

Chapter 8

EFFECTS ON PARENTS AND FAMILIES

Parents are the first and most important people in children's lives (Haveman & Wolfe, 1995; Landy & Tam, 1996; Rutter, 1985). One of the major goals of the Better Beginnings Project was to support and strengthen parents in their role of fostering their children's development, and, to this end, a wide range of program activities for parents and children were implemented.

This chapter addresses the extent to which the Better Beginnings goal of improving parents' and families' abilities to foster healthy development in their children was achieved within the short-term research period. Parent health, parent social activities, parenting behaviours, and parent and family social and emotional functioning are areas of concern in this chapter. Measures used to examine these various topics will be described followed by results (both overall and site-specific when applicable).

In a few instances, comparisons will be made to other sources of data in which the parents are exclusively female. As described in Chapter 5, approximately 90% of the Better Beginnings respondents are female. Male/female differences for the outcome variables in question were checked, and none were significant.

PARENT HEALTH

People differ in their self-referential definitions of health. The same degree of pain or inconvenience or fatigue is ignored or is acceptable to some, but very distressing and limiting to others. Consequently, health researchers usually ask questions related to health from several perspectives (Collins, Rowland, Salganicoff & Chait, 1994; Stephens, 1988).

Better Beginnings parents were asked, "In general, compared to other persons your age, would you say that your health is excellent, very good, good, fair, or poor?" Parents also reported use of recent prescription medications and answered a series of questions to determine whether health problems limited them in their daily activities: "Are you currently limited at all in the kind or amount of work you do or other activities because of (a) physical health problems, (b) emotions, nerves or mental health, or (c) physical pain or discomfort?" (Charette, 1988; Statistics Canada, 1988). Parents with limitations were asked to describe their health problems in greater detail. To explore parental health as it affects their children, parents were asked, "Does the condition of your health interfere with caring for your child?"

In addition, the prevalence of overweight and underweight in parents and any change in weight status between the two measurement points was examined. Height and weight were self-reported. Overweight is defined as a value for the Body Mass Index (BMI)¹ greater than 25.0. This is the level associated with an increasing risk of developing health problems (Health and Welfare Canada, 1988). A BMI of 20 to 25 is considered a good weight for most individuals. An individual with a BMI less than 20 is considered underweight.

¹ BMI is calculated as: weight in kilograms/(height in metres)².

Results for Parent Health

The parents were generally healthy. Those with health problems primarily had physical problems that were often chronic and frequently associated with mental or emotional health problems. The most common conditions that limited parents' activities were back problems, joint or muscle problems, asthma, pregnancy, and arthritis. This is similar to findings in other studies of women in similar age groups (Fogel & Woods, 1995).

There were no overall significant differences in the proportion of parents in each of the BMI categories between the baseline and focal cohorts for either sex. None of the males had a BMI below 20, and only a small proportion of females can be considered underweight. The proportions with BMIs greater than 25 (which indicates overweight) for the focal cohorts are considerably higher for both males (varying from 52% to 76% by site) and females (42% to 57%) compared to the 1990 Ontario Health Survey (48% for males aged 20 to 44 years; 28% for females) (Hedley *et al.*, 1995).

Younger Cohort. Across Ontario, women in this age group usually rate their health as excellent or very good (National Population Health Survey (NPHS), 1994-95). Younger cohort parents were most apt to rate their health somewhat less positively, as very good or good. Over twice as many parents in the younger cohort, 17% versus 7% in Ontario, rated their health as only fair or poor. No consistent pattern of effects of Better Beginnings programs on parents' general health ratings was found. Similarly, there were no differences in the number or types of prescription drugs the parents used before or after programs or in comparison to the Peterborough comparison site.

No consistent pattern of effects on physical or mental health or pain limitations was found. Fourteen per cent reported limitations due to physical health. Of these, two thirds had a chronic limitation (lasting more than one year). Sixteen per cent reported either emotional or mental health limitations. Eighteen per cent of parents had experienced physical and mental health problems when these conditions were combined. Pain or discomfort limited 14% of the parents. About one parent in eight felt limited in their ability to care for their children because of their health limitations, and this did not significantly change after programs or in contrast to the comparison site.

Older Cohort. Overall, older cohort parents reported their health as very good. Their ratings were about the same as those for the rest of the Province (NPHS, 1994-95). No consistent pattern of effects of Better Beginnings programs on parents' general health ratings was seen. No consistent pattern of differences was found in the number or types of prescription drugs the parents used over time. The most common type of prescription drug used was for pain, but no differences were seen over time.

For limitations related to physical health, the pattern was not significantly different in the same communities before and after programs. Fourteen per cent reported limitations due to physical health. Of these, two thirds had a chronic limitation (lasting more than one year). Only 5% reported emotional or mental health limitations. When the mental and physical health limitations were combined, 17% of parents report limitations. In the longitudinal data, the rates per year were similar, and there were no significant differences between groups. About one parent in 10 felt limited in the ability to care for children because of health limitations, and this did not significantly change after programs or in contrast to the comparison sites.

PARENT HEALTH PROMOTION, ILLNESS PREVENTION, AND HEALTH RISK BEHAVIOURS

Parental health promotion involves actions taken to increase levels of good health (health enhancement), to prevent problems from occurring (risk avoidance), and to decrease the chances of developing health problems (risk reduction) (Ontario Ministry of Health, 1990). Parents' behaviours act as models for children's future health promotion behaviours. Better parental health promotion means that more parents will be healthier in the future and therefore better able to provide optimal care for their children. Some health risks, such as parental smoking, can be harmful to the health of their children.

Parents were asked questions about selected health promotion and illness prevention behaviours. Indicators were selected from among behaviours known to be related to better parent health outcomes and for which at least some personal choice is possible (Garceau, 1988; Mitchell, 1995)². Certain behaviours carry widely understood risks to health and, for parents, secondary risks to the health and safety of their children. Health promotion and illness prevention data were collected on exercise, Pap smears, and breast self-examinations. Health risk data were collected on use of tobacco and alcohol among parents.

Exercise

Improvements in exercise suggest a commitment to a healthier lifestyle. Exercise and attention to nutrition are the primary health promotion behaviours that individuals can change. Mothers in the younger cohort were asked how frequently they exercised before, during, and following pregnancy. Parents in the older cohort site reported on their exercise over the last month when their children were in SK through Grade 3.

Pap Smears

Timely use of Papanicolaou (Pap) smears for the detection of cervical cancer is a means of identifying treatable cancer early (Gold & Richards, 1994). Since Pap smears are done by physicians, this is an indicator of use of the health care system for early identification of a treatable health problem. Women reported the timing of their last Pap smear, and responses were coded as within the guidelines or not at the 33-month interview for the younger cohort sites and at JK, Grades 1 and 2 interviews for the older cohort sites.

Breast Self-Examination

Monthly breast self-examinations can aid the early diagnosis of breast cancer, which is more likely to be treatable when caught early. This question was asked at the 18-month and 33-month interviews in the younger cohort sites, and at SK, Grades 1 and 3 in the older cohort sites.

Cigarette Smoking

Smoking is a very difficult habit to change. Associated with the major killers—heart disease, lung cancer and cerebrovascular disease—smoking is also linked to osteoporosis, cervical cancer and, among pregnant women, to low birth weight and miscarriage (Costello & Stone, 1994). Importantly, secondhand smoke is a direct risk to children (Youngkin & Davis, 1994). Smoking was measured by parents' report

² Over-reporting of health promotion behaviours has been documented in other studies. An example is higher reported rates of Pap smears compared to medical record reports of the test (Ontario Ministry of Health, 1990). So change in rates rather than the absolute rate is most notable.

of the number of cigarettes and/or packs of cigarettes smoked per day. These data were categorized on a scale of 0 (no smoking), 1 (less than ½ pack a day), 2 (more than ½ to 1 pack a day), and 3 (more than 1 pack a day). As a rough indication of the study children's exposure to smoke in the home, parents were asked how many smokers are there in the home. Taken together with whether or not the parent smoked, the number of smokers in the home was calculated. The scale was 0 to 2 (two or more smokers). Questions about cigarette smoking were asked at every data collection point.

Alcohol Use

Excessive alcohol use is a direct risk to parents and has indirect risks to the children. Regular, heavy alcohol consumption is related to strained social relations, legal difficulties and acute and chronic health problems (Fogel & Woods, 1995). Parents were asked, "In the past 12 months, how often did you drink alcoholic beverages?". Mothers reported on alcohol use before, during and following pregnancy in the younger cohort sites; in the older cohort sites, parents reported on alcohol use at every interview. Results for those who became pregnant during the study period were also checked. The scale ranged from 0 (never) to 3 (once a week to daily); questions were also included on binge drinking. As indicators of serious alcohol use, the four CAGE questions (Ewing, 1984) were asked at three data collection points in both the younger and older cohort sites.

Results for Parent Health Promotion, Illness Prevention, and Health Risk Behaviours

Younger Cohort. Regarding health promotion, parents at Better Beginnings sites had significantly better rates of exercise during the first seven months of pregnancy, in comparison to Peterborough ($p < .01$, $es = .12$)³; three sites had significantly higher levels and the other two were in the same direction. When parents' rates of exercise after pregnancy were examined, significantly more parents in the comparison site exercised than in the project sites ($p < .01$, $es = -.33$); three sites were significantly lower, and the other two were in the same direction.

Regarding illness prevention, all sites except one had more mothers within the Pap smear guidelines than the provincial rate, which is approximately three out of four Ontario women of the same age (NPHS, 1994). Overall, no significant difference for Pap smears within guidelines was found in Better Beginnings sites compared to Peterborough.

Women in Peterborough reported more frequent monthly breast self-examinations compared to women in the five demonstration sites ($p < .01$, $es = -.25$); three of the five sites showed significant results as well.

The analyses for cigarette smoking were quite detailed; results for the baseline-focal comparison will be presented first, followed by the longitudinal comparison. Parents in the Better Beginnings communities did significantly less smoking after programs than before ($p < .01$). Three of five sites had significant decreases in smoking after programs began; the two remaining sites were in the same direction. Before Better Beginnings, when their study children were four years old, almost half (45%) of the parents smoked. This is a very high rate compared with only about a quarter of Ontario women of the same age. After Better Beginnings, the percentage of parents smoking dropped from 45% to 35%. Even with this significant drop, overall the parents still smoked more than Ontario women (35% compared to 28% (National Longitudinal Survey of Children and Youth; NLSCY, 1997)). The relatively greatest drop in smoking was among the heaviest smokers.

³ For an explanation of how effect sizes were calculated, see page 6-21.

The longitudinal data included the parents' recall of the amount smoked before, during, and following pregnancy. The longitudinal analysis needs to be interpreted with the understanding that cigarette smoking is addictive and that relapse is common. The following overall pattern in smoking is seen at most sites. First there is a drop in smoking during pregnancy. Next is a rebound. Figures were relatively stable from 18 to 48 months. Parents at all sites rebound to about the same or higher level of smoking as before pregnancy. So the higher the rate of pre-pregnancy smoking, the greater the drop in smoking during pregnancy and the greater the rebound.

Three separate analyses were done: of the decline from before to during pregnancy; of the rise from pregnancy to 3 months after; and of the period from 3 to 48 months. The first two analyses showed no consistent pattern favourable or unfavourable to the Better Beginnings sites. For the period from 3 to 48 months, parents in the comparison site reported a decline in smoking relative to the demonstration sites ($p < .01$); three of the sites showed a significant difference and the other two sites were in the same direction.

To summarize, cigarette smoking was very heavy in Better Beginnings communities. This concurs with other surveys, which report higher rates among those with lower incomes and less education (Ontario Ministry of Health, 1990; Lamarche, 1988; Fogel & Woods, 1995). Although the baseline-focal results were significant ($p < .01$), the longitudinal results were mixed, so it was concluded that there was no consistent pattern of a Better Beginnings effect on cigarette smoking in the younger cohort sites.

Better Beginnings children were often in homes with many smokers. Although the baseline-focal results were positive ($p < .01$), the longitudinal results did not show a consistent pattern. The average number of smokers in a home for the baseline-focal children was high, approximately one smoker per home. After Better Beginnings, all of the program communities had a significant overall drop in number of smokers in homes. However, the longitudinal analyses showed no consistent, significant pattern.

As with the cigarette smoking analyses, analyses for alcohol use were also quite detailed. Results for the baseline-focal analyses reveal that the overall average was about one drink a month. Reports of alcohol consumption among Better Beginnings community parents were much lower than that of women in Ontario of the same age: 63% of the parents used alcohol before Better Beginnings versus 80% in Ontario (NPHS, 1994-95). This gap was widened slightly but significantly after Better Beginnings, with only 59% of the parents reporting the use of alcohol ($p < .01$). The drop in alcohol consumption was significant for one site.

Three separate analyses were done for alcohol use for the longitudinal comparisons: of the period from before to during pregnancy; from pregnancy to 18 months after; and of the period from 18 to 48 months. The three analyses showed no consistent pattern of effects.

CAGE scores showed no one in the alcoholism range. Binge drinking reports were rare. Alcohol use data were collected for those who were pregnant during the study period, but too few were pregnant for analysis.

To summarize, heavy alcohol use was rare among the study parents. Given strong baseline-focal significant results, but a lack of significant differences in the longitudinal data, the evidence for a Better Beginnings effect on alcohol use among parents in the younger cohort sites is inconclusive.

Older Cohort. Better Beginnings appears to help reduce cigarette smoking. The parents were very heavy smokers, and this is a very difficult habit to change. Nearly half (46%) of the parents in the older cohort Better Beginnings communities smoked before programs began, compared to only about a quarter of Ontario women of the same age (28%, NLSCY, 1997). For the focal cohort, the rate almost halved to 26% ($p < .01$, $es = .30$; Figure 8.1). This significant drop brought the Better Beginnings parents in line with Ontario women: 74% compared to 72% nonsmokers (NLSCY, 1997). The drop was most evident among the heaviest smokers. The same picture emerges in the longitudinal analyses; overall, there was a significant difference in the Better Beginnings sites versus their comparison sites in smoking ($p < .05$, $es = .19$).

The number of smokers in children's homes shows a consistent pattern of falling. There were fewer smokers after Better Beginnings in the baseline-focal analysis ($p < .05$, $es = .18$); one site was significant and another in the same direction. In the longitudinal analysis, the same pattern of a reduction in smokers in the homes was seen overall and at all sites, but these results were not statistically significant.

Self-reported alcohol use was low among the study parents. Reports of alcohol consumption among Better Beginnings community parents were slightly lower than among women in Ontario of the same age (NPHS, 1994-1995). Binge drinking was rare. Similarly, a measure of alcoholism, the CAGE questionnaire, found none of the parents scored in the serious alcoholism range. Nevertheless, in the baseline-focal analysis, a significant drop in alcohol use was found ($p < .01$). All sites were in the same direction, and one was significant. The overall longitudinal result was showing a small but non-significant increase in alcohol consumption. Therefore, there is inconclusive evidence for a Better Beginnings effect on parental alcohol consumption in the older cohort sites.

For all other measures of parent health (e.g., breast self-examinations, timely Pap smears, exercise), no consistent effects were found.

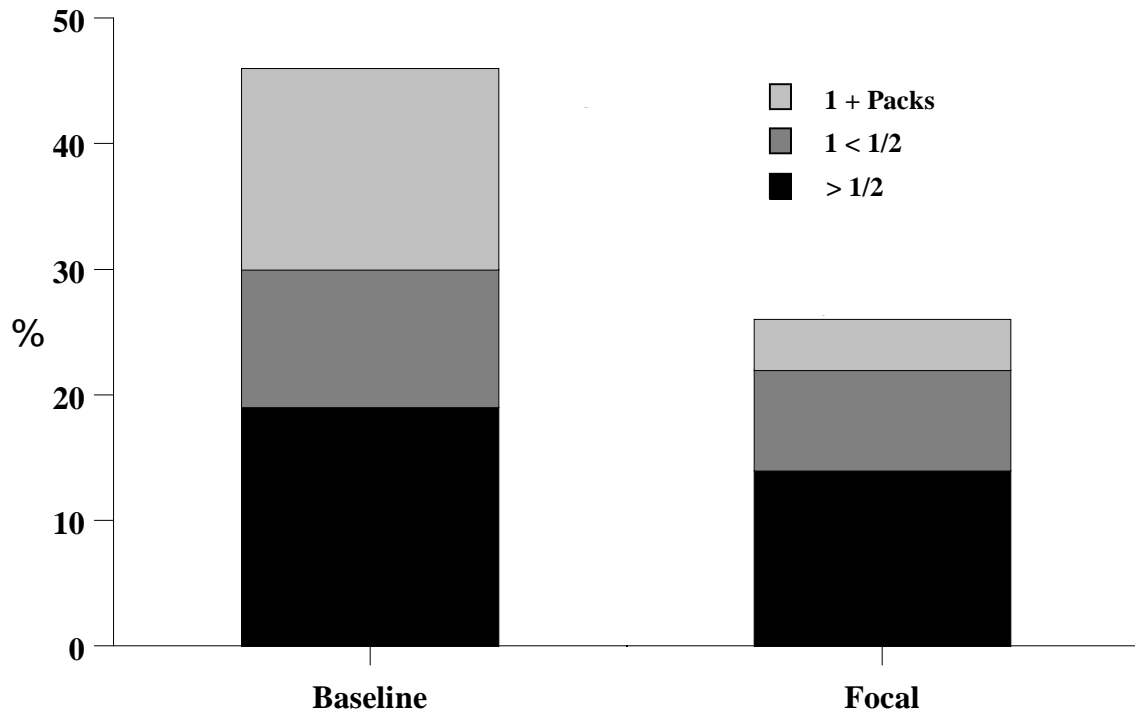
Site-Specific Findings for Parent Health Promotion, Illness Prevention and Health Risk Behaviours

Highfield. In Highfield, a pattern of improved health promotion and illness prevention behaviour emerges. Parents report more timely Pap smears, more frequent breast self-examinations, more frequent exercise, fewer smokers in the home, less alcohol use, improved ratings of health, fewer health limitations, and less use of prescriptions for pain. Of the 18 comparisons, 6 were significant and 15 were in a favourable direction.

PARENT SOCIAL ACTIVITIES

To get a sense of the extent to which parents in Better Beginnings communities got involved in the life of their communities, they were asked to indicate how much they engaged in a number of community-based activities over the previous month, including getting together with friends, getting together with other families in their communities, taking part in organized recreational activities such as fitness classes or softball, giving time to help with community activities such as Cub-Scouts or hockey teams, attending meetings of community clubs or organizations, and attending religious services at a church, mosque, synagogue, or temple. Another index of neighbourhood involvement (the neighbourhood activities index) was computed by summing individuals' responses to a series of five questions asking how often over the previous year they had engaged in activities such as community recreational events, working with a children's group, or neighbourhood social events.

Figure 8.1
Percentage of Smoking Parents of Grade 2 Children
Older Cohort Sites, Baseline-Focal Analysis



In 1993 (baseline), nearly half (46%) of the parents in the three older cohort sites smoked. The rate of smoking dropped to 26% by 1997 ($p < .01$). The drop was most evident among the heaviest smokers.

Results for Parent Social Activities

Younger Cohort Sites. Results of the baseline-focal and longitudinal analyses revealed only one significant effect: parents in the demonstration communities had a greater reduction in getting together with friends over time than did parents in the comparison community ($p < .01$, $es = -.61$).

Older Cohort Sites. There were no consistent significant effects for the older cohort sites.

PARENTING

Because of the importance placed on parents and the parenting role in the Better Beginnings programs, a number of measures of parenting behaviours and attitudes, as well as parents' interactions and activities with their children, were included as outcomes.

Parent/Child Interaction

In order to assess the quality of interactions between parents and their children at 18, 33 and 48 months, the Parent/Caregiver Involvement Scale (PCIS; Farran, Kasari, Comfort & Jay, 1986) was completed by the researchers while carrying out the in-home parent interviews and child assessments. The researchers were trained in the use of the PCIS using procedures developed for use in the Better Beginnings Project by Dr. Marilee Comfort from Thomas Jefferson University in Philadelphia. Scores yielded by the PCIS were: 1) play interaction quality: a rating of the quality of parent-child interactions during a five-minute free-play period in the home, and 2) general parent-child interaction quality: a rating of the quality of five different aspects of parent-child interactions (availability, acceptance, atmosphere, enjoyment, and learning environment) during the entire time the researcher was in the home.

Parenting Behaviours

Another measure of parenting behaviour, the Iowa Parent Behaviour Inventory (Cruse, Clark & Pease, 1978) was employed for the baseline data collection in the younger and older cohort sites and also for the first wave of longitudinal data collected in the older cohort sites in 1994. This scale is designed to measure various aspects of parents' behaviour toward their child, including involvement, limit setting, and responsiveness. Unfortunately, this measure proved unacceptable psychometrically for our sample, yielding unreliable indices of parenting behaviour, possibly because of the complex language in many of the items.

As a result, subsequent parent interviews employed three parenting subscales used in the first wave of the NLSCY in 1994. These questions were adapted from Strayhorn and Weidman's (1988) Parent Practices Scale. Parents are asked to indicate how often they engage in various behaviours toward their child, ranging from "never" to "many times a day". The three resulting subscales are labelled hostile/ineffective parenting (e.g., "How often do you get angry when you punish your child? How often do you feel you are having problems managing your child in general?"), consistent parenting (e.g., "How often does your child get away with things that you feel should have been punished? How often when you discipline your child does he/she ignore the punishment?"), and positive interactions (e.g., "How often do you and your child talk or play with each other, focusing attention on each other for five minutes or more, just for fun? How often do you do something special with your child that he/she enjoys?").

These parenting behaviour questions were part of the 18, 33, and 48 month parent interviews in the younger cohort sites and included in the SK to Grade 3 parent interviews in the older cohort sites.

Parent Sense of Competence

Parents' feelings of satisfaction and competence as parents at the older cohort sites (SK, Grade 1 and 3 interviews) was measured with the version of the Parenting Sense of Competence Scale developed by Gibaud-Wallston and Wandersman (1978; see also Johnston & Mash, 1989) and revised by the FAST-Track Project (Conduct Problems Prevention Research Group, 1992). (The length of the existing parent interview precluded its administration to younger cohort parents.) The revised scale consists of two 6-item subscales: parenting satisfaction and parenting efficacy. Parenting satisfaction is an affective dimension reflecting low levels of anxiety and frustration concerning the parenting role (e.g., "Parenting leaves you feeling drained and exhausted", "It is really difficult to decide how to parent your child", and "Being a parent makes you tense and anxious"). Parenting efficacy is seen to be a behavioural dimension reflecting competence, problem-solving ability, and capability in the parenting role (e.g., "You feel you are doing a good job as a parent"; "You know what you need to do to be a good parent"; "Being a parent is as satisfying as you expected"; and "If something is troubling your child, you can figure out what it is"). Parents rate how strongly they agree or disagree with the 12 statements.

Results for Parenting

Younger Cohort. No overall significant differences were found between program and comparison site parents on either of the PCIS ratings, or on the three subscales of the NLSCY parenting measure. However, there were two significant site effects for the PCIS, so the results of the researchers' ratings of the parent-child interactions during the five-minute free-play period using the PCIS are presented in Figure 8.2 for all sites except Guelph, where there were too few observations for analysis.

Older Cohort. Results of the longitudinal analysis for the three subscales of the NLSCY parenting measure reveal an overall significant decrease in hostile-ineffective parenting behaviours in the program sites compared to the comparison sites ($p < .01$). However, this is not considered to be a general trend because the only site to evidence any significant change was the Highfield Better Beginnings site, which began in SK with the highest mean for hostile/ineffective parenting and decreased to become the lowest by Grade 3 ($p < .01$, $es = 1.73$). The other two program sites showed little change in mean ratings over the four years. The other two subscales (consistent parenting and positive interactions) revealed no overall significant differences between the program and comparison sites.

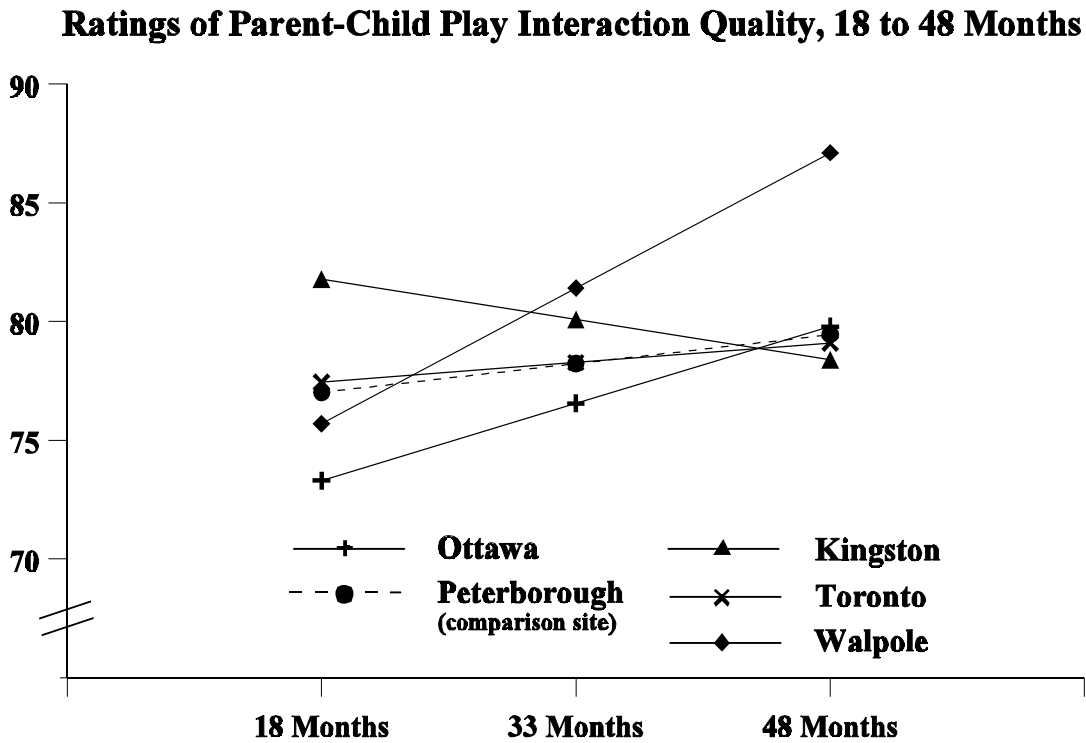
For the Parenting Sense of Competence scale, longitudinal analyses revealed no differences among the sites on either the parenting-satisfaction or the parenting efficacy subscales.

Site-Specific Findings for Parenting

Highfield. As mentioned earlier, parents in the Highfield Better Beginnings site showed a significant decrease in hostile-ineffective parenting behaviours compared to parents in Etobicoke ($p < .01$, $es = 1.73$). Parents in Highfield also showed significantly more consistent parenting behaviours ($p < .01$, $es = .80$) and more satisfaction with their parenting role ($p < .05$, $es = .40$).

Kingston. Ratings of the quality of parent-child play interactions in the Kingston project site, while the highest of all sites when children were 18 months, decreased to the level of the other sites by the 48-month ratings ($p < .01$, $es = -.65$).

Figure 8.2



Ratings of the quality of parent-child interactions during a five minute free-play period showed a significant increase from 18 to 48 months in Walpole and a significant decrease in Kingston.

Site	Change/ Interview	s.d.	N	Effect Size
Kingston	-1.70**	5.79	56	-.65
Ottawa	3.24	7.46	27	ns
Toronto	.83	7.75	44	ns
Walpole	5.71**	7.34	19	1.01
Peterborough	1.28	5.29	150	na
Demonstration-Comparison	-.28	6.38	296	ns

** Difference from comparison site is significant at $p < .01$.

Walpole Island. The quality of parent-child play interactions increased significantly from 18 to 48 months compared to the Peterborough comparison site ($p < .01$, $es = 1.01$). The increase in Walpole Island ratings is particularly noteworthy, since they were the lowest at 18 months, becoming higher than any of the other sites at 48 months. There were also significant improvements in the PCIS rating of general parent-child interaction quality ($p < .01$, $es = .35$).

PARENT AND FAMILY SOCIAL AND EMOTIONAL FUNCTIONING

Better Beginnings program initiatives have been developed to have positive effects on the child's home environment. To determine what changes were produced, a number of measures were collected regarding parental depression, life stress, social support, marital satisfaction, quality of family functioning, and conjugal violence.

Social Support

In coping with stressors, people may draw on support from others to varying degrees. Parents' perceived social support was assessed with a briefer (six item), more simply worded version of the 24-item Social Provisions Scale (Cutrona & Russell, 1987). Parents responded on a four-point scale to items including: I have family and friends who help me feel safe, secure, and happy and If something went wrong, no one would help me. Parents were asked about their perceived social support when their children were 3, 18, and 48 months old in the younger cohort and in JK, Grades 1 and 3 in the older cohort.

Depression

Parental depression was assessed through the Centre of Epidemiological Studies Depression scale (Radloff, 1977), a 20-item scale covering depressive symptoms, each rated for its prevalence in the parent's life and scored on a four-point scale. Scale scores can range from a low of 20 to a high of 80, with higher scores indicating greater prevalence of depressive symptoms. Parental depression was assessed at every home interview, from baseline (1993) through to 1998.

Life Stress

Across all data collection points (except at 33 months, due to the length of the interview), parents were asked whether a set of 14 potentially stressful events had occurred in the past year. These items were chosen on the basis of frequency of endorsement, from a larger pool of questions that were asked as part of the Social Change in Canada Series (SCCS) (Institute of Social Research; 1977; 1979; 1981). That is, items with very low response rates in the SCCS sample were not included in the Better Beginnings protocol. Parents were asked to indicate whether they had experienced such stresses as losing a job or being unemployed, financial problems, separation from a spouse or partner, or a serious illness.

Parents were also asked how much tension they felt in juggling their job or studies, housework, family and child rearing, and other factors, on a scale where 0 means no tension and 10 means a great deal of tension. The phrasing of the question was slightly different for employed and unemployed parents, so the analyses were done separately for these two groups.

Intimacy/Marital Satisfaction

As a measure of intimacy/marital satisfaction, Better Beginnings used seven items on marital relations taken from the Quality of Life Survey (Institute of Social Research, 1977). Six items form an intimacy

satisfaction scale, and the seventh item is a measure of overall marital satisfaction. With minor wording changes, the items were used for both legally married and common-law couples.

This set of questions was used across all data collection points (except at 18 months in the younger cohort and at SK in the older cohort). Examples from the intimacy satisfaction scale include the level of interest their husband/wife/partner shows in their work and in what they have to say, and the amount of love and affection their husband/wife/partner shows for them. Replies to these items are scored from extremely satisfied to not very satisfied. Parents were also asked, To what extent does your (marriage/relationship) satisfy your needs for friendship and understanding? Replies are scored from all your needs to none of them. The overall marital satisfaction question is, All things considered, how satisfied or dissatisfied are you with your (marriage/relationship)? Replies are placed on a scale from 0 to 10, with a lower number indicating less satisfaction and a higher number indicating more.

Family Functioning

The 12-item General Functioning Scale of the Family Assessment Device (FAD) originally designed for use in a clinical setting (Epstein, Baldwin & Bishop, 1983) was used to measure family functioning. Parents rate the entire family (which may include the extended family if the parents think it appropriate) on items such as, In times of crisis we can turn to each other for support, We express feelings to each other, We can't talk to each other about sadness we feel, and Making decisions is a problem for our family. Parents rate how strongly they agree or disagree with the 12 statements. The FAD was used for all data collection points except at 18 months in the younger cohort and SK in the older cohort.

Domestic Violence

In the version of the Conflict Tactics Scale (Straus, 1990) used in this study, parents were asked about methods they and their partners had used, in the previous year, to deal with conflict between them. These included such non-violent methods as talking things over and bringing in a third party to try to work things out. Then questions were asked about throwing things at each other, pushing, grabbing or shoving, slapping, kicking, biting or hitting with a fist, hitting or trying to hit the other with an object, and beating the other up. These questions were asked at 18 months and at 48 months in the younger cohort, and at SK and Grade 2 in the older cohort.

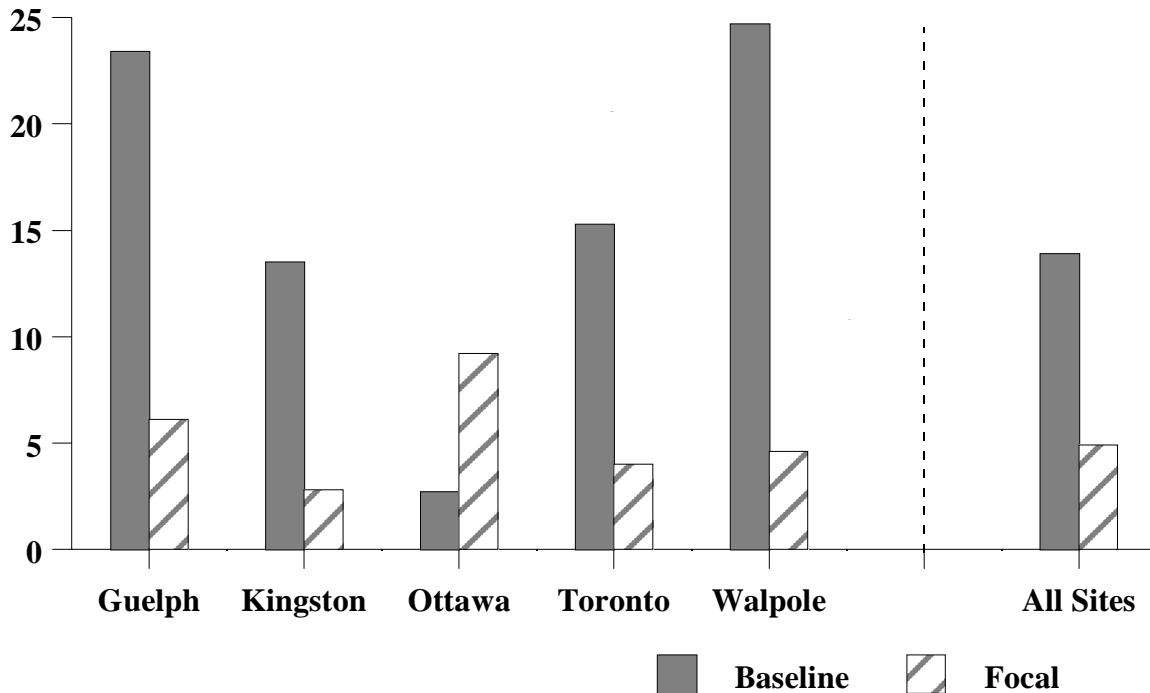
Results for Parent and Family Social and Emotional Functioning

For social support, depression, life stress, intimacy with partner, and family functioning, there was no consistent pattern of effects in either the younger and older cohort sites across both baseline-focal and longitudinal comparisons.

There was a significant increase in marital satisfaction ratings for parents in the older cohort demonstration sites compared to parents in the comparison sites ($p < .01$, $es = .72$). There were also slight but non-significant increases in marital satisfaction ratings from baseline (1993) to 1997/1998.

For domestic violence, the proportion of parents who reported that they had been recipients of violence declined sharply under the baseline-focal design for both the younger and older cohort sites. For the younger cohort sites, $p < .01$ and $es = .32$; for the older cohort sites, $p < .01$ and $es = .44$. (Figures 8.3 and 8.4). The proportion of parents reporting that they had been violent themselves declined as well: for the younger cohort sites, $p < .05$ and $es = .22$; but for the older cohort sites, the decline was not significant.

Figure 8.3
Percentage of Respondents Reporting Partner-to-Respondent Violence
Younger Cohort Sites, Baseline-Focal Analysis



The percentage reporting partner-to-respondent violence declined at 4 of the 5 younger cohort demonstration sites between the baseline interviews and those conducted with the focal cohort 4 years later. For the sites combined, the decline was from 13.9 per cent to 4.9 per cent ($p < .01$). Percentages for the individual sites, which should be treated with caution in view of the small Ns on which they are sometimes based, are presented below.

Site	Baseline			Focal			Effect Size
	%	s.d.	N	%	s.d.	N	
Guelph	23.4	41.6	19	6.1	26.2	39	.48
Kingston	13.5	32.0	68	2.8*	17.7	60	.41
Ottawa	2.7	15.9	35	9.2	30.2	30	-.31
Toronto	15.3	37.7	60	4.0	20.4	41	.40
Walpole	24.7	41.1	15	4.6	27.6	22	.61
All Sites	13.9	33.8	197	4.9**	23.4	192	.32

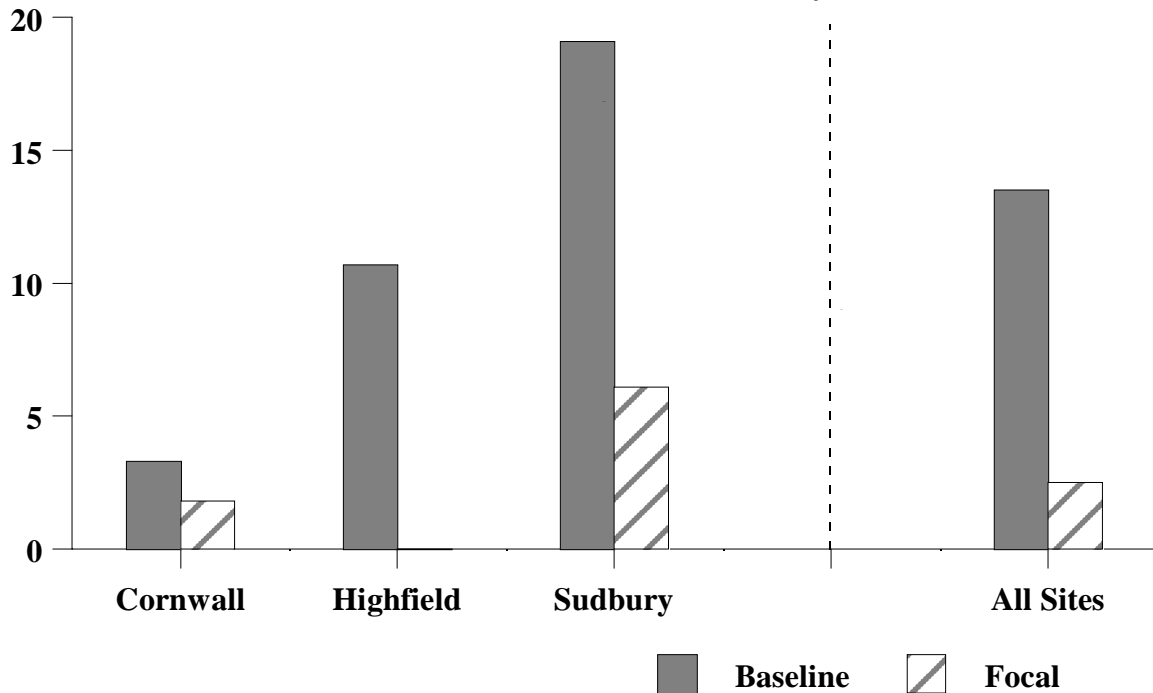
* Difference from baseline significant at $p < .05$.

** Difference from baseline significant at $p < .01$.

Figure 8.4

Percentage of Respondents Reporting Partner-to-Respondent Violence

Older Cohort Sites, Baseline-Focal Analysis



The percentage reporting partner-to-respondent violence declined at all 3 older cohort demonstration sites between the baseline interviews and those conducted with the focal cohort four years later. For the sites combined, the decline was from 13.5 per cent to 2.5 per cent ($p < .01$). Percentages for the individual sites are presented below.

Site	Baseline			Focal			Effect Size
	Mean	s.d.	N	Mean	s.d.	N	
Cornwall	3.3	18.9	30	1.8	13.4	56	.10
Highfield	10.7	31.5	28	0.0*	0.0	55	.66
Sudbury	19.1	39.6	68	6.1*	19.1	49	.12
All Sites	13.5	34.3	126	2.5**	15.7	160	.44

* Difference from baseline significant at $p < .05$.

** Difference from baseline significant at $p < .01$.

These changes from baseline to focal are striking; however, the longitudinal data present a picture of minimal change – too little, in fact, for any detailed analysis. At the older cohort sites, data were gathered at SK and at Grade 2. For respondent-to-partner violence, of the 269 families interviewed, across the older cohort sites, only 12 families shifted from reporting violence to not reporting it, and only 11 in the other direction. For partner-to-respondent violence, of 265 families interviewed only 11 shifted altogether, 7 reporting an increase and 4 a decrease. At the younger cohort sites, data were gathered when children were 18 and at 48 months of age. The questions on family violence at 18 months are not strictly comparable with those at 48 months. If, making due allowance for the risks involved, the comparison is made, only 25 out of 259 families reported shifts in partner-to-respondent violence, 15 reporting a decrease and 10 an increase.

What remains striking is the sharp decline from baseline. If the apparent effect does not result from a difference between cohorts, it must have taken place between the baseline-data-gathering period and the times in which the SK data, for the older cohort, and the 18-month data, for the younger cohort, were gathered. That is, the decline must have taken place in a period of not more than two years.

Although Better Beginnings sponsored events such as weekend workshops on family relations, no site made reduction of domestic violence a consistent major theme of programming (although Guelph emphasized it for a time), so the causal mechanism that might produce such a sharp decline in violence over a relatively brief period is unclear. Nor is it clear what mechanisms might have produced similarly low levels in comparison sites.

A possibility that must be acknowledged is that the low levels obtained from the longitudinal cohort result from the timing of the interviews. The Ontario government's advertising campaign, emphasizing that violence toward wives is a criminal offense, might have influenced reports of violence either by curbing it or by reducing the likelihood that it would be reported. It is a commonplace among survey researchers that underreporting is liable to take place on sensitive topics. By increasing the sensitivity of the topic, the advertising campaign may well also have lowered respondents' willingness to report conjugal violence.

So we are left with three possible explanations, not mutually exclusive: an effect of Better Beginnings, due to unknown causal mechanisms; an effect of provincial initiatives; or a result of increased unwillingness to report family violence. There is a clear change in the data, but interpretations must be drawn cautiously.

Site-Specific Findings for Parent and Family Social and Emotional Functioning

Highfield. Parents in this site showed a general pattern of improvement for parent and family social and emotional functioning:

- " reduced tension/stress,
- " less depression and more social support,
- " improved intimacy with partner, and
- " improved general family functioning plus more marital satisfaction and less domestic violence.

Of the 18 comparisons, seven were significant, and 17 comparisons were in the favourable direction.

Toronto and Walpole Island showed significant reductions in stressful life events and tension in juggling job/studies, housework, family, and child rearing across both designs (baseline-focal and longitudinal). Each site had 2 out of 6 significant effects, and 5 out of the 6 analyses showed reductions.

SUMMARY OF SIGNIFICANT FINDINGS FOR PARENTS AND FAMILIES

PARENT HEALTH

General Findings

- " The prevalence of overweight in parents (BMI>25) was considerably higher for both males (varying from 52 to 76% by site) and females (42 to 57%) compared to the 1990 Ontario Health Survey (48% for males; 28% for females).
- " In the younger cohort Better Beginnings demonstration sites, results for women's health promotion/illness prevention are mixed: they report less frequent breast self-examinations, less frequent exercise after pregnancy, but more frequent exercise during pregnancy when compared to women in Peterborough, the comparison site.
- " Parents in the older cohort Better Beginnings demonstration sites report reduced smoking and fewer smokers in the home.

Site-Specific Findings

Highfield. Parents at the Highfield Better Beginnings site had improved health outcomes: they report more timely Pap smears, more frequent breast self-examinations, more frequent exercise, fewer smokers in the home, less alcohol use, improved ratings of health, fewer health limitations, and less use of prescriptions for pain. Of the 18 comparisons, 6 were significant and 15 were in a favourable direction.

PARENT SOCIAL ACTIVITIES

General Findings

- " Parents in the 5 younger cohort demonstration sites report less frequent get-togethers with friends compared to Peterborough (p<.01).

PARENTING

Site-Specific Findings

Highfield. Parents at the Highfield Better Beginnings site show positive improvements in their parenting role. They showed a significant decrease in hostile-ineffective parenting behaviours (p<.01), more consistent parenting (p<.01), and more satisfaction with their parenting role (p<.05).

Kingston. Ratings of the quality of parent-child play interactions in the Kingston project site, while the highest of all sites when children were 18 months, decreased to the level of the other sites by the 48-month ratings (p<.01).

Walpole Island. The quality of parent-child play interactions increased significantly from 18 to 48 months compared to the Peterborough comparison site (p<.01). The increase in Walpole Island ratings

are particularly noteworthy, since they were the lowest at 18 months, becoming higher than any of the other sites at 48 months. There were also significant improvements in the PCIS rating of general parent-child interaction quality ($p < .01$).

PARENT AND FAMILY SOCIAL AND EMOTIONAL FUNCTIONING

General Findings

- " Reduced domestic violence between parents and their partners in both the younger and older cohort demonstration sites.
- " Parents in the three older cohort demonstration sites report increased marital satisfaction compared to parents in the two comparison sites.

Site-Specific Findings

Highfield. Parents in this site showed a general pattern of improvement for parent and family social and emotional functioning:

- " reduced tension/stress,
- " less depression and more social support,
- " improved intimacy with partner, and
- " improved general family functioning plus more marital satisfaction and less domestic violence.

Of the 18 comparisons, seven were significant, and 17 comparisons were in the favourable direction.

Toronto and Walpole Island showed significant reductions in stressful life events and tension in juggling job/studies, housework, family, and child rearing across both designs (baseline-focal and longitudinal). Each site had 2 significant effects out of 6, and 5 out of the 6 analyses showed reductions.