

*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 (Karoły *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 through 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 neighborhood 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 Beginnings 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 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 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 children'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 occurrences 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 in 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 Lions 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-chairs, 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 place 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. 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 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.