

Targeted parent-focused programs

4.1 INTRODUCTION

Parent-focused programs have a variety of primary objectives, some of which relate solely to the parent, for example, the reduction of repeat pregnancies in teenagers.¹ This chapter concentrates on the research from those parent-focused programs where the primary goal is promotion of at-risk children's development.

Parent-focused programs intended to promote the development of at-risk children do not constitute a delimited set of strategies. Instead they vary in components, in intensity, and in duration. Some involve home visiting during which supportive adult-child interactions are modelled and the mothers are provided with information on child development and activities to do with the children; while others provide a range of services aimed at supporting family functioning in general. Many parent-focused programs also include working directly with the children in a group program.

All the programs discussed in this chapter are based on the assumption that at-risk children's development can be promoted by supporting the family, or by changing the parent's behaviour and/or the home as a learning environment. Evaluation findings from programs that focused solely on the parent are not encouraging. Some programs, but not all, were found to influence parenting behaviour and/or to improve the home as a learning environment. When changes in parenting and/or the home environment occurred there was also sometimes, but not always, evidence of short-term developmental gains for the children. Lack of follow-up studies beyond school entry makes it impossible to determine if gains, where they occurred, carried through to the children's subsequent school careers.

The findings from programs that included a group program for the children are more encouraging. Most report developmental gains with the most benefit appearing to occur when the children's program is the most developmentally stimulating and intense, for example, the Kingston and Walpole Island (Ontario) Better Beginnings, Better Futures sites. The apparent importance of program quality and intensity is consistent with the findings for the targeted group programs for children discussed in the previous chapter. Unfortunately, no program combining a parent and children's component provides child outcome data beyond senior kindergarten.

On the basis of the research findings, many child development experts have concluded that greater benefits for at-risk children's development result from child-focused, group programs that work directly with children than from indirect approaches such as delivering parenting education to parents.²

4.2 Single-site research projects

Single-site research projects are able to randomly assign parents into a program and a control group. As a result, they are able to maximize the probability that any differences between the two groups are the result of the program rather than some pre-existing between-group differences.

Some single-site research projects focus their program solely on the parent. Others provide a combination of a parent-focused program and a group experience for the children. The first approach enables consideration of the effectiveness of a parent-focused program per se. In 'combination' programs, it is difficult to separate out the influence of the parent-focused program from that of the children's group program. For the sake of clarity, the two approaches are discussed separately.

4.2a *Research projects focusing solely on the parent*

Of nine parent-only programs, five failed to demonstrate any differences between the program and the control groups at the end of the project.³ Four showed some effect on parenting behaviour and/or the home environment. In three of these four programs, the children in the program group had higher scores on a measure of cognitive functioning than did children in the control group at the time of program termination or follow-up.⁴ In one of the programs, however, this benefit for children was only observed in one of three cohorts and for only one of two measures.⁵ None of these three projects followed the children beyond school entry and therefore it is not possible to know if the parent program was associated with any differences in the children's school performance.

The tenth program, the Elmira Prenatal and Early Infancy Project,⁶ is probably the best known and certainly the most intensive parent-focused research project. It targeted first-time mothers with low educational levels who were living in low-income families.

Participants typically were enrolled prior to the end of the second trimester of pregnancy and remained in the program until their child's second birthday. The program consisted of weekly home visits by a registered nurse during the first month after enrollment then bi-weekly until the birth of the baby. The nurse again visited weekly for six weeks after the birth, then bi-weekly until age 21 months and finally once a month between the child's 21st and 24th month. On average, visits lasted between 75 and 90 minutes.

At age four, a larger number of development-promoting materials was found in the homes of children in the program group and fewer safety hazards. However, there were no other significant differences in the home environment between the program and the control groups. At ages three and four, there were no differences between the program and control groups on measures of the children's cognitive abilities. The next follow-up was at age 15. At that time, the children whose mothers had been in the program had lower rates of arrest and of conviction and also smoked and drank less.⁷ No data are provided on tests of school readiness nor on school achievement. While the program does not appear to have influenced the children's development, it did have a beneficial effect on pregnancy outcomes, the incidence of child neglect or abuse, and number and spacing of subsequent pregnancies. There were no significant differences between the program and control groups on any other measure of health status or maternal employment history at the time of final follow-up.

In summary, results from research projects that focused solely on the parent are mixed. Some programs were found to influence parenting behaviour and/or the home environment but others did not. When changes in parenting or the home occurred, there was also sometimes evidence of short-term benefit for children's development. However, lack of follow-up data beyond school entry makes it impossible to determine if gains, where they occurred, carried through to the child's subsequent school career.

4.2b Combination parent-focused and children's group program research projects

Generally evaluations from research projects that combined a parent-focused program with a group program for the children did not follow the participating children beyond the end of the project, usually at age two or three.⁸ As a result, they do not have data on school readiness. Table 4.1 provides information on the evaluation findings from three projects that both used randomized assignment into the program and control groups and conducted long-term follow-up on both groups of children. In all three programs, the home visitors showed the mothers specific activities to do with the children that would promote language and cognitive development and the children received an educational group experience as well.

TABLE 4.1: EVALUATION FINDINGS FROM THREE COMBINATION PARENT-FOCUSED AND CHILDREN'S GROUP PROGRAM PROJECTS

Project	Initial sample	Follow-up sample	Latest follow-up	Program	School skills, educational attainment	Behaviour
The Florida Parent Education Project (Jester and Guinagh, 1983)	E = 288 C = 109 Entry, age 3 - 24 mth, exit at age 3	E = 83 C = 24	yearly, to grade 7	Weekly home visits to mother and twice a week part-day preschool program for children at ages 2 and 3	math achievement, E > C reading achievement, E = C use of special education by grade 7, E < C E = 23%, C = 54% grade retention by grade 7, E = C E = 28%, C = 29%	Classroom behaviour problems, E = C
The Early Training Project (Gray and Klaus, 1970; Gray, Ramsey and Klaus, 1982; 1983)	E = 44 C = 21 Entry age 4 or 5, exit at age 6	E = 36 C = 19	age 19	Weekly home visits to mother for the nine months of the school year for 2 years, preschool for 10 weeks, half day, five days a week for each of two summers	achievement tests at age 7, E > C achievement tests at ages 10 & 17, E = C use of special education by age 18, E < C E = 5%, C = 29% grade retention, by age 18 E = C E = 58%, C = 61% high school graduation by age 18, E = C E = 68%, C = 52%	Teen pregnancy through age 18, E = C
Houston Parent-Child Development Center (Andrews et al., 1982; Johnson and Walker, 1991)	E = 97 C = 119 Entry age 1 - 3 yr, exit age 3 - 5 yr	school data E = 50 C = 87 achievement tests E = 39 C = 76	yearly, to grade 5	30 home visits in year one, 12 hours a week of parent group sessions in year two. Four part-day group sessions a week (12 hours a week) for 8 months in year two for the children	achievement tests, ages 8 - 11, E = C grades, ages 8 - 11, E = C special education by age 11, E = C, E = 27%, C = 31% grade retention by age 11, E = C, E = 16%, C = 29% need for bilingual education at age 11, E < C E = 14%, C = 36%	Teacher ratings of behaviour problems, E = C

Notes: E = the program group, C = the comparison group. Differences that are not statistically significant are indicated by E = C, differences that are significant in favour of the program group at a $p < .05$ level or better are indicated by E > C (E greater than).

As indicated in Table 4.1, two of the three projects report higher average scores on achievement tests among the program children and a lower rate of placement in a special education class. However, it is not possible to determine the extent to which the children's developmental gains resulted from their group program or from the training their mothers received. As discussed in Section 3.2d of the previous chapter, adding a home visiting parent education program to a full-day educational group program does not appear to improve the level of benefit obtained by children over that obtained by children who receive only a centre-based group program.⁹

The Houston (Texas) Parent-Child Development Center project is the only one of the three to provide information about the effect of the program on parenting skills and the home environment. Observations of the parents with their children at the end of the program indicated that program mothers talked with their children and elaborated on their verbalizations more frequently than did the control mothers. They were also more affectionate with their children and gave them more praise. The program group obtained a significantly higher score on a standard measure of the home as a learning environment (the *Home Observation for Measurement of the Environment*).¹⁰ However, in this group of Mexican-American families, the only between-group difference for the children was a reduced need for bilingual education classes. This finding is more likely to reflect the influence of the eight months of part-day group sessions obtained by the children prior to school entry than the effect of their parents' improved parenting skills.

4.3 Large-scale multi-site programs

Large-scale multi-site programs target families with preschool children who are living in conditions deemed to put the child's development at risk, for example, low-income neighbourhoods. Unlike single-site research projects, they serve families in multiple neighbourhoods across a large urban area, or a whole province, state or country. Since the program is open to any family in the targeted community, researchers cannot randomly assign parents to a program and a control group. Instead, they have to rely on a comparison group obtained after-the-fact, for example, a group of children living in the same neighbourhood whose parents did not participate in the program.

There are three Canadian large-scale multi-site parent-focused programs: (1) the federally-funded *Community Action Program for Children* (CAPC), (2) Ontario's *Better Beginnings: Better Futures*, (3) The Toronto District School Board's *Parenting and Family Literacy Centres*. This section reviews outcome evaluations from Canadian programs and also from the U.S. *Home Instruction Program for Preschool Youngsters* (HIPPY). This U.S. program is probably the largest targeted parent-focused program in that country and provides follow-up findings beyond the end of the actual program. The first HIPPY program in Canada was launched in

Vancouver in 1999 with 52 families participating in it for six months. An interim report indicates high levels of parent enthusiasm but does not provide any data on child outcomes.¹¹

4.3a The Community Action Program for Children (CAPC) ¹²

Background

CAPC was established in 1993 as part of the federal government's Child Development Initiative. It targets children from birth to age six and has, as its primary purpose, the promotion of at-risk children's development. As of 1997, there were 1,726 CAPC programs across Canada with programs in every province, the Northwest Territories and the Yukon. Among them, they provided services to an average of 28,765 children every week.¹³ Depending on the site, program components include one or more of:

- Home visiting.
- Group parenting education courses.
- One-on-one developmental programs for children.
- Group programs for parents and children.
- Group programs for children only.
- Community outreach and organization.

Research methodology

The importance of evaluating CAPC was recognized at the outset and a set of standard methods for collecting assessments on the conditions of family risk and the level of child functioning were developed for use across Canada. The CAPC evaluation compares children whose families participated in CAPC and children from families with similar income levels from the *National Longitudinal Survey of Children and Youth* (NLSCY). To-date, the only hard child outcome data available is published in a document that is labelled an 'interim national report.' It covers the period from entry into a CAPC program and nine months later and uses information that was collected on 1,146 participants. A second national follow-up of families 24 months after entry has been completed but the report is not yet available.¹⁴

Findings

There are strong indications of high parent satisfaction levels with CAPC. The Atlantic Region CAPC evaluation reports that on a 10-point scale, with ten being wonderful, 88 percent of parents rated CAPC as eight or better.¹⁵ When describing their experiences, parents stated they were welcomed, comfortable in the settings and felt very supported. Furthermore, 54% reported positive changes in their relationships with their children, 56%

reported improvement in their children's social skills, and 30% stated that their child's language skills had improved.¹⁶ (It is important to note that these reports of improvement are based on parental opinion, not actual assessment).

The hard data from the national interim report indicate a decline in maternal depression and negative caregiving among the CAPC participants; and the reductions were greater than those experienced by the comparison NLSCY parent respondents.¹⁷ Child motor and social development among the CAPC participants remained the same after nine months while there is a downward trend in reported levels of child emotional and behavioural problems. In contrast, in the NLSCY comparison group there is a downward trend in motor and social development as well as in reported child emotional and behavioural problems.¹⁸ No data are provided from assessments of school readiness.

Discussion

The extent to which children benefit from their families' participation in CAPC, and the component that might be responsible for any benefit is impossible to determine from the evaluation reports for the following reasons:

- All the findings related to the children's development are either anecdotal, as in the parents' reports, or presented graphically rather than statistically, for example, average scores for the program and the comparison group. Graphs may magnify small but non-significant differences (no information is provided on the extent to which any of the differences reported are statistically significant).
- CAPC sites vary in their mix of components, the way in which a particular component, such as parenting education, is provided, and the intensity of each service. While this is a strength in terms of meeting community needs and preferences, the variability across sites means there is no single CAPC model. The interim report on the national evaluation does not address this variability in components across sites but instead combines and reports data from sites with different components together. As a result, it is impossible to determine which CAPC components are the most effective in promoting children's development, if, in fact, there was a statistically significant difference between the program and comparison groups.

In summary, the CAPC evaluation reports indicate that parents feel supported by CAPC and there is some indication that it has a positive effect on their parenting style. There is no hard evidence that CAPC promotes children's development or assists them to be more ready for school.

4.3b *Better Beginnings, Better Futures* ¹⁹

Background

Better Beginnings, Better Futures is a 25 year longitudinal demonstration project targeting children and their families living in communities whose characteristics are believed to put children at risk for developmental problems. In 1991, the Ontario government selected specific neighbourhoods in eight communities to be project sites. Five focus on children from conception to age four (the “younger cohort”) and three focus on children between the ages of four and eight (the “older cohort”). Funding began in 1991 with the actual programs becoming fully operational in 1993. The first group of children and their families began to receive services in 1994. The government guidelines for this project were ambitious and required each site to:

- Implement and maintain prevention services aimed at promoting child development.
- Foster resident participation in determining local needs and designing, implementing and maintaining programs.
- Develop and foster partnerships among community services.
- Engage in broad community development.

Not surprisingly, *“Sites interpreted this broad mandate in various ways, and found that they could not give equal attention to all parts of it, so that different choices from site to site were made about where to invest the most energy.”*²⁰ For example, among the younger cohort sites Kingston put much of its emphasis on direct programming with the children while Guelph had a strong emphasis on broad community development and creating service partnerships.²¹ There were also between-site differences in the same individual program component. Home visiting was a core component in all of the younger cohort sites but there was between-site variation in the background and training of the home visitors, the frequency of home visits, and the age up to which visits were made.²²

Given its purpose, this report will focus on the outcome measures related to child development and on the younger cohort sites, namely Walpole Island, a First Nation community, and low-income neighbourhoods in each of Guelph, Kingston, Ottawa, and Toronto (see Table 4.2). Thus, no findings related to parent health and nutrition, general family functioning, or neighbourhood outcomes are reported.

Research methodology

Since it was not possible to have randomized program and control groups, the researchers used two quasi-experimental designs. The first, called the “baseline-focal design,” was a comparison between baseline data collected on children aged 48 months and their families in

the project sites before the programs began and data from children age 48 months and their families in the same sites after the programs had been operating for five years. The second design, called the “longitudinal comparison site design,” involved recruiting a group of infants and their families in each target site and in three comparison neighbourhoods where there was no Better Beginnings, Better Futures funding plus another different community (Peterborough). Outcome measures on these approximately 700 children and their families were collected when the children were 3, 18, 22 and 48 months of age. As evident in Table 4.2, the two designs used different outcome measures.

Findings

Table 4.2 illustrates that there were : (1) similarities and variations in findings across sites, (2) general across-site patterns, and (3) site-specific patterns. (See the table note for an explanation of the various notations and symbols used in it). Specifically, there were:

- three general across-site patterns: (1) junior kindergarten teachers reported decreased emotional problems in three of the four sites for which this information was available; (2) children showed evidence of improved ability to process and respond to verbal communication (auditory attention and memory) in four of the five sites; (3) there was no improvement found in non-verbal problem-solving at any site.
- findings from other measures, such as parent report of behaviour problems and consistency of parenting approach, are inconsistent across sites.
- a site-specific pattern of improved social-emotional functioning and school readiness emerged in Kingston and non-significant trends in that direction were also found in Ottawa. A second site-specific pattern, improved language, motor, attention and memory development along with improved general parenting approach and parent-child interactions, was found in Walpole Island.

Factors that may have influenced the findings

No other program providing only home visiting or only parenting education for parents whose children are deemed to be at risk has reported improvements in children’s social-emotional functioning, as found in Kingston and Ottawa. The researchers suggest that the Better Beginnings, Better Futures findings may reflect the combination of home visiting, playgroups and group programs for children provided in all five sites. In particular, the general finding of reduced teacher ratings of emotional problems in junior kindergarten students may reflect the increased number and variety of socialization and play experiences in the Better Beginnings, Better Futures communities. *“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 in kindergarten.”²³

Overall, the greatest benefit occurred in Kingston and Walpole Island while there were few gains related to children’s development in Guelph. What might explain these across-site differences? All three sites had a home visiting program, provided other types of parenting education such as formal parent education groups, and operated both children’s play groups and parent/child drop-in programs.²⁴ According to the researchers, *“Kingston also invested extensive program resources in child care, both by enriching local daycare centres in the neighbourhood and also by providing a large number of informal child care experiences for children.”*²⁵ These informal child care experiences included supervised children’s play groups available three times a week. Furthermore, Kingston was the only site to intentionally support continued involvement with the child and family from prenatal home visiting through various types of parent-child and children’s programs until school entry.²⁶

In the Walpole Island Better Beginnings, Better Futures site there was, *“A high quality local day care facility that was attended by over fifty percent of the children participating in the research at age 48 months.”*²⁷ The only prevention projects that have had success in improving cognitive development and language skills in at-risk preschool children, such as the Abecedarian and Perry Preschool Projects discussed in Chapter 3 have provided intensive, centre-based educational programs. Thus, the finding of cognitive improvement only in the Walpole Island site is consistent with other research. There was also substantial improvement in parent-child interactions in this site. The researchers suggest this may reflect the emphasis on parenting and the quality of the *“programs developed and implemented in conjunction with the local parent-child centre.”* Like Kingston, the Walpole Island site was also characterized by, *“Continuity of the home-visiting and parent-child play-groups provided to young children by the Better Beginnings Project.”²⁸*

In contrast, Guelph put most of its emphasis on community development and spent only half as much of its core funding on family visiting. The majority of the focused programming for children in Guelph involved a kindergarten readiness program of eight sessions a month for three-year-olds.

TABLE 4.2: OUTCOMES: BETTER BEGINNINGS, BETTER FUTURES PROJECT

Measures	Baseline-Focus Design					
	Guelph	Kingston	Ottawa	Toronto	Walpole Island	Total sample
JK Teacher rated:						
Decreased emotional problems	na	0.72**	0.23	0.25	-0.09	0.27**
Decreased behavioural problems	na	0.33	+	-	-	+
Increased prosocial behaviour	na	0.12	+	-	-	+
Increased school readiness	na	0.43**	+	- *	+	+
Decreased behavioural problems, parent report	-	+	-	+	+	+*
Cognitive functioning:						
Improved receptive language	-.**	+	+	+	-.*	-
Improved non-verbal problem-solving	-	-	-	-	-	-.*
Measures	Longitudinal Comparison Site Design					
	Guelph	Kingston	Ottawa	Toronto	Walpole Island	Total Sample
Improved temperament, parent report	+	-	+	-	-	-
Improved developmental quotient:						
Overall	-	-	-	-	0.38	-
Expressive language	-	-	-.*	-	0.57**	-
Receptive language	-	+	+**	+	0.11	+
Fine motor	+	-	+	-	0.41	+*
Gross motor	+	-.**	-.**	+	0.68**	-
Auditory attention and memory	-0.12	0.35	0.52*	0.47*	0.47	0.36*
Visual attention and memory	-	-.*	-	+	0.08	-
Parenting:						
More consistent	-	-.*	+	+	-	-
Less hostile/ineffective	-	-	-	+	-	-
More positive parenting	+	+	-	+	+	+
Improved parent-child interaction	na	-0.65*	+	-	1.01**	-
Improved general rating of parenting quality	na	-0.08	+	+	0.35**	+

Source: Peters et al., 2000, Appendix 1.1

Note: In the above table, 'na' signifies that either the information was not collected or there were too few subjects to enable data use. The numbers represent effect size attributable to Better Beginnings, Better Futures, that is, the extent of difference between groups or change over time. By convention, an effect size of 0.20 is considered to be small, one of 0.50 is spoken of as being moderate, while one of 0.80 is treated as large. Degree of statistical significance is indicated by * if $p < .05$ and ** if $p < .01$. A symbol of '+' indicates that the difference favoured Better Beginnings, Better Futures while '-' indicates an undesirable or non-beneficial effect. These symbols occur when an effect size is not reported.

In summary, the success of the Kingston and Walpole Island sites may reflect both involvement of the children and their families in on-going programming throughout the period from birth to age four and the provision of substantial opportunities for children to engage in supervised group programs for children during all four years. The benefit of such formal group children's programs during the preschool period has also been found by the Canadian National Longitudinal Survey of Children and Youth ²⁹ and in a nation-wide study in Britain.³⁰ The researchers themselves note that, *"Short-term outcomes were greatest in the area of program focus, with child-focused programs [strongest in Walpole Island and Kingston] affecting child outcomes, parent/family focused programs effecting parent and family outcomes."*³¹

Discussion

There is clear, statistical evidence that at-risk children's development was enhanced in some of the Better Beginnings, Better Futures sites. As with the CAPC evaluation, it is difficult to disentangle the influence of the various Better Beginnings, Better Futures program components. Furthermore, families could and did use other community services, such as child care, a fact that makes it difficult to determine the extent to which gains were the result of Better Beginnings, Better Futures or another service. As noted by the researchers, the evidence seems to support the theory that the child-focused programs, whatever their source, had the most effect on children's social-emotional and cognitive development. This is consistent with other research.

4.3c The Toronto Parenting and Family Literacy Centres ³²

Background

These centres, which are located in thirty-four elementary schools across the former City of Toronto, are open to all families with a child under age five who live in the neighbourhood. They reach an estimated 7,000 families at any one time. All the centres provide the same mix of services:

- An opportunity for parents or the child's other regular caregiver to participate with the child in a children's program.
- A lending library of children's books, books on child development, music tapes, and toys.
- Parenting education and adult literacy and numeracy courses.
- Information about other community services.

Research methodology

In the first year of what is to be a multi-year evaluation, junior kindergarten students from 10 different downtown schools who had attended a Parenting and Family Literacy Centre and a comparison group of children from the same classrooms who had not were assessed by their teachers for school readiness, literacy skills, and numeracy skills. In the second year, when they were in senior kindergarten, the same group of students was assessed using the Early Development Instrument (EDI) ³³ developed by the Canadian Centre for Studies of Children at Risk, McMaster University, Hamilton.

Findings

A draft report from this project indicates that the junior kindergarten teachers rated the children who had attended a Parenting and Family Literacy Centre as more advanced in each of overall school readiness, literacy skills, and numeracy skills (see Table 4.3). The teachers also noted in subsequent interviews that children with centre experience had better social skills, adjusted to school more easily, had better listening skills, and were better able to operate in a group. When the children were assessed using the EDI in the following year, a smaller percentage of children who had centre experience than comparison group children obtained scores in the lowest 30th percentile in any of: (1) social competence, (2) emotional maturity, (3) language/cognitive development, or (4) communication skills/general knowledge (see Table 4.4). The greatest between-group differences were in social competence and language/cognitive development. There was much less difference in emotional maturity and communication skills/general knowledge.

TABLE 4.3: PROPORTION OF CHILDREN RECEIVING A HIGH JUNIOR KINDERGARTEN TEACHER RATING, TORONTO PARENTING AND FAMILY LITERACY CENTRES

Variable	Program group N = 108	Comparison group N = 108
Overall school readiness	54%	9%
Literacy skills	45%	7%
Numeracy skills	50%	9%

Source: Yau, forthcoming, Figure 1.

TABLE 4.4: PROPORTION OF CHILDREN AT THE LOWEST THIRTIETH PERCENTILE AS MEASURED BY THE EARLY DEVELOPMENT INSTRUMENT (EDI) WHEN IN SENIOR KINDERGARTEN, *TORONTO PARENTING AND FAMILY LITERACY CENTRES*

Variable	Program group	Comparison group
Social competence	27%	55%
Emotional maturity	29%	37%
Language/cognitive development	28%	51%
Communication skills/general knowledge	37%	54%

Source: Yau, personal communication.

Discussion

These evaluation findings are encouraging. However, again it is not possible to determine the extent to which the benefit received by the children reflects the influence of participation with other children in a group program versus the provision of parenting education and other parent supports. The finding that the greatest between-group difference at senior kindergarten was in social competence suggests the influence of the experience with other adults and children during the group program rather than the effect of parent training per se.

Seventy-one percent of the children in each of the program and the comparison groups had a home language other than English.³⁴ Being exposed to English during the group program could be expected to benefit the children's English language development while such benefit would not be associated with a program that simply focused on the parents. Thus, the higher rating on language and communication skills obtained by the program group in senior kindergarten may be a result of the children's participation in a group program and their resultant exposure to English.

4.3d The Home Instruction Program for Preschool Youngsters (HIPPY)³⁵

Background

HIPPY is a two-year program, starting when the children are age four that involves bi-monthly home visits by para-professionals supplemented by bi-monthly group parent meetings. The HIPPY program is very structured and is implemented in the same way across all sites using the same standard materials specially developed for HIPPY.³⁶ These include HIPPY story books for the parents to read with their children and activity materials designed to assist children develop visual-motor, language, discrimination, and problem-solving skills. During home visits, which typically last about an hour, the home visitor presents the material and uses role playing to teach the parent how to use the story books

and activities. Between visits, the parents are expected to read to the child from one of the books and work on a set of activities for approximately 15 minutes every day. During the group meetings the parents are given the next week's package of materials and an opportunity to raise questions, discuss concerns, mingle with the other participating parents and engage in group activities such as arts and crafts.

Description of evaluation studies

The results of two studies have been published, neither of which provides follow-up beyond the time of the children's entry into grade two.³⁷ One study involved two sequential cohorts at a site in New York state with the children in each cohort randomly assigned to the HIPPY program or the control group. The HIPPY program at this site was operated as part of the city's public school Early Childhood Center and all the children in both groups and both cohorts attended this high quality program as four-year-olds and then entered kindergarten as five-year-olds. Thus the New York state study assessed the impact of HIPPY on children's cognitive skills, school readiness and school performance *over and above* any effect from participation in a high quality preschool program.

The other study was conducted concurrently in Arkansas and also involved two sequential cohorts. This was not a randomized trial and none of the children in either the HIPPY program or the comparison group attended any group preschool program at age four although 92% participated in kindergarten as five-year-olds. In both studies each child's cognitive skills were assessed using the same standard instrument at entry into the study and again at the end of the program period when the children were completing kindergarten. Kindergarten and grade one achievement data were also collected and teachers completed a rating of the child's adaptation to the school setting at the beginning of grade one and again at the beginning of grade two.

Findings

The results in both studies were mixed and inconclusive. As illustrated in Table 4.5, the HIPPY children in the first cohort of the New York state study had a more successful entry into school and higher reading skills at the end of grade one. None of these effects was replicated with the second cohort.

TABLE 4.5: EVALUATION FINDINGS FOR THE NEW YORK HIPPY PROGRAM

Variables	Cohort 1		Cohort 2	
Adjusted mean score	HIPPY (n = 37)	Comparison (n = 32)	HIPPY (n= 47)	Comparison (n = 66)
End of the program				
Cognitive skills	52.21 *	49.28	53.96	53.03
Reading readiness	47.58	41.59	44.16	45.79
Mathematical concepts	52.03	43.66	46.79	51.30
Rating of classroom adaptation	3.66*	2.75	3.23	3.39
One year follow-up				
Reading skills	54.25*	38.08	52.35	50.91
Mathematics skills	55.59	48.57	56.49	58.33
Rating of classroom adaptation	3.60*	2.83	3.54	3.44

* denotes a statistically significant difference in favour of the HIPPY group.

Sources: Baker, Piotrkowski and Brooks-Gunn, 1999, Tables 3 and 4.

Note: Sample size refers to the initial sample, not the follow-up sample.

The results from the Arkansas study were mixed for both cohorts. In the first cohort there was a non-significant trend for the HIPPY children to be rated as better adapted to the classroom at the beginning of grade one and by the beginning of grade two this difference was statistically significant. There were no real differences between the program and comparison groups in achievement test scores. However, 87% of the HIPPY children were promoted into first grade compared to only 69% of the comparison group. In the second cohort of the Arkansas study, the comparison children outperformed the HIPPY group on school readiness and achievement at the end of kindergarten. There were no other significant group differences on any measure at either the end of the program or the one year follow-up.³⁸

Discussion

The researchers report that the inconsistent results could not be explained by differences in the characteristics of the cohorts in either site or in the way the HIPPY program was implemented between cohorts. Apparently there were not adequate statistics at either site on the number of home visits each parent had received nor the number of group meetings they had attended to enable exploration of the level of each family's involvement to determine if there were cohort differences. However, the researchers note that in other HIPPY sites significant variation in the levels of parent involvement have been found as a result of parents not being at home when the home visitor came and/or not attending group meetings. In addition, program staff suspect that not all parents actually do the assigned

reading and related activities with their children on a daily basis. Thus, it is possible that not all parents (and therefore not all children) received the full program; lower than intended family involvement might have been greater with one cohort than with the other in either the New York state site and/or the Arkansas site.

4.4 Discussion

Summary of the research findings

The findings of the evaluations of the parent-focused programs discussed above and other evaluations reported in the literature can be summarized as follows:

- Some home visiting programs improved the mother's life course, for example, the number and/or spacing of subsequent pregnancies,³⁹ and the mother's participation in formal education or the paid labour-force.⁴⁰ Other studies did not assess these life course variables, while one reports no effect on them.⁴¹
- Home visiting programs have been very successful in reducing the incidence of indicators of child maltreatment.⁴²
- Some parenting education programs influenced parenting behaviour in positive ways and/or improved the home as a learning experience;⁴³ others did not.⁴⁴
- There is little evidence of the hoped-for link between changes in parenting practices and/or the home environment and long-term benefit to the academic careers of children at risk for impaired development unless the parent-focused program included a group program for the children.

What might explain the findings?

Parenting education and parent support programs intended to promote children's development are each based on the same two assumptions.

- Increased knowledge about child development and the importance of appropriate stimulation for young children will change parenting behaviour and/or the home as a learning environment. These changes, in turn, will improve developmental outcomes for children.
- Changes in the parent and/or home environment will occur quickly enough to coincide with the child's developmental needs.

Theoretically, the assumption that children's development will be promoted by changes in undesirable forms of parenting behaviour and/or improvement in the home as a learning environment makes sense. Parenting behaviour, in particular the quality and tone of the mother-child interaction, has been linked to child well-being and development in many studies.⁴⁵ The extent to which linguistic stimulation and other learning experiences are available in the home has repeatedly been demonstrated to be associated with children's developmental level and school readiness.⁴⁶ However, the anticipated changes in parenting or the home environment as a result of a parent-focused program are not always achieved. When changes do occur, they usually are not accompanied by benefits to the child's school readiness or subsequent school career.

The failure of programs that focus solely on the parent to promote children's development may reflect a lack of synchronization between the child's needs and changes in the parent and/or home environment when changes do in fact occur. Important aspects of child development occur on their own timetable and both emotional support and appropriate environmental stimuli must be available when the child is biologically primed to achieve new skills. For example, key neural pathways associated with language, and dependent for their development on adequate linguistic stimulation, are laid down in the first year of life. Children's development is sequential with each stage building on the preceding stage. Because children cannot wait for the benefit of parenting education to trickle down from the parent at some future stage, some developmental psychologists argue that instead of relying on indirect routes to enhance child development, children at risk should receive direct programming.⁴⁷

4.5 Conclusions

There is a need to be very clear about the purpose of a targeted program. Anecdotal evidence from two targeted Canadian parent-focused programs indicates that parents like them, feel supported by them, and feel that the program contributes to positive changes in their children.⁴⁸ However, this is not sufficient if the purpose is to promote the development of at-risk children and to improve their school-readiness.

The research evidence indicates that parent-focused programs on their own are not an effective mechanism for increasing the school-readiness of at-risk children. 'Combination' programs that include a group program for the children in addition to the parent-focused program have enhanced children's development. Unfortunately, it is not possible to disentangle the effect of the parent-focused component in contrast to the children's program. The evidence, for example from Better Beginnings, Better Futures, does suggest that child-focused programs have the greatest effect on children. The experience of Project CARE (see Section 3.2d in Chapter 3) calls into question whether adding a parent-focused program to a high quality, full-day centre program for children results in significant gains for the children.

Notes

1. For example, Field et al., 1982.
2. Barnett, 1998; Gomby et al., 1995; National Research Council and Institute of Medicine, 2000; Ramey et al., 1995.
3. Jacobson and Frye, 1991; Larson, 1980; Lyons-Ruth et al., 1990; Osofsky, Culp and Ware, 1988; and Wasik et al., 1990.
4. Field et al., 1980, 1982; Gray and Ruttle, 1980; Madden, O'Hara and Levenstein, 1984.
5. Madden, O'Hara and Levenstein, 1984.
6. Olds, Henderson and Kitzman, 1994; Olds et al., 1999.
7. Ibid.
8. For example, Brooks-Gunn et al., 1994a.
9. Ramey et al., 1985.
10. Caldwell and Bradley, 1984.
11. Britannia Centre/Simon Fraser University, 2000.
12. Boyle, 1999; Health Canada, 1998.
13. Health Canada, 1998, p.4.
14. Sharon Gribbon, Health Canada, personal communication.
15. O'Hanlon and Vander Plaat, 1997, p. 86.
16. Ibid., pp. 69 - 70.
17. Boyle, 1999, Figure 5.
18. Ibid., Figure 6.
19. Pancer, Cornfield and Amio, 1999; Peters et al., 2000.
20. Peters et al., 2000, Executive Summary, p. 1.
21. Ibid., Figure 1.2.
22. Pancer, Cornfield and Amio, 1999.
23. Peters et al., 2000, p. 39.
24. Pancer, Cornfield and Amio, 1999, Appendix A.
25. Peters et al., 2000, p. 27.

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26. Ibid., p. 39.
 27. Ibid., p. 31.
 28. Ibid.
 29. Lipps and Yiptong-Avila, 1999.
 30. Osborn and Milbank, 1987.
 31. Peters et al., 2000, p. 56.
 32. Gordon, 1987; Mary Gordon, personal communication; Yau, Forthcoming.
 33. The EDI has been normed on over 16,000 students across Canada with validity and reliability studies conducted in Alberta and Ontario (Hertzman et al., forthcoming, p. 1).
 34. Yau, Forthcoming, p. 2.
 35. Baker, Piotrkowski and Brooks-Gunn, 1998; 1999.
 36. Baker, Piotrkowski and Brooks-Gunn, 1998.
 37. Baker, Piotrkowski and Brooks-Gunn, 1999.
 38. Ibid.
 39. Field et al., 1982; Kitzman et al., 1997; Olds et al., 1999.
 40. Field et al., 1982; Brooks-Gunn et al., 1994a; Olds et al., 1999.
 41. Kitzman et al., 1997 (in regard to parent participation in education or the paid labour force).
 42. Barth, Hacking and Ash, 1988; Gray et al., 1979; Hardy and Street, 1989; Kitzman et al., 1997; Larson, 1980.
 43. Andrews et al., 1982; Field et al., 1980; Gray and Ruttle, 1980; Johnson and Walker, 1991; Madden et al., 1984.
 44. Jacobson and Frye, 1991; Larson, 1980; Lyons-Ruth et al., 1990, Olds et al., 1999; Osofsky, Culp and Ware, 1988; Wasik et al., 1990.
 45. See, for example, Bornstein, 1995 and Maccoby, 1992.
 46. See, for example, Bradley, 1995; Bradley et al., 1989; Duncan, Brooks-Gunn and Klebanov, 1994.
 47. Barnett, 1998; Gomby et al., 1993; National Research Council and Institute of Medicine, 2000; Ramey et al., 1995;
 48. Britannia Centre/Simon Fraser University, 2000; O'Hanlon and Vander Plaat, 1997.