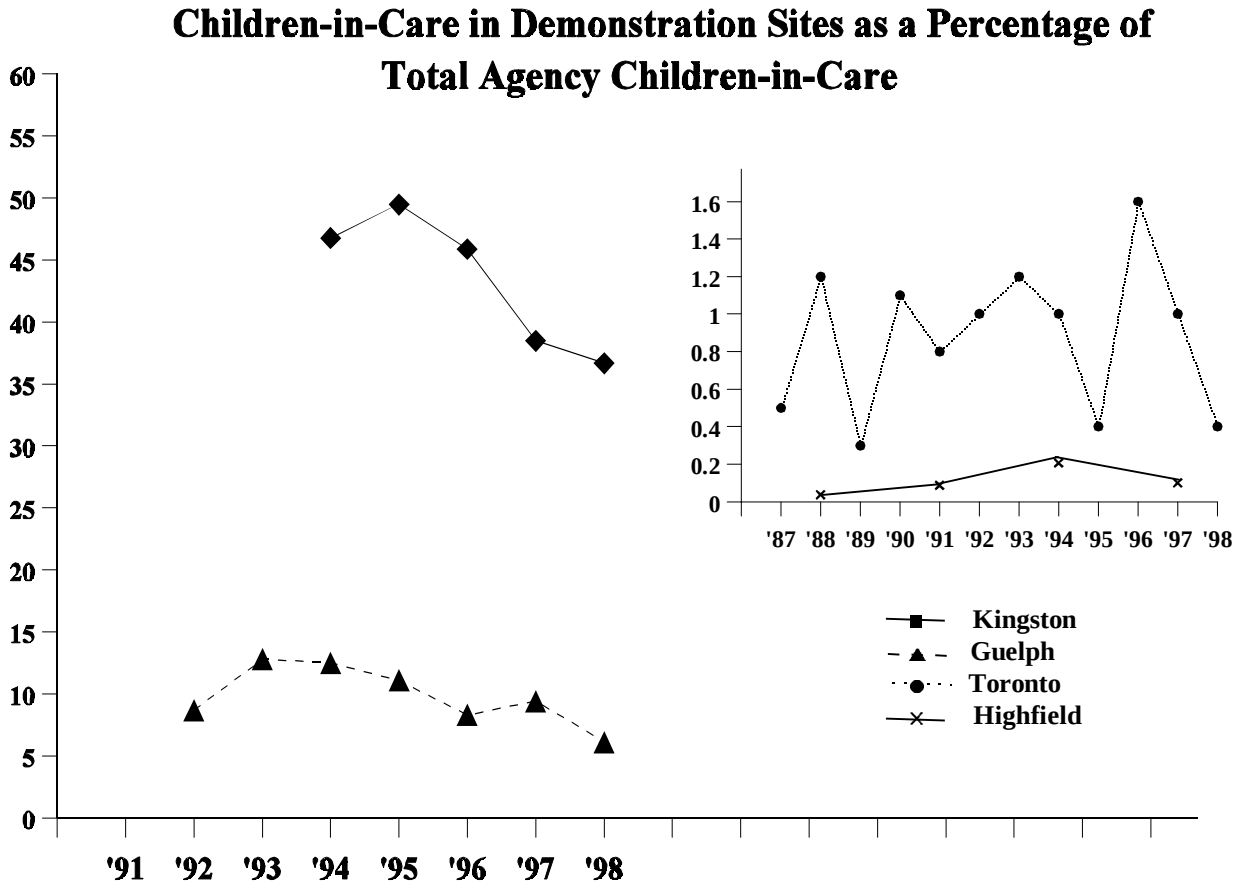
It is at school that Better Beginnings older cohort children spend considerable time during the day. It was deemed important to gain parent and teacher assessments of aspects of school life, involvement and communication in order to describe them and detect changes that might be linked to Better Beginnings initiatives. Three sources of information were analyzed concerning the schools in the older cohort Better Beginnings sites and comparison sites: parent ratings, teacher ratings, and the Principals September Reports concerning special education instruction.

Figure 9.1



The percentage of family service cases in Better Beginnings sites declined in Highfield, Ottawa, and Toronto. The percentage of family service cases moderately increased for Guelph and Kingston. All of these trends were statistically significant.

Figure 9.2



The percentage of children-in-care placements in Better Beginnings sites gradually declined in Guelph from 1993 to 1998 ($p < .01$). The percentage of children-in-care in the Better Beginnings Toronto site showed no consistent trend over time. Due to the small number of cases in Highfield, a moving three year average was plotted. Despite the small numbers, there was a significant reversal of an upward trend ($p < .05$).

Parents Perceptions

When their children were in Grades 2 and 3, parents were asked a series of questions about their children s school, their relationship with their children s teachers and their involvement with the school. These questions were based on similar questions asked of teachers in the NLSCY. The four school ratings include Most children in this school enjoy being there and School spirit is very high ; parents rate these items on a scale from 1 to 4, where 1 is strongly agree and 4 is strongly disagree. Examples of the 11 parents ratings of their relationship with their child s teacher and involvement in the school include You enjoy talking with your child s teacher , You feel your child s teacher pays attention to your suggestions, and You volunteer at your child s school. Parents can rate these 11 items from 0 (not at all) to 4 (a great deal).

Results for Parents Ratings of Child s School and Relationship with Teacher

There were no overall consistent improvements in parents ratings of their children s school or teachers either in the baseline-focal or longitudinal comparisons.

Site-Specific Findings for Parents Ratings of Child s School and Relationship with Teacher

Highfield. Parents in the Highfield Better Beginnings site showed significant improvements in ratings of the relationship with their children s teacher and involvement in the school. This result was particularly strong when ratings of the teacher made by parents of Grade 2 children in 1993 were compared to those from 1997/8 ($p<.01$, es=.56), but also ratings improved more from Grades 2 to 3 in the Highfield Better Beginnings site than in its comparison site, Etobicoke ($p<.05$, es=.47). Similar but smaller effects were present in ratings of the child s school ($p<.05$, es=.37 for the baseline-focal comparison).

Principals Reports of Special Education Instruction

The Ontario Ministry of Education and Training collects information from the principal of every school in Ontario concerning registration numbers, types of special education programs and number of students receiving instruction for various types of special education needs. This information is provided for the school as a whole and does not distinguish one grade level from another. Thus, although the older cohort projects of Better Beginnings emphasize programs for children registered in JK through Grade 3, the Principal s Report data cover all grades in a school, usually JK to Grade 6 or Grade 8. Despite this limitation, this information may be a way to monitor general trends and changes in certain school characteristics.

For this current report, information on special education services from the Principal s Reports from 1992 to 1997 was analyzed for the schools in each of the older cohort sites of the Better Beginnings Project, as well as for schools in the comparison sites: Cornwall and Ottawa-Vanier (French), Highfield and other Etobicoke schools, Sudbury and Ottawa-Vanier. These different analyses were done on data pertaining to children in all grades who were receiving special education instruction: 1) the percentage of all children identified with exceptionalities, regardless of the type of exceptionality classification; 2) the percentage of children with behavioural problems; and 3) the percentage of children with learning disabilities (the latter two types are subsets of the first).

Results for Principals Reports of Special Education Instruction

The picture that emerges from analysis of the Principals Reports is that schools in the Better Beginnings sites showed decreases in the percentage of special education students and those in schools in the two

comparison site schools sets showed increases over the period from 1992 to 1997 (Figure 9.3). The largest relative decreases occurred in the Cornwall and Highfield schools ($p<.01$ for each site). Cornwall was the only site which showed a consistent pattern of significant decreases for all three categories (students requiring special education instruction overall, students with behavioural problems, and students with learning disabilities).

School Climate

A School Climate Questionnaire was administered to the teachers of SK to Grade 3 in each of the three older cohort demonstration sites (10 schools in the first year) and the two comparison sites (13 schools in the first year) beginning in 1994/5 when the focal cohort group of children was in SK through to 1997/8 when the children were in Grade 3. The survey was designed to provide a description of the school environments in schools attended by the Better Beginnings older cohort children compared to schools in the comparison sites. The comparisons do not allow for an evaluation of how school climate has changed from before Better Beginnings programs were in place to after programs were in place, because the first data collection point was the spring of 1995 which was approximately one and a half years after Better Beginnings programs had commenced in the demonstration sites.

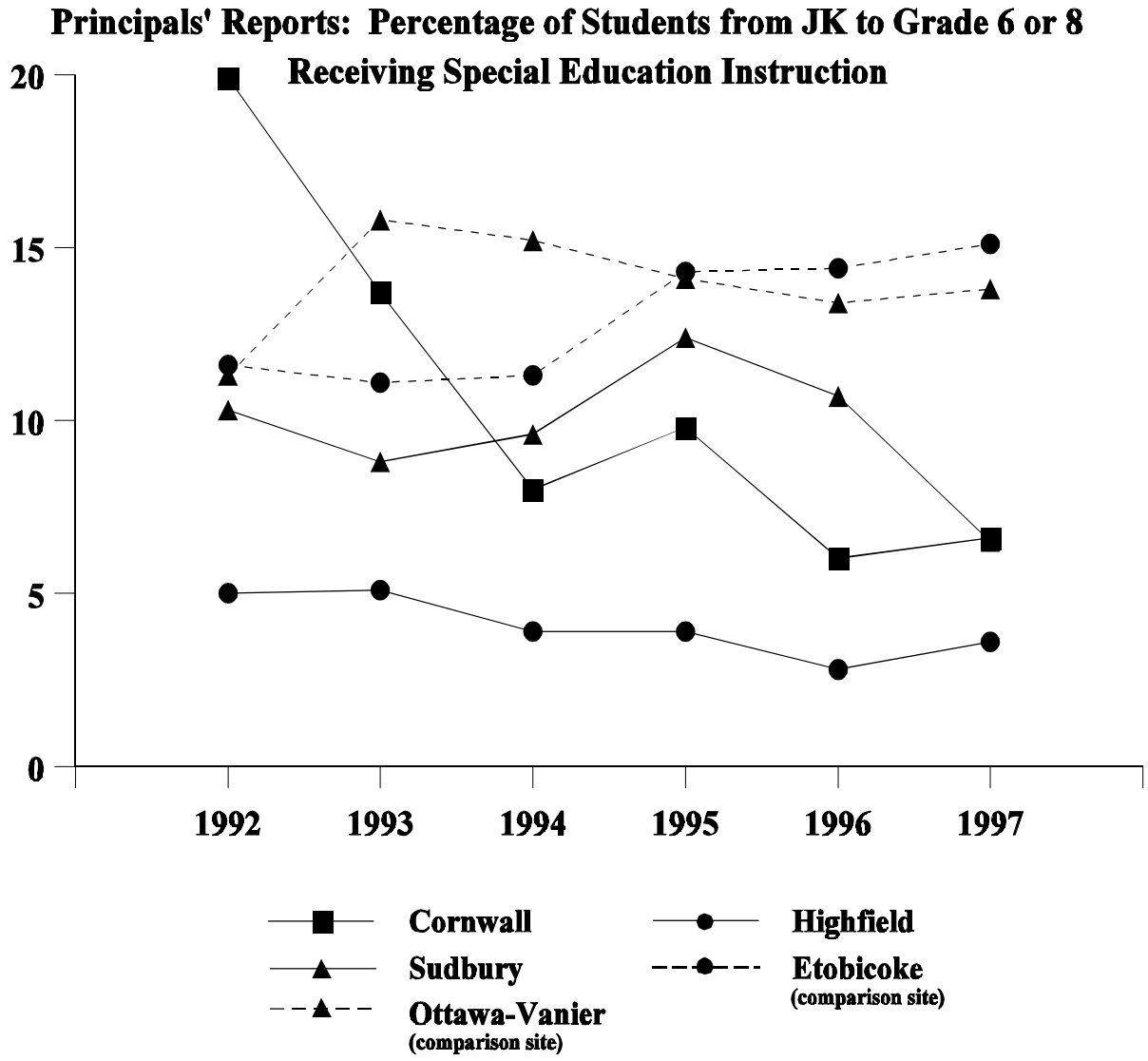
The questionnaire covered topics such as the teacher s background, school climate, children s social behaviours, parent involvement, and working conditions. A few questionnaire items were derived from the NLSCY (1994) and from *Teachers in Canada: Their Work and Quality of Life* (King & Peart, 1992), but most of the questions were developed by RCU Core Team members with input from the community research committees.

The 30 items dealing with school climate, children s social behaviours, parent involvement, working conditions were factor-analyzed, and four scales were identified: Children s Social Behaviour (5 items), Teaching Climate (10 items), Teacher Workload/Support (10 items), and Parent Involvement (5 items). Items that constituted the Children s Social Behaviour scale include behaviour at recess and lunchtime, showing compassion, and showing respect for school property. Examples from the Teaching Climate scale are staff commitment to achieve school goals, work satisfaction, and school as setting for ethnocultural diversities. Items from the Teacher Workload/Support scale include parental support of the school s goals and activities, heavy workload, and unrealistic expectations of teachers. Finally, examples from the Parent Involvement scale include parent involvement in the child s learning, with classroom activities, and with decision-making on school policy.

Results for Teacher Ratings of School Climate

As expected, there were no significant differences in the teachers ratings of school climate as reflected in the four scales in the Better Beginnings sites in 1994/5 compared to1997/8. Nor were there any significant differences in teachers ratings of school climate in the three demonstration sites compared to the two comparison sites on any of the four scales. Nevertheless, the results help to explain the school milieu and climate from the teachers point of view and provide formative feedback to the schools.

Figure 9.3



Schools in the three Better Beginnings sites showed decreases in the percentage of students receiving special education instruction, while schools in the two comparison sites showed increases. The decreases were statistically significant (p <.01) for both the Cornwall and Highfield sites.

SUMMARY OF SIGNIFICANT FINDINGS FOR NEIGHBOURHOODS AND SCHOOLS

PARENT RATINGS OF THE NEIGHBOURHOOD

General Findings

In the younger cohort Better Beginnings demonstration sites, parents report:
- ← increased ratings of safety walking at night; and
- ← decreased get-togethers with friends.

In the older cohort Better Beginnings demonstration sites, parents report:
- ← increased satisfaction with their personal dwelling;
- ← greater use of playground or recreation programs in both the baseline-focal and longitudinal comparisons; and
- ← increased general neighbourhood satisfaction.

Site-Specific Findings

Parents at both Guelph and Kingston reported a broad pattern of improvement in their neighbourhoods: less deviant activity (alcohol and drug use, violence and theft), increased community cohesion, and improvements in other conditions (the condition of their homes, safety walking on the street, and the general quality of their neighbourhood). At Toronto, there was a pattern of unfavourable change on the same variables.

POLICE STATISTICS

There was a decline in vandalism at all sites, with two of them (Highfield and Toronto) statistically significant; but with the very large number of occurrences involved, statistical significance could be obtained for relatively modest trends. There was no consistent pattern for breaking-and-entering. Again, there were statistically significant differences (favourable at Highfield, but unfavourable at Kingston and Sudbury), but these could be obtained relatively easily with the numbers involved.

INVOLVEMENT WITH LOCAL CHILDREN S AID SOCIETY

There were no consistent site-to-site changes in involvement with the Children s Aid Societies, either for opening of family service cases, or for children-in-care. Results for opening of family service cases showed significant declines observed at Highfield, Ottawa and Toronto, and rises at Guelph and Kingston. There was a decline in children-in-care at Highfield and Kingston.

SCHOOL RATINGS

General Findings

- ← Analysis of the Principals Reports indicate a decrease in the percentage of special education students in the three older cohort Better Beginnings demonstration sites ($p<.01$). The largest relative decreases occurred in the Cornwall and Highfield sites ($p<.01$ for each site).

Site-Specific Findings

Cornwall: From the analyses of the Principals Reports, results indicate a consistent pattern of significant decreases for students requiring special education (overall), students with behavioural problems, and students with learning disabilities ($p<.01$ for each effect).

Highfield: Parents in the Highfield Better Beginnings site showed significant improvements in ratings of the relationship with their children s teachers, their involvement in the school, and ratings of the school.

Chapter 10

COMMUNITY DEVELOPMENT AND RESIDENT PARTICIPATION IN BETTER BEGINNINGS, BETTER FUTURES

INTRODUCTION

What would the ideal community be like? The first images that might come to mind are those of tree-lined streets, comfortable houses, people chatting with their neighbours, children playing. Further thought might suggest the kinds of resources that would be available in the ideal neighbourhood parks, libraries, shopping, schools, a variety of programs and activities for all. At the most profound level, however, our ideal community is a place where residents feel a sense of attachment and connection to their neighbours, where they feel safe and secure, where they feel a sense of belonging, and where they would want to stay.

Unfortunately, the reality for many people is very different from this ideal. Many individuals live in neighbourhoods where they don't know their neighbours, where they fear for their own and their children's safety, where crime is rampant, where houses and apartments are rundown, and where the fondest wish of many residents is to move away. Is it possible to somehow transform these unhealthy neighbourhoods into healthy, supportive ones? How would we begin such a task?

The literature suggests a number of processes that may be important in the development of healthy communities. These include resident participation in community decision making, collaboration between residents and professionals working in the community, a self-help approach, and the participation of community members in meaningful volunteer and educational experiences. Foremost among these processes is the active participation of residents in all matters affecting their community. Residents can be involved at many levels: they can participate in community programs, attend meetings and information sessions, chair committees, organize programs or events in the community, or lobby officials from government or human service agencies (Arnstein, 1969). The kind of participation we are concerned with is the kind defined by Wandersman (1984) as a process in which individuals take part in decision making in the institutions, programs, and environments that affect them (Wandersman, 1984, p. 339).

The crucial element in this kind of resident participation is that it involves the resident as an initiator and a creator of programs and services, not merely a recipient of such programs, or even a consultant in the process of creating services (Burke, 1979). It is through the active participation of community members in program decision-making that they develop a sense of control or empowerment (Coates, 1971; Tilley & Carr, 1975). Moreover, the literature is replete with examples of instances in which a failure to involve community members has resulted in inferior programs (Wandersman, 1984), and instances in which citizen participation resulted in improved programs and services (e.g., Comer, 1976, 1980; Hodgson, 1984; Pancer & Nelson, 1990) and a better match between the needs of the community and the kinds of services provided (Iscoe, 1974).

Community development and resident participation were key elements in the conceptualization of Better Beginnings, Better Futures. Community development was one of the three primary objectives of Better Beginnings, Better Futures (to strengthen the ability of communities to respond effectively to the social and economic needs of children and their families , OMCSS, 1989, p. 1). As mentioned in the previous chapter, it is the community-driven nature of Better Beginnings that distinguishes it from almost all other prevention programs in North America. With very few exceptions (perhaps only the 1, 2, 3, GO! project established in Montreal after Better Beginnings was initiated; see Bouchard, 1997), no other prevention program has focussed on community development or community involvement to the extent that Better Beginnings has. In this chapter, we describe how community development occurred at the different Better

Beginnings sites, and discuss in detail the ways in which residents have been involved in this process, and the impact that involvement had on the residents themselves and the communities in which they live.

WHAT IS COMMUNITY DEVELOPMENT?

Community development can be considered as much a "process" as it is "programs." While many of the sites employ individuals who are designated "community development" staff, these staff spend a great deal of their time in activities that would not necessarily be described as "program" activities. They may accompany a group of residents to present a request for improved lighting and fencing to the local housing authority, organize a forum on job training, or work with residents to clean up a local park so that children can play safely.

Better Beginnings, Better Futures uses a *community-driven*, rather than *expert-driven* approach. Most prevention programs are conceived, planned and implemented by experts or professionals. In recent years there has been growing concern about the dominant role that professionals have played in those kinds of programs, and about the subordinate role played by the individuals who are meant to benefit from those programs. The problems inherent in expert-driven programs include the lack of control given to the community, the promotion of power imbalances between professionals and community members, and the failure to utilize community members knowledge, abilities and commitment. As well, expert-driven programs often focus on deficits rather than strengths and do not give people the opportunity to help themselves (Pancer & Nelson, 1990).

The community-driven approach taken by Better Beginnings, Better Futures is very different from expert-driven approaches. The following are some of the key characteristics of the community-driven approach:

- Community residents are actively involved in all aspects of program development and delivery; they are key decision-makers in the process of deciding what kinds of programs are needed, how these programs will be implemented, who will staff them, and where they will be offered.

- The programs and activities offered at each site are created to meet the needs of the community, as these needs have been expressed by community residents themselves.

- Community building and community development underlie much of the programming in Better Beginnings communities.

- Accessibility is a major concern in the approach to Better Beginnings programming. Every effort is made to make programs geographically accessible, available in the language that residents speak, and comfortable. Barriers to participation, such as transportation and the need for childcare, are addressed to ensure that residents can participate without cost or other restrictions.
- Community events and celebrations are considered a crucial means of bringing individuals together and giving them a sense of community.

Community Development Goals and Activities

What are the major goals of community development, and how are they achieved? The following describes some of the major goals of community development, and the activities that have been used to achieve them at the Better Beginnings sites.

Goals:

- improving residents' ability to advocate, on their own behalf, with government and community agencies;
- working in partnership with residents and community agencies to coordinate services and secure other needed programs and services.

These kinds of goals were achieved through partnerships such as that formed in Sudbury between the project and the Separate School Board:

> The need for francophones to establish their own programs sparked a dialogue with the Separate School Board to access the Centre St-Gabriel in January of 1992 to set up a program in the French language.

Goals:

- enabling residents to know and understand their neighbours better;
- strengthening ties between cultural groups.

Residents came to know and understand one another through many of the projects' programs, and also through working together, training together and participating in community events together. This also helped individuals from different cultures get to know one another, promoting understanding between cultural groups in the community:

> Most of the project's activities and programs encourage this objective (strengthen ties between community residents). The staff have noticed that there are markedly fewer conflicts between neighbours. One member observed that "Since so many of us have been trained in conflict mediation, which is really just common sense problem-solving skills, more people feel obliged to try to settle their differences amicably".

Goals:

- establishing ties between community agencies and residents;
- networking with other community organizations;
- working in partnership with residents and community agencies to coordinate services, and secure other needed programs and services.

There was evidence in all of the projects that residents were forming a closer and more equitable relationship with service providers from the various agencies, primarily by getting to know them as individuals, on a basis of equality. This helped residents communicate more confidently with agencies, and it also enabled them to work more effectively to obtain needed programs and services.

Goal:

- facilitating the development of new community groups, helping them to organize themselves and to get training and resources.

Better Beginnings sites often facilitated the development of community groups and organizations, and once these groups were established, helped them to obtain needed resources:

> The community workers facilitate new community groups, helping them to organize themselves and to get specific training and resources. For example, two community workers are presently working with an anti-poverty group that is trying to organize self-help workshops and community parties. Another community worker is working with a parent to organize their tenants association. Many of the staff sit on Parent Councils at the schools in the area.

Goals:

" giving the community more control over its economic future;

" providing training opportunities to allow residents to enhance their organizational, self-presentation, problem-solving and work skills.

Helping residents become more employable by providing training was one means employed by Better Beginnings sites to enhance the economic welfare of community members. The sites also worked to reduce the impact of economic hardship by establishing community gardens, clothing exchanges, bartering systems, and other activities:

> Community members are provided with a number of training opportunities to enable them to participate in the project. Some are trained to co-facilitate groups and chair meetings and these volunteers receive ongoing mentoring from staff members. Most childcare providers and assistants were and continue to be hired from within the community and receive intensive training and supervision. Some of the Family Visitors were originally hired from within the community and trained as peer educators. The base of job skills in the community has grown considerably because of Better Beginnings.

Goal:

" increasing social and recreational opportunities.

Many individuals in Better Beginnings communities live in isolated pockets in the community, making it difficult to connect with their neighbours or to participate in Better Beginnings programs and activities. To deal with this challenge, Better Beginnings projects often brought the programs to the residents.

The "Travelling Road Show" in Sudbury, which goes to a different location each week, is a program specifically formed to establish links with communities which are self-contained (housing projects) and unable to access Better Beginnings programs.

Goal:

" increasing the sense of community and pride in the community (e.g., through community events and celebrations).

One element that was considered crucial to community development was residents sense of community and pride in their community. One way in which Better Beginnings attempted to increase this was to hold a variety of community events.

> A sports day with NIKE was organized in November. Forty children from the programs attended. [Other community events included] a francophone literacy meeting and luncheon, breakfast with Santa, can-skate programs, participation in francophone festivals, winter carnival, health fair, outdoor leadership programs for the community kids, and a parent group.

Many of the Better Beginnings programs aided the community development process in more than one way. Community kitchens, for example, not only provide assistance in dealing with economic hardship, they also bring residents together and give them a sense of accomplishment.

> The kitchens are not just about cooking together, they are a support system for the people in them. Many members have increased their knowledge about cooking, their self-esteem and confidence. They create community. A staff said: Everyone in the kitchens learns something every day from one another.

RESIDENT INVOLVEMENT

Resident participation is the cornerstone of any neighbourhood or community development process. From the earliest stages, it was understood that residents of each of the communities selected as Better Beginnings, Better Futures sites would be involved not only as participants in or "recipients" of the various programs, but as decision makers and planners of those programs as well. Indeed, the document that outlined the major themes and principles underlying the initiative stated that It is important that members of the community have key responsibilities for decision-making about the design, implementation and evaluation in community-based primary prevention programs (OMCSS, 1989 p. 70).

What Motivated Residents to Participate in Better Beginnings?

Residents had different motives for becoming involved as project volunteers and staff. The reasons for getting involved with the project have not changed much since the early phases of the project; however, the project now seems to be better known and understood by the neighbourhood and residents.

- **Gaining employment**

Since many staff are hired from within the organization, people have come to recognize that volunteering may give one an advantage in the hunt for employment. One site makes this very visible through their policy to award job applicants extra points for volunteering. With people struggling to survive financially, it was not surprising to learn that the possibility of making some money was a prime motivator for some participants.

- **Bringing up children in a French language and culture (Francophone sites)**

Residents in the Francophone sites participated in the project because they felt it was a place where they and their children could improve their French and engage in the French language and culture. Participants have stated that their own and their children's French has improved markedly as a result of their participation. They also note the importance of learning and maintaining their culture and language.

" **Becoming more knowlegeable about Native language and culture (Walpole Island)**

Many of the residents who participated in the Walpole Island Better Beginnings project were motivated by the desire to learn (and have their children learn) more about native language, crafts and traditions.

" **Making the community a better place to live**

Residents were also motivated to get involved because of their desire to improve their communities.

> I can't picture Parents for Better Beginnings [the Toronto Better Beginnings site] not being around. I think that my community needs it [PFBB] there, so if I can be a part of a committee that's going to say "Maybe we should fundraise this or this . . .," write letters or whatever, then I will do that.

" **Helping others**

For many residents, being able to help others was a primary factor in their involvement. Some people feel a desire to give back to the community without receiving anything in return because this gives them a sense of satisfaction. The project provided these residents with an avenue to help others.

" **Learning and acquiring skills**

For many participants who became involved with Better Beginnings, a chance to learn new skills was the motivation for participating in the project. Many participants who mentioned this motive were recent immigrants who saw in the project an opportunity to informally improve their English skills and learn about the local culture. Others wanted to develop employment skills in order to be better prepared when the time came to join the workforce.

" **Satisfying curiosity**

Some residents got involved because they were curious about what the project entailed and were also interested in keeping in touch with what was happening in their community.

" **Getting involved in something meaningful, interesting and valued**

Many residents participated in the project because it seemed interesting, allowed them to express their opinions about decisions that affected their neighbourhood, and provided an opportunity to use their skills to do something meaningful and valued, which often resulted in a sense of achievement.

> Just being able to see what s happening with everything, like the planning. . . . You can say, "That s not a good idea, or that s a good idea." . . . Helping to plan things . . . feeling like you re important, like you have an opinion and you have a voice . . . (parent focus group).

" **Seeing Better Beginnings as a voice for the community**

Better Beginnings staff saw the project as a central place where residents could gather to voice their problems and concerns about things occurring in the community, and it provided for this activity.

" **Being able to monitor children**

Some parents felt most comfortable knowing they could be near their kids, whether in school or childcare, while the parents were participating in Better Beginnings programs or activities. If any problems occurred, the parent could be right there to deal with it immediately.

> Being close to my kids. Being able to see them, what s going on in the school and that kind of thing. That way I m close. That s probably the main reason to be close to them.

" **Being recognized for one's contributions**

A factor that maintained resident involvement was the encouragement and recognition of participants' contributions. Knowing that one's work is valued, and receiving positive encouragement, is all that some people need to be motivated to continue their involvement.

Other motives for getting involved in the project included participants' perception that there were opportunities to learn through the project and to share new abilities with the community. Others realized that the project allowed them to learn new teamwork skills, and to learn about their community as well as about other cultures.

" **Fostering resident involvement**

A great deal of effort has been invested in fostering resident involvement at the eight demonstration sites, but there were differences among the sites, as well. There were different ideas guiding actions about how many volunteer residents should be involved, where they should participate, and how many other types of participants should also be present. These ideas about the level and type of resident involvement have had an impact on recruiting attempts at the sites. The sites with the highest levels of volunteer resident involvement all seemed to have had clear objectives to achieve at least 50 per cent resident involvement on key work groups as quickly as possible. Several strategies were employed to enhance resident involvement:

" **Giving priority to resident participation**

The two sites with the greatest numbers of volunteer residents involved made it clear that achieving high levels of resident involvement in all important decisions received a great deal of attention early in the project development process. Resident involvement was a basic value that influenced all decisions and work procedures at those sites.

" **Modifying working procedures**

Most sites highlighted the need to modify the procedures normally used by professionals in meetings and in making decisions. It was considered important to make the atmosphere of meetings more comfortable for residents who were getting involved for the first time. This involved simplifying formal decision-making procedures, encouraging professionals not to use unnecessary jargon, and using different ways to present information at meetings (e.g., adding a visual presentation to a verbal one, and providing a verbal clarification of written material). Suggestions were made to hold meetings at times convenient to residents rather than necessarily during professional working hours. It was also seen as important to allow residents to speak for themselves and to take on responsibilities such as chairing meetings and making reports from sub-committees to the board.

" **Providing training and ongoing support**

There was general agreement that concrete supports were necessary to foster resident involvement - for example, paying for or providing childcare during meetings, compensating for lost revenue if appropriate, helping with transportation. A number of site reports commented on the need to train residents for the roles that they were playing on boards and committees and, perhaps, to provide them with more between-meeting support so that they can take part in discussions in a more effective fashion. The need to provide staff support to subcommittees and working groups was mentioned.

" **Limiting professional involvement**

At most sites, there was a perception that it was necessary to control the number of professionals taking part in decision-making structures, and, in some cases, the types of professionals involved, so that residents would not be intimidated and overwhelmed by more experienced participants.

" **Encouraging participation of ethnic minorities**

Early on in the projects' development, there was relatively little success at involving members of minority communities, particularly when language proficiency was an obstacle. However, outreach went on, and ideas arose about what would be helpful the hiring of staff from minority communities, making available publicity material in different languages, developing some program components specifically for minorities (e.g., a parent group, a parent child program), using translations at meetings and in outreach, establishing working relationships with associations representing minority groups, and having some separate organizational structures and program development groups that operate in different languages. In general, these strategies proved quite successful in attracting members of diverse cultures to participate more actively in Better Beginnings.

" **The effects of government requirements**

The negotiations between the sites and the government representatives affected resident involvement in three major ways: (a) by reducing the size of target communities for some sites, changing the definition of which residents should be involved; (b) insisting that some sites increase the numbers of residents involved on their main decision-making bodies or that they involve residents more quickly than proposed; and (c) requiring more formal procedures and controls on boards/steering committees, which changed what was expected of participating residents.

" **Other suggestions**

A number of site reports stressed the need for sites to use community development or outreach workers in the recruitment of participant residents. Some site reports suggested that having programs available makes the attraction of new residents easier.

How Were Residents Involved?

The following list of the activities residents were involved with at the demonstration sites illustrates some of the most common contributions residents made:

" actively participating on major committees and subcomittees (often chairing these committees);

" serving as active members of partner agency boards;

- participating in decision-making regarding program management (e.g. generating budgets, planning programs, community events);
- supporting and managing programs (e.g., purchasing and preparing food for meetings, community events, organizing toy lending-library, providing childcare);
- being involved in community consultation (e.g. providing feedback on research reports, taking parti in hiring research staff and recruiting research participants);
- donating goods and services (e.g., food and crafts for fund-raising, interpretation and translation);
- being active in programs and activities/support (e.g., volunteering in snack program, family resource centre, classroom);
- working as paid staff (e.g., childcare assistants, family visitors, office workers, coordinators);
- participating on the Better Beginnings Network (the network to which all Better Beginnings projects belonged);
- advocating on behalf of the project and the community (e.g., making presentations to public officials, writing letters);
- fundraising;
- participating in promotional activities (e.g., making presentations to visitors to the site and to off-site groups and organizations, tending displays in malls and at community events);
- identifying community needs.

CHALLENGES, OBSTACLES, BARRIERS AND NEGATIVE IMPACTS OF RESIDENT INVOLVEMENT

Although participants have reaped many benefits from being involved in Better Beginnings, some have faced, and still do on occasion, various obstacles to staying involved. While a number of the obstacles to getting residents involved that were identified in the early phases of the project are no longer significant challenges, others continue to prevail in some form. Nevertheless, important progress was reported in involving residents at the sites. However, the challenges described below illustrate the complexity of fostering meaningful resident participation in the project.

Lack of Trust and Tension Between Service Providers and Residents

Residents were reluctant to get involved, and then to stay involved, because of their initial lack of trust of the service providers and the tension that resulted from this. Some residents had had negative experiences with other agencies, or heard of others such experiences, which left them mistrustful. However, over time, trust has developed between staff, agencies and residents, as residents learned through experience that staff and agencies are genuinely interested in helping people to build a better community.

One of the factors that created tension between residents and service providers was the language and procedures used in meetings. Many residents felt intimidated by agency representatives and by the meetings because of the professional jargon and formal processes that were used, often without orienting the residents to this new structure and language. Some residents were not only intimidated but feared agency representatives, especially those from child welfare agencies, and often were too afraid to clarify the meanings of words, procedures or financial decisions. Residents at one site set up secret meetings at first to figure out what occurred at committee meetings. However, over time, residents sitting at the committee table with various agency representatives realized the staff were people, just like themselves, with a job to do. Agency representatives also began to recognize the need to conduct the sort of meetings in which residents could actively participate. Some sites found ways, such as making meetings more informal, setting up penalties for using bad words, creating a buddy system for new members, and providing explanations of procedures (which was done willingly by a chair and the sponsoring agency s director). Regularly training committee and action group members has also made them more familiar with the language and procedures used at meetings.

> She [one of the human service professionals associated with the project] kept saying, "We need you, we need you." And then she would bring up this empower. What the devil is empower? But most people did not know what it meant. And she used other words too, because that's part of the lingo that goes with being educated and so on.

Residents, at times, felt that service providers didn t really understand what it was like to live in the community, and what the community really needed:

> The people that don't live here don't know, they can't feel [neighbourhood residents'] suffering, they have to be in their shoes. If you don't live here for 24 hours, you don't really know them, it doesn't matter how long you work here.

The imbalance of power was an obstacle to fostering meaningful resident participation in the early phases of the project. Being involved in committees and participating in decision making with professionals was a new experience for many residents. Resident and agency representatives working relationships were strained at first since neither group was used to the different styles and ideas of the other. At first, residents were intimidated at meetings and therefore lacked assertiveness. However, more recently, residents participate in meetings at least as much as agency and staff do.

Differences in Cultural Background, Language and Lifestyle

Trying to involve residents from other countries can involve barriers of communication, expectation, and culture. However, these residents are taking on more roles and now participate to a greater extent than they did at the beginning of the project. Staff are still learning how to make programs more accessible to new immigrant families, and continuously work at increasing their knowledge about different cultures and their needs. An effort has also been made to hire multicultural staff for various positions in the project.

> [Asian parents] are not likely to join committees and teams because of the language and because they are too busy. If they can't speak English well enough to join the group, they will just be embarrassed to try to express themselves. Most families are working, are not on social assistance, so they are very busy with family responsibilities, and have no time to volunteer. They don't have any spare time. Sometimes they even work Saturday and Sunday, and they also need time to relax and spend with their children.

Restricted Funding Results in Restricted Programming and Access to Programs

The range of community problems that residents would like to deal with cannot always be addressed because of the limits in Better Beginnings funding. Attempting to run programs past capacity has resulted in overcrowding and overworked staff, at which point the program is at risk of becoming ineffective or may experience participant drop-off:

> Playgroup was starting to get really crowded. I felt claustrophobic in there, it was really noisy! I just can't handle all this noise and this screaming and everything. Sure it was because the kids are having fun. Well, poor Better Beginnings. The Playgroup is started and it's advertised in the pamphlets and everything and more and more people are starting to go, but the place is too small! The kids are bumping into each other and running into each other, and you know, that's too bad because the idea of Playgroup is good.

Equally important, financially disadvantaged families sometimes cannot participate if Better Beginnings requires a financial contribution. Financial constraints, despite everything, limit the participation of extremely disadvantaged families in some activities. While most programs are free, and family-geared activities are designed to allow children of all ages to participate, sometimes the project asks for a small financial contribution, or families need to provide their own transportation, meal or snack. This can put a financial burden on families that would like to be involved. The site at which this issue arose has recognized that extremely disadvantaged families may be prevented from becoming involved, and a decision has been made to examine this issue in the near future.

> I have counted the number of activities the other day, just for the fun of it. And you have to include $1.50 for the bus: round trip, it is $3.00 for the day. Even if the babysitter is provided for, if she lives on the other side of the city, it s another $3.00. If there are other activities . . ., it comes to $10.00 per week, just for small activities. Minimum: $40.00 per month.

Tensions Resulting from Hiring Community Members

One of the benefits of participating in Better Beginnings is the possibility of gaining employment through the project. However, this benefit has some negative consequences; residents often compete for jobs and are devastated when they are not hired, especially when they feel they are qualified and have contributed much time and effort to the project. This disappointment can lead to jealousy, suspicions of favouritism, and resentment toward the project or among residents themselves because of failed expectations.

Another challenge resulting from hiring community members derived from the loss of freedom to speak out that some residents experienced when they became staff members. As residents, they had felt free to speak their minds about Better Beginnings and the community; as staff, they felt they had to be more restrained in what they said about the project:

> I liked [Action Group] better as a participant, cause I could talk and I was heard. More than I m heard now. Now, we re told to keep [quiet]. We re not told this when we re hired, but learned it as we went along. [Her colleague adds:] They boost you up to talk, to be strong, then you get hired and you re told to stop. . . . Hard for me personally.

Difficulty in Setting Boundaries Between Work and Personal Life

Three sites described in detail the negative impact that staff residents have experienced in attempting to maintain a clear boundary between community life and work. Resident staff who work closely with community residents and who sometimes live in the same neighbourhood develop close bonds and a sense of intimacy, which frequently leads to demands being put on staff outside working hours. People have varying expectations of staff who are also residents; the community does not acknowledge staff people's official work hours, and often expect staff residents to contribute more time to the community, which makes the staff question their responsibility to the project versus their rights as community members. This dual role can be a source of stress as staff attempt to balance taking care of themselves and supporting their community. There appears to be no simple solution to this complex problem, since it is easy to get caught up in other people s problems while trying to simultaneously keep one s distance. In order to address this problem, some sites mentioned training staff about how and where to draw a boundary between their personal and work life.

Potential for Burnout and Over-Involvement

Near-burnout occurred for those who faced the challenge of juggling family life and their commitment the project. Some mothers had to struggle in order to continue their volunteering because their children resented the time that was spent away from home, or because of their partner's opposition or lack of support. Some participants who experienced this stress had to decrease their involvement considerably in order to meet their family s needs. In some cases, participants had to withdraw from the project either briefly or permanently.

> My husband would take (the children), and after a while he started saying, "No, don't do any more volunteering, I don't want to watch the kids anymore," because they just drive him nuts. They won't go to bed for him or anything. . . . He would have to call me up and say, "Get home and just put these kids to bed.

People already experiencing stress in their lives may easily feel overwhelmed by the amount of work there is to do. Others are so willing to help out that they end up taking on too much responsibility and eventually find they need to reduce their involvement. Some people who have had multiple demands placed on them find it hard to say no and do not wish to decrease their involvement. However, this over-involvement can often lead to burnout as multiple demands are placed on a few volunteers. Sometimes, participants find that receiving a request for help is flattering, while at other times it is a struggle to juggle their other responsibilities with the project s needs. This was especially true in the early years of the project when there were only a few volunteers that were heavily relied upon to play diverse roles, to attend several meetings a month, and to help in the promotion of the project.

> There was a real high level of stress, burnout . . . because although other people were doing this as part of their work and they could go home after, this was part of my life, so I couldn't get away from it. . . . I was involved with it during the day, then [when] I went home Better Beginnings was still in my life. . . .Because there were only a few community people at first, I felt really stressed.

Other Parents' Negative Parenting Practices and Attitudes

Some families were reluctant to continue their participation with the project after witnessing other parents negative parenting practices and attitudes while attending programs. It seems this problem is not an easy one for staff to resolve.

> There is no respect between the parent and the child. They hit their kids, they yell at them, they swear at them and I find that very hard to deal with and that was actually one of the reasons we stopped going.

Gender Imbalance

In the early years of the project, a great gender imbalance existed in the volunteering with, staffing of, and participation in programs, suggesting that perhaps not enough was done to attract males to the project.

> When I first started going to the action group, there were two men on the action group, and one at first he was introducing himself as the token male. He d been the only one for a while. . . . It s still taking time to get them to come out. A lot of them just feel very shut in. It s taking them longer to realize that there is something there for them. . . .At least, they are starting to realize that there is something there.

Closely related to the issue of a gender imbalance in the programs was the "woman-centred" focus throughout the project. The few men who initially participated worked hard to promote the use of language that was inclusive, and designed programs such as a dads' support group for male participants.

Age of Volunteers

Many volunteers have some kind of a connection with the project that usually results from having a child participating in the program; therefore, often volunteers come from a narrow age group since most have children in the early school years. Consequently, special efforts need to be made to involve those who are not directly connected with the project.

> I also think, one of the things that is a barrier and will probably continue to be a barrier for a while is the types of programs that we run and I m thinking more in terms of the ages, the age group. Because as much as we have a lot of programs, we re still bound by our mandate, which is [age] 4 to 8. So, one of the things I m thinking about now is that when you go out to do outreach, if we can t offer, if we don t offer, programs for kids that are beyond 8, I mean we re hard-pressed to get those people involved. It s all, what s in it for me? And very rare the person is going to come that really, one that don t have a child here, or their child has never been here, or that they re not getting something really out of it. To become a volunteer, to get involved just for the sake of it, that is very rare. Because most people have a connection somehow . . . (staff focus group).

Conflict with Schedules or Inconvenient Location

While it is not economical or possible for some residents to participate because they live too far away from the project, or have moved out of the neighbourhood, others cannot participate because meetings are held during hours that allow easier access to those who are unemployed than those who hold regular full-time employment. This suggests that certain residents, such as project employees or professionals, are excluded from meetings, which are mostly held during the day. Childcare at one site is inconsistently offered during meetings, impeding the involvement of those parents who need childcare in order to participate. Some sites have addressed this problem by making meeting times more flexible in order to be more accessible to those who hold full-time employment.

Uncertainty over Project Funding

A barrier that many staff and residents experienced near the end of the demonstration period was uncertainty over whether the project would continue. The government could have cut funding completely, which made it difficult for staff to stay motivated and to motivate others to stay involved.

> The last couple of years was the uncertainty of the project and whether or not it was going to be around; I think, more or less, people sort of, . . ., but even in how we were conducting ourselves, I mean as a staff we were more or less winding down; we sort of, "Well what s the use?" kind of thing. So our attitude may have been a part of why and how we deal with people, how we encourage people to be involved. Because we were wondering about our own staff and our own self . . . (staff focus group).

Simultaneously, however, this uncertainty inspired some community residents to advocate and lobby for continued funding for the project.

> Also I think at that time they became, they [the residents] took most control of the situation because they started writing letters we asked them, and they did in different languages, they wanted the project to continue. So they [the government] thought, they were really surprised by the people who wrote in . . . (staff focus group).

Perception that Project is Intended for Families in Need

Some residents limit their involvement, identify more with staff than other residents, and decline taking on leaderships roles due to the misperception that the project is supposed to benefit only disadvantaged families.

> Other people in the neighbourhood believe the project is intended to benefit only those in need; for example, families on social assistance, or with particular kinds of problems, so it does not apply to their family.

Not Feeling Valued for Time Spent Volunteering

One of the benefits of involvement in Better Beginnings is the satisfaction people feel when their contributions are recognized. But if time spent volunteering for the project is not recognized, residents may feel that their work is not validated. However, staff attempt to address feedback from residents immediately in order to minimize the negative impact on them.

> People work so hard . . . to set it (Playgroup) up nicely and make it inviting,. . . and [they come back] at 11h30 and the place looks destroyed.

Limitations of Training of Community Residents and Staff

Lack of financial or human resources create a barrier to making resident involvement as meaningful as it has the potential to be. When human resources are limited, staff find it difficult to balance the time spent on training volunteers versus that spent providing services. It is especially challenging to find the time necessary to train residents who have little work experience, or require constant direction and guidance. Similarly, training courses cost money that staff feel could be spent on service delivery. However, it is recognized the training of community members is an important aspect of Better Beginnings, and that it is important that community residents be hired for the project; therefore, management at one site offer

extensive professional development experiences and training to staff and management on the subjects of communication, conflict resolution, working styles, and organizational practices.

Lack of Support for Newcomers

One site mentioned the lack of orientation for new participants. This was also a current issue for another site, as illustrated by residents' observations about how new participants used to be nurtured, but that this had been lost over time. As a result, some participants feel a lack of importance or belongingness.

> At the beginning, the parents were so much more encouraged to come and were nurtured and stroked. . . . It s now the same group of parents over and over again. They re kind of taken for granted, and the new people come along [and] they re just kind of whoosh, they re pushed right in, and that nurturing and that adjustment hasn t occurred and I think it might not have been as easy for them.

Language Barriers in Bilingual Communities

Sites that conduct many or all of their programs in French (Cornwall and Sudbury's francophone community) face a barrier related to the language and culture that are essential to the communities. Even though the Better Beginnings sites are in a French-speaking location, some children come from families in which one of the parents is English-speaking and has only a limited knowledge of the French language. Better Beginnings leaders welcome English-speaking parents and attempt to use a variety of methods to facilitate communication with all parents (by using translators, publishing newsletters in both languages, or speaking English). However, when the French language is used exclusively during all formal meetings and in report writing, many people might be excluded.

There also appears to be a constant tension among participants who hold divided views about the language issue. One favours promotion of the French language and culture with the hope that English-speaking parents will eventually learn sufficient French to participate in the program; the other favours use of the language spoken by most parents in each situation.

One site formed committees to address these obstacles. At one point, it was decided that meetings would be conducted bilingually, a translator would be chosen at the beginning of each meeting, and bilingual members would be encouraged to converse in French. However, despite these efforts, meetings are mostly conducted in English due to the fact that a majority of the residents were not bilingual, thus hindering the implementation of this recommendation. People are encouraged to express themselves in the language of their choice during meetings. A solution to this problem was the creation of work groups that gave members the opportunity to meet within their cultural group and to express themselves in the language of their choice. As a result,this obstacle seems to have been overcome.

The language barrier also posed a major problem when this site attempted to integrate French- and English-speaking programs, because it was difficult for children in these programs to converse in French, which resulted in parents threatening to withdraw their children if the situation continued.

HIRING NEIGHBOURHOOD RESIDENTS

Hiring neighbourhood residents was a major strategy at all demonstration sites for incorporating resident wisdom into project and program development. It was clear that resident employment has had a substantial impact on the projects. Some of these effects were unanticipated.

Hiring Priorities and Impacts

Sites identified a variety of challenges resulting from hiring active community members as staff:

- the "loss" of (usually the most) active volunteer leaders as they become staff;
- confusion as resident staff continue to hold board or committee positions that they held as volunteers;
- a "loss of status" as employed residents feel they lose their voice as community representatives and as they find themselves supervised by professionals;
- tensions with neighbourhood peers not in staff positions;
- loss of incentives for some residents to volunteer if they did not obtain staff positions for which they had applied.

Resident-Only Groups

Four of the seven demonstration sites had, or wanted to have, some form of resident-only group that was initiated through the project for example, an independent community group, an advisory group to the board or steering committee, a program group or a program development group. One site attempted somewhat unsuccessfully to link with an existing school's parents group and most sites held periodic meetings of residents for various purposes. Several sites reported the use of resident-only groups (with staff support) as part of their program activities.

Where the resident-only groups were clearly integrated into the administrative structure of the site for example, a program development group making suggestions to the board and implementing program decisions there were few difficulties reported. However, two sites invested considerable effort into developing an "independent" resident-only community group with unclear linkages to the project's administration. Early on, one of these community groups made substantial contributions to the initial project proposal and to the early project development stages at the site. Yet, as the sites' administrative structures become formalized, as residents began to participate on these structures, and as residents were hired and program activities begun, the purpose of these community groups became less clear and their influence diminished.

Payment and Recognition of Volunteers

One of the difficult issues faced early on by the sites had to do with payment of resident volunteers. In almost all the sites there had been discussions, sometimes lengthy and heated ones, about if and how residents should be compensated for things that might be considered to be "volunteer" activities, such as attending meetings, organizing community events, and helping out with programs. In all but one of the sites it was decided that only residents' direct expenses would be compensated. Parents were to be reimbursed for childcare, transportation and other expenses that they incurred in order to participate in the project. In practice, residents were also compensated on a "fee-for-service" basis for specific, time-limited tasks, such as cooking and serving meals at meetings and round-tables, setting up and taking down playgroup decorations and equipment, and serving as breakfast attendants.

Residents were paid (for a while) for the time they spent attending committee meetings in only one of the sites. In this site, they were given $10 plus an additional $7.40 an hour to attend meetings. Officially, this was designated as payment for childcare and transportation expenses, but it was understood that this was really intended to compensate residents for their time and contribution. Initially, this payment appeared to be sanctioned by the ministries.

There were a number of reasons for paying residents to volunteer their time to the project:

- payment was thought to encourage more people from the community to participate;
- payment compensated residents for the costs that they incurred in participating;
- payment redressed the inequity between service providers (who were being paid for their work) and residents who were not, which may have prevented a more equal partnership from developing between the two groups; and
- this provided financial assistance to residents, many of whom were suffering from financial hardship.

There were also reasons for not paying participants to volunteer:

- many residents opposed the idea of paying people for volunteer work, feeling that volunteer work should not be compensated;
- while paying residents for committee work may have reduced the inequity between residents and service providers, it may have produced other inequities in the project between those who are paid for their participation and those who are not paid. A concern that this practice would result in a "two-tiered system of rewarding volunteers" that would "split the very group we're trying to unite" was the major reason that the policy was discontinued at the site in which it was implemented; and
- payment involves considerable expense.

Recognizing Volunteers

While most of the sites felt that a policy of paying volunteers was too problematic to implement, there was still a desire to recognize the contribution of community members to the project. Indeed, at one of the sites, the parents involved with the project felt that payment or other gratuities should be used to recognize and reward already-active parents, rather than as a way to motivate inactive parents. In order to accomplish this, the site established a "Fun and Recognition Committee" to organize and plan events to recognize the contributions of the volunteering parents. Parents seemed to feel more comfortable with planning these special recognition events than they were with payment.

Relationships Between Community Residents and Service Providers

At first, there were difficulties in the relationships between agency representatives and community residents at many of the sites. This was somewhat expected because these two groups of people from completely different backgrounds were thrown together and expected to be able to function effectively together.

> In the first month of the project s operations, residents found it difficult relating to service providers on an equal basis. They were somewhat intimidated by the differences in language, by the formality and structure of committee meetings, and by the decision-making process employed in the project.

However, over time these difficulties are lessening, as residents become accustomed to the operations of the project and as trust is developed between the agencies and community members.

> The relationships between agencies and residents is slowly changing over time, mostly because of the increasing number of people who have had positive experiences interacting with agencies. The proximity and familiarity of agency representatives has been a major factor in overcoming fear and building trust among residents.

Along this road to partnership between the agencies and the residents, lessons have been learned. These lessons include the realization that professional language and jargon are not appropriate in dealings with community members, and that members of a team will not feel like partners unless both sides are equally represented.

> [In the beginning], service providers greatly outnumbered residents and staff. As it was expected, building new relationships between these different stakeholders in the project was challenging under those circumstances. . . . [Furthermore], service providers and staff were aware of the need to make sure that their language and actions were not excluding residents from participating.

Despite the progress that has been made, it seems that residents still are mistrustful of some agencies. Many times these are the agencies that have to intervene in crises and, as such, pose a threat to the community members.

> At the crisis intervention level, there is still fear and distrust between residents and agency partners that tends to be concentrated among families who have been involved with child welfare agencies.

It appears that developing partnerships demands a lot of time and patience because for many, these working relationships are built mainly on positive personal interactions between service providers and community members.

> The degree of comfort residents feel with particular service providers is related to the extent to which the agency has integrated its services with the project, and is directly related to the opportunity residents have had to interact personally with agency representatives.

It also appears that there is a difference between residents perceptions of service providers and their perceptions of Better Beginnings staff. Although there are sometimes problems with the service providers, it seems that the staff have been accepted into the community wholeheartedly, and for some residents they are even seen as extended family members.

> The project staff's ability to maintain an open and welcoming attitude, to go to people and to actively listen, seems to represent a major advantage to facilitate integration of new participants.

> It s like an extended family, members go out of their way to support you. . . . [One woman notes that the staff are genuinely kind]: Staff enjoy helping, so I can accept their help. . . . They have compassion for those on social assistance.
>
> The staff have become a second family for many who otherwise have no reliable source of family. . . . It is the connections that the Better Beginnings staff have initiated between people which has been the ultimate focus, and has become the community s greatest resource.

Therefore, in spite of tensions and occasional setbacks, residents have experienced fairly positive relationships with staff and service providers, and both sides have realized that are many positive things to be gained through continued partnership.

> Now that Better Beginnings is established as a leader in the community, it is setting an example for how agencies can work with the communities that they serve. Other organizations such as schools, hospitals, city council, and the housing authority are having to answer to the community for not providing meaningful community involvement like Better Beginnings!

BENEFITS FOR RESIDENT INVOLVEMENT

Participating in Better Beginnings, Better Futures programs and activities resulted in many benefits for residents and their families, the project itself, and the community as a whole. In the early phases of the project, residents who were most involved derived the most benefits. While those who are fairly involved still do gain the most benefits, many more residents now share the advantages of being involved in the project.

At each urban site, a selected group of residents were interviewed about their experiences in Better Beginnings. Those interviewed had to have lived in the community for at least two years, and to have had substantial involvement with the project. At least half at each site had children in the focal cohort. Participants varied widely in age and cultural background. On average, twelve people were interviewed per site. Much of what follows about benefits for residents is based on our report on their interviews (Pancer & Foxall, 1998).

Achieving Personal Growth, Development and a Sense of Empowerment

As a result of the various ways participants are given opportunities to get involved in the project, residents who have done so have gained a sense of confidence in their abilities and increased self-esteem, they have become more assertive, independent and more aware of the resources available to them, and have developed a variety of life skills. They also feel worthwhile and feel a sense of empowerment. Many feel satisfaction from having the opportunity to help others in their community.

- **Enhanced confidence and self-esteem.**

One of the most frequently mentioned benefits of participating in Better Beginnings has been an increase in self-confidence and self-esteem. Many active participants attribute these enhanced feelings of confidence and esteem to the opportunities they were given at Better Beginnings. They were able to engage in new kinds of activities, such as attending meetings, planning programs and events, interviewing candidates for staff positions, making presentations to teachers, professionals and politicians, and

developing other skills they could use to help the project. For the first time, residents felt that they were listened to and respected for their opinions. Many residents were shy and withdrawn before they gained this confidence, and they were surprised to see themselves in situations where they spoke their mind and took charge of their lives.

> Better Beginnings gave me more confidence because now I am doing the Parenting Group and before I would have never led a group, not in my whole life. And I am going into a theatre group and I never would have done that before. And now getting involved in that Parenting Group, which I never would have done before; you know, it's a group of people there and me at the front talking. And learning how to use a flip chart and everything. It's going good. And I am just feeling more confident, not being shy.

Residents also described feeling good about themselves and being more satisfied with their lives as a result of what they have learned through the project.

Staff could see the confidence building in some residents as they took small steps in their involvement in order to prepare themselves for eventual employment. Each new experience led to more confidence, which allowed movement to bigger and better challenges.

> I know we've had so many [parents] who have gone from the snack program to the classroom. . . . You see people gradually through the various stages, preparing for work. . . . [One parent] is now on the Board of the Health Centre and probably through involvement here she got experience and confidence to do that. . . . [Another parent has] been involved with the snack program and is very keen about the community. She decided to run for trustee. She did a remarkable job ... [She] has gone on to the Board of the [municipality's] Social Development Council (field notes, 10/18/95).

" **Reinforcement of confidence in participant's own abilities.**

Some residents just needed some time to become comfortable in the Better Beginnings environment, and a little bit of encouragement, to reinforce their confidence.

> I told myself that by getting involved, I would get in the system, get one foot in the door. I could ask questions without having people look at me, . . . because people would think: Ah, she works with Better Beginnings, that's why she asks questions!.

> I realized that I could sit on almost any committee meeting and have an opinion. But at first, one (parent) would say, "The other people, they know that," just because they were a professional. But later on, we realized that if they were professional and they had a degree, it didn't mean they knew this . . . (parent's comments, 1997).

" **A sense of independence, assertiveness and awareness of resources and rights**

Building an Awareness of Resources and Becoming Independent. A number of participants indicated that they had gained greater knowledge about community resources that were available to them and to their children. They learned how to identify their needs and to seek help. Staff personally worked with many residents in order to make them more aware of the resources available to them. Once staff saw that residents were comfortable enough to seek out and use the resources themselves, they encouraged residents to be assertive and try to be independent. Many residents just needed a little support in the beginning; Better Beginnings was there to provide essential tools to eventually allow participants to

function independently and to use the resources in their communities.

> They told me that when my daughter turns 5 years old I can t be involved in the Family Visitor program anymore. So what my Family Visitor is doing is that she s trying to show me all the services that are around in the area so that I ll know them and be able to use them myself when I m out of the program. . . . Having a Family Visitor has helped my kids, but it has also made me more confident to do things by myself. Like this afternoon I ll be going alone to the doctor s with my son. (June 1997)

Becoming More Assertive . The increase in confidence and self-esteem that participants experienced also led to their acting more assertively with agencies, as well as in their personal life. Before becoming involved with Better Beginnings, some residents felt they were being taken advantage of and they did not have the courage to say no, even though they were already feeling overwhelmed. Participants mentioned that, as part of their learning to be more assertive, they also learned the ability to ask for and accept help when needed.

> At the beginning, the building was falling apart and Housing wasn't doing anything. My kids have asthma and the paint was coming off and cracking. . . . I guess working for Better Beginnings gave me the courage to go. . . . By working for them I learned that you do have a right to go to housing and tell them you have the right to fix something you rent. . . . When before, you know, I used to think that this is subsidized housing and I'm just glad that I have this place and I never thought to like to go to them and tell them and say, "Look you don't do this, I'm going to do this!" Better Beginnings gave me the courage to know that I can do it. My place is better than it was before.

Positive Relationships with Service Providers and Community Institutions . In addition to giving residents the opportunity to get to know their neighbours, Better Beginnings also brought residents into closer contact with other service providers in the community. Residents now have a better knowledge of the various agencies, as well as the confidence to discuss their problems as they arise. Rather than just receiving services from agencies, residents and service representatives now collaborate on a more equal basis.

> We've got better relations with agencies and there's been a whole lot of difference in the neighbourhood now people know there's places they can go, there's people they can talk to and then those people can put them where they need to go or who they have to talk to. . . . When they see somebody from welfare sitting at the same table with you, they've proven that they're ordinary people. They're just like you and I and they have a job to do.

" **Development of positive social skills, life skills and communication skills**

Through their volunteer work for the project, many residents have enhanced their life skills.

> [Interviewer: What did you learn from doing the Needs Assessment?] I really learned to talk to people. I was afraid because when you don t know how to approach people you don t know how to talk to them. I learned that there s nothing to be afraid of. You have to try and you can do it. I think I learned that. If you want to do it, you can do it.

" **Feeling worthwhile, valuable and important**

A number of residents expressed feeling worthwhile, valuable and important. It appears that no matter what state their life was in, the experiences they had through Better Beginnings made these residents feel important. Many were given the task of sharing their knowledge and expertise about their own experiences, promoting and representing the project to the outside community, planning and implementing events and activities, and listening to others who were experiencing difficulties in their lives. The positive effects of realizing that residents had something of value to contribute to the project and the community were extraordinary.

> (T)here was a group of people that were in from another organization and they asked me to come and speak as a parent about the project and that was very flattering. . . . I had the privilege of showing these people the whole centre, . . . so all this sort of thing was really rewarding for me. I actually was becoming known in the project and that was really nice.

" **Becoming a better person**

Several residents spoke of the positive changes they noticed in themselves as a result of their involvement with Better Beginnings.

> I have become a healthier, stronger parent and all around a much better person. I have had the confidence and the skills needed to apply for and receive a part-time position with the Better Beginnings project . . . (field notes 02/02/96).

" **Feelings of empowerment on a personal and community level**

As a result of their involvement, residents gained a sense of power as individuals, as well as a community as a whole. This empowerment developed over time as residents began to feel comfortable at meetings and started expressing their opinions, had opportunities to get involved in decision-making, and felt that they were being taken seriously by others in the project. Once residents felt that they had the power to influence important decisions that would affect them or the community, they began to play a more active role in lobbying for the project and taking on more ownership of it.

> The community I live in has become closer. . . . I have become empowered to be an active community resident. I feel that I can approach teachers and community agency personnel with confidence and composure.

" **Sense of life purpose and sense of identity through self-discovery**

One of the ways in which residents experience personal growth is through the development of their personal identity, often through a process of self-discovery. Many have realized they enjoy who they really are; it just took someone else to listen to them before they recognized the special qualities within themselves.

> I find that BB places a lot of emphasis on the woman, the joy of being a woman and solidarity between women. I like being a woman, and I have shared my femininity I ve lived it fully between women who understand. We have enough negative messages in our society. And I find that BB beautifies the image of the woman. I have really enjoyed being a mother, being Mommy, being a woman (May 1997).

" **Satisfaction gained from helping others**

Many residents got involved with the project because they saw an opportunity to help others, and the sense of satisfaction these residents gained from helping others in turn made them feel better about themselves.

> Through helping other families, I feel better about myself. Being able to offer the support I personally needed before has helped me personally.

" **Greater political awareness and involvement**

Residents often became more politically aware and sometimes heavily involved as a result of their participation in the project. Having seen staff advocating for the project, residents eventually took on this role themselves and realized they too could fight for changes.

> Before being involved with Better Beginnings, you would have to give me a hint if you asked me who the Prime Minister was. I mean, I was just so uninvolved; . . . nothing that was happening in the government was affecting me. But through them [Better Beginnings] it kind of opened up my eyes and helped me realize that I can participate in the outcome of my future.

Through their political involvement, some residents gained insight into the broad social factors that influenced their lives and those of the people around them, and this resulted in an even deeper sense of commitment and the desire to see some changes.

> Doing public speaking, like to the Premier of Ontario . . . As I got to learn more about how political the lives of people are who are living in poverty, the more I wanted to do something to try and change that.

> There s another meeting called Community Voices where we have a group of residents who are learning about the political system, and how to . . . go out and talk for themselves . . . (staff focus group).

Learning Opportunities, Training, and Re-entry into the Workforce

Residents involved in Better Beginnings have learned a variety of skills through their participation with the project. Some residents got involved in public speaking while promoting the project, new immigrants were able to improve their English skills informally, and many participants developed enough employment skills to be hired by the project or to seek employment elsewhere.

" **Building competencies and learning organizational and leadership skills**

Many residents became involved in public speaking, had opportunities to engage in decision making, attended training sessions, and gained work experience. These were new experiences to most residents and many appreciated the opportunities to develop their organizational, leadership and communication skills.

> It's like going to college, . . . it's hands-on experience. Most people who go to college can get the theory part of it, you know, just theory, but . . . hands-on is just, just so different, and, to me, I received a college degree in terms of the skills I learned, you know: chairing

> committees, writing letters, . . . going to events and meetings and actually making presentations, so it improves your speaking skills, takes away your fear to talk . . . to a large crowd, and knowing, . . . regardless of how many people are sitting out there looking at you, you can handle this. . . . Iit was a job, it really was a job. . . . The benefits and the rewards, better than the job. I don't think I . . . would have learned all I learned had I gone to college for that four years. . . . And also, the more you learn, the more you feel capable, because I went back and took many workshops.

" **Development of public speaking skills**

Public speaking provoked anxiety in residents as much as it does to anyone else. But staff had confidence in residents to promote the project in the best way they could. This support allowed residents to engage in speaking to the public, and, over time, it has become second nature to these participants. In the process, residents realized how powerful their input can be if they have the courage to stand up to politicians and tell them what they do or do not support.

> [E]ach time [speaking in public] is getting better and better. . . . I used to hate stuff like this, . . . but I felt kind of good last week when I did the debate, and I thought, you know, there's no way if Onward Willow hadn't got me used to doing this public speaking, . . . if it hadn't been for that, I wouldn't have been able to debate the same way.

" **Home Visitor training opens up employment opportunities**

Home visitor training, in particular, benefited participants because participants built up their strengths in order to be competent on the job. In fact, one participant's experience was so positive that she decided to make a career out of that type of work and went back to school.

> [T]here was a lot of training that went on for the home visitors and whatever areas were our weaknesses, Onward Willow provided the training to build up our strengths. . . . But learning all this stuff, it was like gates had been opened, you know, and it was time for me to pass through those gates. So I decided that as much as I enjoyed my job as a home visitor, I wanted to learn more, so I resigned as a home visitor and was accepted at the Social Service Worker Program and I went to school for two years and just recently finished in April. So that came as a result of what I was doing as a home visitor, because I wanted to do my job better. I wanted to do it on a more professional basis because I was only a lay person. I was trained infomally and using some of my own life experiences and that sort of thing, but I wanted to do more.

" **Improved work skills and encouragement from staff allow for further career and educational development**

Receiving support to learn and grow on the job has encouraged participants who were thinking about going back to school or work but were not confident enough about their skills to do it on their own.

> In August, I applied for a job with [name of agency]. It took me a week and a half to decide to apply. . . . I have found that with Better Beginnings, I had reached a stage in my life where I needed more challenge. Then it took me a week and a half before deciding if I was going to meet this challenge; to decide to take this chance or let it go. I decided to take it, and I haven t regretted my decision ever since. At my new job, I can say that up to now the experience I acquired with Better Beginnings helped me. When

> you apply for a job like that, you need some experience. There are too many people and too much competition nowadays, too many individuals with extensive backgrounds to be hired without having experience (a parent and former project employee, 1997).

" **Creation of jobs through Better Beginnings**

Many residents who began their involvement as volunteers were eventually employed in a variety of jobs, including home visitor, research assistant, and teacher s aid. For some people, this income was much needed, but for others it was also a recognition of their capabilities and a fulfilment of their dreams to do work they ve always wanted to be involved in, and Better Beginnings allowed them to have this opportunity. Some employees are willing to put extra time into the project because they know it benefits their community.

> I d never have thought that six years later [i.e., six years after her initial involvement with the project] it would be me that would be hired. Wow! Something I can do. And then, really, I m not so bad at it. I have a lot of fun! Now, I m [formally recognized as the person] in charge of what I do.

" **Training promoted persistence**

Volunteers and paid staff have had opportunities to gain work skills, but, more importantly, they learned the value of perseverance and commitment.

> I started off as a volunteer so I didn't just like jump in and just start working and get paid. I started from volunteering. I was just, you know, helping out and then they said, "Hey! You're doing such a good job, why don't you see if you could get paid by [student training program]?" And I said, okay. So . . . the job wasn't handed to me, I had to work my way to it, so in the future that's always going to be there saying, "Hey! Remember when you got the job at PFBB? You had to WORK for it." So, in other words, don't quit and always keep trying 'cause when you try you know you put effort into it and then you know you deserve that award at the end instead of something just being handed to you and you didn't work for it it's just given to you.

BENEFITS TO SCHOOL

School and Community Are More Integrated

Resident involvement has also had a positive impact on a school in which one of the Better Beginnings projects is housed. The school and community became more integrated, allowing for the development of closer relationships and opening up communication between teachers, parents and the community.

> [The] school has really opened up its doors to the community because of Better Beginnings being around. The school would have been more secluded from the community. . . . Now it s wide open and it s more used, and I think people in the community are feeling now more pulled to the school. It s not off limits. It s a space they can share and access. . . . [The] school [is] more accessible to parents and residents. . . . [The] school is nothing like it used to be prior to Better Beginnings . . . (field notes 10/18/95).

Teachers and Community Members Are Communicating

Teachers have also gained an understanding of their community as a result of their involvement in Better Beginnings committees, which many parents attend.

> Better Beginnings has given teachers an opportunity to see themselves in a different role in relationship to the community, and teachers have a better sense of community because they're going on committees with other parents . . . (field notes 10/18/95).

Parents Feel Welcomed in the School

The school is no longer a place where parents are uncomfortable. They now feel more integrated into the school and confident in expressing their opinions.

> Parents feel welcomed and feel part of the school. Would challenge any school to the number of parents who said that they feel welcomed . . . (field notes 02/23/95).

BENEFITS TO BETTER BEGINNINGS PROJECT

Volunteers Free up Staff Time and Make More and Better Quality Programs a Possibility

Since the residents who help to create programs have more invested in them, they also play a greater role in developing and running the programs. This gives staff time to plan and administer the programs, and to spend their time communicating with parents and helping them. The volunteer time also results in more programs and events that would not have been possible without those volunteers.

> I think with residents involved in any program or any event that we do, I think it allows for us to have, not less to do but less burden on our shoulders, so therefore allowing us to have an even better program . . . (staff focus group).

> In the kindergarten classes they never went on trips, and now they have three trips planned for the year because they have the volunteers (staff focus group).

Residents Know Needs of Community, Which Results in Successful Programs

Residents at most sites are extensively involved in the planning of project activities and events. The ideas for new programs often begin with the residents, and since they are experts in the needs of their communities, programs that are coordinated by staff and residents seem to be more successful. One site reported that this results in "programming that always fits much like a tailored suit" (O, p. 9). Much programming is participant-controlled, since residents request programs that would fill their needs, and sites usually try to provide such programs.

> I think for a long time . . . we pushed for the Breakfast Program and now it is here and we're saying, "see, it's successful.". . . So I think the parents have stuck around to finally see the benefits of saying, "We need a Breakfast Program, we need a Breakfast Program." And now we have one here and it's benefitting the project and the teachers are liking it . . . (parent focus group).

> The aerobics is one of them. The ballet, for little kids. Two of the programs that have gotten provisions for, and how that works is that somebody will come to me and say, "Can you do this?" And I will say, "Well, for you? Or do you know of other people that would want this program?" And they'd say yes. They'd go away and . . . I would get a list of all the people who want the program, so that then we'd know that there is a need (staff focus group).

Since residents are experts in the needs of the community, programs developed by residents themselves actually result in better attendance.

> Another benefit of resident participation in program planning is well-attended programs. The PEAS Group and the Community Drop-in are good examples of this. Both of these programs were built based on gathering residents together and asking them what they wanted the program to look like. The result was consistently good attendance.

Enhanced Program Relevance and Organization

In all the sites, resident involvement was seen as crucial in developing programs that were relevant to the needs of the community. Without resident input, programs might have never gotten off the ground or might not have been as effective. Therefore, one of the most important contributions to the project has been residents' knowledge of their community and what kind of programs would be effective in that community.

> It has ensured that our work is relevant to the needs of the community. In all levels (staff, volunteers, etc.), we have a strong community voice – parents who know what the challenges and needs are.

Organization Stays Accountable

Resident involvement has ensured that the project as an organization stays accountable for the programs it offers and the way in which it operates.

> Community residents know what their community needs. PFBB has taken full advantage of expert input. [Resident participation has helped PFBB] by keeping the organization accountable to the communities it serves, visible, and recognized.

Project is Held in High Regard in the Community

The outside community holds the program in high regard. Many residents were given the opportunity to make presentations about the project to politicians, teachers, and other professionals, which had a very positive effect on how the project was perceived in the community.

> Another thing we rely a lot on residents for, again back to the advocacy stuff where we, a lot of people have developed the skills to go out and do the public speaking stuff, talking to politicians, and other groups about what the project does. So right now, this project is held in high regard – one of the reasons for high parent or resident involvement, left, front and centre. That we have taken the 51 percent [i.e., a decision to have at least 51% of all committees be comprised of residents], even though we may not have 51 percent in some of our committees, we're still make sure that residents are [prominent] in all of the committees and really and truly have a voice . . . (staff focus group).

Other Benefits

The collaborative relationship between staff and residents has resulted in the creation of an environment built on trust, which helps the project quickly build trust in the community. One site spoke about using the trusting relationship as a promotional tool to draw new participants to the project. Staff s efforts to nurture the talents of community residents are partly responsible for residents taking on a greater ownership of the project, which benefits the project in the end since staff can concentrate more on providing essential services. Resident involvement has also benefited the project because staff are educated about different cultures in the community, more skills are brought to committees, and the project s mandate for working with the community is fulfilled. Staff are also satisfied by the fact that residents show their support for Better Beginnings programs.

BENEFITS TO COMMUNITY

Through their involvement and experiences at Better Beginnings, residents act as role models for others, influence other agencies, and advocate for all community residents. Through the development of a belief that the community could be a better place, the physical safety and appearance of the community has improved, and community residents now feel more responsibility for community members and problems.

Residents as Role Models

Children and the community have benefited from seeing involved residents model positive behaviours. Parents were also happy that they learned how to be better role models for their children.

> One dad noted that the many community improvements increase the local kids pride in an otherwise pejoratively labeled neighbourhood. He also noted that, because of his involvement in the project, he is now helping kids in the community who are not directly involved (they re older than the target group). As a result, these children and adolescents are learning that some adults can and do care and can listen without judging them.

All Residents Benefit From Social Action

Some of Better Beginnings, Better Futures communities have experienced changes that resulted from residents coming together to take action for needed services and programs. As a result of residents taking responsibility for social action within the project, the community benefits from improvements, such as a four-way stop sign and meal programs, that residents have fought for.

> Participants noted that there have been many improvements to the community as the result of Better Beginnings. These include tangible things such as a four-way stop, meal programs, food box, parties and trips.

> We're a much stronger community, much stronger. I mean we ve done endless things. [One of the Better Beginnings residents], there, she gets people to go around and get petitions and things from the city council. We have that four-way stopping flashing light at the bottom of the hill. A little boy [had been] killed here. We have our other stop signs and things too. We've gone out there and fought for it. We fought for our community but it also hits the press and it's been done. Better Beginnings did it right.

Resident Influence on Other Agencies

Through their experience in dealing with agencies within the project, many residents have learned that they can also influence other agencies. The standards set by Better Beginnings have now become standards that residents believe all agencies should follow, and they are not afraid to ask them to.

> "Through my involvement with Better Beginnings I joined an introductory panel at the [local] Hospital in 1991 and got very involved in obstetrics. I assisted in the renovation of the floor, became Chair of the Maternal and Newborn Program Community Advisory Panel, and I am an active member of the Neighbourhood Relations committee, which has a great influence to the Board of the Hospital, much like the Better Beginnings Parent Group did. Through the hospital, I was contacted to do consulting for the Health Canada Family Centred Care Maternal and Newborn Guidelines for Health professionals, and give my feedback and ideas from a "'consumer" perspective. This was an enjoyable experience, as I was one of the only consumers ever to have an impact on such material.

Development of a Belief that the Community Can Change for the Better

Many residents have seen the reopening of parks that were once considered unsafe and now are busy leisure parks, and they attribute this to the project s efforts to improve the community. This has influenced residents' beliefs about their community in a positive way.

> Better Beginnings has helped people to believe in their community. A number of respondents noted that the North End of Kingston has been given a number of negative labels and this contributed to people feeling ashamed of their community and hopeless about change. Likewise, residents had seen several organizations come and go and were skeptical about the possibility of change. With Better Beginnings, people believed that the community could be different.

One long time-member of the project remembers how encouraging it was to participate in the Vision Day. She remembers that you couldn t tell the difference between the community and agency people.

Decreased Use of the Welfare System

While some residents who are on welfare increased their feelings of worthiness as a result of the opportunities Better Beginnings has provided, others have decided to get off welfare altogether after realizing they can contribute to the workforce in a meaningful way.

> Being involved with Better Beginnings has made me more confident, has given me self-esteem. Even if Better Beginnings is gone, I ll have a job. I won t go on welfare anymore (March 1997).

Malnutrition and Cases of Abuse are Recognized and Acted Upon

As part of feeling a greater sense of responsibility toward their community, residents and staff keep an open eye for problems families may be having and ensure that these problems are dealt with immediately, and, ideally, prevented in the future.

> There have been some changes in the community. People aren t getting away with things, like if they see kids getting abused, BB will make sure that the right people are

> contacted. Or if they re not being fed, there s more help, with them being there. Before, nobody really cared, they never did anything (June 1997).

Improvement in Physical Appearance of Community

Residents spoke about the communities cleaner physical appearance, and felt this was partly due to Better Beginnings initiatives and partly due to the residents greater sense of ownership and pride in their communities.

> I think one of the things that is evident almost immediately is the recognition that this is our home. We, as members of the community, live here; . . . this is our home. Respect for the physical community, the fact we've planted gardens, flowers and that we've been able to renovate [the local park] by putting in walkways, trees and that kind of thing, is the first evidence that people feel at home. . . . People have gotten together and raised issues . . . to preserve green space in the community . . .

Sense of Safety and Security

Several residents felt that their communities had become more safe and secure places for themselves and their children.

> I think people feel safer too with Better Beginnings here. The Project Coordinator has a big part in that, because she did a lot of work with getting the police to come into the community and work with the kids. I guess the more the people get to know each other, the more they feel safe, too.

Residents are More Comfortable Actively Dealing with Agencies

Residents are confident and comfortable in dealing with community agencies as a result of their involvement in the project.

> It's made me feel more comfortable, like getting, being involved in the school with . . . the teacher, because we . . . parents are able to be in the school.

Sense of Community, Belonging and Openness to Experience

For many residents, the benefit of participating in the project has been a reduction in their social isolation, and the development of a social support network that was almost non- existent before they became involved. Over time, community residents began to feel a sense of connection with other residents and the larger community, began to take pride in their community, and developed a sese of ownership and responsibility for their neighbourhood. The supportive and nonjudgmental environment promoted by Better Beginnings also resulted in staff and residents learning about and accepting different cultures and personalities.

" **Reduction in social isolation, boredom, loneliness and fear**

Several residents spoke about the friendships they had made through their participation, and how Better Beginnings helped to break the isolation they had experienced. Better Beginnings sites maintain an open door policy, in which anyone can drop in and immediately experience a break from their isolation.

> Better Beginnings offers the community a break from their isolation. [I m] no longer isolated, there is always a playgroup or something going on that you could be involved with to have a voice in your community.
>
> [If it were not for the project] I wouldn t have any friends, I wouldn t have a working group. . . . I d be lost, maybe I wouldn t be here anymore.

" **Increase in social support through development and enhancement of support networks**

The opportunity to meet other residents was another benefit of participation. As a result of meeting so many people through Better Beginnings, residents feel tied to the people they have met and to their community. The social contact offered by Better Beginnings was a way to expand their social network, make friends, and have someone to do things with. Some residents saw their friends as sources of support and help if the need arose. Many felt that the friends they met could be considered as extended family.

> As for me, the best part was meeting all these nice people in the community. Before I was involved, I lived here for 13 years and didn't even know as many people as I got to know in the two years since I've been involved. These are the best friends I ever knew. I'm not involved anymore in Onward Willow, but I still come and see all my friends. This is the best community I've ever lived in. I've lived in several cities for over 25 years, and, in my opinion, this is the best place.
>
> Through volunteering in the kitchen, you meet other parents and are able to provide support to one another. . . . We support each other. We love each other . . . (field notes, 01/09/95).

" **Sense of ownership and responsibility for community**

Residents that become involved in the project have developed a sense of ownership and responsibility for their community, which has influenced the decision making for the project. Rather than considering themselves or the project in isolation, residents make decisions that are best for the community as a whole.

> Some things are better now. . . . Parents take responsibility for other people's children . . We [made a difficult decision] because it was the best for the neighbourhood, not because it was up to us personally. . . . [In the future] I can see me still working with these people and looking for more funding and just trying to help a lot more people get through the way I did . . .

" **Community is a good place to live**

While many Better Beginnings communities have had pejorative labels, over time there has been a complete turnaround. Some residents have become so attached to the community that they have moved back to the neighbourhood after being away for a while.

> I'm not going to let this fall by the wayside, as I ve seen too many changes. Too many positive changes. Big changes in the community. People stand up in front of groups of people, and television, or anything else, and we are proud of our community. We like living here; people don't want to move out. In fact, people who had moved out have moved back now. They want to be in Better Beginnings, they want to be part of what's happening.

" **Greater sense of connection among community residents**

Many residents felt a greater sense of connection with other people in the community and attributed this sense of connection to the presence of Better Beginnings.

> It's a lot quieter and people are pretty respectful. And we know each other, like I know a fair amount of people around here. If they need stuff, they can come here or if they need help they can go to Onward Willow. . . . There's a connection. If people have problems, they can phone and have people to talk to. . . . You'll drive by a house for sale and you'll think, "That's a nice house for sale," and then I'll go, but it's not in the Better Beginnings neighbourhood and I really don't want to leave, because it's working so well here . . .

> There's definitely been lots of changes here. It's a lot quieter, people are talking to their next-door neighbours no matter what race they are. I have participants that are visiting with their neighbours no matter what race they are; . . . visiting with their neighbours and they never would have before. Last year, we had a potluck here at the Community Centre put on by Better Beginnings and the Tenants Association. And we had one family who came over for the potluck, that had lived here for eight years, and that was the first time they ever set foot in the Community Centre. I was on the association and I could never get them out to anything, but they came to this potluck! It was amazing! I think that's because Better Beginnings is around, and people know it. I think people are getting really connected.

" **Understanding and acceptance of different people, personalities, cultures**

A supportive, respectful, nonjudgmental, nonracial environment is promoted at Better Beginnings projects. This has had a great impact on the views of many residents about people from cultures other than their own. Residents talked about this impact as if Better Beginnings had broken barriers that previously precluded them from relating in any way with people of other cultures. Both staff and community members learned to have patience, to be empathetic and understanding, to have an appreciation of other cultures, and to accept others as people like themselves. It appears this change in attitude toward other cultures would never have occurred for most people if they did not have encounters with those of other cultures in an environment like Better Beginnings. Some residents felt so supported by the people they have met through Better Beginnings that they consider these people as their extended family.

> Maybe I was a little racist before. Maybe it scared me, and when you go to the Community Centre and they are there, they give you a little smile and they don't know how to talk to you, it's less scary. I know their culture, I heard them talk, I know the problems that they have, so I'm less tempted to judge them. I'm even tempted to have discussions with them and meet them. I find that a program like that mixes up the cultures well. It's less difficult to cross the bridge it's like it breaks the barriers.

" **Development of a better understanding and respect for community**

Some residents had previously had little contact with their neighbours and the community, and their involvement in the project helped them to realize how others saw the community. This fostered a better understanding of and respect for the community.

> In the springtime I did the whole needs assessment thing. It was good to knock on doors and talk to people. I would never think that we're going to sit here for three hours with a

group of people fixing the questions and then going out. It took a lot of time but I think you get to see how people in the same community see the community in such a different light. How could I, who live in Apartment X, and someone who lives in Apartment Y, perceive this place as so different?

LESSONS LEARNED

" The involvement of neighbourhood residents in developing, implementing and publicizing programs is crucial to ensure that programs meet the needs of the community and have high levels of participation. Participation of residents can be enhanced by providing childcare for those attending meetings, by providing food or snacks, or by other means that make participation comfortable for those who come out.

" Programs need to be responsive to community wants and needs. Listening to the community and acting quickly to serve them can have a positive effect on program participation. Some of the most heavily used programs have been ones that were requested by the community.

" Community members need to give a long-term commitment to the program, because lasting, meaningful change takes time.

" Recruiting parent volunteers is essential to the success of the program. All of the project coordinators felt that the parent volunteers were vital to the project.

" Hiring resident parents can increase the programs success because those parents are sensitive to the community needs, they can relate to the different ethnic groups, and they seem to elicit greater levels of trust and participation from the community.

" Having teenagers as volunteers and paid employees in the program is beneficial because they develop bonds with others outside their age group and it allows the community to see the teens in a positive light. This contributes to the community s feelings of safety.

" However, residents should be hired on the basis of their skills, not just because they have experience living in the community.

" Regular consultation with the community is vital for program design, implementation, and evaluation. The volunteers who sit on the committees know what the community needs and will ensure that the programs continue to meet the needs of the families in the neighbourhood.

" It is important to thank volunteers for all of their hard work. Recognition dinners and honorariums are effective ways of showing appreciation to residents.

" Meetings and events should be less formal and more social to be welcoming to community residents; having food and "treats" is one important way of providing a more social atmosphere and promoting a sense of community.

" The kind and degree of benefit that residents experienced appeared to relate to the type and level of their involvement. Individuals who participated in the planning and development of programs as members of steering and working groups, who were hired as program staff, or who had spoken on behalf of their project to outside audiences, were the ones who appeared to derive the greatest benefit.

Chapter 11

PARTNERSHIPS AND PROGRAMS: SERVICE-PROVIDER INVOLVEMENT IN BETTER BEGINNINGS, BETTER FUTURES

INTRODUCTION

In Better Beginnings, Better Futures, partnerships developed among the demonstration projects, other organizations serving the communities, and local residents. This creation of partnerships has resulted in new programs, increased resources, and improved working relationships among partners in the demonstration communities, but Better Beginnings also illustrates plainly the limits of what can be expected from voluntary collaborations between service organizations. It also provides useful guidance about how to proceed under similar circumstances.

This chapter provides a brief summary of the findings in the main service-provider cross-site report (Cameron, Hayward, McKenzie, Hancock & Jeffery, 1999). The evidence for these findings can be found there.

Government Mandate for Service-Provider Integration

According to the original Request for Proposals (Government of Ontario, 1990), the program model for the Better Beginnings, Better Futures sites should be an integrated model:

> The Integrated Model requires that within a given community, services for children and families must blend and unite. Integration minimally means that service-providers and educators develop common goals, objectives and collaborative plans for meeting these intents. Conceptually, the Integrated Model moves beyond coordination of services to as full a merging of service planning and delivery as possible (p. 4).

For the younger cohort sites, this meant that programs aimed at reducing risks and promoting optimal development for the pre-natal/infant age group must integrate with programs aimed at reducing risks and promoting optimal development for preschoolers (p. 5). For the older cohort sites, the programs for preschoolers must integrate with programs directed toward reducing risks and promoting optimal development for early elementary school-aged children (p. 5). The Request for Proposals provided the following guidelines for integration:

1. Adapt or circumvent traditional professional or bureaucratic limitations to meet the needs of children and families.

2. Eliminate inter-ministerial, inter-agency segmentation.

3. Establish a locally appropriate plan for integration which focuses on:
   - joint personnel, such as hiring of a local Better Beginnings Director, or the scheduling of bi-weekly meetings of the principals and directors, or producing a new inter-organizational chart;
   - common facilities, toys, equipment, rooms, secretaries, computers, supplies;
   - collective training of staff; and/or
   - improved allocation of financial and staff resources for all activities from education and home-visiting to recreation and parent training (p. 10).

In addition to developing an integrated program model, the sites were directed to coordinate with other programs and resources which provide services for children and families that are identified as having problems beyond the scope of the primary prevention services (p. 10).

DEFINING SERVICE INTEGRATION

Although there is inconsistency about terminology in the service integration literature,[1] there does appear to be some common understanding that there are at least three different approaches to integration (Aiken, Dewar, DiTomaso, Hage, & Zeitz, 1975; Gans & Horton, 1975; Hastings, Roberts, Jodin & Hung, undated):

- **Voluntary Integration** - a set of organizations are connected loosely and on a voluntary basis. There is no independent structure to provide coordination, and each agency retains its own autonomy. Each organization controls its own services.

- **Mediated Integration** - a set of organizations are linked through the efforts of one organization. The coordinating organization takes primary responsibility for guiding the integration, but may also provide direct services. The participating organizations are involved on a voluntary basis.

- **Directed Integration** - One organization has a mandate, often including legal and funding authority, to direct the integration of a set of organizations and has the authority to impose decisions on participating organizations. Typically, the coordinating organization does not provide services, but is devoted exclusively to coordinating activities.

For those interested in developing organizational partnerships, little guidance is available on specific strategies. The development of practical strategies for fostering service integration or collaboration is still in its early stages.

The vision of service-provider involvement at most Better Beginnings sites remained consistent over the duration of the project. There continue to be two general roles for service-provider involvement in Better Beginnings, Better Futures. Service-providers were to participate in management and administration, and to contribute to the delivery of the programs. All sites, except Sudbury, continue to have service-providers participate in project governance and management. At most sites, service-providers continue to participate in program delivery. In Cornwall, Guelph, Ottawa, and Kingston, the original vision of integration was broadened to include residents along with service-providers. Resident participation continues to be an important aspect of the vision at all of the sites.

There are two visions of service integration at the sites: (1) a hub-and-spokes vision; and, (2) a web vision. In the hub-and-spokes vision, the project remains the centre of planning and implementation for project activities. Agencies function as the spokes, and participate in a variety of activities at the sites. Their involvement with each other is mediated by the project with few, if any, external connections between agencies. Currently, there is commitment to this vision at the majority of sites (Highfield, Guelph, Kingston, Toronto, Sudbury).

[1] Several authors have come to the conclusion that there is a lack of clarity and agreement in the social integration literature (Aiken *et al.*, 1975; Deber, Rondeau, & Beatty, 1990; Hagebak, 1979; Martin, Chackerian, Imershein, & Frumkin., 1983; Redburn, 1977; Weiss, 1981). Some authors (Deber *et al.*, 1990; Martin *et al.*, 1983; Redburn, 1977; Weiss, 1981) have pointed out that, while there are some generally accepted definitions, they are too broad and vague to be useful in clarifying the concept.

The web vision promotes relationships among participating agencies within and outside the project context. The agencies involved create a web of services and resources that are available to the community. In this vision, the role of the project is to assist in creating links between itself and other agencies as well as facilitating links between different agencies. Currently, the vision at two sites (Cornwall, Ottawa) is most indicative of the web model.

The focus on visioning that characterized the early years of the projects has given way to collaboration in the creation, planning, and delivery of programs. In defining and implementing an integrated model, many of the sites felt hampered by a lack of direction from funders and lack of clarity about the roles and responsibilities of different stakeholders. Furthermore, the sites were concerned about what they saw as unrealistic expectations outlined in the Request for Proposals (Government of Ontario, 1990). Most sites report little or no success in circumventing traditional barriers, and consider elimination of inter-ministerial and inter-agency segmentation beyond their reach. Site reports offer the opinion that, given the size and scope of the demonstration projects, the expectation that Better Beginnings, Better Futures would be able to effect broad change in delivery systems was unrealistic.

Overall, service integration at most sites closely parallels a voluntary or mediated integration. The language of partners or partnerships is used at most sites (Cornwall, Highfield, Guelph, Toronto, Sudbury) to describe the relationship that exists between the sites and service agencies. Most sites have witnessed a strengthening of their relationships with other community organizations over time, and are working to encourage these partnerships. Service-providers are actively involved in programming with Better Beginnings, Better Futures, and there is an increasing reciprocity in the exchange of resources and expertise.

MOTIVATION FOR PARTNERSHIPS

There is general agreement in the literature about the motivation for service collaboration. One common argument is that existing service networks are excessively fragmented, overly complex, and lead to duplication, waste, and confusion among service users (Cameron, Karabanow, Laurendeau & Chamberland, 1999; Family Resource Coalition, 1993; O Looney, 1995; Wharf, 1994). Consequently, there is the belief that inter-organizational partnerships will improve the efficiency, accessibility, flexibility, and responsiveness of social services (Cameron *et al.*, 1999; Harbert, Finnegan & Tyler, 1997; Taylor, Brooks, Phanindis & Rossmo, 1991). Further, some argue that services will be enriched and more effective for consumers (Family Resource Coalition, 1993; Kagan, 1991).

Recently, some authors have described more tangible reasons for collaborative efforts; that is, reasons that would directly benefit those organizations involved. Kagan (1991) argues that collaboration may increase access to resources or compensate for needed resources. Bailey and McNally Koney (1996) argue that the political climate favouring reduced spending and tax cuts increases competition among social service organizations. They assert that:

> As competition increases, collaboration is gaining attention as a method whereby local health and social service organizations, community leaders, and neighbourhood businesses can increase their access to resources and policymakers (p. 604).

Being in agreement on basic principles and having similar mandates were common reasons for service-provider involvement in Better Beginnings, Better Futures. Six sites suggest that having similar goals and values remains one of the primary reasons for agencies becoming involved. Two indicate that commitment to enhancing service delivery and to developing a collaborative model were factors. Three

sites report that some agencies were motivated by their perception that they would be able to provide more services to children and families in the community. Three sites stated that service-providers were motivated by increased access to services and quality programming for children and community residents. Four of the sites report that agencies became involved in order to better carry out their own mandates. Collaboration between the project and service-providers allows for the sharing of space, for greater access to programs for children and families, and for both the project and the agency to disseminate information about its programs and activities.

In addition, three sites indicated that some organizations initially became involved with the project as a way of securing monies to operate their own programs and activities, which were threatened by funding cuts. Several sites indicated that they had developed a positive reputation through their commitment to children, families, and communities, through the programs that they offered, and because of their favorable working relationships with other community organizations. In turn, the sites reputation has encouraged other agencies to become involved with them.

A PROJECT FOCUS FOR PARTNERSHIPS

Early in the sites development, service-providers served two roles (Cameron, Vanderwoerd, & Peters, 1995): (1) as expert consultants and advisors in program development and (2) as project-governors and decision-makers. Through the creation of structures such as small working groups and sub-committees, many of the sites were able to use the professional expertise of service-providers to develop the various components of the program model (e.g., home visitors, childcare, and nutrition). Similarly, at all the sites, service-providers were able to participate in the governance of the project through steering committees. At most sites, service-providers participated in the hiring of staff and, at four sites, they helped with training initial project personnel. They assisted in joint supervision of program staff at two of the Better Beginnings, Better Futures sites.

At all the sites except one (Sudbury), service-providers continue to contribute to decision-making through participation on working groups and steering committees. The role of service-providers has changed as the demonstration sites have developed. In the early stages, service-providers had a broader range of involvement, including greater involvement in day-to-day management. However, as project staff were hired, service-providers focused more on participating in project governance, and they provided guidance for program content and staff training.

Many of the sites continue to have agency representation from many service sectors, including social services, health, education, and other, non-ministerial, agencies. The number of agencies involved ranged from five to thirteen in 1999. Since the time of the original cross-site report, some sites have witnessed an increase in the number of primary agency partners (Cornwall, Guelph, Kingston), others have seen few changes (Highfield, Ottawa, Toronto) and one (Sudbury) has fewer primary agency partners. Despite the fluctuations that have occurred over the past few years, a stable core group of agencies continues to be involved at most sites. Early in the project s development, small groups or committees were established in different areas such as community development, childcare, pre-natal/early childhood supports, or finances. Service-providers with relevant expertise participated in these working groups. Through similar structures, service-providers continue to contribute to planning and development of programs.

The projects both provide and receive resources from other agencies to enrich programming. The most common exchanges between the project and service agencies are the use of space and facilities at all the sites, and training for staff and residents at all sites except Sudbury. There has been an increase since 1995 in the sharing of resources, equipment, and space by agencies at four sites (Highfield, Guelph,

Toronto, Sudbury). In addition, there has been an increase in sharing of training and expertise at two sites (Highfield, Guelph).

At the Highfield, Ottawa and Sudbury sites, there has been an increase in collaboration between the demonstration sites and community agencies to create new programs. Two sites (Cornwall, Guelph) have partnered with agencies to deliver core Better Beginnings, Better Futures programs, resulting in increased participation by outside agencies in delivering site programs. Some sites have made arrangements that have allowed for the provision of staffing by an agency in return for shared programming (Highfield, Kingston, Sudbury). Other contributions include consultations and administrative or staffing supports. Sites continue to provide joint programming with other organizations, and some sites have evolved towards more joint programming efforts and greater sharing of resources with other agencies (Cornwall, Highfield, Kingston, Toronto) or more stability in joint programming relationships with service-providers (Guelph).

BETTER BEGINNINGS, BETTER FUTURES AS CATALYST

Better Beginning, Better Futures has played a number of roles in fostering the collaborations, ranging from supporting ad hoc collaborations to developing formal agreements. Better Beginnings, Better Futures acts as a catalyst, drawing organizations and agencies together to collaborate around the needs of children and their families. There has been general recognition from service-providers that there would have been no collaboration without the initiative of Better Beginnings. As the projects added staff, at least two sites observed a growing dependency by agencies on Better Beginnings staff to initiate involvement and to coordinate the practical details of collaboration:

> When staff were hired the responsibility of facilitating integration seemed to lie with the Project's supervisory staff. ... The Project's staff members have taken the lead in coordinating most of these programs. They have taken responsibility for scheduling planning meetings, evaluations, booking space, purchasing food and preparing snacks, setting up and taking down program equipment, and for calling participants with announcements. (Toronto)

OBSTACLES TO PARTNERSHIPS

Increased professionalization and specialized agency mandates make connections between service organizations more difficult. Each group of professionals has its own set of values, assumptions, and ideologies, which may not be congruent with those of other professional groups (Aiken *et al.*, 1975; Bruner, 1991). Hagebak (1979) argues that these agency and professional blinders make it difficult to conceptualize anything as comprehensive as an integrated local delivery system. Morrill (1996) concurs:

> ...the character of the existing delivery system includes significant interconnected and self-reinforcing features, such as categorical program fragmentation and categorical funding. The reformers are continually faced with a never-ending set of issues that forces them back towards the status quo and eventually exhausts them (p. 192).

O Looney (1997) argues that service integration projects may fail because of a lack of clear definitions and an identifiable starting point for the project. Divergent pressures and self-interests make it difficult to achieve positive relationships and trust between participants (Hagebak, 1979). Many authors recognize that differences in legal mandates, operating regulations, and accountability methods pose formidable obstacles to greater service integration (Beatrice, 1990; Bruner, 1991; Deber *et al.*, 1990; Hagebak, 1979;

Koppich & Kirst, 1993; Weiss, 1981). Several authors comment that the lack of funding to support integration processes or financial incentives for agencies to integrate are significant barriers (Bruner, 1991; Hagebak, 1979; Koppich & Kirst, 1993; Weiss, 1981).

Some authors have pointed out that integration is difficult simply because it requires a great deal of time for systems to change, and for relationships to develop between people and organizations (Bloomberg, 1994; Bruner, 1991; O Looney, 1997). In addition, integration invariably involves the shifting of influence and resources among organizations. Resistance to giving up control and power (Koppich & Kirst, 1993; O Looney, 1997), protection of traditional areas of service (Weiss, 1981), and clarifying and defining roles for participating organizations (Ellmer, Lein, & Hormuth,1995; Karp, 1990) all present substantial barriers to achieving integration.

The Better Beginnings, Better Futures sites continue to encounter several obstacles to collaboration. By far the most commonly mentioned is severe funding cuts to many of the service-providers involved in the collaborations. The lack of time and resources available at individual agencies seriously decreased the resources available to the collaboration.

Many of the sites have alluded to an inability to communicate and solve problems effectively, due to a lack of trust between agencies and between service-providers and residents. The length of time required to develop trusting relationships continues to be a common barrier to the involvement of service-providers. Funding and time constraints, resulting in inconsistent representation and irregular attendance on the various committees, hindered involvement.

At least two sites experienced some difficulty establishing common objectives for the collaborative effort because service agencies had differing mandates and different ways of working. Some service-providers felt they could not justify their involvement to their Boards of Directors given that their mandate was to serve a broader population (based on age or neighbourhood) than Better Beginnings, Better Futures does.

The negative attitudes of some community members towards professionals and the attitudes of some professionals were identified as obstacles to involvement. Although all of the sites worked to overcome these obstacles, Toronto identified negative perceptions as a challenge more often than the other sites. The Guelph site reported that a barrier to involvement was the difficulty in sorting out issues of power and control. Three sites suggested that an obstacle to encouraging service-provider involvement was finding appropriate balances in participation by service-providers, community residents, and staff.

WHAT WORKS WELL IN PARTNERSHIPS

The great diversity in the types of service integration initiatives described in the literature limits our capacity to identify general patterns and to draw lessons for future service integration efforts. Nonetheless, with these limitations in mind, it is possible to abstract some lessons for service integration projects from the literature reviewed.

Merkel-Holguin, Printz Winterfeld, Harper, Coburn, and Fluke (1997) recommend developing a statement of philosophy to guide the implementation of neighbourhood service integration. They also suggest involving service-providers from a broad range of agencies serving the neighbourhood, as well as neighbourhood leaders, in the planning and implementation of the project, including their involvement on a local advisory board. Substantial time should be allocated for planning, start-up, and coordination. Co-location of key services is identified as an important strategy, as are the development of joint team staffing and shared agency workloads. Ongoing communication among all stakeholders is believed to be

critical and should be reciprocal between community residents and inter-agency team members. Training and education of agency personnel, project staff, and the community members is also important.

Many authors note that having a common vision, as well as common goals and values, is important in helping a collaboration to proceed smoothly, and to overcome barriers when they arise (Armstrong, 1997; Bailey & McNally Koney, 1996; Deber *et al.*, 1990; Gray, 1985; Greenley, 1992; Hastings *et al.*, undated). In some cases, researchers have argued that participating organizations with similar funding sources, service populations, and geographic areas are important in making collaborations more successful (Bloomberg, 1994; Deber *et al.*, 1990; Taylor *et al.*, 1991; Yessian, 1995).

Collaboration initiatives need to invest a considerable amount of time into their development process (Cameron *et al.*, 1999; Ellmer *et al.*, 1995; Gans & Horton, 1975; Hassett & Austin, 1997; Merkel-Holguin *et al.*, 1997; O Looney, 1994; Vander-Schie, Wagenfield, & Worgess, 1987). The importance of commitment to the collaboration, good communication among partners, and a willingness to be flexible are cited as facilitating factors in collaboration efforts (Adams & Nelson, 1997; Armstrong, 1997; Bailey & McNally Koney, 1996; Dinnebeil, Hale, & Rule, 1996; Ellmer *et al.*, 1995; Harbert *et al.*, 1997).

Good leadership skills also are necessary. (Armstrong, 1997; Bailey & McNally Koney, 1996; Kagan, 1991). Many authors note the importance of those with decision-making authority being involved in the collaboration (Bailey & McNally Koney, 1996; Ellmer *et al.*, 1995; Greenley, 1992). In addition, it is necessary that front-line staff and community members accept and understand the purpose of the collaboration (Adams & Nelson, 1997; Bloomberg, 1994; Hassett & Austin, 1997).

It is also necessary to have sufficient resources (Deber *et al.*, 1990; Ellmer *et al.*, 1995; Kagan, 1991). These usually include money, staff, technology and training (Kagan, 1991) Some authors claim that successful integration depends on ongoing monitoring and evaluation because participants need feedback on how they are doing and what adjustments should be made (Greenley, 1992).

The Better Beginnings, Better Futures sites have identified what they have found to be useful approaches to facilitating service-provider involvement in their voluntary collaborative efforts. Good interpersonal relations based on mutual trust and respect emerge as a key factor to working together effectively. The importance of allowing sufficient time for relationships to build and for the collaboration to evolve is recognized. Respectful and trusting partnerships between service-providers and community residents develop as they get to know each other personally.

Several sites commented that developing good working relationships is easier when agencies have existing commitments to the community. These agencies often share similar philosophies with Better Beginnings, Better Futures and are familiar with the residents and the community.

A few sites mentioned specific formal mechanisms that helped to build relationships between the project and service-providers. In recognition of time constraints, several sites developed small, task-focused groups in which both residents and service-providers participated. In addition to being a comfortable way to introduce residents and service-providers, they were seen as useful structures to facilitate service-provider involvement in program development.

While it is essential to have the endorsement of front-line staff, individuals with decision-making authority also need to be involved. Front-line staff need to understand the collaboration so they can provide service appropriately. Decision-makers need to champion the collaborations and to make supportive policy decisions within their own agencies.

BENEFITS FROM PARTNERSHIPS

Kagan (1991) contends that collaborations have two broad goals: improving direct services for families and fostering change in delivery systems. However, there is debate about whether collaborations should be held accountable for both types of outcomes. Despite these difficulties, Kagan states that:

> ... through case study and other qualitative methods, evidence that collaborations are making a difference is mounting ... Often expressing their success in terms of enhanced trust, communication, and understanding, collaborators hasten to report that simply bringing together diverse groups who have never spoken, thereby establishing the collaboration, is an important accomplishment. And indeed it is (p. 74).

Ellmer *et al.* (1995) describe the Texas Children s Mental Health Plan (TCMHP) as a state-funded interagency initiative developed to provide a range of core services to children with emotional disturbance and their families (p. 346). Based upon a qualitative investigation, including interviews, researchers observations, and a review of documents, the authors report many positive impacts:

> ... agencies developed a better understanding of each other s mandates and limitations. With this new background information available, agencies opened better lines of communication among themselves, making further collaboration easier to both conceive and implement. As agencies interacted and worked with each other, systemic problems were most easily discovered and corrected. Another positive outcome of the TCMHP was the development of more extensive and improved services ... (p. 350).

On the other hand, integration efforts often have not lived up to expectations. Despite the studies suggesting positive impacts, there are more studies and reviews which question the impact of service integration, particularly on improvements in outcomes for users of services. For example, Bickman (1996) reports that an 80-million-dollar project to test whether a continuum of mental health and substance abuse services for children and adolescents is more cost-effective found that the new system had better access, greater continuity of care, and more participant satisfaction, and used restrictive services. But there were no improvements in service participant outcomes. He concludes that ...[service integration]...is unlikely to improve client outcomes unless it also reforms the actual services delivered (p. 699).

Pandiani and Maynard (1993) conclude that despite the intuitive and common sense appeal of interagency collaboration, the results reported in the literature on its effectiveness are checkered at best (p. 87). Similarly, Rotherum-Borus (1997) concludes that the data [on service integration] have not supported the importance of this factor for improving children s outcomes ... (p. 139). The most common conclusion in the literature is that there is insufficient evidence to judge whether integration improves service outcomes, reduces costs, lessens service fragmentation, and improve services accessibility (Deber *et al.*, 1990; Frumkin, Imershein, Chackerian, & Martin, 1983; Martin *et al.*, 1983; Oliver, 1990; Pandiani & Maynard, 1993; Runkle-Hooyman, 1976; Wharf, 1994).

Perhaps the most dramatic impact of Better Beginnings, Better Futures partnerships has been the increased level of programming and resources available to residents. Besides delivering programs directly through the Better Beginnings, Better Futures projects, agencies were drawn into the community by the projects space, resources and auspices. All of the sites described many examples of programming and resource benefits from service-provider partnerships with Better Beginnings, Better Futures.

Increased visibility of participating agencies within the community is one of the most frequently mentioned benefits to service-providers from their involvement in collaborations. Motivations for becoming involved in a collaboration are diverse, yet the entrance gained to the community by being affiliated with a grass-roots project is a common enticement.

Greater efforts at joint programming and sharing of resources have expanded programs in a number of ways. A few successful programs have been picked up by other service-providers, some programs are being offered outside of the Better Beginnings, Better Futures neighbourhood, and some programs are enriched by a sharing of resources. At some sites, Better Beginnings, Better Futures plays a role in assisting groups to obtain additional funding to help them expand or to create new resources, especially outside of the Better Beginnings, Better Futures mandate. In addition, Better Beginnings, Better Futures encourages other services and agencies to enter their neighbourhoods by sharing the resources and reputation of the Project. Through cooperation on this practical level, services have been expanded to provide a greater range of resources for the community.

Better Beginnings, Better Futures programs also benefit from the supports provided by other agencies. The types of assistance offered by other programs include supervision, training, technical expertise, space, resources, and equipment. As service-providers collaborate more often, they learn more about the programs offered. They can better use the resources available by making more appropriate referrals for the residents who need assistance. Sites reported that larger referral networks have evolved and are considered a benefit of collaboration.

Some Better Beginnings, Better Futures sites have developed new structures to enable other organizations to cooperate. Coalitions or other structures have been developed to look at issues that do not fall within the Better Beginnings mandate, but in which the project participates. For example, the Community Action Group in Cornwall incorporated as a result of the demonstration project s efforts to allow other community organizations to cooperate in prevention initiatives. At the Guelph site, the neighbourhood model of partnership has been adopted by other communities in the city. The Toronto site s childcare working group evolved into a childcare network for dialogue among childcare providers in the neighbourhood.

A benefit of working with other agencies and community residents is the learning that occurs. Not only do agencies learn more about the community and its resources, but they also learn how to work more cooperatively with other service-providers. As a result of learning about communities and resident involvement, service-providers report new ways of assessing how accessible their services are. In addition, many of the sites noticed a greater level of commitment among service-providers as a result of participating in an effective collaboration. Struggling to develop common values and vision to provide better can positively influence the way agencies work together. This experience is transferable when forging partnerships with other agencies:

> That's true, we're speaking of two agencies which used to be acting like cat and mouse. But since they got around our table, they've put their opposite opinions aside and they're now supporting each other. They share their expertise with the project, and both agencies benefit from this experience. (Toronto)

> When the project began to develop their health and family support programs, both the public health department and the community health centre participated. Although these two agencies had similar mandates and served a similar group, they had rarely worked closely together prior to Better Beginnings. As a result of their work together with the project however, these two agencies have begun to develop a relationship and held discussions around ways in which their health

services can be offered in a more complementary way. (Guelph)

Our organization has gained a new idea of how to work in a relationship mode...this has had a positive effect on our ways of working. (Ottawa)

THE UNIQUE SITUATION AT WALPOLE ISLAND

The Walpole Island experience is unique among all eight Better Beginnings site. The philosophies and values of the Native community influence all aspects of Better Beginnings. The Band Council, which has the power to restructure community services, has influenced the integration of services not only at Better Beginnings, Better Futures, but for all services provided on the Island. The Band Council has promoted service integration by setting up the Partnerships Task Force (developed in 1996), which has a representative from all social and educational services of Walpole Island First Nation, including Better Beginnings. A hub-and-spokes vision may be present at this site, as it is at several others; however, the hub is the Band Council, not Better Beginnings, Better Futures. The Partnerships Task Force was to develop a structure and process for the integration/coordination of services.

According to information provided by the site, service-providers were to be involved in Better Beginnings in two general roles: the administration and management of the project by serving on committees and the development and delivery of the prevention programs. At this site, it is important that service-providers first become involved in a group consultation process of integration; that is, a process of discussing and identifying community needs and how best to serve them. The original vision was to have service-providers involved who serve children in the 0 to 4 age range, as well those who fall outside that age range.

Service-providers are involved in project administration by sitting on the project s Steering Committee. Prior to start-up, an Advisory Group was formed and service-providers from various agencies/programs on the Island (e.g., Band Council, Health Centre, Social Services) were involved. A service-provider from the Parent/Child Support Program (PCSP) has also been involved on the Restructuring Committee. The organizations/services that have been most consistently involved in project administration include the PCSP, the Bkejwanong Children Centre, the Band Council, the Health Centre, and a community services agency.

The program heads from the PCSP and the Bkejwanong Children s Centre have been most involved in program planning and development. Both of these organizations have worked very closely with Better Beginnings over the years to develop programming for children aged 0 to 4. The project has been less successful in involving organizations in programming to service residents outside that age range.

Better Beginnings has worked closely with both the PCPS and the Bkejwanong Children s Centre in providing services. Three Family Support Workers, funded by Better Beginnings, work at these sites. The three workers conduct home visits, as well as assist with the playgroup and drop-in. With Better Beginnings assistance, the PCPS has been able to expand its programs to serve families with children up to age 4; prior to Better Beginnings, the upper age limit was 2. The Better Beginnings Outreach Facilitators have also worked with these organizations to provide Native language and cultural instruction. Staff at the PCPS are responsible for the supervision of the Family Support Workers. The Outreach Facilitators have also provided assistance to the Native language teacher in the Walpole Island elementary school.

OVERVIEW OF PARTNERSHIP FINDINGS

- The vision of service-provider involvement at the Better Beginnings, Better Futures demonstration sites has remained quite constant over the duration of the project. Service-providers were to be involved in the governance of the projects and in the development of new programs. At most sites, Better Beginnings, Better Futures was to be the hub for service integration efforts with only two sites envisioning organizational collaborations independent of the demonstration project. Changes in the mandates of existing organizations and the functioning of the funding ministries were seen as unrealistic for such relatively small projects.

- In the early years of Better Beginnings, Better Futures, the sites had great difficulty understanding how to translate the idea of facilitating service integration into practice. Over time, less effort was invested in defining service integration as attention turned to creating voluntary partnerships with service agencies in order to increase resources and programming in the demonstration communities.

- Service-providers became involved in these voluntary collaboration both because they shared similar objectives to Better Beginnings, Better Futures and because they saw possibilities for improving their access to resources and/or improving their services through the partnerships. As the reputation of the Better Beginnings, Better Futures projects improved over the demonstration period, outside agencies saw increased advantages in connecting with neighbourhood-based participatory project with networks and credibility different from their own.

- All sites except one continued to have a stable core of service-providers involved with the project from 1995 to 1999. Overall, the numbers of agencies involved and the diversity of exchanges taking placed increased over this time period.

- There is agreement that Better Beginnings, Better Futures is the catalyst for most of these voluntary collaborations. There is general recognition that these partnerships would not have been formed without the initiative of Better Beginnings, Better Futures personnel and volunteers.

- A number of obstacles made these voluntary partnerships more difficult to realize. Financial cutbacks at participating agencies decreased the resources available for the collaborations. The time required to develop trust and differences in mandates and self-interests were common obstacles. Sorting out issues of power and control was a challenge, as was balancing the involvement of service-providers and residents in the projects.

- Good interpersonal relationships based on mutual trust and respect were considered essential to the productive partnerships that developed. This trust took a lot of time to develop. Several sites commented that partnerships were easier with agencies that shared similar mandates and had existing commitments to the neighbourhood.

- The creation of partnerships has resulted in the creation of significant new resources and programming in each demonstration community that would not exist without these collaborations. This has come about through joint programming, by finding new sources of funding, by encouraging agencies to locate in the neighbourhoods, and by mutual enrichment of programming between Better Beginnings, Better Futures and partner agencies.

- Increased visibility and accessibility for the services of the partner agencies in the demonstration communities are frequently mentioned benefits of these partnerships. Service-providers also

comment their involvement has changed their attitudes about communities and residents and about the appropriateness of their own programs.

%ï Better working relations between partner agencies and more positive attitudes towards collaboration also are reported. In three communities, new structures supporting ongoing dialogue among agencies outside of the auspices of Better Beginnings, Better Futures have come from the demonstration project.

Chapter 12

ECONOMIC ANALYSIS

A number of recent literature reviews of early intervention, prevention and promotion programs for young children and their families, described earlier in this report, have emphasized the importance of including economic analyses of costs and benefits in evaluations of the quality of programs. Although few reports in the literature report such economic analyses, they seem to be particularly valuable when attempting to draw conclusions about social policy implications from research.

The purposes of this chapter are to present an analysis of the costs of the Better Beginnings, Better Futures Project, and to begin to explore the question of whether the program model is economically viable whether it has the potential for translating the larger good of society by avoiding costs of remedial action later in life.

COSTS OF THE BETTER BEGINNINGS, BETTER FUTURES PROJECT

Costs represent the value of the resources used to deliver the Better Beginnings, Better Futures programs in the various sites in Ontario. Costs of the programs comprise the direct expenditures necessary to run the programs, which include resources consumed by them as well as expenditures borne by clients participating in the programs. The resource requirements for programs are known as their ingredients, and it is the social value of those ingredients that make up the overall cost of the Better Beginnings, Better Futures model.

The key elements in early childhood interventions are labour (of varying levels of skill and expertise), facilities, equipment, materials, and any other items that are necessary to the successful implementation of the interventions. Donated volunteer time is an essential other item, particularly for community-based interventions such as those in Better Beginnings. The reason for capturing volunteer time is that, even if government did not have to pay for this time, it does represent a *cost* to someone. The dollar value of services-in-kind volunteer time can be determined by estimating the cost of having to hire someone to do the job.

The analysis of costs takes on two dimensions. The first relates to how costs are compared to the outcomes of the interventions (which will be dealt with in the latter part of this chapter). Briefly, the analysis here can take the form of cost-effectiveness, cost-benefit, or cost-savings analyses. The second dimension relates to who actually pays the costs of the interventions. The decision-maker who is paying for part of the overall cost of implementing the intervention is not likely to be interested in the costs of volunteers. Yet if the more successful interventions include significant contributions that are paid for by organizations and people external to that decision-maker, the policy- maker should be aware of these cost distributions. Otherwise, decisions about which interventions to replicate or implement on a larger scale might be based on an erroneous foundation.

Useable financial data are available for the eight Better Beginnings demonstration sites for various years from 1992/3 through 1997/8. Data on volunteer time have been provided by the sites for the years 1994/5, 1995/6 and 1996/7. Both types of cost data have been broken down by major programs; that is, Home Visiting, Child-Focused Programs, Family/Parent-Focused Programs, Community Development Programs, and Classroom Enrichment. For Walpole Island, an additional program, Community Healing, was included in the analyses.

Complete direct government costs and volunteer time are available for all eight sites for two years: 1995/6 and 1996/7. These are the two years that will be reported in this chapter. In many ways, these two years are those which best represent the ongoing costs of the Better Beginnings, Better Futures Project. All site programs had been operating at full funding levels for two years (1993/4 and 1994/5). Programs had been finetuned, staff were experienced in their positions, and the programs were well-known in the local neighbourhoods and beyond. The demonstration phase was due to end in December 1997, so no serious staff or cost reductions had yet been undertaken. Thus, the maximum annualized costs for operating the local Better Beginnings programs are accurately reflected in the 1995/6 and 1996/7 budget figures presented in this chapter.

Direct Government Costs

Younger Cohort Sites. Programs funded directly by the Ontario government in the five younger cohort sites were implemented and operated under four major categories: Home Visiting, Other Child-Focused, Family/Parent Focused, and Community Development, plus Community Healing at Walpole Island.

As shown in Table 12.1, approximately $2.8 million was spent on these programs by the five sites combined each year. Of the total amount invested in all five sites for the two years combined, Kingston and Toronto accounted for about 25% each, followed by Ottawa and Guelph (18% each) and Walpole Island (13%). Close to half of these expenditures were for the Home-Visiting programs, followed by Family/Parent-Focused programs (about 21%), Community Development programs (20%), Other Child-Focused programs (11%) and Community Healing (1%). This general trend was observed in three of the five sites, with Guelph and Walpole Island being the exceptions. In Guelph, resources were more evenly distributed among the four program areas: Home Visiting (33%), Other Child-Focused (26%), Family/Parent-Focused programs (25%), and Community Development (16%). In Walpole Island, Community Development programs used almost half of the resources.

Older Cohort Sites. In the three older cohort sites, programs funded directly by the Ontario government were implemented and operated under four major categories: Classroom Enrichment, Other Child-Focused, Family/Parent-Focused, and Community Development. As shown in Table 12.2, just over $1.7 million was spent on these programs by the three sites combined each year. Of the total amount invested in all three sites for the two years combined, Sudbury accounted for about 37%, followed by Cornwall (33%) and Highfield (29%). Resources were roughly evenly distributed among the four program areas: Classroom Enrichment (30%), Other Child-Focused (25%), Community Development (23%) and Family/Parent-Focused (22%). In Cornwall, Classroom Enrichment/Primary School Programs accounted for about 48% of total costs, followed by Community Development (26%), Family/Parent-Focused Programs (15%) and Other Child-Focused Programs (11%). In Highfield, Classroom Enrichment/Primary School programs accounted for about 38% of total costs, followed by Family/Parent-Focused programs (33%), and Community Development programs (29%). In Sudbury, about 58% of expenditures were for Other Child-Focused programs, followed by Family/Parent-Focused programs (18%), Community Development programs (16%), and Classroom Enrichment/Primary School programs (8%).

Table 12.1 Direct Government Costs for Younger Cohort Sites, by Program and Year (1995/6 to 1996/7), Ontario Better Beginnings, Better Futures

Site and Year	PROGRAM					
	Home Visiting	Other Child-Focused	Family/ Parent-Focused	Community Development	Community Healing	Total
	- $ -					
Guelph						
1995/6	163,119	135,304	124,849	77,633	0	500,905
1996/7	165,396	129,052	125,304	80,240	0	499,992 [1]
Total	328,515	264,356	250,153	157,873	0	1,000,897
Kingston						
1995/6	376,589	159,136	99,077	66,230	0	701,032
1996/7	393,751	157,465	107,270	65,073	0	723,559
Total	770,340	316,601	206,347	131,303	0	1,424,591
Ottawa						
1995/6	300,282	12,773	128,978	74,494	0	516,527
1996/7	311,558	7,160	127,431	69,830	0	515,979
Total	611,840	19,933	256,409	144,324	0	1,032,506
Toronto						
1995/6	397,870	0	161,593	172,444	0	731,907
1996/7	390,509	0	159,217	160,786	0	710,512
Total	788,379	0	320,810	333,230	0	1,442,419
Walpole Island						
1995/6	63,933	0	73,232	183,377	56,389	376,931
1996/7	67,694	0	70,665	160,878	26,620	325,857
Total	131,627	0	143,897	344,255	83,009	702,788
All Sites						
1995/6	1,301,793	307,213	587,729	574,178	56,389	2,827,302
1996/7	1,328,908	293,677	589,887	536,807	26,620	2,775,899
Total	2,630,701	600,890	1,177,616	1,110,985	83,009	5,603,201
					Average Cost/Site:	$560,320

Notes:

[1] Annual data estimated from third-quarter figures for 1996/7.

Table 12.2 Direct Government Costs for Older Cohort Sites, by Program and Year (1995/6 to 1996/7), Ontario Better Beginnings, Better Futures

Site and Year	PROGRAM				
	Classroom Enrichment	Other Child-Focused	Family-Parent Focused	Community Development	Total
	- $ -				
Cornwall[1]					
1995/6	228,424	69,502	86,564	191,953	576,443
1996/7	321,593	62,934	92,327	104,084	580,938
Total	550,017	132,436	178,891	296,037	1,157,381
Highfield					
1995/6	200,761	0	165,520	143,711	509,992
1996/7	186,292	0	175,669	150,205	512,166
Total	387,053	0	341,189	293,916	1,022,158
Sudbury					
1995/6	44,172	395,636	105,631	94,748	640,187
1996/7	63,820	355,289	125,009	113,824	657,942
Total	107,992	750,925	230,640	208,572	1,298,129
All Sites					
1995/6	473,357	465,138	357,715	430,412	1,726,622
1996/7	571,705	418,223	393,005	368,113	1,751,046
Total	1,045,062	883,361	750,720	798,525	3,477,668
Average Cost/Site:					$579,611

Notes:
[1] The program costs in Cornwall are based on functional budgets which, though unaudited, were carefully reviewed by the financial person at the site for reasonable accuracy. The total figures for Cornwall are based on audited statements.

Direct Costs Per Child and Family

Since the intent of Better Beginnings, Better Futures programs is to be available to and potentially accessed by *all* children in the respective site locations, the cost of the programs has been related to the total number of children in each of these areas; that is, we have calculated a cost per capita.

Younger Cohort Sites. The 1996 Census has been used to calculate a cost-per-child of the overall programs in each site. Census data report the number of children age 0 to 4 living in a particular area; this age range directly corresponds to the main programming focus of the younger cohort sites. Since not all children did in fact, participate, this cost figure will be too low.

Therefore, another way to examine the costs is by relating them to the users of, or participants in, the services. Each of the younger cohort sites (with the exception of Walpole Island) collected program participation information from the families in the community attending Better Beginnings programs and meetings for at least one year. No site collected program participation data on all of their programs: three sites collected participation data on approximately one third of their programs, and one site gathered data

on approximately half of its programs. Still, these site-provided program participation data do offer some insight into the degree of contacts families made with the Better Beginnings programs, although they certainly *underestimate* family involvement.

Table 12.3 shows the distribution of program expenditures per child and per family in the five younger cohort sites for 1996/7. Obviously, the larger the number of children in each respective location, the smaller will be the cost per child. In 1996/7, Toronto, with the highest number of children, had the lowest cost per child ($632) and Walpole Island, with the fewest children, had the highest cost per child ($1,303). The average cost per child for the five sites combined is $733 per year. When looking at the costs per *family*, the average cost per family for the four sites combined is $1,390 per year, with a range from $882 in Ottawa to $1,947 in Toronto.

Since the cost-per-child estimate is likely too low and the cost-per-family too high, the true average cost might best be viewed as lying somewhere between the two. This yields an estimate of approximately $1,100 per family per year.

Table 12.3: Total Number of Children in Younger Cohort Sites, and Direct Cost per Child and Family in 1996/7 Year, Ontario Better Beginnings, Better Futures

Sites	Direct Costs 1996/7	Number of Children [1]	Cost/Child	Number of Families [2]	Cost/Family
Guelph	$ 499,992	625	$ 800	279	$1,792
Kingston	$ 723,559	1,095	$ 661	533	$1,358
Ottawa	$ 515,979	690	$ 748	585	$ 882
Toronto	$ 710,512	1,125	$ 632	365	$1,947
Walpole Island	$ 325,857	250	$1,303	na	na
ALL SITES	$2,775,899	3,785	$ 733	1,762	$1,390 [3]

Notes:

[1] 1996 Census tract data for areas served by Better Beginnings for children ages 0-4.

[2] This number reflects the number of families participating in Better Beginnings programs/meetings as recorded by the programs. This number is an underestimate of the total number of families participating, as not every program recorded attendance (program attendance was only recorded for approximately 20% to 50% of programs offered at each of the sites). Walpole Island did not collect any program participation information.

[3] This figure was calculated by using the summed budgets for 1996/7 for all the younger cohort sites, excluding Walpole Island as no program participation figures are available ($2,450,042 divided by 1,762 families).

Older Cohort Sites. For the older cohort sites, school records were used to obtain estimates of the number of children from 4 to 8 years old attending schools served by Better Beginnings; Census data were not specific enough because data were reported for the age group 5 to 14 years. In Highfield and Cornwall, many of their programs were classroom-based, so that all children attending school would have access to the programs. In Sudbury, the site-provided program participation data on 3 of their 18 programs revealed that over 80% of the cohort participated in programs, and it is very likely that almost all of the remaining children would have been involved in one of their classroom-based programs. Therefore, we are confident that using the school records to estimate the number of children in the sites between 4 to 8

years old will provide us with a realistic estimate of program participation. Table 12.4 reveals that the cost-per-child in the three sites combined for 1996/7 was $1,130 and ranged from $991 in Highfield to $1,308 in Sudbury.

Table 12.4: Total Number of Children in Older Cohort Sites and Direct Cost-per-child in 1996/7 Year, Ontario Better Beginnings, Better Futures

Sites	Direct Costs 1996/7	Number of Children[1]	Cost / Child
Cornwall	$ 580,938	529	$1,098
Highfield	$ 512,166	517	$ 991
Sudbury	$ 657,942	503	$1,308
ALL SITES	$1,751,046	1,549	$1,130

Notes

[1] Based on the school records for areas served by Better Beginnings for children in Junior Kindergarten through to Grade 2 in 1996/7.

Services-in-Kind Expenditures

While direct government expenditures on early childhood interventions are essential, they represent only part of the story. Another major component of successful community-based interventions in health, education, and social services is the other direct program contribution that comes from volunteers (of unpaid time). In order to account for the total *real* cost of these interventions, these unpaid donations, or services-in-kind (SIK as referred to in Better Beginnings, Better Futures), have to be documented and costed. Through significant effort by staff at the Better Beginnings program sites, complete data on this volunteer effort were captured for the major program areas in the younger and older cohort site locations for the years 1994/5, 1995/6, and 1996/7. The volunteer contributions encompassed *unpaid* work provided by community members, program staff, service providers, and student placements/training programs in each of the major program areas. For the most part, this involvement included work on various committees, provision of program services, and general administration.

As was done for the direct government expenditures component, SIK are shown for the younger cohort and older cohort sites (see Table 12.5) for the years 1995/6 and 1996/7. To estimate the value of contributed hours, different hourly wages were allocated for the various types of volunteers, based on a code book generated by Ms. Angela Mione, Dr. Sheila Neysmith, and Dr. Marge Reitsma-Street (1995). Sites recorded volunteer hours separately for Better Beginnings staff, community members, service providers / secondments, and student placements / low-paid training programs. The estimated value of staff and community members volunteer time was $14 per hour. This figure was suggested by Statistics Canada and by the Seniors Issue Group (ARA Consulting Group, 1994) to estimate the value of housework, caregiving or volunteer activities; this average hourly wage of $14 is derived from the average wage of all occupations in 1992. For service providers and secondments, the estimated market value is $25 per hour. For student placements / low paid training programs, the estimated value used was $6.85 per hour, the minimum wage for Ontario, effective January 1, 1995. No adjustments were made for inflation, even though hours were contributed over time, between 1994 and 1997.

Younger Cohort Sites. Table 12.5 shows that the estimated value of unpaid volunteer time at the five younger cohort sites for the two-year period 1995/6 to1996/7 amounted to just over $1.1 million per year which is approximately $230,000 per site. Overall for the five sites combined over the two years, the greatest proportion of volunteer hours was found in the Community Development programs (55%), followed by Administration/ General and Family/Parent-Focused programs (19% each).

Older Cohort Sites. With respect to the older cohort sites, the total value of these unpaid volunteer hours for all three sites combined was approximately $500,000 per year which is approximately $175,000 per site. When program distribution across sites was considered over the two years, the greatest proportion of volunteer hours was consumed by the Community Development programs (37%), followed by Classroom Enrichment programs (21%), Other Child-Focused programs (19%), Family/Parent-Focused programs (16%), and Administration/General (7%).

Table 12.5 Services-in-Kind[1] by Program and Year (1995/6 to 1996/7), Ontario Better Beginnings, Better Futures

YOUNGER COHORT SITES							
Site and Year	**Home Visiting Volunteers**	**Other Child-Focused Volunteers**	**Family/ Parent-Focused Volunteers**	**Community Development Volunteers**	**Administration/ General Volunteers**	**Community Healing**	**Total Volunteers**
				- $ -[2]			
All Sites							
1995/6	47,893	22,526	274,707	646,264	211,116	14,226	1,216,732
1996/7	46,930	17,651	170,413	640,497	242,249	3,248	1,120,986
Total	94,823	40,177	445,120	1,286,761	453,365	17,474	2,337,718
						Average Services-in-Kind Per Site Per Year	233,772
OLDER COHORT SITES							
Site and Year	**Classroom Enrichment**	**Other Child-Focused Volunteers**	**Family/ Parent-Focused Volunteers**	**Community Development Volunteers**	**Administration/ General Volunteers**	**Community Healing**	**Total Volunteers**
				- $ -[2]			
All Sites							
1995/6	136,856	89,939	105,509	167,179	40,005	na	539,488
1996/7	87,311	112,923	61,644	225,839	31,330		519,047
Total	224,167	202,862	167,153	393,018	71,335		1,058,535
						Average Services-in-Kind Per Site Per Year	176,423

Notes

[1] Estimates of the value of volunteer hours.

[2] Dollar values are based on hourly wage rates for the following types of volunteers: $14/hour for Better Beginnings staff and community members (Statistics Canada and Seniors Issue Group, 1994), $25/hour for service providers and secondments (estimated market value), and $6.85/hour (Ontario minimum wage) for student placements/training programs.

DISCUSSION

Direct Government Costs

For the years 1995/6 to 1996/97, government has invested approximately $4.6 million per year into the Better Beginnings programs across eight sites in Ontario, which is approximately $570,000 per site. For 1996/7 it was estimated that the cost-per-child or family for the younger cohort Better Beginnings programs was between $700 and $1,400, and in the older cohort sites, the cost-per-child was approximately $1,100.

How reasonable are these costs? That is difficult to answer in any absolute sense, but one way to put these estimated annual costs into perspective is to compare them with the costs of other prevention programs and with other services funded by the Ontario Government. Unfortunately, few programs have reported costs, and many that have, have been small-scale U.S.-based programs which were carried out in the 1960s and 1970s. In order to compare the estimated costs of the Better Beginnings program for 1996/7, costs of several other projects and services, expressed in 1997 Canadian dollars, are presented in Table 12.6 below.

Table 12.6: Comparison of Better Beginnings Program Costs with Other Prevention Programs and Ontario Funded Services

Programs/Services	Costs in 1997 Canadian Dollars [1]
Better Beginnings, Better Futures	$1,100 - $1,400 /child or family/year
Perry Preschool Project	$8,600 /family/year
Elmira (NY) Home Visiting Project	$4,300 /family/year
U.S. Comprehensive Child Development Project (CCDP: 1989-1994)	$21,000 /family/year
U.S. HeadStart Program	$6,400 /family/year
U.S. Infant Health and Development Program	$14,300 /family/year
Ontario primary school [2]	$7,000 /child/year
Full-time licensed childcare in Ontario	$8,500 /child/year

Notes:

[1] Canadian dollar worth $0.70 in U.S. dollars in 1997.

[2] Lawton, Ryall & Menzies, 1996

These comparisons are instructive. The Perry Preschool Project, costing $8,600 per family per year for two years, provided half-day preschool five days per week for each child and a weekly home visit to each child's mother during the school year. Short-term improvements were reported on children's IQ performance; no positive short-term effects were reported on children's social, emotional, or health outcomes, or any outcomes for parents. The Elmira Home Visiting project, which provided an average of nine nurse home-visits prenatally and monthly home visits for a maximum of two years postnatally, cost $4,300/family/year, and the short-term outcomes of that project yielded no effects on children, while maternal outcomes were limited primarily to a group of 38 very high-risk mothers. The CCDP project, which provided low-income families with a home visitor/case manager for up to five years from the birth

of their child to school entry, cost an astounding $21,000 per family per year, and there were no important outcome effects on either children or parents.

The Better Beginnings project funded a range of programs, including home visiting, parenting programs, child-focused playgroups, and school and classroom programs. Most of these programs were new resources to the local neighbourhoods and schools. However, a few programs, especially preschool and day care programs, were already in existence, and Better Beginnings funding provided enrichments, usually in terms of additional staff. Thus, comparisons of Better Beginnings costs with other more narrowly focused programs that provided entirely new resources (e.g., the Perry Preschool Project) must be made carefully.

From these comparisons, however, it appears that the annual costs of operating the Better Beginnings projects are extremely modest, particularly when one considers that many of the programs were new to the neighbourhood, and also that the programs were so broad, i.e., not focused exclusively on either children or parents, but also on the local neighbourhood, on integrating local service and on developing resident involvement in project management and other community development activities.

Services-in-Kind

An important dimension of Better Beginnings is the nature and extent of the volunteer input into the programs. At approximately $3.4 million for the two years 1995/7, the value of the volunteer services is an important ingredient in the successful implementation and operation of the programs. Without these services-in-kind, either the sites would have had to scale back considerably or government would have had to increase its direct costs. Yet it is not only from the cost perspective that such volunteer services are pivotal to the success of the programs. It is suggested that a high degree of volunteering contributes to increased social cohesion and community capacity. For example, community members (e.g., parents and other family members) providing valuable unpaid services might be expected to develop greater feelings of ownership and empowerment that, in turn, may translate into increased self-assurance and autonomy. Over the long run, it is hoped that this will result in less dependency and reliance on expensive government-funded social and economic programs.

There are important longer-term questions concerning the relationship between direct funding and provision of valuable services-in-kind, including: How much difference (if any) do the extent and variation in services-in-kind make to the impacts of programs? Is there a "best practices" combination of paid and unpaid resources that would serve as a benchmark and that could be used for the replication and dissemination of similar programs in the future? These issues can be addressed only in relation to the long-term outcomes or effects of the Better Beginnings, Better Futures programs.

Economic Viability of the Better Beginnings Model

The previous discussion of the costs of implementing and operating the programs in the various Better Beginnings, Better Futures sites represents only one important element that must be considered in evaluating the effectiveness of such interventions. Policy makers need to know not only how much they cost, but also whether or not they represent good social investments. In this regard, it is necessary to determine the degree to which programs are providing direct benefits to parents and children, and to ascertain the value of the broader benefits to society at large. It is essential to appreciate, however, that assessment of the broader societal benefits of these programs cannot be estimated until the children are in their mid- to late teens and early twenties.

In the long run, Better Beginnings, Better Futures could produce improvements in such areas as school and educational achievement, economic self-sufficiency, lower levels of criminal activity, and improved

mental and physical health outcomes. For example, children from the Better Beginnings program areas may require fewer special-education programs, less social assistance, and fewer health care services, experience fewer arrests, and earn more income and contribute more tax revenues than would comparison children. It is in these areas that other early-intervention programs have been able to demonstrate that true cost savings resulted, but they began five to ten years after program completion (Barnett, 1993; Karoly *et al.*, 1997).

While the short-term effects and benefits of the Better Beginnings, Better Futures programs reported earlier appear promising, it is far too early to say with certainty that such programs would actually generate such long-term savings.

Furthermore, particular programs at each site appear to be more promising in some outcome areas than others. Again, however, it is impossible to predict differential long-term cost-effectiveness of these programs.

Of course, knowing that Better Beginnings is "on track" is important in order to assure government that their use of tax revenues can be justified, at least in part, by the potential savings to government they generate. While short-term outcomes may provide useful indicators of such potential cost savings, it must be stressed that long-term follow-up of the subjects is required if savings are to be fully accounted for. Most of the benefits that generate monetizable cost savings occur long after the intervention has been completed (Karoly *et al.*, 1997, p.78). This is the case with the Better Beginnings Project, where the full range of cost benefits and savings resulting from the prevention of emotional problems, for example, are expected to be realized years in the future.

CONCLUSION

True cost-benefit analyses of early-intervention and prevention projects in the literature are few, yet are essential for the ultimate formulation of policy, and adoption and dissemination of intervention programs. More complete and detailed evaluation of interventions is needed and must be built into programs when they are designed, as has been done in the case of Better Beginnings, Better Futures. It is certain that, if continued, the evidence for cost savings (and, in the longer term, cost benefits) will become more robust. In order for this to occur, however, long-term, longitudinal follow-up is essential. Such cost-benefit analyses will make important contributions to social policy formulation in the future.

Chapter 13

CONCLUSIONS AND IMPLICATIONS

The Better Beginnings Project being implemented in eight disadvantaged communities throughout Ontario, is, in many ways, the most comprehensive and complex prevention initiative ever implemented for young children, their families and their local neighbourhoods.

The differences between the Better Beginnings Project and others in the literature are numerous.

Most programs for disadvantaged young children focus on only one or two domains of children s development (e.g., intelligence/cognition, or social-emotional functioning, or physical health), and collect information on a small number of outcome measures. The Better Beginnings program model, however, focuses on all aspects of children s development.

Most programs focus predominantly on the children, predominantly on parents, or, in fewer cases, on both children and their parents. The Better Beginnings model, based on an ecological view of human development, focuses on children *and* their parents/families *and* their local neighbourhood and schools.

Most prevention programs for disadvantaged young children and their parents are targeted to those that are considered highest risk; for example, those with very low socioeconomic status or high levels of behavioural problems. Better Beginnings, on the other hand, is a universal program; that is, it is intended to include all children in a particular age range and their families living in a geographically disadvantaged neighbourhood.

Most program models are designed and implemented according to prescribed protocols developed by experts outside the program site, and if more than one site exists, all sites implement exactly the same program protocol. In the Better Beginnings model, on the other hand, neighbourhood residents at each site are actively involved in all decisions regarding program development and implementation, and each site has developed the type and number of programs considered most appropriate to local needs.

Most programs for young children operate as independently funded operations with little or no interest or mandate to coordinate intervention activities with other service-providing organizations in the community. The Better Beginnings model, on the other hand, actively encourages coordination, collaboration, and integration of Better Beginnings programs with other social-service, health, and educational organizations in each neighbourhood site.

Most programs for young children provide prescribed interventions for a maximum of one or two years, and few collect any follow-up measures after the intervention ceases for purposes of determining whether short-term outcome effects are maintained or if other, long-term benefits develop. The Better Beginnings model, on the other hand, was designed to provide program support for four years of children s development (prenatal to age 4, or ages 4 to 8), and to follow a group of children into adolescence to determine longer term outcomes and potential cost-savings.

Most programs provide no description of the procedures and processes involved in the development and implementation of these programs or the organizational and decision-making structure. The Better Beginnings initiative, on the other hand, has emphasized the importance of collecting ongoing information to allow thorough descriptions concerning *how* each local site developed its organization and decision-making structures, including the participation of neighbourhood residents and the involvement of service-providers in this process.

Few programs for young children systematically collect and report information about program costs. The Better Beginnings program, on the other hand, required the collection and reporting of both direct and indirect costs at each site to provide information relevant to policymakers and government representatives who are responsible for the prudent expenditure of public funds.

Although the Better Beginnings Project is not unique with regard to any one of these aspects, it is unique in attempting to incorporate all of them in a single program model implemented in relatively autonomous, disadvantaged communities.

Since the project was funded as a research demonstration project, it has required a great deal of time to collect, analyze, and report data on all aspects of the program model in eight demonstration communities, as well as three comparison sites. The research is as complex, comprehensive, and unique as the program model being evaluated, and has necessitated a broad, multidisciplinary effort to collect, analyze, and report a) qualitative/descriptive data on local project development; b) quantitative outcome data on over one hundred measures of child, parent, family and neighbourhood outcomes; and c) economic analysis of program costs.

To develop and evaluate an intervention initiative as comprehensive and complex as the Better Beginnings, Better Futures Project requires extensive time, resources, and effort. An important implication of attempting to carry out high-quality and comprehensive research on a complex, multisite, community-driven project is that the time required to analyze and report the findings is substantially greater than for smaller, less comprehensive or more prescribed interventions with limited outcome measures. A major challenge to the research and evaluation efforts has been to draw conclusions from so much information collected in eight Better Beginnings project sites where each site developed and implemented programs which were similar in some ways, but dissimilar in many others.

In the following sections, the conclusions and implications of the short-term findings of the Better Beginnings initiative from 1992 to the spring of 1999 are presented and discussed in terms of the project's goals. Due to differences in programs and outcome measures, conclusions for the younger and older cohort sites are often presented separately. Two patterns of results are described. One involves outcomes that are similar across younger or older cohort sites. A second involves a pattern of outcomes on a series of related measures within a site. Both patterns of outcomes are important in understanding the short-term effects of Better Beginnings programs on children, their families, and their neighbourhoods. Also, the extent to which each site emphasized various aspects of the Better Beginnings program model (including continuous, high-quality programs throughout the age range, resident involvement, and partnership with other organizations) is likely to exert important influences on child, family, and community outcomes.

GOAL: TO PREVENT EMOTIONAL AND BEHAVIOURAL PROBLEMS AND PROMOTE SOCIAL FUNCTIONING IN YOUNG CHILDREN

This was the first goal outlined in the Request for Proposals in 1990 and was the main reason for undertaking the Better Beginnings, Better Futures Project.

In three of the younger cohort Better Beginnings sites, there was a general decrease in children's emotional problems as rated by JK teachers from 1993/4 to 1998/9. (No data were available for Guelph because few children had access to JK.) In Kingston, JK teachers also rated children as showing decreases in behavioural problems, increases in prosocial behaviour, and an increase in school readiness over the same time period. Since there was little indication of improved cognitive performance during the preschool years in Kingston children, it appears that the teachers' improved school readiness ratings reflected mainly social and emotional changes. In the Kingston Better Beginnings programs, home visiting and informal playgroups were important components, as they were in all the other younger cohort

sites. However, Kingston also invested extensive program resources in childcare, both by enriching local daycare centres in the neighbourhood and also by providing a large number of informal childcare experiences for children. This combination of supports, available from birth to JK entry, may have contributed to the substantial improvements in social and emotional functioning of children in the Kingston site.

In the three older cohort Better Beginning sites, children also showed declines in *teacher* ratings of overanxious emotional problems, as well as improvements in self-controlled prosocial behaviour as rated by teachers, and cooperative prosocial behaviour as rated by parents. These changes may reflect the effects of school-based social skills programs operating in these three sites. Improvements in social-emotional functioning as rated by teachers were strongest in Cornwall and Highfield, where school-based programming was more intense than in Sudbury. Although there were programming differences, both the Cornwall and Highfield programs included educational assistants who provided in-class individual and group activities for children from JK through Grade 2.

Decreases in emotional and behavioural problems as rated by *parents* were noted only in Highfield, with Cornwall parents showing no consistent changes, and a suggestion that Sudbury parents rated their children as increasing in emotional and behavioural problems. In Highfield, there was a direct connection between the Better Beginnings school-based programs and the children s parents via regular home visits by Better Beginnings staff. Also, Highfield teachers were trained to provide a social skills program (Skills for Growing) in their classrooms; these programs included specific activities involving parents as well. Possible effects of this strong emphasis on connecting school and parent programming in Highfield are noted again later in other areas of parent functioning.

Implications

The major goal of preventing emotional and behavioural problems in young children was accomplished most successfully with general reductions of emotional problems in both younger and older cohort sites as rated by teachers. Few studies have reported improvements in social-emotional functioning in young children before school entry. Two studies, the Abecedarian and Infant Health and Development Projects, that did report such effects provided full-time, year-round, centre-based childcare for a minimum of two years, and in both cases the improvement disappeared after the children entered school. No home-visiting programs have reported improvements in preschool children s social-emotional functioning. The finding of reduced emotional problems at school entry in three of the younger cohort sites suggests that the combination of home-visiting, playgroups, and childcare provided in these Better Beginnings sites may be effective in allowing children to begin school with less anxiety. The additional improvements in JK teacher ratings of behavioural problems, prosocial behaviour, and school readiness at the Kingston site are particularly encouraging.

In the older cohort sites, the reduction in overanxious emotional problems as rated by teachers was accompanied by an increase in ratings of self-controlled prosocial behaviour in all three sites during the early primary school years. It is interesting to compare these findings with those of the Helping Children Adjust Project, also funded by the Ontario Government. That project provided one year of teacher-provided social skills training and enhanced reading instruction in kindergarten through Grade 2 for 1,400 children attending 30 primary schools in disadvantaged neighbourhoods. (A third program component, parent training, was poorly attended and dropped after the first year.) Children receiving social skills training showed significant improvements in ratings of prosocial behaviour on the playground, as well as decreases in parent and teacher ratings of behavioural problems over a three-year period relative to comparison groups that received no social skills training. There were, however, no improvements in parent or teacher ratings of prosocial behaviour, and no results were presented concerning ratings of emotional problems.

The overall decreases in teacher ratings of children s emotional problems and increases in children s self-control found in the older cohort Better Beginnings sites were nearly *three times larger* than the decreases in behavioural problems reported for the Helping Children Adjust Project, and the differences in Cornwall teacher ratings were even greater.

The largest and most consistent effects on children s social-emotional functioning were found in Highfield on teacher ratings of increased social skills and decreased emotional problems in children and on parent-reported decreases for both emotional and behavioural problems and improved social skills in their children during the early primary school years. Again, these improvements in social-emotional functioning in Highfield were substantially larger than those reported in the Helping Children Adjust Project over a similar period of time.

The original Better Beginnings program model recommended the establishment of continuous program supports for children from pre-birth to age 4 in the younger cohort sites and from age 4 to 8 in the older cohort sites. The results of the outcome measures of children s emotional and behavioural problems, as well as social skills, suggest that the improvements in these areas of children s functioning were more apparent in sites where continuity in programming was most evident. The combination of early home-visiting in Kingston followed by a series of formal and informal childcare programs may have provided the intensity and continuity of support required to positively influence social-emotional development in children up to the age of four and allow them to enter kindergarten with less anxiety and relate more effectively to teachers and peers. The fact that the school-readiness measure employed with JK teachers has been found to correlate more strongly with measures of social behaviour than cognitive performance suggests that social-emotional maturity is viewed by teachers as a particularly important domain for children s early school adjustment.

The improvements in children s emotional problems, behavioural problems, and social skills were substantially greater in the older than the younger cohort Better Beginnings sites. These improvements were larger and more widespread in the two older cohort sites that provided in-classroom individual and group support to children continuously from JK to Grade 2, which suggests the importance of these program strategies for young primary-school children.

Finally, the specific outreach to parents in order to connect them with the school and other Better Beginnings programs in Highfield was associated with large improvements in their ratings of children s social-emotional functioning. As discussed later, the impact of the Highfield program on parent functioning is also reflected in several other outcome domains.

GOAL: TO PROMOTE OPTIMAL DEVELOPMENT IN CHILDREN

To reflect the holistic view of the child emphasized in the Better Beginnings model, a wide range of measures were collected on various aspects of children s development, in addition to those assessing social, emotional, and behavioural functioning described in the previous section. These included the child s physical health, growth, nutrition, and general and cognitive development, as well as academic achievement.

Child Health

In the younger cohort Better Beginnings sites, children had more timely immunizations at 18 months than in the comparison site. This suggests increased awareness of parents regarding the importance of preventive health practices for their children. However, there was less encouragement by parents to wear bicycle helmets in the Better Beginnings sites, so no clear indication of improved child health promotion existed in the younger cohort sites.

In the older cohort sites, improved ratings of children s general health status occurred in all three Better Beginnings sites. Also, in both Cornwall and Sudbury, a general pattern of improvement occurred on preventive and promotive activities, including reduced child injuries, more timely booster shots, more parental encouragement to wear a bicycle helmet, and an increase in parents sense of control over their children s health.

Implications

The failure to find any indication of Better Beginnings effects on children s physical health in the younger cohort sites is consistent with other studies employing home-visiting, playgroups, and childcare programs for infants and preschoolers which have failed to demonstrate positive program effects on children s health (Karoly *et al.*, 1998; Gomby, Culross & Behrman, 1999).

The positive outcomes in the older cohort sites indicate an increase in parents knowledge and actions taken to prevent injury and disease in their children. This interpretation is supported by similar changes in parents behaviour regarding their own health described later.

Child Growth and Nutrition

Better Beginnings, Better Futures provides the first population-based information on dietary intake, height and weight status of Canadian children since the Nutrition Canada Survey (1973).

The growth patterns of all children in the study compared favourably with normative data for height and for the percentage of children who were underweight. There was, however, a higher than average percentage of children who were overweight. This remained unchanged over the five years and underscores the need to increase opportunities for physical activity in young children.

In the older cohort Better Beginnings sites, there was a general increase in children s intake of all nutrients over the first two years of the project. This was likely accomplished in two ways. First, parents had increased access to food though emergency food cupboards and other food resources set up in each site, thereby increasing the amount of food available to each family. Secondly, all three sites set up one or more snack or meal programs before, during or after school, as well as offering food to all child-related programs, thereby increasing all children s access to foods of high nutritional quality. The programs in Cornwall were particularly effective in improving children s nutritional intake.

In the younger cohort sites, only children in the Toronto Better Beginnings neighbourhood showed improvements in nutrition. However, the overall nutrient intake was within acceptable levels for children in all younger cohort sites, a finding in sharp contrast to U.S. studies which show several dietary inadequacies in preschool children.

There is some indication of future nutrient inadequacies in children in the older cohort sites, because recommended levels of nutrients such as zinc and calcium increase from 7 to 10 years of age, and there was no indication of improved intake of these nutrients for these children from 6 to 8 years of age.

Implications

Children in the younger cohort sites showed nutritionally adequate diets, a finding in sharp contrast to results from studies of U.S. preschool children. Children in the older cohort sites showed improved nutritional intakes over the first two years of Better Beginnings programs, but then stabilized. These analyses suggest that these children may be at increasing risk for inadequate intake of certain nutrients, particularly zinc and calcium, as they approach adolescence.

The before, during and after school food programs which have been operating in all older cohort Better Beginnings sites should increase the availability of foods high in calcium and zinc and raise awareness of such foods.

Other approaches to improving the nutritional health of low-income children have been dominated by federally mandated programs such as the National School Lunch and School Breakfast Programs in the United States (Gordon *et al.*, 1995). Although these programs have improved the daily nutrient intake of children, they are formally structured and do not allow for either parent input or involvement. Nor are they amenable to the changing needs of the community. The Better Beginnings approach is unique in that it empowers neighbourhood residents to decide how food programs should be designed and implemented.

General/Cognitive Development and Academic Achievement

In all the younger cohort Better Beginnings sites, there was consistent improvement on a measure of auditory attention and memory, one of the six subtests from a standardized test of general developmental skills. That is, children in the Better Beginnings sites improved in their ability to hear, process, and act on simple instructions and to repeat increasingly complex words and numbers in sequence. This is an important area of development, reflecting children s ability to process and respond to verbal communication. There were no other consistent cross-site improvements on any of the other subtests, which included expressive and receptive language, fine and gross motor skills, and visual attention and memory.

One exception was the Walpole Island First Nation Better Beginnings site, where children in the research sample showed improved performance overall on this standardized test of development and on all of the six subscales. One possible explanation for this finding in Walpole Island is the continuity of home-visiting and parent-child play-group programs provided to young children by the Better Beginnings Project, in conjunction with a high-quality local daycare facility, that was attended by over 50% of the children participating in the research at 48 months.

There were no improvements in the older cohort Better Beginnings sites on any of the measures of cognitive development or on measures of reading or mathematics achievement.

Implications

The failure to find any other consistent improvement in cognitive development or academic achievement may reflect the difficulty of effecting positive changes in this domain in young children. A recent review of home-visiting programs for families with children from birth to five years of age (Gomby *et al.*, 1999) concluded that these programs have produced no general improvement in children s cognitive development. Projects that have been successful in improving cognitive/intellectual development in preschool-aged children have all provided intensive, centre-based educational programs to very high-risk young children with a heavy emphasis on cognitive activities (e.g., the Abecedarian and Perry Preschool Projects). Since none of the younger cohort Better Beginnings sites provided this type of intensive centre-based programming, the failure to demonstrate general improvements in intellectual functioning is not surprising.

In the older cohort sites, the failure to find improvements in cognitive functioning or academic achievement again is consistent with findings from other projects focusing on this early primary school age group. The Helping Children Adjust Project, described earlier, provided one year of enriched experiences in reading to children from JK to Grade 2, yet found no positive effects on the same reading achievement measure employed in the Better Beginning s research. This was the only cognitive outcome measure reported in the Helping Children Adjust Project (Hundert *et al.*, 1999).

One reason for the difficulty in demonstrating improved cognitive and academic achievement in this older age group is that all children in project and comparison schools receive regular primary school education programs throughout the implementation period. In order for a positive effect to show, programs would have to improve academic achievement over and above that being accomplished by regular Kindergarten and Grade 1 and 2 educational activities. It is unlikely that any of the Better Beginnings programs, designed to improve cognitive/academic performance, was intensive enough to produce such an effect; nor, apparently, was the reading program in the Helping Children Adjust Project.

GOAL: TO IMPROVE PARENTS AND FAMILIES ABILITIES TO FOSTER HEALTHY DEVELOPMENT IN THEIR CHILDREN

To assess the effects of the Better Beginnings programs, outcome measures were collected on several areas of parent and family functioning, including a) parent health, b) parenting practices and parent/child interactions, and c) parent/family social and emotional functioning.

Parent Health

The rates of overweight for adults were considerably higher in all the research sites for male parents (varying from 52% to 76% by site) and female parents (42% to 57%) compared to Ontario averages of 48% for males and 28% for females of comparable age. There were no changes in any sites over the course of the study.

Mothers in the Peterborough comparison site reported higher rates of breastfeeding their children at birth than in the Better Beginnings sites, although the breastfeeding rates after 3 months were comparable across all sites. Peterborough mothers also reported higher levels of breast self-examinations and more exercise for the first 18 months after pregnancy than mothers in the Better Beginnings sites. In contrast, mothers in the demonstration sites report higher levels of exercise during pregnancy; the higher levels of exercise prenatally in all the Better Beginnings sites may have resulted from the heavy emphasis on prenatal classes and home-visiting. However, in Peterborough, a strong breastfeeding campaign has been operated by the local health unit and hospital for several years, resulting in high rates of mothers initiating breastfeeding, substantially higher than the Ontario average. The higher levels of breast self-examinations and exercise during the first 18 months after pregnancy may also be affected by this public health program in Peterborough.

Energy, zinc, folate, and calcium intakes of women in all sites who were breastfeeding were below the recommended nutrient intakes. This has little effect on the quality of the breast milk, but may jeopardize the nutritional health of the mother. Since these data were collected, the Canadian recommended intake of folate has been increased substantially. Thus, the dietary intake of women who are breastfeeding is an even greater concern. The public health initiatives to encourage breastfeeding among low-income women must include strategies to ensure their access to fresh fruits and vegetables (best sources of folate) and to milk and other dairy products (or alternate sources of calcium and zinc).

In the older cohort sites, there was a decline in the incidence of parents smoking and the number of smokers in the home. The reduction in smoking is an important effect because this is often considered the most serious public health problem in Ontario.

Parents in Highfield showed the most consistent improvements in health, including more timely Pap smears and more frequent breast self-examinations by mothers, more exercise, the use of fewer drugs for pain and fewer types of prescription medications. Highfield parents also reported a decrease in the number of smokers in the home, reduced alcohol consumption, less limitation on daily activity by health-related problems, and an improvement in ratings of general health. These changes in health were accompanied by similar changes in other areas of parental family functioning in Highfield, described

below.

Implications

In the younger cohort sites, there were few indications of improved health status or health behaviours in the parents. In fact, mothers in the Peterborough comparison site showed greater improvements in several health areas than the mothers in the Better Beginnings sites. It appears plausible that these differences resulted from the effects of a highly organized and long-standing maternal health program in Peterborough focusing on breastfeeding. This points to the challenges provided by a research design which analyzes changes in the Better Beginnings project communities relative to those which occur in non-project/comparison sites. Although comparison sites provide a useful reading on general societal changes that may confound changes seen in the Better Beginnings sites, comparison communities are also interested in developing and implementing programs that will prevent problems in young children, and promote the healthy development of children and their families. The possibility that effective programs existed and/or were developed during the course of this study cannot be controlled.

In all three older cohort sites, there was a decline in maternal smoking and the number of smokers in the home. The reduction in maternal smoking and number of smokers in the home may be due to the increased opportunities for mothers to interact with others in parent support groups or Better Beginnings committees and to volunteer for a variety of community activities, especially in their child s school where smoking is restricted or discouraged. The finding that parents in the Highfield site showed the greatest improvements on a variety of health measures may be a result of the strong emphasis in that site on providing outreach to parents through home-visits, and on active encouragement of parents to engage in a variety of programs offered by Better Beginnings at their children s school.

Parenting Practices and Parent-Child Interactions

There were few consistent changes in measures of parenting practices or parent/child interactions in either the younger or older cohort sites. Ratings of the quality of parent-child interactions were made by researchers during their in-home visits in the younger cohort sites when the children were 18, 33, and 48 months old. These ratings were highest at Kingston and Toronto at 18 months and remained stable over the two following periods. The ratings were lower in Ottawa, Walpole Island, and Peterborough at 18 months. However, all three sites showed improved ratings over the following periods with the ratings in Walpole Island showing large improvements, ending up substantially higher at 48 months compared with all other sites where ratings at 48 months were essentially equal. This large increase in the quality of parent-child interactions in Walpole Island may reflect the emphasis on Better Beginnings programs that were developed and implemented in conjunction with the local parent-child centre.

In the older cohort sites, the only consistent change in parenting occurred in Highfield where there was a general improvement in parenting practices, especially increases in consistent parenting, decreases in hostile/ineffective parenting, and an increase in reported satisfaction with the parenting role. The measure of hostile/ineffective parenting, used in the National Longitudinal Survey of Children and Youth, has been found to relate strongly with children s emotional and behavioural problems. The fact that this measure showed a very large decrease in Highfield (the effect size was 1.73) provides further evidence for the strong impact that the Better Beginnings programs had on parents in that site.

Parent/Family Social and Emotional Functioning

Decreased violence was reported between parents and their partners in the younger and the older cohort Better Beginnings sites, accompanied by an increased rating of marital satisfaction in the older cohort sites. The changes in reports of domestic violence occurred early in the program between 1993 and 1995. After that, the reports remained stable. The processes producing the early reports of change are unclear.

In two of the younger cohort sites, Toronto and Walpole Island, parents also reported decreases on several measures of parent and family stress. In Walpole Island, this finding, in conjunction with the improvement in parent/child interactions, again suggests that the program was effectively influencing parents and children in that site, possibly through the variety of activities provided by the parent/child centre. In Toronto, a major source of the reduced stress derived from a reduction in the tension experienced by employed parents who had to juggle childcare with other responsibilities.

In Highfield, there was a general pattern of improvement in parents' level of stress, depression, and social support, in addition to the general improvements in marital satisfaction and domestic violence reported in all sites. These changes, taken in conjunction with those that occurred in parents' health and parenting practices, add to the picture of broad improvements in Highfield parents.

Implications

The positive changes in parents' behaviour in the Better Beginnings sites were limited to decreases in domestic violence early in the program, and more general improvements in two sites, Walpole Island and Highfield. The decreases in reports of domestic violence would be socially significant, if clearly linked to programming reported. However, it is difficult to identify the exact mechanisms through which Better Beginnings programs may have influenced these changes, in light of the absence of change in a variety of other measures of parent and family functioning, and in view of possible causes other than Better Beginnings programs mentioned in Chapter 8.

The failure to find consistent improvements in other areas of parent and family functioning has been noted in recent reviews of other programs for young children and their parents (Karoly *et al.*, 1998; Gomby *et al.*, 1999). The few programs that have improved parenting behaviour or the quality of parent-child interactions have done so by actively involving parents in parenting classes and other programs with their children in centre-based daycare or school settings. Home-visiting, informal playgroups or parent support groups offered outside of daycare or school settings have been less successful in modifying parenting behaviour, the quality of the home environment for children, or parent/family social-emotional functioning.

The strongest Better Beginnings effects on parent/family functioning occurred in Highfield, including improvements in a number of measures of parents' health, health risk and health promotion behaviours, parenting practices, and parent/family social and emotional functioning. The intensity and breadth of these changes are impressive, given the outcomes of other studies.

Not to be overlooked, however, were positive outcomes on several parent measures in the other two older cohort sites in Cornwall and Sudbury. In addition to reductions in reports of domestic violence and increased marital satisfaction, parents in both Cornwall and Sudbury showed a pattern of increased health promotion behaviours, both for themselves (reduced smoking) and for their children (more timely booster shots, less child injuries, more parental encouragement of their children to wear bicycle helmets and to be vigilant when crossing streets, and increases in a sense of control over their children's health). These outcomes suggest a general increase in parents' awareness of preventive and promotive health behaviours, which, in turn, could have important longer-term influences on their own health as well as that of their children.

As noted earlier, the overall finding of greater improvements in parent and family outcomes in Highfield than in either Cornwall or Sudbury may reflect the strong emphasis on home-visiting to parents and also active encouragement of them to engage in a variety of Better Beginnings programs at their children's school.

GOAL: TO IMPROVE THE QUALITY OF LOCAL NEIGHBOURHOODS AND SCHOOLS FOR YOUNG CHILDREN AND THEIR FAMILIES

According to the ecological model of child development, the quality of neighbourhoods and schools exerts a strong influence on young children, both directly in terms of such factors as safety and resources for play, and indirectly through parents, friends, and neighbours.

Effecting and demonstrating changes in the quality of neighbourhood characteristics within a five year time frame is an extremely challenging task, especially when the neighbourhoods are large, and contain high percentages of socioeconomically disadvantaged families. Also, personnel in all the Better Beginnings projects reported that the changes that occurred to the welfare system during the period of this study decreased disposable income and access to affordable housing for some families in their neighbourhoods, raising stress and increasing crises in these families. These changes were widely viewed as increasing the difficulty of improving neighbourhood characteristics.

In the younger cohort Better Beginnings sites, parents reported increased feelings of safety on the street at night. One negative finding, a relative decrease in the reported frequency of getting together with friends, resulted from a small group of parents in the Peterborough comparison site reporting substantially larger increases in the frequency of social contacts with friends relative to all of the Better Beginnings sites.

Parents at both Guelph and Kingston perceived an improvement in neighbourhood cohesion; less deviant activity (alcohol and drug use, violence and theft); and gave more favourable ratings to the condition of their homes, safety walking on the street, and the general quality of their neighbourhood. In contrast, at Toronto there was a consistent pattern of decline in all ratings of neighbourhood cohesion, satisfaction and quality.

In all three older cohort Better Beginnings sites, a scale for general neighbourhood satisfaction showed modest but consistent improvements, and there was an increase in parents satisfaction with the condition of their personal dwellings, particularly large in Highfield. Also, there was a large increase in children using neighbourhood playgrounds in Highfield and Sudbury.

In addition to parents interview responses to questions concerning characteristics of their neighbourhoods, two other sources of data regarding characteristics of Better Beginnings neighbourhoods were collected and analyzed: a) Children s Aid Society records reflecting the percentage of total agency open family/child cases and children-in-care cases that came from the local Better Beginnings neighbourhoods, and b) police records reflecting the percentage of total municipal occurences of break-and-entry and for vandalism/wilful damage which came from the local Better Beginnings neighbourhood.

There were no consistent substantial changes in either the CAS data from 1992 to 1997 or the police records from 1991 to 1998 for the Better Beginnings neighbourhoods. In many ways, the lack of results was to be expected, since so many people living in each neighbourhood would not be expected to be involved or influenced by Better Beginnings programs in any direct way. This is not to imply that there were no attempts by Better Beginnings projects to establish close working relationships with their local CAS and police. In several communities, CAS connections with the Better Beginnings projects were strong from the point of proposal development in 1990. This was especially true in Guelph where the CAS is the host agency for the Better Beginnings project, the CAS Executive Director has been actively involved from the beginnings, and a satellite CAS office was established in the same building with close working relationships with the Better Beginnings project. Also, in most other project sites, connections between Better Beginnings and CAS programs have been ongoing. Although these efforts have been successful in forging partnerships and may be helping to break down local suspicion, the official CAS figures do not yet reflect any consistent changes in involvement. The same observations apply to police records.

One exception occurred in Highfield, where analyses of both police and CAS records yielded statistically significant decreases in the percentage of total municipal arrests for break-and-entry and for vandalism, as well as decreases in the percentage of total CAS cases and children-in-care coming from the Better Beginnings community since the project started in 1992. While the effect sizes were very small, this overall pattern of decrease in arrests and CAS involvement adds to the improvements in child behaviour and parent functioning in Highfield.

Implications

None of the other model prevention programs for young children described earlier has included measures of neighbourhood characteristics or attempted to focus programs on neighbourhood change; programs and their outcome measures have been limited to one or more aspects of child development or parent functioning. The fact that the Better Beginnings program model included local neighbourhood improvement as an important goal for the project is another unique aspect of this initiative.

The positive changes reported indicate that parents in several of the Better Beginnings sites view their local neighbourhoods as improving in safety and quality for young children and families. Neighbourhood improvements were most evident in two younger cohort sites, Kingston and Guelph, where parents reported improvements in neighbourhood safety, cohesion, satisfaction, and quality.

A strong program emphasis in Guelph on community development and local capacity building beginning with the original project proposal have likely resulted in the improved parent perceptions of neighbourhood quality in that site. In Kingston, an attempt has been made to incorporate community building in all aspects of project management and organization, including the development and implementation of individual programs, and establishing partnerships with other service organizations.

Explanations for the negative pattern of neighbourhood effects in the Toronto Better Beginnings site are not apparent from its programming. The Toronto site has the greatest multicultural diversity, the highest percentage of single-parent families, and the lowest mean income of the urban Better Beginnings sites. Combined with major revisions to welfare support, these factors may have overwhelmed any ability of the Better Beginnings programs to foster improvements in parents perceptions of neighbourhood quality, satisfaction and cohesion.

These findings will make an important contribution to the literature on the effects of prevention programs for young children by demonstrating that improvements in the quality of disadvantaged neighbourhoods can occur in conjunction with programs which are also providing supports to children and their families. It is important to determine whether these improvements can be maintained or enhanced, and what long-term consequences these changes have on the children who have experienced these improvements.

Neighbourhood Schools

Next to parents and family, schools are among the most important influences on the development of young children, particularly between the ages of 4 and 8. In the older cohort Better Beginnings program model, described in the original Request for Proposals, school-based programs were to be a key program ingredient, and one of the model programs described was Comer s comprehensive school change project (Comer, 1985). Information was collected from three sources concerning a variety of characteristics of the schools in the older cohort Better Beginnings and comparison sites: the parent interview, teacher ratings of various school characteristics, and Principals September Reports concerning special education students.

Parents answered interview questions on a scale about their children s teacher, including how much they enjoyed talking with their children s teacher, and how much the parent asked the teacher questions or made suggestions about their children. A second series of questions asked the parent about their

children s school, including whether they thought the school was a good place for their children to be, and whether they felt confident in the people at their children s school. In Highfield, parents showed improved ratings concerning both their children s teacher and school, while parents in Sudbury and Cornwall did not show any consistent changes. The size of the effects were moderate. The finding that parents increased in satisfaction both with their child s teacher and school again underscores the potential value of programs designed to actively forge parent-school connections and involvement.

A set of ratings concerning various aspects of school climate collected from Senior Kindergarten through Grade 3 teachers in all the demonstration and comparison site schools yielded no changes over time. Unfortunately, the first set of school climate ratings were collected in 1995, at least one and a half years after the school programs were implemented, so changes may already have taken place.

Information concerning the percentage of students in all grades who received special education instruction was provided by the Ontario Ministry of Education and Training for every school in the three older cohort Better Beginnings sites, as well as those in the comparison sites from 1992 to 1997. These were students identified as those with exceptionalities such as learning disabilities and behavioural problems. These data show schools in all Better Beginnings sites decreasing in the number of all students identified for special education instruction, and schools in both comparison sites with increases over the study period. The largest relative decreases occurred in the Cornwall schools between 1992 and 1994 with a decrease from 20% to 8% of the students receiving special education instruction. However, the percentage continued to decrease through to 1997. In Highfield, the percentage of students receiving special educational services was the lowest of all sites beginning in 1992 at 5%. Despite this, however, the percentage decreased slowly but significantly over the five year period through to 1997. There was no decrease in the Sudbury schools from 1992 to 1996, but a substantial drop from 1996 to 1997. It will be interesting to see whether this one year change is maintained when data for 1998 and 1999 become available.

Implications

It is possible that the in-classroom supports provided through the Better Beginnings programs from JK to Grade 2 in both Cornwall and Highfield may have contributed to reducing the number of special education students in these schools. In Sudbury, the major programs for early school-aged children were outside the classroom, and many were outside of school hours, which might account for the smaller overall reductions of special education students in that site. It is important to note that reductions in the numbers of special education students reported by schools in the Cornwall and Highfield Better Beginnings sites occurred over the same time period when numbers were increasing in schools in the two comparison sites. The possibility that school-based Better Beginnings programs reduced or replaced the need for special education resources provided by Boards of Education has important implications for the way in which the integration of services for young children can yield potential cost savings.

GOAL: TO DEVELOP HIGH-QUALITY PROGRAMS TO MEET THE LOCAL NEEDS OF YOUNG CHILDREN AND THEIR FAMILIES

Balancing the goals of high-quality programs with those of community capacity building and resident involvement and also building partnerships with other service-providing organizations proved to be very challenging for the Better Beginnings sites. The younger cohort projects all developed home-visiting (also referred to as family visiting) programs and placed an emphasis on hiring and training local residents to staff the programs. These programs provided information and support to mothers and their children beginning prenatally or at birth. In addition, all younger cohort sites provided parent-child play groups and a variety of other programs for parent support or training. Given the responsiveness of the programs to local needs, the number and range of programs was large, including some programs and activities open to all community members and in some cases, programs for children of school age and

older.

When the costs of operating the Better Beginnings programs are compared to programs which have provided only home-visiting for two to five years, the Better Beginnings programs are strikingly inexpensive. This suggests that the amount of financial resources available to operate any of the individual program activities may have been too low to allow for maximum effects to be realized. Despite this limitation, however, the positive outcomes that were realized in the younger cohort Better Beginnings sites are encouraging.

Several outcome effects in the younger cohort communities warrant comment is terms of specific programs. One is the general finding of reduced teacher ratings of emotional problems in JK students. A plausible influence on this change in the Better Beginnings communities is the number and variety of play group experiences provided to young children and their parents, including informal and formal childcare programs. Anxiety at school entry is a common phenomenon in young children and increased experience with other children and other adults during the preschool years increases the likelihood of positive emotional adjustment to kindergarten. Play groups and informal childcare activities were provided by all Better Beginnings programs but an emphasis on organizing an ongoing continuum of such activities from infancy through to kindergarten appeared to be intentionally supported in the Kingston Better Beginnings programs and as noted earlier, may be related to the greater improvements in several areas of social-emotional functioning for JK students at that site. How Kingston organized their programs to follow the development of children was described on a local report,

> Moms are contacted during pregnancy and the Health Educator does an intake assessment that would lead to Prenatal classes and/or Family Visiting. Family Visiting can continue until the child reaches his 5th birthday. During this time, a parent and her child might participate in the Infant Group, Toddler Group, attend playgroups and use Parent Relief. Parents may place their children in Childcare while they attend committee meetings. Some weekends, the whole family might attend a Special Event or visit the Parks program in the summer.

Organizing programs in this fashion is consistent with the original Better Beginnings, Better Futures program model which emphasized the development of a "seamless network" of programs for children and their families throughout the four years of children's development.

In Walpole Island, the Better Beginnings project provided home visiting as well as a variety of programs through a local parent-child centre. These programs, offered in conjunction with a separately funded, high-quality childcare centre, also provided a continuum of child and parent programs which may have contributed to the positive child development, parent-child and stress outcome effects in that site.

In the older cohort Better Beginnings sites, Cornwall and Highfield developed programs in conjunction with the primary schools in the neighbourhood, providing classroom and school based social skills training and academic enrichment.

In Highfield, educational assistants, called "Enrichment Workers", provided by the Better Beginnings Project worked with the children in the focal research cohort and their families throughout the first four years of primary school, following them from JK to Grade 2. Although similar educational assistant positions (Animateurs) existed at Cornwall, they worked with children at all four grade levels simultaneously. Although this arrangement in Cornwall provided continuous classroom support as children moved through JK, SK, Grades 1 and 2, the concentration of resources in Highfield on one age group of children likely provided them with more intense program support than in Cornwall. A second important role of the enrichment worker in Highfield was to visit each child's parents on a regular basis in order to provide information concerning the child's activities in school, to encourage parent involvement in various Better Beginnings programs, and to provide support for parents concerning child and family

issues and information regarding community resources. The enrichment workers followed the same group of children and families for four years. This strategy in Highfield yielded more concentrated Better Beginnings program support to the research children and their families than in any other project site. In addition, several other programs were provided in Highfield: a health and nutrition program which provided lunch for children who required it, and also, beginning in 1995, the Lion s Quest Skills for Growing program, which is a comprehensive social skills development program provided by all primary classroom teachers. This later program receives support from Better Beginnings and the Highfield Junior School. Although Highfield, like other Better Beginnings sites offered a variety of additional child, parent and community programs, it appears to be unique in having provided several major programs to the children and families in the focal research cohort from 1993/4 to 1996/7, with a heavy emphasis on classroom assistance and connecting parents to the local school and other Better Beginnings programs. Also, Highfield Junior School is the only school in the Better Beginnings neighbourhood, in contrast to Sudbury and Cornwall where there were five local primary schools in 1996/7. These factors may well account for the fact that Highfield yielded more positive outcome results for children and their parents than any other Better Beginnings site.

GOAL: TO STRENGTHEN THE ABILITY OF SOCIO-ECONOMICALLY DISADVANTAGED COMMUNITIES TO RESPOND MORE EFFECTIVELY TO THE NEEDS OF YOUNG CHILDREN AND THEIR FAMILIES: DEVELOPING COMMUNITY CAPACITY THROUGH RESIDENT INVOLVEMENT

Community development to organize the project from a grassroots level involving community member and service-provider support as well as the empowerment of residents to be involved were key elements in the conceptualization of the Better Beginnings, Better Futures model. It is this community-driven nature of Better Beginnings that distinguishes it from almost all other prevention programs in North America involving young children and their families.

The most important approach to community development and local capacity building has been the involvement of community residents in all aspects of Better Beginnings program development and implementation.

Developing local Better Beginnings organizations that successfully involved neighbourhood residents was an extremely challenging task, and was one of the major reasons that most sites took up to three years to establish and begin to implement programs. Two sites, Guelph and Sudbury, have placed a particularly strong emphasis on community development and resident involvement in managing their organization and developing programs. Interestingly both of these project sites had employed community development activities and personnel to assist with the development of their original Better Beginnings proposals on 1990. Community development has remained a key organizing principle for the Guelph and Sudbury Better Beginnings projects throughout the decade.

Community representation is present in many private and public organizations, typically in the form of one or two volunteer nonprofessionals who sit on the boards of directors and its committees. It became apparent in the Better Beginnings Project that including one or two community members on a committee with six to 10 paid professionals from area services providing agencies did not provide the critical mass required for neighbourhood residents to feel comfortable and confident in raising concerns and offering opinions. Therefore, a 50% rule was established, requiring that each Better Beginnings organization s steering committee and subcommittees contain at least 50% local residents as members.

There have been many challenges in establishing and maintaining this level of resident involvement in all of the Better Beginnings projects. These include: unfamiliar terms and procedures used by professionals; feelings of intimidation and power imbalances felt by residents in relation to professionals; ethnic tensions; jealousy; feelings of favouritism; failed expectations for residents not hired for project

positions; difficulties experienced by both staff and volunteers in setting boundaries between work and personal life; juggling family and project responsibilities; and language barriers in bilingual and multilingual communities.

Despite these challenges, through the hard work of many people in each site, resident participation with the local projects and other community activities and organizations has become firmly established, and represents one of the most successful short-term outcomes of the Better Beginnings projects. For example, residents are involved as active members of major project committees, and subcommittees, often as chair or co-chars, and in program management and support, including hiring project and research staff. They also donate goods and services and raise funds. Some local residents have been employed as project staff and many others volunteer time to Better Beginnings programs; for example, in schools, parent-child centres, and community events. Also, residents have become actively involved as local leaders in advocacy and promotional activities including making presentations to public officials.

In 1998, local RCU researchers interviewed many residents, project staff, and other agency representatives who had been involved with the local Better Beginnings projects for several years. Based on these interviews several areas of positive outcomes resulting from resident participation were identified.

Personal benefits for the participating residents. The kind and degree of benefit that residents experienced appeared to relate to the type and level of their involvement. Individuals who participated in the planning and development of programs as members of steering and working groups, who were hired as program staff, or who had spoken on behalf of their project to outside audiences, were the ones who appeared to derive the greatest benefit. These included greater confidence, self-esteem, self-knowledge, assertiveness, awareness of rights, political awareness and involvement. They also reported the development of skills, including public speaking, improved language ability, and employment skills. These experiences have encouraged some residents to go back to school or seek employment.

Benefits of resident participation for the Better Beginnings projects. Resident volunteers have freed up staff time, making more and better quality programs possible. Information on volunteers hours were systematically collected at each site from 1994 to 1997. The time volunteered to the Better Beginnings projects by neighbourhood residents totaled over 128,000 hours for the three-year period, which is equivalent to three full-time staff positions per year per site.

Residents knowledge of their community has enhanced the relevance of programs and organizational structures, making projects more accountable to the community in which they operate. Also, local resident involvement in the promotion and advocacy of the programs has increased the level of trust and respect for the Better Beginnings projects, from other neighbourhood residents, but also more widely from other service providing organizations and local politicians.

Benefits of resident involvement for the communities. Residents who have been actively involved are seen as positive role models for their children and other community members. Many of the residents expressed increased feelings of ownership and responsibility for their neighbourhoods, and also felt an increased understanding and acceptance of people with different personalities and cultural backgrounds.

Finally, individuals from other local organizations felt that they benefited from seeing how the Better Beginning projects successfully involved local residents, and many began to adopt a similar approach in the management of operation of their own organizations.

Some residents reported that their neighbourhoods had become more safe and more secure places for themselves and their children. Two examples of this were reported in both Sudbury and Guelph where the buildings in which the Better Beginnings projects were based had been vandalized repeatedly early in the project, but not at all during the past four years.

Comment

- Community development and empowerment of residents for their involvement are essential components of a vibrant primary prevention project like Better Beginnings.
- The eight Better Beginnings projects have incorporated local neighbourhood residents, albeit with varying emphases, in all aspects of the organization, management, and delivery of services.
- The involvement of neighbourhood residents in all stages of program development allowed the projects to identify and address community needs.
- The time, energy, and skill involved in eliciting and maintaining resident involvement will lead to enhanced participation. This participation is gained through respecting the knowledge and skills local residents have to offer, by communicating in plain language avoiding professional jargon, and in very practical ways by providing free childcare and transportation subsidy if required and food or snacks for volunteers. Dinners, gifts and honoraria have been found to be effective ways to recognize residents for their hard work and involvement in these Better Beginnings projects.
- Effective resident involvement as volunteers and as project staff is considered to be a key to the success of sustaining the local Better Beginning projects. Local residents become sensitive to community needs, represent and communicate with the various ethnic and cultural groups, and elicit high levels of trust and respect for the project from the community.

GOAL: TO ESTABLISH A LOCAL ORGANIZATION CAPABLE OF IMPLEMENTING THE BETTER BEGINNINGS. BETTER FUTURES MODEL

Although this was not stated as a formal goal of the Better Beginnings, Better futures initiative, developing a viable local organization represented one of the most formidable challenges faced by each demonstration site.

Because of the breadth of the Better Beginnings mandate, and its innovative nature, designing and putting in place stable organizational structures and programs took at least two to three years. At almost every site, there was initial difficulty in recruiting and maintaining an appropriate number of residents to participate in project committees. This occurred more easily in Sudbury and Guelph where great effort had been made to involve local residents in the proposal development process in 1990. Sites went through a long process of modifying decision making procedures, working out relationships between resident participants and professionals, and developing strategies to build partnerships with other service-providing organizations.

In developing their projects, sites differed in the relative emphasis on community development and involvement, establishing focused programs and creating partnerships among service organizations. Because the project goals were so broad, and time and money limited, choices had to be made as to where to invest most heavily.

Sites also varied in the extent to which they embraced alternative organizational models, defined in terms of egalitarian structure and remuneration, hiring on the basis of local residency and life experience, and consensus decision making.

There was little variation, though, in the criteria for hiring managers. Except for one site, this was done on the basis of formal qualifications and relevant work experience. On the other hand, service delivery staff at most sites were chosen almost exclusively on the basis of personal characteristics and life experience. Across the sites, the average proportion of service delivery staff who worked part time was 55%; the proportion tended to be lower for core program staff. The use of many paraprofessional and part time staff required much attention to training, which was done in varied ways from site to site.

A consistent finding was that project coordinators, besides coordinating and supporting activities, influenced many core aspects of program development, contributing, for example, to the strong emphasis on community development and resident empowerment at one site, and to clear articulation of an alternative organizational approach at another. Hiring the project coordinator was consistently linked to the beginning of rapid program development at all sites.

Ontario Government representatives were involved with the Better Beginnings sites around many issues, including: increasing resident participation, dealing with the sponsoring organization, hiring, program creation, accountability arrangements, staff relations, salary structures, development of program working groups, and consideration of geographic areas to be served. Although there has been much more direction and guidance from funders in other projects reported in the literature, there are few references to projects as broad or as community-based as Better Beginnings.

Finally, most sites have been blessed with markedly positive and productive relations between the local Better Beginnings project and the sponsoring organization that assumes financial and legal responsibility for the project. In Sudbury, a new corporation was formed to serve this sponsoring function.

GOAL: TO ESTABLISH PARTNERSHIPS AND PROGRAMS WITH OTHER EDUCATIONAL AND SERVICE-PROVIDING ORGANIZATIONS: INTEGRATING SERVICES.

In the early years of Better Beginnings, Better Futures, the sites had great difficulty understanding how to translate the idea of facilitating service integration into practice. Over time, less effort was invested in defining service integration as attention turned to creating voluntary partnerships with service agencies in order to increase resources and programming in the Better Beginnings communities.

Service-providers became involved in these voluntary collaborations both because they shared objectives similar to those of Better Beginnings, Better Futures, because they saw possibilities of improving their access to resources or improving their services through the partnerships, or both. As the reputation of the Better Beginnings, Better Futures projects improved over the demonstration period, outside agencies saw increased advantages in connecting with neighbourhood-based participatory projects with networks and credibility different from their own.

All sites except Sudbury had a stable core of service-providers involved with the project from 1995 to 1999. Overall, the numbers of agencies involved and the diversity of exchanges taking placed increased over this period.

There is agreement that Better Beginnings is the catalyst for most of these voluntary collaborations taking place. There is also general recognition that these partnerships would not have happened if not for the initiative of Better Beginnings personnel and volunteers.

A number of obstacles made these voluntary partnerships more difficult to achieve. Financial cutbacks at participating agencies decreased the resources available for the collaborations. The time required to develop trust, and to overcome different mandates and self-interests, were common obstacles. Sorting out issues of power and control was a challenge, as was balancing service-provider and resident involvement in the projects.

Good interpersonal relationships based on mutual trust and respect were considered essential to the productive partnerships that developed. This trust took a lot of time to develop. Several sites commented that partnerships were easier with agencies that shared similar mandates and had existing commitments to the neighbourhood.

The creation of partnerships has resulted in significant new resources and programming being created in each Better Beginnings community; resources and programming that would not exist without these collaborations. This has come about through joint programming, finding of new sources of funding, encouragement of agencies to locate in the neighbourhoods, and by mutual enrichment of programming between Better Beginnings, Better Futures and partner agencies.

Increased visibility and accessibility to the services of the partner agencies in the Better Beginnings communities is a frequently mentioned benefit from these partnerships. Service-providers also comment about changing their attitudes about communities and residents and about the appropriateness of their own programs because of their involvement.

Better working relations between partner agencies, and more positive attitudes towards collaboration, also are reported. In three communities, new structures supporting ongoing dialogue among agencies outside of the auspices of Better Beginnings have resulted from the demonstration project.

Implications

There is substantial interest among policy makers, service-providers and community leaders in the potential value of local coordination and/or integration of social and educational services; this is particularly true for child and family services in disadvantaged neighbourhoods. Unfortunately, there have been few demonstrations available to guide the development of such initiatives or to provide evidence concerning the value of local service integration. St. Pierre and Layzer (1998) recently concluded that there is little evidence to support the assumption that To be effective for low income families, existing services need to be coordinated (p.13). In fact, the results of the Comprehensive Child Development Project in the U.S. (St. Pierre *et al.*, 1997) indicated that providing low income families with a home-visitor/case manager, in order to coordinate services had no positive effects on children or families, mainly because families in the control group equally accessed services without the assistance of a home-visitor/case manager.

In the Better Beginnings neighbourhoods, however, the focus has been on building partnerships among the service-providing organizations themselves as a way of maximizing service accessibility and availability. The Better Beginning projects have demonstrated that these partnerships can be successfully established, and that organizations that were providing services independently of each other or not at all in the neighbourhood, can work effectively together. The experience of the Better Beginning projects in fostering these partnerships will serve as valuable examples for other disadvantaged neighbourhoods.

PROGRAM COSTS

Program costs were collected from the quarterly financial reports and audited annual statements submitted by each of the demonstration sites to the Ontario Government. On average, each site receives $570,000 per year from direct government funding.

A second cost was the services-in-kind donation from volunteers. Averaging approximately $300 per child per year, the value of the volunteer services is an important ingredient in the implementation and operation of the programs. Without these services-in-kind, either the sites would have had to scale back or government would have had to increase its direct costs.

Calculations yielded an estimate of the average costs of the Better Beginnings, Better Futures Project of approximately $1,400 per family per year in the younger cohort sites, and approximately $1,100 per family per year in the older cohort sites.

One way to put these estimated annual costs in perspective is to compare them with costs of other prevention programs.

The Elmira Home Visiting Project, which provided an average of nine nurse home visits prenatally and monthly home visits for a maximum of two years postnatally cost $4,300/family/year, and the short-term outcomes of that project yielded no effects on children, while maternal outcomes were limited primarily to a group of 38 very high-risk mothers.

The Perry Preschool Project, costing $8,600 per family per year for two years, reported short-term improvements on children's IQ performance, but no significant positive short-term effects on children's social, emotional, or health outcomes, nor outcomes for parents.

From these comparisons, it appears that the annual costs of operating the Better Beginnings projects are extremely modest, particularly when one considers that many of the programs were new to the neighbourhoods, and also that the programs were so broad, i.e., not focused exclusively on either children or parents, but also on the local neighbourhood, on integrating local services, and on involving residents in project management and other community development activities.

CHALLENGES AND LIMITATIONS

A major challenge to Better Beginnings, Better Futures has been its broad and complex mandate. This may also be its greatest strength in terms of its opportunity to contribute new knowledge to the field of prevention, especially concerning large-scale, multi-site initiatives. However, some specific challenges and limitations to the project and to the research carried out to determine its outcomes warrant discussion. Those related to the quality and intensity of programs, the timing of measure selection, the strength of outcome effects, and the initial years of studying the cohorts.

Program Quality

One limitation to interpreting the short-term outcomes is the lack of a formal evaluation of the quality of the individual programs at each site. Although some sites carried out evaluation activities for some of their programs, there was no provision in the research contract for these, and given the large number of programs implemented, such an undertaking would have been extremely expensive. One objective of program evaluation, the degree to which program staff adhered to explicit, anticipated implementation procedural plans would have been nearly impossible to accomplish because specific program characteristics were not provided by the Government. Since each site was expected to develop programs that would meet local needs and conditions, thereby creating substantial variation in, for example, procedures and practices for home-visiting programs, the numerous important programs at each site would require separate evaluative attention.

As part of a commitment to resident participation and community economic development, each Better Beginnings project placed emphasis on employing community residents as program staff, often relying more on life experience than educational/professional credentials. This is in sharp contrast to model programs such as the Abecedarian, Perry Preschool, and Elmira home-visiting projects, which employed highly qualified and experienced childcare staff, primary school teachers, and public health nurses, respectively, to work with small numbers of children/families. Staff in these programs were provided explicit program procedures to follow and received extensive training and ongoing supervision. This was not the model employed in Better Beginnings. It is unclear the extent to which different outcomes might have existed under a different staffing model, yet no assessment of this alternative approach could be made.

Program Involvement

Another limitation is the lack of information on the intensity of involvement in various programs for children and families in the project sites. This concern might have been alleviated by the development of a common management information system for use in all sites in the same way that a common financial accounting was utilized. In 1995, the Government attempted to introduce a program participation data collection system, and all eight Better Beginnings sites were to utilize this system in fiscal 1996/7. However, due to lack of training and technical support for what turned out to be a very complex undertaking, incomplete program participation information is available for that one year period. Therefore, the only source of information available to the RCU concerning the intensity of program involvement was that collected in the parent interview and this yielded global indicators of parent and child participation in major categories of neighbourhood activities and programs. Extensive effort was invested in analyzing these parent-reported program participation data in an attempt to identify any systematic patterns relating intensity or breadth of program involvement to all child and parent outcome measures over the five years. No such pattern was identified. Interestingly, similar results were recently reported from results of the Comprehensive Child Development Project (CCDP), a five-year intensive home-visiting/case management project for disadvantaged families with young children in the U.S. Analyses of program participation data collected from a standardized management information system and also from parent interviews revealed no consistent relationships between either source of program participation data and any child or parent outcome (St. Pierre *et al.*, 1997). Taken together, these findings suggest that the sheer amount or intensity of participation may not be systematically related to program outcomes. This issue requires further study.

Selection of Research Outcome Measures Before Specific Programs Were Developed

The research design as well as the community-driven nature of the Better Beginnings Project required outcome measures to be selected and approved by both the government funders and the local project sites before the programs were developed. This required the RCU to adopt an extremely large number of quantitative and qualitative measures that would reflect the broad goals of the Better Beginnings program model, namely: a) preventing emotional and behavioural problems in young children; b) promoting all aspects of children s development; c) providing support to parents and families; d) improving the quality of local neighbourhoods for children and their families; e) integrating programs with other local social and educational services; and f) involving local residents in all aspects of program decision-making.

As the specific programs and organizations developed in each of the eight communities, some of the outcome measures employed were unrelated to specific program goals, and, in other cases, measures required to address unique program goals were inadequate or absent. An example is the heavy emphasis placed on creating local leadership and political activism in several communities that was not addressed by measures collected in the parent interview. This knowledge will influence the selection of better outcome measures for the proposed follow-up research.

Relating Outcome Effects to Better Beginnings Programs: The Issue of Signal Versus Noise

There are many challenges in evaluating prevention interventions in natural settings such as the Better Beginnings neighbourhoods and schools. The most difficult issue may be that of study design. The gold standard design for studies which allow for tight experimental control of the intervention (e.g., drug trials), is the double blind randomized controlled trial, where study participants are randomly assigned to either a drug or a non-drug/placebo condition, and neither the participants nor the researchers are aware of who received what until after the study is completed.

Few, if any, of these conditions can be met in natural environments, and therefore quasi-experimental designs are often employed. The Better Beginnings research employed two such designs: a before-after design and a longitudinal comparison group design. In the before-after (or baseline-focal) design,

outcome measures were collected in 1992/3 on one group of children and their parents in each Better Beginnings site before the programs were fully implemented. Then again several years later, they were collected on another group of same-aged children and their families who had the opportunity to experience the Better Beginnings programs for up to four years. Since any observed changes in those outcome measures may have resulted from larger societal influences impacting all Ontario children and families, such as changes in economic conditions, health services or welfare practices, a one-year birth cohort of children and their families was studied over time, both in the Better Beginnings sites and in three comparison sites where no Better Beginnings funding was available (the longitudinal-comparison group design). To the extent that the cohort of children and families in the comparison communities was the same as those in the Better Beginnings communities in terms of demographic and personal characteristics, and to the extent that children and families in the two settings differed over the study period only in whether or not they were influenced by Better Beginnings programs, then outcome differences can be attributed to the presence or absence of Better Beginnings.

In the present study, it is difficult to determine precisely the degree to which these conditions were met. First, due to limited funds, only three comparison sites were employed; two comparison sites for the three older cohort demonstration sites, and one comparison site for the five younger cohort demonstration sites. Due to the extensive cultural and socio-economic diversity among the five younger cohort Better Beginnings sites, the one comparison site in Peterborough provided a poorer match demographically than the older cohort comparison sites. To minimize the effects of any socio-demographic differences between sites, all of the analyses of outcome variables statistically controlled for demographic differences.

The second assumption of the same number and type of non-Better Beginnings programs operating in both demonstration and comparison sites also presented a challenge. It was impossible to control what additional programs and activities were operating for children and families, either within the Better Beginnings sites or the comparison neighbourhoods. Their influences are background noise against which the effects of Better Beginnings programs must be determined. As mentioned previously, information was collected from parents in each interview concerning the type and frequency of neighbourhood programs and services they utilized during the past six months. Two differences between demonstration and comparison sites emerged from these program participation measures. Parents in the Peterborough comparison site reported much lower use of home-visiting services than parents in all of the younger cohort Better Beginnings sites.

A second difference in parent-reported program participation occurred between the Highfield Better Beginnings site and its comparison site in Etobicoke. Parents in the Etobicoke site reported consistently lower participation in all types of programs on which information was collected. These program participation differences mirror the many differences in outcomes in favour of Highfield. Since both sites contained the highest percentages of immigrant and multicultural families of any study sites, it appears that the Highfield Better Beginnings programs may have been particularly effective in involving immigrant families in a wide variety of program activities that did not occur spontaneously in the Etobicoke neighbourhood.

Despite methodological precautions, it is difficult to attribute specific outcome differences to specific programs because of the lack of strict experimental control. This is likely the reason that in the original Request for Proposals, the first research goal was "... not to discover the most efficient or leanest package of prevention services, but to determine how effective a reasonably-financed and community-supported project can be" (Government of Ontario, 1990).

Future prevention studies should explore the feasibility of employing large longitudinal databases, such as the National Longitudinal Survey of Children and Youth, as a means of providing comparison outcome data that can be based on closely matched demographic characteristics, and also that should be less influenced by idiosyncratic program effects than are data from a small number of comparison sites.

Studying the First Cohort of Children and Families

The longitudinal outcome measures have been collected on a single birth year cohort of children and their families : children born in 1994 in the younger cohort sites, and children who were four years old in 1993 in the older cohort sites. These are the groups of children who are to be followed over time to determine longer-term outcomes. The decision to study one birth cohort in each site was based partly on the amount of research resources available, and also on the fact that this was the first wave of children and families to move through the full four years of Better Beginnings programming, starting in 1993/4.

During the first year, however, each Better Beginnings site was still adjusting and fine-tuning its programs, eliminating some that were considered ineffective and adding others. Since the demonstration was scheduled to end in 1997, the last two years of programming for the longitudinal cohort (1996 and 1997) were characterized by increasing staff uncertainty and stress.

There is a definite belief among program staff that the programs experienced by the longitudinal research cohort were less stable and of poorer quality than those currently being implemented. To the extent that this is true, the outcome results presented in this report underestimate the effects that would be expected from children and families currently involved in the Better Beginnings programs. The periodic collection of several key outcome results on four and eight year old children and their families in the younger and older cohort sites, respectively, would yield valuable information on the degree to which the outcomes presented in the current report are stable or changing in important ways.

PROJECT DEVELOPMENT CONSIDERATIONS FOR FUTURE PREVENTION INITIATIVES: LESSONS LEARNED FROM BETTER BEGINNINGS, BETTER FUTURES

Project development processes are as important to good outcomes as are credible approaches to helping attain project goals. The following are core considerations in developing programs that will match with original intentions and allow credible evaluation:

" Even moderately complex projects require at least two years of implementation before stable functioning can be expected. Complex projects such as Better Beginnings, Better Futures need a minimum of three years. This time requirement needs to be provided for in the project development and assessment time lines. Formative and process assessments have the potential to provide useful feedback during the start-up stage.

" Prevention projects which rely solely on local development processes to interpret and implement broad and general mandates have been characterized by a number of phenomena. They are: high levels of variation in approaches across demonstration sites, local communities having difficulty figuring out what to do and how, and original project intentions not being clearly tested over the demonstration period.

" Clearer outcomes are more frequently reported in projects when the original mandates are more specific about what is to be demonstrated and where project implementation is supported and monitored.

" Better Beginnings, Better Futures confirms that project relations with sponsor organizations generally are less complicated if they share similar priorities and ways of working. It is helpful if the funding organization, host organization and project negotiate early in the demonstration project how the project will be accountable to the sponsor, how the project s needs for independent functioning and buffering from host agency procedures will be accommodated, and what long-term administrative arrangements are foreseen for the project.

" Demonstration project mandates need to balance breadth and focus. While it is tempting to expand project mandates, doing so greatly increases project complexity and usually introduces priorities which are only partially compatible. It is important to be clear in the beginning about what are the most important elements to be tested in any particular demonstration project and how these elements might fit together.

" There is a deep tension between locally-controlled participatory processes and the implementation of predetermined focused programs. It is critical in project development to be clear about the role of participatory processes. Better Beginnings, Better Futures unequivocally illustrates how passionately commitments to locally-controlled processes can be held. Negotiating a balance with other priorities will not be simple. In community development, participatory processes are the core definer of what is to be accomplished. How decisions are made is more valued than what is done. Under such circumstances, community development is the prevention model that is being demonstrated. Participatory processes sometimes are central to program helping processes, as in self-help and mutual aid organizations. Or participatory process can focus on adapting programs to local circumstances without altering elements essential to the model s effectiveness. Involvement in project governance can create valuable opportunities for voluntary leadership and bring useful insights into project development. Difficult as the challenge may be, it is important to be clear in the beginning about the place of participatory processes in any prevention project or program.

" Most of the positive outcomes reported in the literature have been associated with clearly defined focused programs. It is critical in a prevention demonstration to be specific about what focused program model(s) are to be demonstrated and what is required for the potential of this approach to be adequately demonstrated. If particular focused-program models are to be used, their implementation must be carefully supported and monitored, and deviations from effectiveness requirements corrected. If focused programming is to be employed in conjunction with participatory processes and service integration, it is critical in the design phase of the demonstration project to clarify their respective roles and boundaries.

" Resident involvement/community development is not the *sine qua non* nor the heart of effective prevention. Neither is focused programming. Nor is service integration. Rather these are separate processes with different goals and implementation requirements. They produce different kinds of outcomes. Inclusion of any of these development threads represents a choice and, if multiple threads are given importance, their relationship to each other requires consideration.

" Project development requires developers. It is wasteful to have local communities solve major development puzzles by themselves or perhaps not to solve them at all (Schorr, 1997). Reports from many successful multi-site projects and from replications of promising programs have stressed the importance of centrally providing proper training, help with problem solving, and monitoring. Project guidance and overseeing a project (with adequate staff, resources, and authority) are as central an element, albeit a commonly neglected one, for good prevention projects as are credible intervention strategies.

" Hiring the initial complement of staff is a major challenge. Better Beginnings, Better Futures confirms that initial personnel, particularly project coordinators, have a pivotal influence over priorities and ways of working that endure for a long time. Clarity about the traits to be sought in a project coordinator is particularly critical. Informed support to demonstration projects in hiring initial personnel can be especially helpful.

" Demonstration projects often experience a time of turmoil and low functioning as the end of project funding approaches. This needs to be anticipated in project assessment strategies. It generally is useful to have plans in place at an earlier point in project development to facilitate

demonstration projects transition to ongoing funding or to close projects.

CONCLUDING REMARKS

THE BETTER BEGINNINGS, BETTER FUTURES INITIATIVE

The Better Beginnings, Better Futures Project being implemented in eight disadvantaged communities throughout Ontario, is one of the most comprehensive and complex prevention initiatives ever implemented for young children. It is unique in that it attempts to incorporate the following aspects into a *single* program model: a) an ecological view which requires program strategies focusing on individual children, their families, and their neighbourhoods, including childcare and school programs; b) a holistic view of children, including social, emotional, behavioural, and cognitive development; c) programs universally available for all children within a specified age range and their families living in the neighbourhood; d) resident involvement in all aspects of the organization, management, and delivery of programs; and e) partnerships with local social service, health, and educational organizations.

In the analyses of the operating costs presented in this report, it was concluded that the costs are quite modest when compared to other prevention projects for which comparable financial information is available. Further, these other demonstration projects have typically not been sustained for more than two or three years; have provided a much smaller number of programs to a smaller group of children and/or parents; have not involved local residents in any aspect of program development or implementation; have not attempted to integrate their programs with those of other organizations; and have collected evaluation information on a small number of child or parent measures, with modest short-term outcome effects. When placed in this context, the accomplishments of the Better Beginnings projects to date are encouraging.

MAJOR SHORT-TERM FINDINGS

Program Development

Better Beginnings, Better Futures has produced many new or improved programs for children and families, parents, schools and communities in the eight participating sites.

- These programs are characterized by high levels of community acceptance and accessibility to groups of differing languages and cultures.

- Many of these child and family support programs are typically found in middle-class neighbourhoods, but were missing or poorly accepted in the Better Beginnings neighbourhoods before the project began.

- The strong involvement of local residents in all aspects of program development and implementation are widely believed to be critical to the acceptance and appropriateness of the Better Beginnings programs.

Resident Involvement

At all program sites, local residents have played a wide variety of key roles in:
- ← project management and decision-making
- ← program development and implementation
- ← program staff (as volunteers and paid staff)
- ← program advocacy

This involvement has led to:
- ← enhanced skills and greater employability on the part of involved residents
- ← reduced program costs
- ← greater acceptance of programs

Service Integration

Significant partnerships have been established between Better Beginnings and programs in social services, health, and education. This has resulted in:
- ← sharing of staff and physical resources
- ← creation of new programs and organizations
- ← collaboration on other family and child initiatives (e.g., Healthy Babies, Healthy Children)

Child Outcomes

The most frequent and consistent patterns of positive child outcomes were in the area of emotional, behavioural and social functioning. This is encouraging since the major goal of the Better Beginnings project at its inception was the prevention of serious emotional and behavioural problems in young children.

Positive patterns of decreasing children s emotional and behavioural problems and improving social skills arose in three project sites that provided the greatest continuity of child-focused programs across the four-year age span, and that allocated the largest part of their budgets to programs for children in the focal age range (Kingston, Cornwall and Highfield).

Also, these positive patterns were stronger in the Cornwall and Highfield older cohort sites that provided continuous and extensive classroom-based programs for children from four to eight years of age than in the Kingston younger site. These differences may be due to the fact that all children in the older cohort sites participated in classroom programs daily throughout the school year, while child-focused programs for children from birth to four years of age (e.g., home visiting, playgroups, childcare) provided experiences that were substantially lower in frequency and duration.

These results are consistent with previous findings that programs which have been most successful in improving the development of very young children from birth to school entry have provided full or half day centre-based interventions directed at the child over a 2 to 4 year period. None of the younger cohort Better Beginnings projects provided child-focused programs of that intensity.

Parent and Family Outcomes

The strongest pattern of parent outcomes appeared at Highfield, where parents reported fewer tension producing events, less tension juggling child care and other responsibilities, more social support, reduced alcohol consumption and increased exercise.ÿÿThis combination of changes might be expected to reduce illness, particularly stress-related, and parents at this site reported reduced use of prescription drugs for pain, as well as a reduced number of types of prescription.ÿÿ

They also reported improved family relations, reflected in increased marital satisfaction, more consistent and less hostile-ineffective parenting, and increased parenting satisfaction.

Many of these variables could easily affect one another, so that Better Beginnings may well have produced its outcomes by affecting some of them directly, with these in turn influencing the others.ÿÿThis possibility makes it difficult to specify the pathways through which the programs achieved the effects they did, but it is possible to point to a distinctive feature of the Highfield program that could have produced the difference between this site and others.ÿÿ

Highfield made consistent, ongoing, attempts to involve parents in their programs and in school events, and to discuss issues that arose for their children or their families.ÿÿThe site s educational assistants visited all the parents of all focal cohort children regularly for four years, discussing how the children were coming along at school, issues in child rearing, and questions about family living.ÿÿParents were encouraged to become involved in parenting programs sponsored by Better Beginnings and other activities at the school, and informed about community resources that could be of assistance.ÿÿIn sum, at Highfield parents of the focal cohort, like their children, were the focus of more frequent, intensive and wide-ranging attention from Better Beginnings than those at any other site.

Neighbourhood Outcomes

There was improvement in general neighbourhood satisfaction, and improvement in housing satisfaction across the older cohort sites. The broadest patterns of change in neighbourhood ratings, however, arose at two younger cohort sites, Guelph and Kingston, where parents reported improvements in community cohesion, decreased levels of deviance (alcohol and drug use, violence and theft), and improvements in several other aspects of neighbourhood life (housing, safety walking on the street at night, and overall quality of life in the neighbourhood).

Guelph's strong emphasis on community development and local capacity building, which began with the creation of its original proposal, could well have led to the improvements seen at that site. Kingston has consistently attempted to incorporate community building into the development and implementation of all programs, including those it has worked on in partnership with other agencies.

School Outcomes

In Highfield, parents showed improved ratings concerning both their children s teacher and school, underscoring the potential value of programs designed to actively forge parent-school connections and involvement.

There were significant reductions in the percentage of special education students reported by schools in the Cornwall and Highfield Better Beginnings sites over the same time period when percentages were increasing in schools in the two comparison sites. The in-classroom supports provided through the Better Beginnings programs from JK to Grade 2 in both Cornwall and Highfield may have contributed to these findings.

The possibility that school-based Better Beginnings programs reduced or replaced the need for special education resources provided by Boards of Education has important implications for the way in which the integration of services for young children can yield potential cost savings.

CONCLUSIONS

- The original Better Beginnings, Better Futures Project model emphasized the ecological nature of child development, which resulted in all project sites developing some programs to support the improvement of child, family and neighbourhood functioning. Analyses of the short-term outcomes support the conclusion that changes were strongest for programs that were intensive, continuous and focused.

  Further, short-term outcomes were greatest in the area of program focus, with child-focused programs effecting child outcomes, parent/family-focused programs effecting parent and family and outcomes, and neighbourhood programs effecting neighbourhood characteristics. These conclusions are consistent with those presented recently in reviews of effective programs. For example, St. Pierre and Layzer (1998) concluded that recent evaluations "call into question the wisdom of relying too heavily on indirect intervention impacts on children, especially when compared with the larger effects of more child-focused, developmental programs. Most researchers conclude that children are best served by programs that provide intensive services to children directly for long periods of time, instead of trying to achieve those effects by delivering parenting education to parents" (p. 18).

- In many ways, the eight locally owned and operated Better Beginnings, Better Futures organizations represent the greatest short-term outcome of this Ontario Government initiative. Faced with an extremely broad and complex mandate, high expectations and relatively little explicit direction, each of the eight communities has developed an organization characterized by significant and meaningful local resident involvement in all decisions. This alone represents a tremendous accomplishment in socioeconomically disadvantaged neighbourhoods where ten years ago, many local residents viewed government funded programs and social service organizations with skepticism, suspicion, or hostility.

  In developing their local organization, Better Beginnings projects have not only actively involved many local residents, but also played a major role in forming meaningful partnerships with other service organizations. They developed a wide range of programs, many of which are designed to respond to the locally identified needs of young children and their families, and others to the needs of the neighbourhood and broader community. As they strengthened and stabilized over the seven year demonstration period from 1991 to 1998, each Better Beginnings project increasingly gained the respect and support not only of local residents, service-providers and community leaders, but also of the Provincial Government which, in 1997, transferred all eight projects from demonstration to annualized funding, thus recognizing them as *sustainable*.

  The short-term findings from these projects are encouraging, and provide a unique foundation for determining the extent to which this comprehensive, community-based prevention initiative can promote the longer-term development of some of Ontario's most vulnerable children.

- There is mounting evidence that poverty and other manifestations of socioeconomic disadvantage are becoming increasingly concentrated in specific urban neighbourhoods across Canada (Zeesman, 2000). This "ghettoization" of family poverty is associated with fewer and lower quality child and family health and social services, poorer schools, and increased toxicity for child and family development. It is in exactly these types of neighbourhoods that the Better Beginnings projects are located. The lessons being learned in the eight Better Beginnings communities have much to contribute to other disadvantaged neighbourhoods searching for ways to foster the future well-being of their children and families.

NEXT STEPS FOR RESEARCH AND EVALUATION: DO BETTER BEGINNINGS LEAD TO BETTER FUTURES?

Longitudinal Followup Research

There is still much to be learned from the Better Beginnings, Better Futures initiative. As consistently pointed out in the recent reviews of the prevention and early- intervention programs, there are very few studies on the long-term effects of programs for young children, and those that do exist have involved small numbers of children and narrowly focused program interventions. Only one, the Montreal Longitudinal Experiment, has been carried out in Canada.

Research on the Better Beginnings project is in an excellent position to contribute to knowledge in this field, since the expectation of longitudinal follow-up research was established as an important goal in the original project design.

Therefore, the RCU is proposing a longitudinal follow-up study of the focal cohort of children and their families to determine longer-term outcomes of the Better Beginnings programs as children develop into adolescence. Research issues for the proposed longitudinal follow-up study will include the following:

Pathways for Change. Based on results from this report, three models or pathways for change will be examined: child and family social-emotional development; parent health promotion and illness prevention; and neighbourhood/community change. This will provide a test of the hypothesis that these pathways can mediate long-term child outcome effects.

Cost Savings. Are there long-term cost-savings from the Better Beginnings Project? The short-term costs of delivering the Better Beginnings programs will be related to potential longer-term cost-saving outcomes such as secondary school graduation rates, use of health and special education services, employment and use of social assistance, criminal charges and convictions, teen pregnancy, and drug/alcohol abuse.

Ongoing Outcome Evaluation

The RCU also proposes an *ongoing outcome evaluation* of the local Better Beginnings projects. The programs in all eight Better Beginnings sites have developed and matured over the past 7 years. The longitudinal research cohort of children and families experienced many of these programs in their early stages of development and refinement. There is a definite belief among program staff that the programs experienced by the longitudinal research cohort were less stable and of poorer quality than those currently being implemented. To the extent that this is true, the outcome results presented in this report underestimate the effects that would be expected from children and families currently involved in the Better Beginnings programs. The periodic collection of several key outcome results on four and eight year old children in the younger and older cohort sites, respectively, would yield valuable information on the degree to which the child outcomes presented in the current report are stable or changing in important ways.

Project Sustainability Research

Very few model demonstration projects survive the end of the demonstration phase. Virtually all of these projects, however, have been top-down , expert-driven interventions which end when demonstration grants end. Important questions remain to be answered concerning whether or not the community-based nature of the Better Beginnings projects will improve their sustainability and maintain continued resident participation, partnerships with other services, and the delivery of child, family and neighbourhood support programs.

Research on these questions, funded by the Ontario Ministry of Health and Long-Term Care, will provide important information concerning the long-term outcomes as well as the continued viability of the Better Beginnings, Better Futures Project.

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Appendix A

TABLE OF PROGRAMS

YOUNGER COHORT SITES (AGES 0-4)

GUELPH - ONWARD WILLOW			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Child and Family-Focused Programs			
1. Kindergarten Readiness	Children entering kindergarten in the following year (mostly ESL children)	1 FT Child Care Coordinator, 1 PT Child Care Assistant, 1 Community Volunteer	8 sessions/month year round, focussing on school readiness skills (eg., fine motor skills, writing, language, and social skills such as learning routines and problem solving
2. Parent Run Drop-In	Mon: Parents and Toddlers Thurs: Parents with children under 5	1 FT Child & Family Coordinator, 1 Child Care Assistant, 2 Community Volunteers	Mon: Parents & children spend time together doing play-centred activities (singing, crafts, etc) Thurs: "Mother Goose Program": Parents learn songs & rhyming games for playing with children, then play the games with their children
3. Parent-Infant Group	Expectant mothers and mothers with infants and toddlers	1 FT Child and Family Coordinator, 2 PT Child Care Assistants, 1 PT Home Visitor, 2 Volunteers, Guelph Community Health Centre, Public Health Unit	Health professionals share their expertise with parents. Parents participate in activities aimed at promoting health and wellness while their children are with the Child Care staff. Parents trade clothes, baby equipment, learn to make baby food, etc
4. Child Play Group	Preschool children age 2.5-5 yrs	1 FT Child and Family Coordinator, 1 PT Child Care Assistant, 1 Parent Volunteer/ Morning	Children are dropped off at the centre where the Child Care Assistants focus on teaching social skills (sharing, cooperation, and problem solving) 8 sessions/month for 52 weeks
5. Parent Take a Break	Mothers of toddler to school-age children who started out in the Parent-Infant Group	1 FT Child and Family Coordinator, 2 PT Child Care Assistants, 1 PT Home Visitor, Parent Volunteers	Children are with Child Care staff while parents are with facilitators in another room. Parents have regular speakers or demonstrations on topics related to child development and parenting. Informal, fun, participatory atmosphere

YOUNGER COHORT SITES (AGES 0-4) (Continued)

GUELPH - ONWARD WILLOW (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
6. Books for Birthdays	Community children up to age 5	BBBF, Shelldale Primary School, Willowdale Day Care Centre, Community Opportunities Development Agency (CODA)	Provides books for children from infancy to grade 1. Books are distributed at Family Gateway, daycare centre, & school. Monthly birthday parties are held for the children. Fundraising by CODA
7. Toy and Book Lending	Parents and children who participate in programs or are home visited	1 FT Child and Family Coordinator, 4 PT Home Visitors, 2 PT Child Care Assistants, 2 Volunteers	Toys & books are available for lending. New Parents are taught how to play & read w/ their babies. Family visitors take toys & books to the families they visit. 5 days/wk for 52 wks
8. Junior Rap	Children 5-8 yrs old	1 FT Youth Coordinator, 2 PT Youth Workers, 2 Community Volunteers/ wk	Recreational activities including group games, crafts and sports. 4 sessions/ month for 40 wks
9. Breakfast Club	Children 5-12 yrs	1 FT Youth Coordinator, 1 PT Breakfast Club Coordinator, 2 Community Volunteers/day	Serving nutritious breakfasts to kids. Older kids help prepare and serve the food. 20 sessions/ month for 50 wks
10. Youth Group	Youth 9-12 yrs, 50% boys & 50% girls	1 FT Youth Coordinator, 2 PT Youth Workers, 2 Community Volunteers/ week	Recreational activities for after school (group games, crafts, and sports). 4 sessions/ month for 40 wks
11. Teen Rap	Youth 13-18 yrs, mostly males	1 FT Youth Coordinator, 1 Community Volunteer, Shelldale School Wellington & Guelph Housing Authority, Family & Children Services, Community Health Centre, Guelph Community Mental Health Centre	Recreational activities after school (group games, crafts, sports). Leadership development involving workshops, fundraising, and guest speakers. Program primarily teen-driven, they do their own planning of activities
12. Karate	Community members aged 3 yrs to adult (but most common is 7-15 yrs)	1 FT Youth Coordinator, 4 Volunteers (2 Black Belt Karate Instructors, 2 Community Residents)	Karate classes for children & adults. There is leadership training for the participants & a potluck supper for parents and friends of kids who participate. 12 sessions/month for 16 wks

YOUNGER COHORT SITES (AGES 0-4) (Continued)

GUELPH - ONWARD WILLOW (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
13. Night Club	Young women 13-15 yrs	1 FT Youth Coordinator, 1 Neighbourhood Resident, Shelldale School, Wellington & Guelph Housing Authority, Family and Children's Services, Community Health Centre, Guelph Community Mental Health Centre	Discussion and support group dealing with young women's issues, including self-esteem, sex, problem solving, and personal hygiene
14. Saturday Morning Drop-In	Community Children between 5-8 yrs	1 FT Youth Coordinator, 2 PT Youth Workers, Shelldale School, Wellington & Guelph Housing Authority, Family and Children Services, Community Health Centre, Guelph Community Mental Health Centre	Drama and creative activities. 4 sessions/ month for 42 weeks
15. Summer Camp	Community youth ages 5-12 yrs, 50% boys and 50% girls	1 FT Youth Coordinator, 4 FT & 2 PT Youth Workers, 45 Neighbour- hood Volunteers, Shelldale School, Wellington & Guelph Housing Authority, Family and Children's Services, Community Health Centre, Guelph Community Mental Health Centre, Brant-Waverley Neighbourhood Group	Recreational activities including group games, crafts, sports, and field trips. Nutritious snacks are provided. Multicultural appreciation is stressed. 20 sessions/ month for 6 weeks.
16. Cooking Club	Community youth ages 8-12 yrs, 50% boys and 50% girls	BBBF staff, 3 Community Volunteers	Planning and preparing a meal, including cooking food and cleaning up. Hygiene and safety are also stressed. 4 sessions/ month for 26 weeks
17. Seasonal Camps (March Break, Christmas)	Community youth ages 5-12 yrs	1 FT Youth Coordinator, 4 PT Youth Workers, 5 Neighbourhood Parent Volunteers/day, Shelldale Public School	Crafts, sensory activities, group games, & field trips. Nutrition program & theme days, social skill & problem solving activities. Parents & children are asked for feedback on the program

YOUNGER COHORT SITES (AGES 0-4) (Continued)

GUELPH - ONWARD WILLOW (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
18. Home Visitors Program	Families with children under age 4	1 FT Home Visitor Coordinator, 5 PT Home Visitors, 5 ethnically diverse women volunteers	Regular home visits in which visitor plays w/ children, delivers toys, books, snacks, encourages community participation, identifies family needs & provides information & support, facilitates peer support groups of home visited-parents.
19. Ban Viet (Circle of Friends)	Vietnamese parents with children under 4 yrs	1 FT Home Visitor Coordinator, 2 PT Home Visitors, 1 Volunteer Facilitator, Agency Representatives	Parents have an informal ESL class w/ activities (crafts, guest speakers, discussions on parenting) while children are w/ Child Care volunteers
20. Friends Circle	Chinese speaking parents of young children	1 FT Home Visitor Coordinator, 2 PT Home Visitors, 4 parents rotate child care support	Parents are taught basic English, go on outings, have guest speakers & demonstrations around cultural, parenting, & health issues
21. El Grupos Las Alegres (Group of Happy People) *Discontinued	Spanish speaking mothers with children under 5	1 FT Home Visitor Coordinator, 1 PT Home Visitor, 1 PT Child Care Assistant, 2 neighbourhood residents provide child care support	Informal ESL class, parents participate in craft activities, outings, guest speakers & demonstrations around parenting & health issues.
School-Based Programs			
1.Community BBQ	Families of children attending Shelldale school	Shelldale Public School, Willowdale Day Care Centre, 15 parent and teen volunteers	Organized outdoor BBQ for parents to meet the teachers at Shelldale School. A second BBQ was held at Willowdale Day Care Centre
Parent-Focused Programs			
1. Parent Workshops	Parents w/ young children living in neighbourhood	1 FT Project Coordinator, 1 FT Home Visitor Coordinator, 1 PT Child Care Assistant, volunteers from various community agencies	15 different workshops were held in 1997 including Nobody's Perfect, Keep it Cool, Anger Management, Get Along with your Child. Work-shops ranged from 1-8 sessions
2. Relief Care *Discontinued	Parents in the community	Relief Care Workers	Care for children in the home when parents need a stress break or there is a medical demand

YOUNGER COHORT SITES (AGES 0-4) (Continued)

GUELPH - ONWARD WILLOW (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Community-Focused Programs			
1. Women's Group	Parents of youth/teens who do not belong to other committees	1 FT Project Coordinator, speakers from various agencies	Parents plan workshops, invite speakers, go to presentations off-site, and do art and craft activities. 4 sessions/ month for 52 weeks
2. Employment Training Program	Neighbourhood residents needing basic skills and/or experience	1 FT Coordinator	Workshops on topics related to employment readiness & skills (communication, organization, use of office equipment). Trainees work on the reception desk at centres & replace staff as cleaners and child care providers
3. Adult Education	Neighbourhood residents	1 PT Adult Education Instructor (Wellington Board of Education), 1 Community Liaison Volunteer	Upgrading formal education levels in structured class settings
4. Bread Box and Weekend Market	Neighbourhood residents	1 PT Food Coordinator, Guelph Welcome Drop-In Centre, Guelph Food Bank, 15 volunteers and drivers/ week	Surplus nutritious food from a local store is collected by volunteers, brought to the Centre, & distributed by other volunteers to points in the neighbourhood. 7 days/wk for 52 wks
5. Clothing Program	Neighbourhood residents	1 Community Development Worker, 12 Neighbourhood Residents on committee, 10 other neighbourhood volunteers	Distribution of clothing to families in neighbourhood & other families in need. Includes picking up clothes, sorting, and distributing them, as well as organizing donations to others (eg., flood victims)
6. Emergency Food Supplies	Families in neighbourhood that request food	BBBF staff, Food Basics, 4 neighbourhood residents	Provide food packages to residents upon request. Packages are designed to provide complete meals for the family for up to 3 days (runs 52wks/yr)
7. Men's Group	Fathers living in the neighbourhood	BBBF staff, 1 PT Facilitator from Family & Children's Services	Men plan social and recreational activities & outings for themselves. 1 session/month for 40 wks
8. Onward Voices	Women in neighbourhood	I FT Community Development Worker	1. Group of women who have developed a tool for expressing personal stories, have created a video, & are working with other women's advocacy groups

YOUNGER COHORT SITES (AGES 0-4) (Continued)

GUELPH - ONWARD WILLOW (Continued)			
Program Title	*Participants*	*Service/Provider/Coordinator/Facilitator*	*Major Program Activities*
9. Legal Clinic	Neighbourhood residents	Local Guelph Lawyer	Provides legal advice to neighbourhood residents
10. Newsletter Committee	Neighbourhood residents	1 FT Community Development Worker, 8 volunteer neighbourhood residents on committee, 3 neighbourhood residents who deliver newsletter	Creation and distribution of a newsletter in the neighbourhood. 2500 copies delivered to homes, apartments, and area schools. 4 papers/ yr
11. Summer Carnival	Children who had attended summer camp & their friends & family	1 FT Youth Coordinator, 11 FT Camp Counsellors, 4 PT Counsellors in training, 12 parent volunteers	Organizing a carnival for families of children who had attended summer camp
12. Community Celebration	Neighbourhood families, project staff, agency representatives, research staff	BBBF Staff, 20 neighbourhood residents and staff, Shelldale School	Organizing a celebration for the neighbourhood to celebrate continued funding for the project
13. Community Outreach	Neighbourhood Leaders (residents on committees, teams, special events groups, management boards)	Neighbourhood Leaders, 25-35 Neighbourhood Volunteers	Neighbourhood leaders took part in several Strategic Planning Committees in Guelph, were mentors for other neighbourhood groups, have been involved in writing funding proposals, have made presentations to schools, politicians, etc
14. Project HOW	Neighbourhood Residents	1 PT Coordinator, 8 Steering Committee Volunteers, Women in Crisis, Homewood Health Centre, Family and Children's Services	Planning & implementing violence prevention programs for the community. Includes community safety audit, focus groups, setting up a women's training group, a men's group, children's activities
15. Fundraising Committee	Neighbourhood Residents	10 Committee Member volunteers, 125 neighbourhood residents helping as volunteers	Charity BBQs, charity bingos, Groundhog dance was held for neighbourhood residents, ticket raffle, bake sale, craft sale, teens held a car wash
16. Christmas Open House and Christmas Hampers	Neighbourhood Residents	30 Neighbourhood Volunteers	Open house at Family Gateway, food was served, Santa & Mrs. Claus attended. Christmas hampers with food & gifts were made & delivered to approximately 70 neighbourhood families

YOUNGER COHORT SITES (AGES 0-4) (Continued)

GUELPH - ONWARD WILLOW (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
17. Community Leadership	Neighbourhood Leaders	1 FT Project Coordinator, 1 Community Development Worker	Supporting and mentoring leaders, engaging residents in "hands on" process of leadership, providing child care, transportation, & other resources that will help leaders to attend meetings
18. ESL (Peer Education)	Neighbourhood Residents	Neighbourhood Residents	Based on the community model of learning, English speaking neighbours help non-English speaking community members grasp the language and then refer them to the School Board for formal ESL training
19. Collective Kitchen *Discontinued	Neighbourhood Residents	Residents	Three groups of 5-6 people meet to cook large meals in a social atmosphere, members then take portioned meals home for their families
20. Community Garden *Discontinued	Neighbourhood Residents	Residents	Families plant, weed, & harvest vegetables in garden plots rented from the city

YOUNGER COHORT SITES (AGES 0-4) (Continued)

KINGSTON			
Program Title	*Participants*	*Service Provider/Coordinator/ Facilitator*	*Major Program Activities*
Child and Family-Focused Programs			
1. Family Visitor Program	Mothers of children prenatal to age 4 (or even 5 if needed)	4 FT and 4 PT Visitors, one Coordinator, one Health Educator and one Social Worker from North Kingston Community Health Centre	Regular home visits to provide information on infant development, prenatal education, nutrition, links to health, social, educational, employment & recreational resources
2. Infant Groups	First time expectant and new mothers of infants up to 6-9 months	Family Visitors, Volunteers, Nutritionist, Nurse, Health Educator, North Kingston Community Health Centre (NKCHC), KFLA Health Centre	Weekly and biweekly meetings provide parent to parent support, informal education, role modeling, contact with professional staff
3. Toddler Group	Parents and their children from crawling age to age 2	Child Care Assistant, Trained Volunteers, Child Care Committee	Drop-in for families for 2hrs/wk. Activities are participant-planned (crafts, guest speakers, etc). Snack and singing time for children
4. Playgroups	121 families in the community	4 Child Care Assistants, Childcare Committee	3x's/wk time for parents and children to socialize. 8 playgroups/wk at 4 different locations
5. Child Care	105 families in the community	Child Care Providers, Child Care Committee	Child care provided to allow parents to attend all programs, committee meetings, & other initiatives
6. Toy Library/ Story Centre	Community families	Read-Write Centre, Child Care Assistant, Child Care Committee	Participants borrow toys. Toys are purchased with donated funds.
7. Child Care Quality Enhancement Program	Children, parents, staff of day cares and nurseries in the area	Child Care Assistants, Community Programs Worker, Child Care Committee	Provide extra resources to preschool groups; Child Care Assistants take projects which staff cannot do b/c of limited time, resources (eg newsletters, etc)
8. Home Child Care Project *NEW	Attempts to make contact with participants is a slow process	Child Care Assistant, Child Care Committee	Provide support to enhance the quality of homecare programs (eg., bulk craft material, activity packages, outings, workshops, etc)
9. Little People Parks Program *NEW	Young children and their parents	Child Care Assistants, Child Care Committee, Jobs Service Canada	1 hr playgroup held 2x/wk in July and Aug in local parks. Activities include crafts, games, singing songs, story reading and snack

YOUNGER COHORT SITES (AGES 0-4) (Continued)

KINGSTON (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
10. Dinner Club *Discontinued	Women & children in the community	Parent Visitor, Child Care Assistant	Informal monthly gathering where families eat together with a planned activity for the children.
11. Dad's Group *Discontinued	Fathers in the community	2 Community Members who had completed the Volunteer Co-Facilitator program, 1 Community Programs Worker, 1 Health Promotion Co-ordinator	Weekly support group for fathers. Food and childcare were provided.
Parent-Focused Programs			
1. Prenatal/Postnatal Support	Expectant mothers within the project area	BBKC, local churches, seniors groups, Alcan, Kiwanis Club, Prenatal/Infant Development Committee	Information provided on a variety of issues. Food, breast pumps, formula, diapers, milk coupons, etc. provided to participants if needed.
2. Baby's Coming	Families unable to access prenatal info in traditional ways	Family Visitor, Health Educator, Kingston General Hospital, Read Write 2, Prenatal/Infant Committee, NKCHC	Nine weekly prenatal sessions about health, nutrition, labour and birth preparation, postpartum care, optional breast feeding class
3. Nobody's Perfect	Single women with low income and low literary levels with kids 0-5 yrs.	BBKC Staff, Public Health Nurse, Child Care Committee, trained community members	2 hr sessions for 6 wks discussing how children behave, develop, learn, & feel, how parents find time for themselves, access to community resources, & other participant-directed topics
4. Parent Support Group	Area residents, many are graduates of Nobody's Perfect	Community Volunteer, Community Programs Worker, Child Care Committee	Wkly meetings with guest speakers and discussions on parenting and problem prevention. Participant-driven topics
5. Parent Relief	Parents of children up to five years	Child Care Providers, Child Care Assistants, Child Care Committee	Short-term (2.5 hrs) childcare relief for parents. Children can visit 1x/wk.
6. Hey What About Me? *Discontinued	Families expecting second or later child	Health Educator, Parent Visitors, Child Care Assistants	3 sessions that review information on labour, delivery, & child care, discussions about how the new child will affect family life
7. Healthy Mom, Healthy Baby *Discontinued	Women in early months of pregnancy	Health Educator	3 monthly meetings, covering medical care, warning signs in pregnancy, healthy lifestyles & nutrition, infant care

YOUNGER COHORT SITES (AGES 0-4) (Continued)

KINGSTON (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Community-Focused Programs			
1. Co-facilitator/ Volunteer Training *NEW	Open to all participants in area	Community Development Workers, BBBF, NKCHC	Training program to develop group facilitation skills. Interested participants must write a letter explaining their interest in co-facilitation.
2. Nutrition Newsletter	Community members	Community Health Centre, 2 Community Residents, Community Development Worker, Nutritionist	Newsletter published on a quarterly basis on various nutrition topics (eg., community gardens, nutritious foods that kids will eat)
3. Food Buying Club	6 members receive bulk food orders/ month	Community Development Worker, BBKC, Dacon Realtor, Public Health Unit	Meets 2x/month to prepare box orders and to pack orders. Box of food in 2 sizes (large=$15, small=$10) of canned goods, spices, flour, etc
4. Good Food Box	Anyone living in the Greater Kingston area.	10 Community Volunteers, Community Program Worker, NKCHC Nutritionist, BBKC Staff	Committee meets bi-weekly to organize food orders
5. Christmas Referrals	Anyone who requests a basket. Over 900 adults and children received toys, food or clothes	Community Development Worker, BBKC Staff, Queen's University, K-Mart, Kingston Police, Salvation Army, CKLC Radio	Referral process for families who identified themselves as needing a Christmas basket from the Salvation Army and/ or winter clothes from the Kingston Police Force
6. Low Income Needs Coalition	Average 5 people/ meeting, but public forums ave. 35-40	Volunteers, Community Development Worker, North Kingston Community Health Centre, Community Legal Clinic, Churches, BBKC	Lobbies for positive changes to social policy. Meets monthly (typically alternating business meeting and public forum)
7. City Playground	Open to anyone who works or lives in North Kingston	Community Development Worker, City of Kingston	Monthly meetings aimed at replacing equipment in city parks. Currently finding out what equipment residents want in parks
8. Special Events	Community members	Community Development Worker, Parent Visitors, Resident Volunteers	Events included community picnics, pony rides, children's games, strawberry picking outing, Halloween and Christmas parties, zoo trips, etc

YOUNGER COHORT SITES (AGES 0-4) (Continued)

KINGSTON (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
9. Child Identification Day	Community members	Community Development Worker, Parent Visitors	Identification day in which children were photographed and finger printed
10. Multicultural Outreach *Discontinued	Community members	Multicultural Outreach Workers, Community Programs Worker	Workers visit families of multicultural backgrounds, try to identify health & social needs, & encourage participation in project
11. Special Project: Quilt	Community members	Health Educator, Family Visitors, Community Volunteers, Local Church Members	The quilt project began in 1993 and took 3 years to finish. Staff and community members worked collaboratively on a quilt displaying the BBBF logo. It is used as a backdrop for media events & a tool to raise awareness about poverty and BBBF
12. Special Project: Mural	Community members	Community Volunteers, local Mall Landlord	The Mall's Landlord donated space and paint to allow BBBF to paint a mural. The mural's theme, endangered species of the sea, was chosen to highlight the vulnerability of funding for children's services
13. Community Kitchen *Discontinued	Community residents	Community Development Worker, Food Worker	Small groups of people cook meals collectively & take portions home to freeze for their families
14. Test Kitchens Program *Discontinued	Community residents	Community Development Worker, 2 Parent Visitors	Recipes to be included in a community cookbook are tested for taste nutritional value, & cost
15. Neighbour to Neighbour Newspaper *Discontinued	Community residents	Editorial committee chaired by Community Development Worker & a resident	Community newspaper which informs residents about issues and events in their community
16. Community Writers' Group *Discontinued	Community members	Community Development Worker, Staff of local literacy program	Group meets wkly to write & edit articles for community newspaper. Program established to help residents with limited skills learn how to write for a newspaper.

YOUNGER COHORT SITES (AGES 0-4) (Continued)

OTTAWA			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Child and Family- Focused Programs			
1. Family Visiting Program	Families with children 0-4.	2 FT & 8 PT Family Visitors (French, English, Somali, Arabic, Spanish, Serbo-Croatian), 1 Family Visitor Coordinator	Visit at home 1-1.5 hrs/wk, parental support provided, modelling and information provided, and linking to community services and crisis intervention.
2. Playgroup	Families with children 0-5.	I FT Playgroup Coordinator, I PT Playgroup Worker, Volunteers	Children get to play with other children and a variety of high quality toys, also snacks provided. Caregiver supervises child to encourage positive interactions between the caregiver and child.
3. Respite Child Care	Neighbourhood residents with children 0-5 years	BBBF	Free child care is provided at the playgroup weekly for two hours to give caregivers time on their own. Children may attend twice/ month
4. Mobile Toy Lending Library	Families with children 0-4.	5 BBBF Workers	Door to door toy-lending service. A different toy is delivered monthly.
5. Heatherington Nursery School	Children 2-1/2 to five years.	Nursery school staff and BBBF provides resources for a PT teacher.	Subsidized quality child care where SEO- BBBF provides one teacher to increase the teacher/child ratio
6. Kids in the Hood	Children 10-14 yrs in the Albion/ Heatherington/ Ledbury and Fairlea area	Project Coordinator, Ottawa Carleton Police Services Officer, Trillium Foundation	Weekly drop-in program where kids take part in either a pre-planned organized visit or in cooperative learning activities
7. Health Integration	Resident Families	Community Nurse provided by South-East Ottawa Centre for a Healthy Community	Consults with parents & children around health issues focused on pre- and postnatal care, trains family visitors.
8. Family Park	Families in community	BBBF	Maintain family park and program occasional child programming

YOUNGER COHORT SITES (AGES 0-4) (Continued)

OTTAWA (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Parent-Focused Programs			
1. Parenting Workshops/ Classes	Parents with young children in the community	BBBF staff, Family Visitors, Community Nurse, Ottawa Carleton Regional Health Department, Andrew Fleck, Parent Preschool Resource Centre	Offers yearly parenting workshops
2. One-Time Counselling	Community residents	Family Visitor Coordinator	One-to-one counselling is provided on a limited basis
Community-Focused Programs			
1. The Better Beginning Community House	All residents of the community.	BBBF Staff	The house is the primary identity of BBBF in the community and offers residents a central place to socialize and obtain information and referrals while also housing the BBBF offices
2. Clothing Exchange	Open to all residents, no sign-in to avoid stigma	2-3 volunteers organize and sort items. BBBF Staff and residents	Provides free clothing and resources in the BBBF Community House. Residents can pick up/ drop off any clothing or small items (eg.,car seats)
3. Women's Group: "Women Working Towards Tomorrow"	Women residents	Paid Facilitators	Weekly group provides women with an opportunity to support each other in a safe environment. Many issues are related to violence and abuse.
4. Theatre Group: "Women For Change and Larry"	Performed for teachers, youth workers, doctors, community outreach workers	BBBF staff, neighbourhood residents, coached by Project Coordinator	Theatre portrays issues relevant to the experiences of people living on lower incomes. A question period follows where service providers can discuss issues with theatre members.
5. Sewing Crafts	Community residents	BBBF Family Visitor, President of the Ledbury Tenant Association	Weekly program to enhance sewing skills while providing participants with a chance to socialize with other community members and share skills.
6. Coffee Time	Community residents	BBBF Family Visitor, Community Volunteers	A drop-in to promote better informal supports within the community. Volunteers and Family Visitors are present for discussion, resources, etc

YOUNGER COHORT SITES (AGES 0-4) (Continued)

OTTAWA (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
7. Fresh Food Buying Club	Community residents	Group of volunteers including BBBF staff and community residents	A cost-effective way of buying fresh fruit and vegetables every month for 40-70 families.
8. Community Celebrations	Community residents	BBBF Staff and Volunteers	Opportunities for neighbourhood residents to mix and chat with one another, participate as families.
9. Magic Bus	Community residents	BBBF	Transports people to Better Beginnings groups and activities in the wider community
10. Community Connections Worker	Community residents	Community Connections Worker	Visits families to provide assistance with settlement and integration issues. Service is not exclusive to families with children under 5 yrs old.
11. Voices of our Neighbourhood	Community residents	BBBF Staff and residents	Newsletter which informs people about BBBF activities & other community events & resources
12. Cooking Classes	Community residents	Family Visitor, Volunteer	Provides knowledge of cooking techniques, healthy eating, understanding of cultural differences
13. Child Care for Parents in Second Language Training *Discontinued	Community residents	Paid resident	Child care support provided for parents while they attend language training and academic upgrading

YOUNGER COHORT SITES (AGES 0-4) (Continued)

TORONTO			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Child and Family-Focused Programs			
1. Community Visiting Program	Expectant women and parents of children up to age 5	1 FT Team Leader of Community Visiting & Perinatal Programs; 5 FT & 3 PT Community Visitors	Home visits that focus on prenatal and child development, family planning and support, advocacy, referrals, crisis intervention
2. Perinatal Nutrition and Support Group (Formerly Prenatal Support Group)	Expectant women, their partners, coaches, & parents of children up to 6 months who participated prenatally	1 FT Coordinator of Community Visiting and Perinatal Programs, 3 FT Community Visitors, 1 Prenatal Nurse & Dietician, 1 Public Health Department Nurse & Dietician, Parent Volunteers, Health Canada Perinatal Nutrition and Support Program, City of Toronto Food Policy Division, Regent Park Community Health Centre	Weekly informal discussion group format. Topics include nutrition, fetal development, breastfeeding, labour, exercises, cultural issues. Participants receive a nutritious meal, $10 food voucher and samples of newborn supplies (eg., diapers)
3. You Make the Difference	Parents with children between 6 months and 3 yrs of age	1 Team Leader of Child Care, 1 Child Care Worker, 1-3 SOS Child Care Workers, 1 Program Helper	Structured parent-child communication program for children at risk of developing language delays. 9 wkly group sessions facilitated by 2 staff
4. Playgroups	Families with children up to 4 yrs of age	1 Child Care Team Leader, 1-2 ECE Child Care Workers, 1 SOS Child Care Worker, 1 Program Helper, 2 Child Care Assistants, Parent Volunteers	Child care provided for parents while they are involved in PFBB adult programs (eg., perinatal programs, Nobody's Perfect etc). A variety of materials & activities are available for children to learn as they play with other children and adults
5. Family Drop-In *Discontinued	Families with children up to 4 yrs of age	Child Care Coordinator, Child Care Workers	Wkly drop-in where families can interact. Focus is on learning through play (art, play in the gym) parents can ask questions of the child care staff

YOUNGER COHORT SITES (AGES 0-4) (Continued)

TORONTO (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Parent-Focused Programs			
1. Parent Education and Support Group	Parents with children 6 months- 6 yrs	1 PFBB Community Worker, 1 Growing Up Healthy Downtown (GUHD) Parent/Child Worker	12 weekly, informal group sessions using a discussion & crafts format. Topics are participant-driven and include child care, parenting, homemade toys, nutrition, exercise, job preparation. Guest speakers are used
2. Nobody's Perfect (Sept-Dec'97)	Vietnamese parents with children up to five yrs	1 Community Visitor, 1Home Visitor from the Public Health Dept	Structured 8 wk parent education program. Group learning and mutual support activities used to discuss children's and parents' needs and issues
3. Parent Relief	Parents with children up to 4 yrs	1-3 ECE Child Care Workers, 1 SOS Child Care Worker or African Women's Group Child Care Worker	Free child care to relieve parents. Structured learning through activities focussing on all aspects of children's development. Snacks provided
4. South East Asian Take a Break *Discontinued	Chinese and Vietnamese mothers & their friends & family	1-2 Community Visitors, 1 Public Health Nurse	Functions like a drop-in, topics are participant -driven. Rotating 6 wk schedule of topics & activities including nutrition, food preparation, physical & mental health. Guest speakers used
5. Bridging the Gap Between You and the CAS *Discontinued	Community members	BBBF, St Michael's Psychiatric Hospital, Children's Aide, Regent Park Community Health Centre	Group organizing support for families who were involved or feared involvement with the child welfare agency
Community-Focused Programs			
1. Community Special Events	Parents and children from 0-4 yrs	PFBB Staff, 2-3 Community Workers, Volunteers	Seasonal events and cultural celebrations. Regular events include summer festivals, Kidfest, Black History Month, Ramadon, BBQs, etc
2. Community Clean Up and BBQ	Adults, children, and local agencies	2 FT Community Workers, 4 Resident Volunteers	6 community clean-up days in the summer followed by a BBQ. Each day focusses on a specific area of Regent Park/ Moss Park

YOUNGER COHORT SITES (AGES 0-4) (Continued)

TORONTO (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
3. Community Drop-in/ Women's Group	Women with elementary school age children	1 Community Worker, Volunteers	Wkly outdoor summer activities held from June-August for women & children, including a meal (eg., BBQ and Baseball game). Events are used to do outreach to women
4. Play and Learn Resource Centre	Parents with children of all ages	1 Community Visitor, PFBB, Gerrard Resource Centre Staff	A variety of resources available on loan (books, videos, free clothing, baby equipment, toys, games, activity kits
5. Community Organizing	Community Members	2 Community Workers, Resident Volunteers, PFBB staff, staff from other organizations	Collaborating on initiatives to build a safer community,(work on community policing, security, housing, youth, & general safety issues)
6. Kindergarten Registration Package	Families of JK children	Community Development Worker, Board of Education Community Liaison	Parents registering children for kindergarten invited for refreshments & a chat, children given "first book bag" containing paper, glue, safety scissors
7. Anti-Racism Training *Discontinued	Community members	Anti-racist educator	Workshops with educator for 10 monthly 6-hour sessions to train local service providers & BBBF committee members, who can then share their knowledge in their work setting
8. Emergency Supplies *Discontinued	Families of children ages 0-4 yrs	Program Assistant	Diapers & infant food available to all members of the community. Information about infant nutrition and budget shopping available
9. Welcome Basket *Discontinued	Community residents	Community Worker	Residents given a guided tour of community, highlighting key social services, safe play areas, stores, etc. Then have a gathering at community centre to get to know other community members and receive "basket of resources".

YOUNGER COHORT SITES (AGES 0-4) (Continued)

WALPOLE ISLAND			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Child and Family- Focused Programs			
1. Playgroup	Parents & their pre-school children	Family Support Workers	Playgroup meets in Family Resource Drop-In Centre. Children & parents play together with a variety of materials, participate in snack & circle time, & parent info sessions 1x/month with topics on child development and parenting
2. Drop-In Day	Children ages 0-4 and their parents	Family Support Workers	Growth & development charts, breastfeeding support, clothing exchange, & toy-lending library
3. Native Language	Parents & pre-school children	Community Outreach Facilitator	Visits playgroups 2x/ wk for 15 minute sessions to teach Ojibway words, songs, & stories to children
4. Home Visiting	Expectant parents & parents of children 0-4 yrs	Family Support Workers	Regular home visits in which the worker provides support, trust, & resources, provides information & guidelines on child development, & role models appropriate behaviour
5. Blanket Program	Parents & their pre-school children	Family Support Workers	Playgroup program offered outdoors at area parks during July and August
6. Bkejwanong Children's Centre Outreach	Children ages 0-4 and their parents	Family Support Workers	Worker provides program & child-development information, staff support, & helps cultural enrichment instructor
7. You Make The Difference - Hanen Program	Parents & their pre-school children	Hanen Facilitators (Family Support Worker, Health Centre, School, & Parent-Child Support Staff)	10 wk early education program; working with parents, caregivers, & teachers to improve children's communication skills, 2x/ yr
8. Bkejwanong Pre-Natal Nutrition Program	Expectant mothers and parents of children 0-4 yrs	Family Support Workers & Nutritionist, Sponsored by Health Centre	2x/ month a dietician came to parent/child support program in the morning for nutritional support, parents received $15 coupon for milk, fruit, & vegetables. Also info sessions on various topics

YOUNGER COHORT SITES (AGES 0-4) (Continued)

WALPOLE ISLAND (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Parent-Focused Programs			
1. Nobody's Perfect	Expectant parents and parents with children 0-4 yrs	Family Support Workers & Health Centre Staff	Two 6-wk sessions/ yr with topics focussing on parenting skills. Children attend playgroup while sessions are being run
Community-Focused Programs			
1. Native Language Classes	Community members	Community Outreach Facilitator & two Community Elders fluent in Ojibway	Classes meet for 2 hrs/ wk from September to June for oral and written Ojibway language lessons which include games, songs, etc.
2. Women's Activity Group	Community members	Community Outreach Facilitator	1x/month sessions held on participant-driven topics (cake decorating, fry bread making, etc.)
3. Newsletter	Community members	Community Outreach Facilitator & PCSP Secretary	Monthly publication designed to increase public awareness of BBBF and PCSP, mailed to parents with children 0-4 yrs, government committees, & other BBBF sites. Also left in high-traffic areas in the community for interested people
4. Volunteer Recruitment Program	Community members	Community Outreach Facilitator	Recruitment of volunteers, development of Job Descriptions, keeping statistics on participants, yearly Volunteer Appreciation Dinner
5. Native Learning Circle	Community members	Community Outreach Facilitator	One 5-wk session held for two hrs/ wk on Beadworking
6. Community Enrichment Sessions	Community members	Community Outreach Facilitator	2 evenings on "Teaching of Pipe" and 2 evenings on "Hairbraiding"
7. Monthly Activity Box	Community members	Community Outreach Facilitator & Parent/ Child Support Program Staff	Monthly draw for two food boxes, one for seniors and one for families on Social Assistance
8. Monthly Community Potluck	Open to all	Community Outreach Facilitators	Guest speakers share their experiences, awareness of BBBF upcoming activities, as well as other programs available to update participants
9. Fundraising	Community members	Community Outreach Facilitator & Fundraising Committee	Fundraising such as ticket raffles, food sales, etc.

YOUNGER COHORT SITES (AGES 0-4) (Continued)

WALPOLE ISLAND (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
10. BCRT	Community members	Community Outreach Facilitator & BCRT Team	Presentations & workshops are presented to various programs, community members or organizations, as asked to present; focus on healthy lifestyles and cultural teachings
11. Seniors' Visits *Discontinued	Seniors	Community Outreach Facilitator	2x/wk luncheons & quilting sessions are held at the Algonquin Seniors Complex. Recruitment of senior volunteers for BBBF took place during these visits

OLDER COHORT SITES (AGES 4-8)

CORNWALL			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Child and Family- Focused Programs			
1. Playground (Summer Games)	Children ages 4-12	BBBF, L'Estrie Family Resource Centre Coordinator, staff instructors, volunteers	8- week long summer program of athletic, recreational, & cultural activities, field trips, & puppet shows on conflict resolution, etc. A parent work group has input into activities implemented
2. Holiday Activities	Pre-kindergarten to grade 2 children	BBBF, parent volunteers, L'Estrie Family Resource Centre, school councils	offers interesting day trips & educational activities for children on civic holidays & professional development days (trips to zoo, museums, biodome, outdoor games, crafts, films, etc)
3. Community Toy Library	Community families	Toy librarian, Community Volunteers	For an annual fee of $20, families can borrow educational games, family resource films, books, etc as often as they like. Volunteers do a lot of fundraising for the library
4. Theme Boxes (now part of the toy library)	Community families and teachers	Project coordinator, teacher, parents	Many different theme boxes containing games & learning activities based on a theme (jobs, jungle animals, etc). Can be borrowed by families or for use in classrooms.
5. Family Visits	Community families	Family Workers	Family workers maintain regular contact with interested families to offer support, information about child development, community services & resources. Also runs seminars on various topics related to family development.
6. Family Activity Centre	Community families	BBBF staff, Community Volunteers	Objectives are to develop & improve parental competence & create good family relationships for optimal child development. Volunteers decide what activities they want and how to implement them (eg workshops, seminars, day trips)
7. Saturday Playtime	Children ages 4-8	BBBF educator	Activities held every Saturday morning at community schools (arts, music, cooking, etc)

OLDER COHORT SITES (AGES 4-8) (Continued)

CORNWALL (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
8. Family Vacation Camp	Community families	BBBF staff, Community Volunteers	Sessions are offered to families in summer and March breaks. Volunteers are in charge of rules of conduct, raising funds to support activities, planning & implementing activities, etc.
School- Based Programs			
1. School Activities Centre	Children in kindergarten to grade 2	Activity organizers	Objective is promotion of the French language & the Francophone culture by supplying an activity organizer into the schools to help the teachers provide high quality activities for the children.
2. Mini- Breakfast	Children in kindergarten to grade 2	BBBF staff	Children can have a healthy breakfast (muffins, fruits, juice, milk, cheese) when they arrive at school. Pamphlets & other information on healthy eating are distributed to families
3. Homework Support	Community families	Educators, Volunteers, Coordinator	Parents & children meet together at the Family Activity Centre. They have a snack & then do homework together with the help of trained educators
Community-Focused Programs			
1. Community Action Group	Community Members	BBBF, Community Volunteers	Organizes social activities, community gardens, environmental programs, supports different local programs like French week & P'Tits Francos, fundraises, increases visibility & accessibility of BBBF, etc.

OLDER COHORT SITES (AGES 4-8) (Continued)

HIGHFIELD			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Child and Family Focussed Programs			
1. Family Resource Centre Drop-in	Families with children aged 0-4	1 Family Support Coordinator, 1 Parent Volunteer, 1 Nurse from Rexdale Health Centre	4 mornings/wk (2hr sessions), families can participate in activities (crafts, etc.), special events, & summer outings. A nurse visits 2x/month to talk about women and children's health.
2. Home Visits	Families of children from JK to Gr. 2	4 Enrichment Workers	Families visited prior to child entering JK to provide info about area services, encouragement, referrals, and general support. Home Visitors spend .5 day/wk in JK classroom. After the child is in JK, home visits focus on school related issues
3. Summer and March Break Program	Children from JK to Gr. 2	1 Enrichment Worker, 4 Volunteers	Fun and educational activities provided for children to prepare them for school
4. Toy Lending Library	Families that use the drop-in	1 PT Librarian, 3-4 Parent Volunteers	Library is open 4 days/ wk. Materials include over 500 toys, games, & puzzles. "Take a Book Program" has question sheets to get parents talking to kids about books. Also parenting resource books & activities to do with children.
5. Play Groups	Families with children in JK	2 Child and Family Enrichment Workers	Activities are unstructured, with an emphasis on providing nurturing and educational environment where families can learn and interact together
6. Preschool Computer Program	Children aged 2- 4.5 yrs who attend drop-in	BBBF main service provider, 1 parent volunteer	Operates during drop-in hours on a first come first served basis. Children each have five minutes on the computer
7. Preschool Literacy	Children aged 2-4.5 yrs who attend drop-in	In-school Coordinator, Family Support Coordinator, School Librarian, 1 SK teacher, BBBF funded	Intended to encourage preschoolers to read, support families, assist with transition to JK by familiarizing family with school personnel. Began in Jan '98
8. Before-and-After-School Program	Children aged 4-8 and 9-12	Community Development Coordinator, Recreation Staff	Age-appropriate recreational activities and nutritional snacks provided for children at the primary school level

OLDER COHORT SITES (AGES 4-8) (Continued)

HIGHFIELD (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
School-Based Programs			
1. Health and Nutrition Program	All children at Highfield Junior School get snacks 3x/wk	1 Nutrition Coordinator, 3 paid parents, 10 parent volunteers, funding from BBBF, the school, parent donations, & other sources	Hold nutrition assemblies, fairs, & other activities. Workshops for parents, Hot Lunch Program ($.50/lunch), providing sandwiches for kids w/o lunches, fitness activities, Play Days, etc
2. Educational Assistants, Parent Volunteers, & Academic/ Language Development	Children from JK to Gr.2	4 Enrichment Workers (EW), 1 certified Teacher, 2 FT assistants for JK and SK classes, 6-10 volunteers	4 EWs spend time in JK Classes to increase kids' exposure to English and adult support, Summer Enrichment programs, After-school Enrichment reading programs, Family Literacy Nights, Made Dual Language tapes to be used by families
3. Classroom Social Skills, Intervention, Storytelling and Drama	School classes	In-School Coordinator, university students, funded by BBBF, Highfield Junior School, Lion's Club	Including a curriculum-based social/ citizenship skills intervention. Also, Gr. 3 students visit a seniors' lodge 1x/wk and spend time with seniors. EW and Parent Volunteers help children to develop better social skills. 2 drama trips/ yr for JK, SK
4. Home-School Connection and Parental Involvement	Parents of children in project school	BBBF Project Manager, In-School Coordinator and other Coordinators and staff, Parent Volunteers	Parents participate in in-school & nutrition committees, School Council, Inner City Committee, School Design Committee, Snack Program, and some have been hired as EW and Research Ass.'s
5. Community and Ethno-Cultural Relations	School and Community members	In-school Coordinator, Enrichment Workers, BBBF, Highfield Junior School	Special events held at school to increase the exposure and participation of various cultures in the community eg., annual Multicultural Caravan
Parent-Focused Programs			
1. Parent Relief	Community Residents (space for 5-10 children at a time)	BBBF main service provider, 2 paid Parents	Child care is offered 2 days/ wk (9 am - 11:30 am) for parents needing a break. Parents must book ahead b/c space is usually filled to capacity
2. Parents' Group	Parents who participate in Drop-in or who have children at Highfield	Family Support Coordinator, CAS Family Support Team, Nurse & Nutritionist from Rexdale Health Ctr	Parents meet weekly to socialize, organize special events, do crafts, or have workshops (eg., women's issues, childhood illnesses, discipline, nutrition)

OLDER COHORT SITES (AGES 4-8) (Continued)

HIGHFIELD (Continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Community-Focused Programs			
1. Resident Participation and Leadership	Community Parents	Community Development Coordinator & Staff; Community Development Committee	Parents are informally encouraged to join project committees, to get involved in planning community events, to advocate for the community (eg, lighting, bus shelters etc). Parents are given skill development and leadership building workshops
2. Welcome Baskets	Community Families	BBBF	Baskets contain info about BBBF, other community services, & goodies. Given to new families through the schools in BBBF area to welcome them and encourage involvement in the project and the community
3. Language and Prevocational Skills	Community Residents	BBBF refers students to the ESL program run by the school board	ESL Program has been running for several years. A Hindi class also ran for one year.
4. Neighbourhood Safety	Community Residents	Community Development Coordinator and Staff, parents	Several community safety forums held. Have implemented security guards, improved lighting, removal of derelict cars, crossing guard, etc
5. Social and Recreational Programs	Community Residents	BBBF staff	Before and After School Programs, March Break Programs, fun activities, and ballet lessons for kids, aerobics and bus trips for parents
6. Ethno-Cultural Programs & Activities	Community Residents	Community Development Coordinator & Staff	Several different cultural events (eg., Diwali, Holi, Black History Month). Also staff are hired that have cultural backgrounds similar to residents

OLDER COHORT SITES (AGES 4-8) (Continued)

SUDBURY			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
Child and Family Focussed Programs			
1. After School/ Holiday Programs	Children aged 4 to 8	9 PT Child Care Workers, College Boreal Placement Students, 3 cooks, 2-4 volunteers, City Parks and Recreation	Daily program provides a safe place for 100 children to play after school and on school holidays. Snacks and special activities are offered. Children are encouraged to solve problems and conflicts fairly.
2. Summer Programs	Programs are offered at 3 sites in the community	9 PT Child Care Workers	Offered 8/wk 9am-3pm, kids participate in activities similar to the After School programs, but with more emphasis on outdoor activities.
3. BBBF Membership and Volunteer	Open invitation to all community residents to become a member of BBBF	Membership Coordinator	The coordinator visits the community residents to explain BBBF and receive feedback from them on the program. Criteria for membership is agreement with BBBF vision and principles. Responsible for running 3 membership meetings a year.
4. L'Arc-en-ciel du Moulin a Fleur	Families with children aged 0-5 yrs.	1 Francophone Community Worker, 1 PT Child Care Worker. Parents who bring their children monitor their children	Mom and tots drop-in program with participant- driven activities. Organized workshops and presentations are very successful
5. Family Visiting Program	Community members	2 S-BBBF staff (1 anglophone, 1 francophone)	Advocates and supports families' needs, provides support to Child Care teams, do presentations for other agencies, schools
6. Travelling Road Show	Open to all community residents.	2 BBBF staff, 3-5 parent volunteers	Staff visit 3 different sites 1/wk to play with children while parents discuss parenting problems and solutions, and organize events.
7. Hallowe'en Haunted House	Whole community	3 PT Child Care Staff, Community Workers	Extend After School program at Hallowe'en to open Haunted House constructed by staff.
8. Summer Camp Experience *Discontinued	Parents and children in the community	BBBF Staff, Local Native Centre	Parents & children go camping for 5 days, & learn Native culture & respect for the environment

OLDER COHORT SITES (AGES 4-8) (Continued)

SUDBURY (continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
School Based Programs			
1. Peaceful Playgrounds Program	Children JK to grade 6 in three local schools	2 BBBF staff, 1 placement student	Teach cooperative games, teach kids how to listen to each other, how to vote democratically, etc. A week is allotted to an anger management course, as well as peer mediation skills for teachers and children.
2. Native Cultural Program	Children in grade 1-3 at 2 schools	2 BBBF staff, 4 Placement Students	Through traditional methods kids are taught about equality of all cultures, and to respect each other, self and mother earth
3. Early Bird Breakfast and Play Program	Focus is on children 4-8, but no one is turned away. Approximately 250 children participate daily.	3 BBBF staff, Child Care Workers, volunteers	Nutritious food is served (eg., eggs, sausages, cereal, etc) and children participate in crafts and physical activities (eg., basketball)
4. Multicultural Support Program *NEW	2 Francophone schools, 3 different classes	1 BBBF PT staff from Rwanda working as a teacher's aide	Children are exposed to different cultures in an informal way. Teacher's aide is currently translating a Rwandan children's book which will be used in the classes.
Parent-Focused Programs			
1. Back to School Teen Mom Program *Discontinued	Teenage mothers in the community	Teacher	5 days/wk a teacher provides continuing education to young mothers. Also provides informal support
2. Christmas Baskets	Whole Donovan/Flour Mill community	Community Workers, Family Support Workers	Assistance in the way of gifts and food at Christmas
3. Babysitting and Transportation	Community Members	Family Support Worker	Provide child care and transportation to permit parents to participate in programs, committees
4. Can Skate			Free skating every winter in partnership with the City. Skates provided.
5. Tout Pour Reussir *Discontinued	Francophone Teen Mom Program	1 FT Francophone Community Worker	Support for teen moms

OLDER COHORT SITES (AGES 4-8) (Continued)

SUDBURY (continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
6. Mom & Tot Drop *Discontinued	Whole community	Family Support Worker	Support for Anglophone moms
7. Parenting Program *Discontinued	Parents in the community	Family Support Worker and Community Worker	Provide parenting sessions, support and information
Community-Focused Programs			
1. Community Kitchen Program	Community residents	1 BBBF staff, parent volunteers, funding from Steel Workers Humanities Fund	Participants plan menu, then cook and clean while staff watch children. Staff shop for groceries and supplies. Each participant takes food home.
2. The Environmental Program	Parents and children	1 BBBF staff, EJLB Grant, placement students, summer students	Offers information about caring for the environment. Annual development of community gardens, which involves participation of children, school yard naturalization, park and stream rehabilitation, recycling, local walks to recognize indiginous plants, animals.
3. Research Program	Community members	1 BBBF FT and 1 PT staff, 1-2 volunteers	Offers the community the possibility to develop local research projects and use the data from the activities to initiate other programs
4. Mediation Group	Parents in the community	Community Workers	Encourages dialogue amongst community workers & parents in order to deal with disagreements through effective conflict resolution techniques
5. Myths & Mirrors Community Arts Program	Community; all ages	1 FT Community Development Worker, 20 volunteers, placement students	Community Arts programs featuring giant puppets, mask making, large scale community art projects and celebrations, theatre, festivals, costumes, parades. Now an independently incorporated organization.
6. Community Development	Native Community Francophone Community Anglophone Community *Discontinued Multicultural Community *Discontinued	1 FT Native Community Worker 1 FT Francophone Community Worker 1 FT Anglophone Worker (discontinued) 1 PT Multicultural Worker (discontinued)	To organize respective communities, help identify community needs, liaise with respective caucuses, implement programs and initiatives in community, advocate, provide support to child care workers.
7. Pre-Teen Program	Pre-teens in the community	Adults & teens from community	2 Programs (English & French) offer activities appropriate for pre-teen age group

OLDER COHORT SITES (AGES 4-8) (Continued)

SUDBURY (continued)			
Program Title	*Participants*	*Service Provider/Coordinator/Facilitator*	*Major Program Activities*
8. GEODE (Grassroots Economic Opportunities Development and Evaluation)	Whole community	1 PT Community Organizer, volunteers: Bronfman funding	To provide community economic development opportunities to low income people including a "Good Food Box", Community Shared Agriculture, a green dollar bartering system for individuals and non-profit organizations. Now an independently incorporated organization.
9. BBBF Provincial Network *Discontinued	All BBBF sites in Ontario	Project Coordinator, 1 PT Provincial Network Coordinator - Atkinson, Trillium Grant	To coordinate BBBF sites throughout the province for the purpose of fundraising, promotion, advocacy, mutual support, sharing expertise and training community members.
10. Fundraising	Community Members	Project Coordinator	Raise funds for programs via small bake sales to large mail campaigns.
11. Committee Training	Community Members	Project Coordinator	To provide training and expertise and ensure community ownership by having all Council Committees run by Council and Community Members, i.e., Finance Committee, Personnel Committee, Program Committee, Membership Committee, Ad Hoc Committees, Newsletter Committee.
12. General Training	BBBF Council Members, Staff, Community Members	Project Coordinator, Community Workers, Membership Coordinator	Provide training on Community Development, First Aid, CPR, Communication, Racism, Child Care Techniques, Chairing and Facilitating Meetings, Concensus Process, How to be a Council Member, Healthy Eating, Environment, Advocacy, Legal Issues, Welfare.
13. Volunteer Recognition	Volunteers	1 FT Volunteer Coordinator	Annual celebration to recognize efforts of volunteers.
14. Community Advisory Committee	Friends of Better Beginnings, Better Futures (including many service providers)	Project Coordinator	A group of over 50 community leaders to provide advice and support on an on-going basis.
15. You Won't Believe It's A Theatre Group *Discontinued	Parents and Children in the community	Community Workers	Provides a safe environment for parents & children to expose & relate social problems that affect their daily lives

Appendix B

DESCRIPTION OF BETTER BEGINNINGS, BETTER FUTURES DEMOGRAPHIC AND OUTCOME VARIABLES USED WITH CHILDREN, FAMILIES, SCHOOLS, AND COMMUNITIES WHEN CHILDREN WERE 0 - 8 YEARS [1]

MEASURE	Source *	AGE OF CHILD								
		Younger Cohort Sites				Older Cohort Sites				
		3 mos	18 mos	33 mos	48 mos	JK	SK	Gr. 1	Gr. 2	Gr. 3
SOCIODEMOGRAPHICS										
Age of Respondent, Partner and children	P	☼	☼		☼	☼	☼	☼	☼	☼
Gender of Respondent, Child	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Relationship of Respondent to Child **	P	☼			☼	☼				☼
Marital Status/Single Parenthood	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Size and Composition of Household	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Number of Children Born	P	☼	☼			☼	☼	☼	☼	☼
Age at First Pregnancy **	P	☼				☼				☼
Country of Birth of Respondent, Child **	P	☼				☼				
Home Language(s) of Respondent, Child **	P	☼			☼	☼			☼	☼
Cultural Group of Respondent & Partner **	P	☼				☼				
Level of Schooling of Respondent & Partner **	P	☼			☼	☼	☼			☼
Labour Force Status of Respondent & Partner	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Volunteering of Respondent & Partner	P	☼	☼	☼	☼	☼		☼	☼	☼
Occupation of Respondent & Partner	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Monthly Income	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Food and Housing Costs	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Low Income Cut Off Status	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Financial Difficulties	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Enumeration Area Characteristics	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dwelling Type	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Public/Private Housing	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Rooms in House/Apartment / Rooms for Sleeping	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Length of Time in Neighbourhood	P	☼		☼	☼	☼		☼	☼	☼
Number of Moves in Previous Five Years	P	☼		☼	☼	☼	☼	☼	☼	☼

*** P = Parent, T = Teacher, C = Child**

** demographic questions were asked only of new recruits after the first wave

MEASURE	Source *	AGE OF CHILD								
		Younger Cohort Sites				Older Cohort Sites				
		3 mos	18 mos	33 mos	48 mos	JK	SK	Gr. 1	Gr. 2	Gr. 3
CHILD EMOTIONAL AND BEHAVIOURAL PROBLEMS AND SOCIAL FUNCTIONING										
Social Skills Rating Scale (Gresham & Elliot, 1990)	P, T							☼	☼	☼
Preschool Social Behaviour Questionnaire (Tremblay *et al.*, 1992)	P, T				☼	☼	☼			
Social Problem Solving (Dodge, 1993)	C								☼	
Self-Concept: Self-Description Questionnaire (Marsh, 1988)	C								☼	
Infant Characteristics Questionnaire (Bates *et al.*, 1979)	P	☼	☼	☼						
Child Behaviour Problems Subscale of the Revised Ontario Child Health Study Scales (Boyle *et al.*, 1993)	P, T							☼	☼	☼
ABC - Maturity/School Readiness (Toronto Board of Education, 1990)	T				☼	☼	☼			
CHILD DEVELOPMENT										
Scales of Independent Behaviour (Bruininks *et al.*, 1985)	P					☼	☼	☼	☼	☼
Diagnostic Inventory for Screening Children (Amdur *et al.*, 1990)	P, C		☼	☼	☼					
COGNITIVE FUNCTIONING AND ACADEMIC ACHIEVEMENT										
Peabody Picture Vocabulary Test (Revised) (Dunn & Dunn, 1981)	C				☼	☼	☼	☼	☼	☼
Dudley-Delage (Dudley & Delage, 1980)	C								☼	
Échelle de vocabulaire en images (Dunn *et al.*, 1993)					☼	☼	☼	☼		☼
WPPSI Block Design (Wechsler, 1967)	C				☼					
WISC Block Design (Wechsler, 1974)	C								☼	☼
WRAT-R (Jastak & Wilkinson, 1984)	C							☼	☼	
Test de Lecture (Commission scolaire des écoles catholiques de Québec, 1990)	C								☼	
Keymath (Connolly, 1991)	C							☼	☼	
Scale of Reading Attitude (Rowell, 1972)	T							☼	☼	☼

*** P = Parent, T = Teacher, C = Child**

MEASURE	Source *	AGE OF CHILD								
		Younger Cohort Sites				Older Cohort Sites				
		3 mos	18 mos	33 mos	48 mos	JK	SK	Gr. 1	Gr. 2	Gr. 3
CHILD HEALTH										
Rating of Child s General Health	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Limitations on Activities	P			☼	☼	☼	☼	☼	☼	☼
Injuries	P			☼	☼	☼	☼		☼	☼
Poisoning	P			☼	☼					
CHILD HEALTH PROMOTION/PREVENTION OF INJURIES										
Immunizations	P		☼	☼			☼	☼		
Child s Exposure to Second Hand Smoke	P			☼	☼					
Parent s Sense of Control Over Child s Health (Tinsley & Holtgrave, 1989)	P	☼		☼	☼			☼	☼	☼
Bicycle Helmet Use	P				☼		☼			
Car Seat Use	P		☼							
Crossing Roads/Streets	P									☼
CHILD NUTRITIONAL HEALTH										
Height	C	☼	☼	☼	☼	☼	☼	☼	☼	☼
Weight	C	☼	☼	☼	☼	☼	☼	☼	☼	☼
24-hour Dietary Recall	P, C				☼		☼		☼	
USE OF HEALTH CARE SERVICES FOR CHILDREN										
Use of Emergency Room	P			☼	☼	☼	☼		☼	
Doctor Visits	P	☼		☼	☼		☼	☼	☼	☼
Dentist Visits	P				☼		☼	☼	☼	☼
Contacts With Professions/Services for Child	P	☼		☼	☼	☼	☼	☼	☼	☼
Times When a Profession/Service was not Contacted for Child	P	☼		☼	☼		☼	☼	☼	☼
Sense of Having Received as Good Service as Others for Child	P	☼		☼	☼		☼	☼	☼	☼

*** P = Parent, T = Teacher, C = Child**

MEASURE	Source *	AGE OF CHILD								
		Younger Cohort Sites				Older Cohort Sites				
		3 mos	18 mos	33 mos	48 mos	JK	SK	Gr. 1	Gr. 2	Gr. 3
PARENT HEALTH										
Self-Rating of General Health	P		☼		☼	☼	☼	☼	☼	☼
Limitations on Activities Due to Health Problems	P		☼		☼	☼	☼	☼	☼	☼
Health Related Problems Reported	P		☼		☼	☼	☼	☼	☼	☼
Limitations on Caring for Child	P		☼		☼	☼	☼	☼	☼	☼
Height	P	☼				☼				
Weight	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Prevalence of Obesity	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Use of Prescription Drugs (Tranquillizers, Sedatives, Antidepressants, Painkillers)	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dietary Intake of Breastfeeding Mothers	P	☼								
Incidence and Duration of Breastfeeding	P	☼	☼							
PARENT HEALTH PROMOTION										
Most Recent Pap Test	P			☼		☼		☼	☼	
Breast Self-examination	P		☼		☼		☼	☼		☼
Frequency of Exercise	P	☼	☼				☼	☼	☼	☼
Frequency of Exercise During Pregnancy	P	☼								
PARENT HEALTH RISK BEHAVIOURS										
Extent of Smoking	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Number of Smokers in Home	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Alcohol Consumption	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Self-criticism or Criticism From Others About Drinking (Ewing, 1984)	P	☼		☼	☼		☼		☼	☼

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MEASURE	Source *	AGE OF CHILD								
		Younger Cohort Sites				Older Cohort Sites				
		3 mos	18 mos	33 mos	48 mos	JK	SK	Gr. 1	Gr. 2	Gr. 3
PARENTING										
Parenting Scale (National Longitudinal Survey of Children & Youth, 1994, 1996, 1998) " Consistency " Hostile Ineffective " Positive	P		☼	☼	☼		☼	☼	☼	☼
Mesure des Conduites de Contrôle Parental (Tessier *et al.*, 1985)	P					☼	☼	☼	☼	☼
Parenting Sense of Competence (Johnston & Mash, 1989)	P						☼	☼		☼
Parent/Caregiver Involvement Scale (PCIS) (Farran *et al.*, 1986)	P		☼	☼	☼					
PARENT SOCIAL ACTIVITIES										
Neighbourhood Activities	P		☼	☼	☼	☼	☼	☼	☼	☼
Get-togethers with Friends	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Get-togethers with Other Families	P	☼			☼	☼	☼	☼	☼	☼
Organized Recreation	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Volunteering in Community	P	☼			☼	☼	☼	☼	☼	☼
Attendance at Religious Services	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Attendance at Meetings of Clubs or Organizations	P	☼			☼	☼	☼	☼	☼	☼
PARENT AND FAMILY SOCIAL AND EMOTIONAL FUNCTIONING										
Tension in Juggling Other Responsibilities and Child Care	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Stressful Live Events in Preceding Year (Social Change in Canada Series, 1977, 1979, 1981)	P	☼	☼		☼	☼	☼	☼	☼	☼
Social Support (Cutrona & Russell, 1987)	P	☼	☼		☼	☼		☼	☼	☼
Parental Depression (CES-D) (Radloff, 1977)	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dyadic Adjustment/Marital Satisfaction (Spanier, 1976)	P	☼		☼	☼	☼		☼	☼	☼
General Family Functioning: Family Assessment Device (Epstein *et al.*, 1983)	P	☼		☼	☼	☼		☼	☼	☼
Conflict Tactics/Violence (Straus, 1976)	P		☼		☼		☼		☼	

*** P = Parent, T = Teacher, C = Child**

MEASURE	Source *	AGE OF CHILD								
		Younger Cohort Sites				Older Cohort Sites				
		3 mos	18 mos	33 mos	48 mos	JK	SK	Gr. 1	Gr. 2	Gr. 3
USE OF COMMUNITY RESOURCES										
Use of Programs (Toy Libraries, Playgrounds, Sports, Drop-in Centres, After School Language Instruction, Libraries, Parent Resource Centres)	P		☼	☼	☼	☼	☼	☼	☼	☼
SENSE OF COMMUNITY COHESION										
(Buckner, 1986) " Sense of Belonging " Willingness to Prevent Negative Change " Sense of Importance to Neighbourhood " Willingness to Improve Things " Sense of Similarity to Neighbours " Feeling that Different Cultures/Races Are Accepted " Pride in Being a Community Member	P	☼		☼	☼	☼	☼	☼	☼	☼
NEIGHBOURHOOD RATINGS										
Perceived Quality of the Neighbourhood (Social Change in Canada Series, 1977, 1979, 1981)	P	☼	☼	☼	☼		☼	☼	☼	☼
Housing Satisfaction	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
Perceptions of Deviant Behaviour in the Neighbourhood	P	☼			☼		☼		☼	
Neighbourhood Satisfaction	P	☼	☼	☼	☼	☼	☼	☼	☼	☼
SCHOOL RATINGS										
School Climate: " Children s Social Behaviour " Teaching Climate " Teacher Workload Support " Parent Involvement	T						☼	☼	☼	☼
Parents Rating of Child s School	P								☼	☼
Parents Rating of Relationship with Child s Teacher/Involvement in School	P								☼	☼

*** P = Parent, T = Teacher, C = Child**

MEASURE	YEARS DATA COLLECTED									
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
DATA FROM OTHER SOURCES										
Canadian Institute of Health: " Very Low Birth Weight " Percentage of C-Sections " Use of General Anaesthesia " Normal Deliveries " Child Hospitalization For: • = Asthma • = All Medical Admissions • = All Surgeries • = Pneumonia		☼	☼	☼		☼	☼	☼		
Principals Reports: " Percentage of Special Education Students " Percentage with Behavioural Problems " Percentage with Learning Disabilities				☼	☼	☼	☼	☼	☼	
Police Statistics: " Incidents of Wilful Damage Reported to Police " Incidents of Breaking & Entering Reported to Police		☼	☼	☼	☼	☼	☼	☼	☼	☼
Child Welfare Services: " Number of Open Child Protection/Family Service Cases " Children Taken into Care by CAS	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Site Provided Parents and Children Participation in Better Beginnings Programs, Meetings and Social Activities								☼		

1. Copies of the parent, teacher and child measures are available from the Better Beginnings, Better Futures Research Coordination Unit.

*** P = Parent, T = Teacher, C = Child**

Appendix C

THE BETTER BEGINNINGS, BETTER FUTURES DEMONSTRATION SITES

YOUNGER COHORT SITES

GUELPH

The city of Guelph, with a metropolitan population of 105,420 in 1996[1], lies 100 km west of Toronto. About 40 per cent of its labour force is employed in manufacturing, with major plants producing electronics, fibreglass and machined parts. The city is home to the University of Guelph.

The project is focussed on an area in the centre of the city, stretching 1.8 km from northwest to southeast, and 1.3 km from southwest to northeast, centred on a major street named Willow Road. The area had a population of 7,590 in 1996. Although it is predominantly native born and Anglophone, the site is home to sizable numbers of immigrants from non-Anglophone countries. In 1991 22.3% of the area's population was born outside Canada, and by 1996 the percentage had moved up to 26.3%. In 1991 more than half of the newcomers had been born in Europe, and in 1996 this was almost half. However, no single cultural group has stood out as the dominant source of immigrants. In 1996, apart from English, 4 languages were spoken at home by 100 site residents or more: Chinese, Punjabi, Spanish and Vietnamese, but the most common of these, Vietnamese, was spoken by just 335 residents. There are two public housing units, and a cluster of privately owned high-rise apartment buildings, as well as a number of privately owned family dwellings in the neighbourhood.

Data from successive Censuses have confirmed the socio-demographic disadvantage of the population, although it takes a somewhat different form from what is seen at other sites. Like the others, Guelph has a high proportion of single parents, 21.2% in 1991, compared to the Ontario figure of 12.6%, and 24.7% in 1996, compared to the Ontario figure of 14.4%. Unlike the other sites, its unemployment rates for 1991 and 1996 were usually within 2 percentage points of those for the province, with the exception of the rate for males in 1991, which stood at 12.0, compared to the provincial figure of 8.6.

Unemployment Rates				
	Guelph		Ontario	
	1991	1996	1991	1996
Male	12.0	7.5	8.6	8.7
Female	9.5	8.6	8.4	9.6

[1] Technically, the Census distinguishes between Census Metropolitan Areas and Census Agglomerations. Since the distinction is of no concern here, the expression 'metropolitan population' will be used for both CMAs and CAs.

Although the unemployment rates were not usually atypically high, employment incomes were low. For full time full year workers, either male or female, earned incomes were around three quarters of the provincial average. In 1991 full time full year male workers averaged $31,928, compared to the provincial mean of $41,509, while full time full year females at the site averaged $21,309, compared to the provincial average of $27,862. In 1996 the site averages were $33,043 for males, contrasted to a provincial mean of $45,477 and $25,304 for females, contrasted to the provincial figure of $32,645. Mean family income was $40,360 in 1990, compared to the provincial average of $57,227, and $42,874 in 1995, compared to the provincial average of $59,830.

The impact of a low income depends heavily on the number who must be supported by it. Statistics Canada s Low Income Cut-offs (LICOs) reflect income, family size, and size of community of residence. Although Statistics Canada, having no official definition of poverty, does not refer to them as poverty lines, LICOs are widely treated as such. For the Onward Willow Better Beginnings research families, 53% were living below the LICOs compared to the Provincial average in 1997 of 18.6%.

KINGSTON

Kingston, with a metropolitan population of 125,447 in 1996, lies near the eastern tip of Lake Ontario and the head of the St. Lawrence River. The city is home to many institutions of advanced education and of government, including Queen's University, the Royal Military College, the head office for the Ontario Health Insurance Plan, and within a 50 km radius, 9 penal institutions. The city's manufactures include aluminum products, synthetic textiles and locomotives.

The Kingston program site, in North Kingston, had a population of 13,115 in 1996. The site is elongated, running 4.3 km from north to south, and is divided by an east-to-west railway line. Those at the site are predominantly native born: in both 1991 and 1996 only 11.9% of the area's population was born outside Canada. It is also predominantly Anglophone. In 1996 88.1% reported English to be their mother tongue, and 92.0% reported speaking English at home. Although French, Portuguese and Spanish were spoken at home by 100 site residents or more, only 1.8% of the population reported that they could not carry on a conversation in English.

Data from successive Censuses have confirmed the socio-demographic disadvantages of the population. Like the other sites, Kingston has a high proportion of single parents, 24.5% in 1991, compared to the Ontario figure of 12.6%, and 27.4% in 1996, compared to the Ontario figure of 14.4%. For both sexes, and for both Census years, unemployment rates at the Kingston site were well above those for the province, as shown below.

Unemployment Rates				
	Kingston		Ontario	
	1991	1996	1991	1996
Male	12.6	18.9	8.6	8.7
Female	15.2	16.3	8.4	9.6

Mean family income was $36,190 in 1990 compared to the provincial average of $57,227, and $36,067 in 1995 compared to the provincial average of $59,830.

The impact of a low income depends heavily on the number who must be supported by it. Statistics Canada s Low Income Cut-offs (LICOs) reflect income, family size, and size of community of residence. Although Statistics Canada, having no official definition of poverty, does not refer to them as such, LICOs are widely treated as poverty lines. For the Better Beginnings for Kingston Children research families, 70% were living below the LICOs compared to the Provincial average in 1997 of 18.6%.

OTTAWA

Ottawa, the national capital, with a metropolitan population of 1,010,458 in 1996, is located on the Ottawa River. The city's economy has traditionally been heavily dependent on the Federal government, and its largest employer is still the federal civil service. Tourism has been its traditional second industry, but its field of most rapid expansion in recent years has been high technology. The city is the site of Carleton University and the University of Ottawa. The city itself is predominantly Anglophone, with a substantial Francophone minority, but other parts of the National Capital Area, notably the city of Hull on the eastern shore of the Ottawa River, are predominantly francophone.

This Better Beginnings project is located in South-East Ottawa, taking in four locally recognized neighbourhoods (Fairlea, Heatherington, Ledbury, and Albion) with a 1996 population of 7,590. Although several neighbourhoods are involved, none is large, and the entire site is contained within an area stretching .7 km from north to south and 1.9 km from west to east. Although its population is predominantly native born and Anglophone, there is a substantial Francophone minority, making up 10.1% of the population in 1991 and 9.7% in 1996. In 1991 28.7% of the area's population was born outside Canada, and in 1996 the percentage had moved up to 33.2%. In 1996, four languages, other than English or French were spoken at home by 100 or more site residents: Arabic, spoken by 295; Chinese, by 150; Somali, by 455; and Spanish, by 200.

Its rates of single parenthood are markedly higher than those for Ontario, standing at 37.9%, compared to the Ontario figure of 14.4%. Its unemployment rates for 1991 and 1996 were above those for the province, as shown below.

Unemployment Rates		
	South-East Ottawa Research Families	Ontario 1996
Male	9.5	8.7
Female	18.3	9.6

Mean family income was $26,340 in 1995, compared to the provincial average of $59,830.

The impact of a low income depends heavily on the number who must be supported by it. Statistics Canada s Low Income Cut-offs (LICOs) reflect income, family size, and size of community of residence. Although Statistics Canada, having no official definition of poverty, does not refer to them as such, LICOs are widely treated as poverty lines. For the South-East Ottawa research families, 75% were living below the LICOs compared to the Provincial average in 1997 of 18.6%.

TORONTO

Toronto, with a 1996 metropolitan population of 4,263,757, is the provincial capital, the financial and manufacturing hub of Ontario, and the leading banking centre of Canada. The city is the seat of Ryerson Polytechnical University, the University of Toronto and York University. In recent decades an influx of third world immigrants has diversified its culture.

The Inner City Toronto site is focussed on Regent Park, one of Ontario's oldest and most densely populated public housing complexes, and on 7 apartment buildings near it in the Moss Park/Oak Street area. The area is relatively compact, since the public housing area included runs only .3 km from north to south, and 1.0 km from west to east. The 1996 population was 11,010.

This inner city Toronto site is demographically distinctive, with the highest proportion of immigrants among the younger cohort sites, the highest proportion of single parents of any urban Better Beginnings site, very high unemployment rates and the lowest mean incomes of any of the urban Better Beginnings sites. In 1991 48.7% of the areas's population was born outside Canada, and in 1996 the percentage had moved up to 58.0. Two cultural groups stood out among immigrants in both Census years: Chinese and Vietnamese. In 1991 15.7% of the population spoke only Chinese at home, and in 1996 the figure had dropped only slightly to 14.9%. In 1991 9.5% spoke only Vietnamese at home, and in 1996 the figure had moved up slightly, to 10.1%. Other home languages had far fewer speakers, but in 1996 more than 100 people spoke each of Arabic, Bengali, Spanish, Tagalog and Tamil at home.

Data from successive Censuses have confirmed the major socio-demographic disadvantages of the population. Its rates of single parenthood are markedly higher than those for Ontario, standing at 50.8% in 1991, compared to the Ontario figure of 12.6%, and 42.5% in 1996, compared to the provincial 14.4%. Its unemployment rates for 1991 and 1996 were well above those for the province, as shown below.

Unemployment Rates				
	Regent Park / Moss Park		Ontario	
	1991	1996	1991	1996
Male	27.7	30.5	8.6	8.7
Female	24.1	31.2	8.4	9.6

Mean family income was $21,193 in 1995, compared to the provincial average of $59,830.

The impact of a low income depends heavily on the number who must be supported by it. Statistics Canada s Low Income Cut-offs (LICOs) reflect income, family size, and size of community of residence. Although Statistics Canada, having no official definition of poverty, does not refer to them as such, LICOs are widely treated as poverty lines. For the Toronto Better Beginnings research families, 92% were living below the LICOs compared to the Provincial average in 1997 of 18.6%.

WALPOLE ISLAND

This project is sponsored by the Walpole Island First Nation, who reside on an island of the same name on the St. Clair River. The major source of employment on the island is government services. The population is entirely aboriginal, apart from a modest number of intermarriages. At the beginning of the project, it was estimated that 2,655 people lived on the island.

Population characteristics cannot readily be taken from the Census, as at other sites, because many people at Walpole Island, as at many other First Nation communities, do not complete Census forms. At Walpole, under 60% of the estimated population was counted into the Census in 1991 and 1996. However, relying on administrative data, the original proposal included figures to confirm the major socio-economic disadvantages of the population. For the year 1990, it was estimated that the rate of single parenthood was (roughly) 50 per cent, and that (roughly) 80 per cent of the children were in a family who received social assistance. The unemployment rate, for males and females combined, was estimated at 60 per cent.

Administrative data did not permit an estimate of mean family income. For those who did respond to the Census, it stood at $21,389 in 1990, compared to the provincial average of $57,227, and $20,686 in 1995, compared to the provincial average of $59,830.

OLDER COHORT SITES

CORNWALL

Cornwall, a city of 49,137 in 1996, with a metropolitan population of 62,183,[2] lies on the St. Lawrence River, roughly halfway between the eastern tip of Lake Ontario and Montreal. It is headquarters for the Canadian St. Lawrence Seaway Authority, and a manufacturing community whose products include textiles, paper, chemicals, furniture and electrical equipment. Although the city is predominantly anglophone, a substantial francophone minority is present, part of the westward extension of Francophones from their North American heartland in Quebec.

The Cornwall programs began with children aged 4 to 8 attending four Francophone schools in the area. In 1996 a new school was added, and in 1997 children from two schools were moved to another, so that the program is now operating in four schools, as at the beginning, but two of them are different from those present at the start.

Of the schools, the two operated by the Roman Catholic Separate School Board draw their students from the Parish of the Nativity, a traditionally Francophone area near the centre of the city, but the two operated by the Public School Board are the only two Francophone schools operated by that Board, so children are bussed to them from all over the city. Because of bussing, *Partir d un bon pas* works within less sharply defined boundaries than other sites do. Yet it is possible to define an area which includes the bulk of their constituency, centred in the Parish of the Nativity, but taking in areas outside it, including 69.9 per cent of Cornwall residents who reported to the 1996 Census that they spoke only French at home.

Because this area, stretching 5.8 km from north to south, and 4.8 km from west to east, includes most of the city of Cornwall, its population (29,475 in 1996) is greater than that of the other sites. Its large population would be very difficult to serve, within an annual budget of about $575,000, if programs were aimed at all children, but since the site s major programs are school-based, and focussed on four schools, the situation is more manageable. In the schools participating, 529 children were registered in 1996-97 in grades JK to Grade 2.

The Cornwall site contains a mix of Anglophone and Francophone residents, with many marriages between the two groups. (Published Census data do not provide a figure for the proportion.) It has a low proportion of immigrants: only 5.8% of the population in 1996 had been born outside Canada.

Census data provide evidence of socio-demographic disadvantage. For example, the proportion of single parents was 16.8% in 1991, compared to the Ontario figure of 12.6%, and 20.8% in 1996, compared to the Ontario figure of 14.4%. Both male and female unemployment rates were above those for Ontario in

[2] Technically, Census documents refer to the area centred in Cornwall as a Census Agglomeration rather than a Census Metropolitan Area. To avoid shifts in terminology from site to site, shifts which make no difference for our purposes, the population figure for either a CA or a CMA will be referred to as the metropolitan population.

1991 and in 1996, as shown in the table below.

Unemployment Rates				
	Cornwall		Ontario	
	1991	1996	1991	1996
Male	11.5	15.1	8.6	8.7
Female	11.0	11.7	8.4	9.6

Mean family income was $44,778 in 1990, compared to the provincial average of $57,227, and $45,309 in 1995, compared to the provincial average of $59,830.

HIGHFIELD

The Highfield School site is located in what, until 1997, was known as the Borough of Etobicoke, the westernmost of the former subdivisions of Metropolitan Toronto.[3]

The project is focussed on Highfield Junior School and its catchment area, which makes up a single Census tract, with boundaries running 1.6 km from north to south and 1.0 km from west to east. The Tract had a population of 8,544 in 1996. In recent decades it has been home to immigrants of many cultures: in the original project proposal it was pointed out that more than 40 languages were spoken by children in the school. In 1991 53.6% of the area s population was born outside Canada, and in 1996 the percentage had risen to 59.8%.

The breakdown of the population by region of birth for 1991 and 1996 was as follows, in percentages:

	1991	**1996**
Canada	46.4	40.2
Africa	1.7	1.5
Caribbean	5.5	7.1
Central & South America	5.6	4.6
Europe	17.2	12.3
India	12.0	18.6
Other Asia	11.4	14.7
Other	0.2	0.9

[3] See the description of the Toronto site above for information on the city.

	100.0	99.9

Apart from Canada, none of the regions listed provided as much as one-fifth of the population in either Census year.

Since parents born elsewhere often have children born in Canada, the proportion of parents born elsewhere is higher than the proportion of the total population listed above. In the Better Beginnings samples, the proportion of adults born outside the country was over 88%.

Although the Census does not publish country of birth for Census Tracts, mother tongue is available, in some detail, and allows for a more precise view of cultural origins. In 1996 nine languages were mother tongue to 100 people or more. Apart from English, they included three European languages (Italian, Polish, and Spanish), three Indian languages (Hindi, Punjabi, and Urdu), Arabic and Chinese. Cultural diversity is clearly a hallmark of the site.

Data from successive Censuses have confirmed the sociodemographic disadvantages of the population. For example, the proportion of single parents in 1991 was 23% compared to the Ontario average of 13%, and 21% in 1996 compared to the Ontario figure of 14%. Both male and female unemployment rates were well above those for Ontario in 1991 and in 1996, as shown in the table below.

	Unemployment Rates			
	Highfield		Ontario	
	1991	1996	1991	1996
Male	14.1	13.3	8.6	8.7
Female	12.6	17.5	8.4	9.6

Mean family income in 1990 was $43,841 compared to the provincial average of $57,227, and $36,054 in 1995 compared to the provincial average of $59,830.

The impact of a low income depends heavily on the number who must be supported by it. Statistics Canada s Low Income Cut-offs (LICOs) reflect income, family size, and size of community of residence. Although Statistics Canada, having no official definition of poverty, does not refer to them as such, LICOs are widely treated as poverty lines. For the Highfield Better Beginnings research families, 72.2% were living below the LICOs compared to the Provincial average in 1997 of 18.6%.

SUDBURY

Sudbury, with a 1996 metropolitan population of 158,393 is the economic centre of a hardrock mining region which is among the world's largest producers of nickel, and also a source of cobalt, copper, gold, platinum, silver and sulphur. In recent years the Sudbury economy has diversified with the expansion of Laurentian University, and the addition of government offices and distribution centres. Although the metropolitan area is predominantly anglophone, there is a substantial francophone minority, who are in the majority in smaller communities near the city.

The Better Beginnings site in Sudbury is made up of two locally recognized downtown neighbourhoods Donovan on the west and The Flour Mill on the east. Geographically, Sudbury is one of the larger Better Beginnings sites, with boundaries stretching just over three kilometres from north to south, and over four kilometres from west to east. In 1996, the population of the site was 13,791. The children of the Sudbury site have been served by six schools, four Anglophone and two Francophone, although one of the Anglophone schools closed in 1997. There were approximately 500 children from JK to Grade 2 attending schools in this site in 1996-97.

The families of Donovan are predominantly Anglophone, but there is a substantial Francophone minority, and churches and other organizations represent minorities of many tongues. In the Flour Mill, traditionally mainly Francophone, businesses and public institutions all have French-speaking staff. (In 1996, 36.7% of all site residents gave French as their mother tongue.) In each of the two neighbourhoods there is a minority of Native, primarily Ojibwa, families. The majority of the residents in the Sudbury site are native born -- only 11 per cent of those resident at the site were foreign-born in 1996.

The families of Donovan and The Flour Mill live with substantial socio-demographic disadvantage. In 1991, the proportion of single parents was more than double that of Ontario overall 27% compared to 13% and in 1996, those figures were 29% compared to 14%. In 1990, the mean family income was $36,191, compared to the provincial average of $57,227. In 1995, it was $36,539 compared to the provincial average of $59,830. Both male and female unemployment rates were well above those for Ontario in both 1991 and 1996.

Unemployment Rates				
	Sudbury Better Beginnings site		Ontario	
	1991	1996	1991	1996
Male	14.1	22.1	8.6	8.7
Female	12.6	19.6	8.4	9.6

The impact of a low income depends heavily on the number who must be supported by it. Statistics Canada s Low Income Cut-offs (LICOs) reflect income, family size, and size of community of residence. Although Statistics Canada, having no official definition of poverty, does not refer to them as such, LICOs are widely treated as poverty lines. For the Sudbury Better Beginnings research families, 75.9% were living below the LICOs compared to the Provincial average in 1997 of 18.6%.