

Chapter 2

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

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

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

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

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

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

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

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

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

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

Successful Programs

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

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

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

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

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

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

High-quality, comprehensive educational preschool programs. The High/Scope Perry Preschool Program offered two years of half-day preschool to 58 poor, high-risk African-American three- and four-year-old children in Ypsilanti, Michigan, between 1962 and 1967 (Schweinhart *et al.*, 1993). Classes ran from October to May, five half-days per week. Teachers were certified public school teachers who received extensive training and supervision. The teacher-student ratio was 1 to 6, and teachers also visited each child's mother at home for 1 ½ hours each week during the school year. This resulted in over 700 hours of highly enriched preschool for the children and 90 hours of home visiting for their mothers over the two years. Compared with a control group of 65 children, the 58 Perry preschool children showed higher IQ scores at 4, 5, 6 and 7 year of age but no differences at age 8 or later. There were no differences between the groups in children's social or emotional behaviour, or on any measures of parents' behaviour. One of the most interesting aspects of this study is that the children have been followed to age 27, i.e., 23 years after completing the Perry Preschool Program, and continue to show superior performance relative to control group children on measures of educational achievement, employment, public assistance, income, and criminal arrests. Calculations of costs saved by these outcomes have indicated a return on the initial program investment of nearly \$7 to \$1 invested, although most of these savings occurred as program participants became adults. These long-term cost-saving outcomes have made the Perry Preschool Study the single most influential early intervention program to date in terms of public and social policy.

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

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

WHAT DO WE KNOW?

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

Outcomes for High-Risk Children

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

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

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

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

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

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

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

Outcomes for High-Risk Mothers

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

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

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

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

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

WHAT DO WE NOT KNOW?

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

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

Narrow Program Focus

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

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

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

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

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

High-Risk versus Universal Programs

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

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

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

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

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

Small- versus Large-Scale Projects

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

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

Outcome Measures and Generalization of Program Effects

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

Is Intervention More Effective Early than Later?

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

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

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

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

Cost Savings

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

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

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

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

Current Social Policy Context

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

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

CONCLUSIONS

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

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

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

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