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A Special Edition on Child Development

It is with great pleasure that the Applied Research Branch presents this special edition of the *Bulletin* focusing uniquely on child development. The research presented here has been commissioned by Human Resources Development Canada (HRDC) using the National Longitudinal Survey of Children and Youth (NLSCY). This collection of research is part of the first stage of HRDC's long-term commitment to support empirical research on child development in Canada. Preliminary findings were presented at the national conference "Investing in Children" held in October 1998.

This stage of research had a particular set of objectives. The key aspect of the NLSCY — its ability to follow children over long periods of time — cannot be exploited for several years until data is available. Hence, the objectives of the first stage were to ensure that the research got off to a good start, as the data will be used for years to come. We set out to demonstrate that the NLSCY could be useful for a broad range of policy and program concerns relating to children. But we also wanted to demonstrate that the NLSCY could accommodate different theories, in different academic disciplines, of the important determinants of child outcomes. Plus, we needed to ensure that as many aspects as possible of the NLSCY data were tested and baseline research was established to anchor the longitudinal research to come.

This is a report reflecting the state of the art in empirical research on child development with no attempt to paper over or reconcile different sets of findings.

In addition, you'll see that some of the articles in the *Bulletin* include a discussion of the policy implications of the research from the perspective of the author. These implications are intended to stimulate policy debate and do not reflect the views of Human Resources Development Canada.

Jean-Pierre Voyer
Director General
Applied Research Branch

Table of Contents

Family

Does Parental Separation Affect Children's Behaviour? 2

Children in Lone-Parent Families—Why Do Most Do Well and Others Falter? 3

Which Family Characteristics Make the Most Difference in Children's Success in School? 5

Work, Money, Time and Learning Development 8

Community

Poverty, Civic Communities and Children's Participation in Supervised Sports 9

Both Families and Neighbourhoods Impact on the Problem Behaviour of Children 10

Children's School Readiness is Influenced by their Neighbourhood 12

Other Environments

Elementary School is a Positive Time for Boys and Girls 13

Changing Children's Environments—New Opportunities or Added Stressors? 15

Special topics: Behaviour

Bully and Victim: Child's Play or Unhealthy Schoolyard Behaviour? 16

Aggressive Girls: Also a Problem 18

Specific Populations

More Immigrant Children Enjoy Good Mental Health than Canadian Children 20

Coping with Child Hunger: Mothers Do Without 22

Close Relationships Reduce Difficult Behaviours in High-Risk Children 23

About this *Bulletin*...

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Does Parental Separation Affect Children's Behaviour?

Canadian children are experiencing the separation or divorce of their parents at earlier ages. Recent data derived from the National Longitudinal Survey of Children and Youth (NLSCY) indicate that 13.8 percent of children born to two-parent families between 1983 and 1984 experienced the breakup of their parents' relationships before they were six years of age. An examination of data for children born between 1987 and 1988 shows that the incidence of those experiencing the breakdown of their parents' relationships had risen to 15.9 percent.

The question of what happens to children in the aftermath of their parents' separation or divorce is a complex and multidimensional one. In a recent study of the relationship between living in post-divorce/separation custody and the presence of emotional or behavioural problems among children, Tony Haddad of Human Resources Development Canada engages two important and interrelated research questions in an attempt to build a better understanding of the impact of parental divorce/separation on children's emotional and behavioural outcomes:

1. Are children living in post-divorce/separation custody arrangements more likely to have emotional or behavioural problems than children living with both parents?

2. Do children in specific types of custody arrangements (mother only, father only and shared) differ in the odds of having one or more problems of an emotional or behavioural nature?

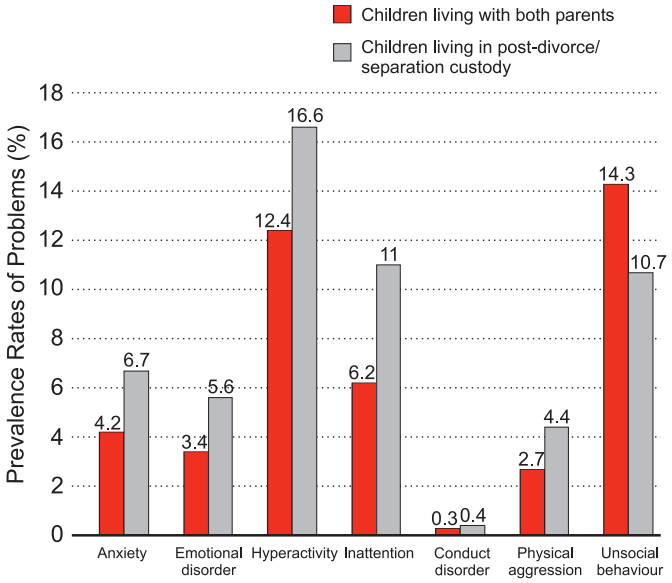
The analysis focuses on children aged 2 to 11 years, from the first cycle of the NLSCY. Emotional and behavioural problems are defined as: anxiety, emotional disorder, hyperactivity, inattention, conduct disorder, physical aggression or unsocial behaviour.

Children of separated/divorce parents have slightly more problems

The study highlights some important and interesting patterns about the lives of Canadian children. First, more than two-thirds of children living either with both parents or living in post-divorce/separation custody arrangements are well adjusted, exhibiting no problems at all. Second, children living in some form of post-divorce/separation custody have a higher prevalence of problems compared to children living with both parents (32.5 versus 28 percent). Importantly, not all the differences between children in post-divorce/separation custody were negative: children in custody arrangements engaged in unsocial behaviour *less frequently* than children living with both parents.

The Proportion of Children with Emotional or Behavioural Problems

Comparing Those Living with Both Parents to Those in Post-Divorce/Separation Custody



In considering the various factors determining the behavioural outcomes of children, the author finds that children in custody arrangements are more likely to have problems than children living with both parents. However, the analysis further suggests that a child's gender, number of siblings and the socio-economic characteristics of the

mother are much stronger determinants of the presence of problems among children. For example, a consideration of gender reveals that the odds of girls having one or more problems are 38 percent lower than for boys. Every increase of one year in a child's age is also related to a decrease of 10 percent in the likelihood of that child having problems. The number of siblings is also related to the incidence of one or more emotional or behavioural problems: with each additional sibling, the likelihood of a child having at least one problem is decreased by seven percent.

In examining the characteristics of the child's mother, Haddad notes that her education and age, as well as household income are strongly associated with the odds of a child having problems. Mothers who have not graduated from high school are 42 percent more likely to report that their children exhibit problems than those who hold university or college degrees. Each year increase in the age of the mother is also associated with an eight percent decrease in the odds of the child having a problem. Finally, the higher the household income, the lower the likelihood of a child having a problem; each categorical increase in household income corresponds to a decrease of three percent in the odds of a child having a problem.

Type of custody arrangement is not significant to the development of problems

In examining the variation between children in different types of custody arrangements, the author finds that children living in sole custody of mother, father or in a shared arrangement do not differ from each other in the likelihood of developing problems. Other factors, such as gender and age of the child, the number of years since the parents separated as well as the mother's education are strongly related to the presence of behavioural or emotional problems among these children. Girls are 44 percent less likely to experience a problem than boys. Every year that the child ages is associated with a decrease of eight percent in the likelihood that he/she will have an emotional or behavioural problem. Mothers who have not graduated from high school as well as those with some post-secondary education are more likely to report that a child has a problem than are mothers with university or college degrees. Relative to mothers with college or university degrees, those with no high school and those with some post-secondary education are 92 and 34 percent, respectively, more likely to indicate that their child has an emotional or behavioural problem. Finally, every year that passes since the parents separated is associated with a 10 percent decrease in the odds of the child having a problem.

Dispelling a myth and some hopeful news

The findings of the analysis lead the author to suggest that the outcome of emotional or behavioural problems in children is likely a consequence of a more complicated set of processes than can be causally attributed by custody arrangements. Haddad concludes that these findings also demonstrate that children are resilient to change and trauma and that the passage of years heals the problems they may develop in relation to the breakdown of their parents' relationships.

Children in Lone-parent Families—Why Do Most Do Well and Others Falter?

Nearly 16 percent of Canadian children are living in lone-parent families. Social scientists have conducted numerous studies comparing the well-being and development of children living in lone-parent and two-parent households. These studies suggest that children living with a lone parent are at increased risk of physical and mental health problems and have lower levels of well-being, competence, and attainment than children from intact two-parent families.

A recent American study, *Growing Up with a Single Parent: What hurts, what helps?* by S. McLanahan and G. Sandefur, concludes that lone-parent children are twice as likely to drop out of school, twice as likely to become parents

themselves before age 20, and one and a half times more likely to be idle (out of work and out of school) in their late teens and early twenties than children from intact families.

There is widespread agreement by social scientists that lone-parent children are at higher risk of certain poor developmental outcomes compared to their counterparts in two-parent households. Nevertheless, as research contained in *Growing Up in Canada*, a publication of Human Resources Development Canada and Statistics Canada, consistently demonstrates, there is strong evidence that the majority of children in lone-parent families grow up healthy. The reasons why most children in lone-parent families do well have not, however, been examined extensively in the empirical literature.

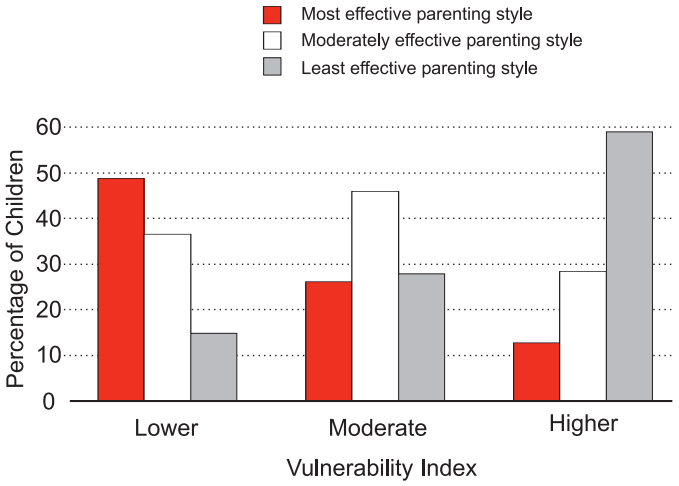
A recent study by David Ross, Paul Roberts and Katherine Scott of the Canadian Council on Social Development examined the factors associated with variations in developmental outcomes for children living in lone-parent families. Specifically noting that most children in lone-parent families are doing well, their aim was to uncover the factors related to positive and negative outcomes among lone-parent children. To accomplish this, the researchers constructed indices to measure vulnerability among lone-parent children aged 2 to 11. These indices were based on measures of health, behaviour, and emotional and academic achievement outcomes.

Analysing a broad range of outcomes, the authors found that the majority of children in lone-parent families do not appear particularly vulnerable to poor developmental prospects compared to those living in two-parent families. Large differences are, on average, due to the poor scores of a small subset of lone-parent children.

Ineffective parenting styles increase children's vulnerability

Comparing children in lone-parent families with high vulnerability scores and those with low vulnerability scores, Ross, Roberts and Scott observed that the variable most strongly associated with vulnerability was parenting style.

Children of Ineffective Parents Are More Vulnerable to Problems



Note: Children who score "higher" on the vulnerability index are much more likely to be living in households where the parenting style is ranked the "least effective."

A more detailed examination of this relationship demonstrated that children who score "higher" on the vulnerability index are about four times more likely to be residing in households where the parenting style ranks lowest in terms of effectiveness than children from more effective parenting environments.

Parenting style has a stronger influence than income

The authors compared the relative importance of variables measuring family income, parental resources, community resources and family characteristics for the vulnerability index. They observed that the scale measuring ineffective parenting styles was by far the most influential variable with regard to vulnerability for all age groups. Income was significantly related to vulnerability for the two younger age groups and unrelated to vulnerability for 6- to 11-year-olds. The researchers note that the statistical relationship between vulnerability and income was weak due to the lack of variance in the income of lone-parent families: most lone-parent families have very low incomes.

Some lone-parent children would benefit from policy intervention

The findings of the research lead the authors to suggest that lone-parent families warrant more attention from a policy perspective. However, since most children in such families are faring well, policy initiatives can be relatively selective. Areas of policy intervention would include supports for parenting (at work, at home and in the community), income assistance, and parental education.

Which Family Characteristics Make the Most Difference in Children's Success in School?

When concerns are raised about children's school success, many traditionally turn to their child's school for answers because it is well known that teachers and schools have an impact on the academic success of children. Schools are often seen to have more of an impact than parents on the education of children. However, parents are the first educators of their children and are responsible for providing them with a physical, emotional, and mental framework for learning. How important is the family for school success?

Little research attention is generally given to what *families* bring to a child's school achievement. To address this issue, Bruce A. Ryan and Gerald R. Adams of the University of Guelph developed a general model called the Family School Relationships (FSR) Model. The FSR Model proposes that those features or characteristics of the child or family that have the most immediate connection to school success will have the greatest influence on school outcomes. The child's personal characteristics are expected to have the largest effect, followed by what families do to facilitate school success by parenting at home. The researchers use the FSR model to show how family relationships affected the school success of more than 4,300 boys and girls between the ages of 6 and 11. These children were surveyed as part of the National Longitudinal Survey of Children and Youth (NLSCY). School success was measured using teachers' ratings of the overall academic performance of the child.

A family's socio-economic status makes a difference in children's success in school

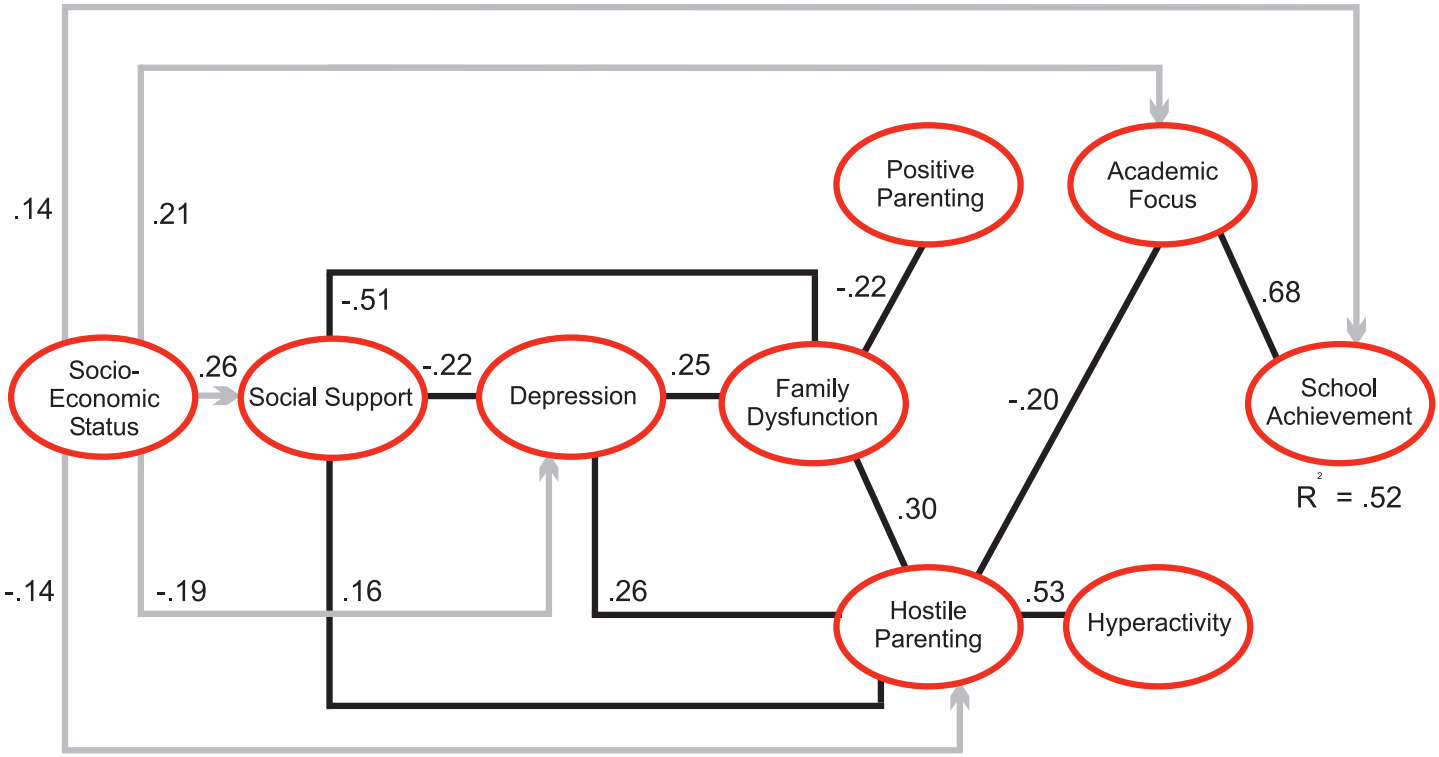
The model is robust and overall explains 54 percent of the variance in child school achievement. The model shows that socio-economic status (SES) plays a powerful role in the lives of children and has both direct and indirect effects across many variables in the model. Higher levels of SES lead directly to higher levels of achievement. Higher levels of SES also lead directly to more positive attitudes towards school in children and positive attitudes lead to higher academic achievement.

Aside from the direct and pervasive impact of SES on many family process variables and the child's achievement, higher SES levels lead to increased levels of social support which, consequently, reduce the amount of depression experienced by the parent. Lower levels of depression appear to help reduce the amount of family dysfunction which, in turn, reduces the amount of ineffective parenting. Lower levels of ineffective parenting lead to children having positive attitudes towards school and positive attitudes lead to higher achievement.

The research reaches a strong conclusion — SES is a very important determinant of a wide range of social and psychological functioning. These data are consistent with the possibility that SES may affect school achievement regardless of what families do to modify the conditions of learning within the home. In fact, the effects of SES are pervasive. Social support, not surprisingly, appears to be more available to parents at higher SES levels. Higher SES parents appear to experience lower levels of depression and to be marked with lower levels of ineffective parenting. This latter finding is consistent with previous research. The data also show that, irrespective of processes within the family, the children in this sample from higher SES homes do better in school — they have more academic skills and academic focus combined with higher levels of achievement — than children from lower SES homes.

A Model Showing the Relationship Between Family Process, Child Characteristics and School Achievement

Boys Aged 6 to 11



Notes: The Family School Relations Model, developed to examine what a family brings to a child's school achievement, proposes that many characteristics of the family are linked together. In a family, one action affects a second and, in turn, a third or fourth action.

For this model, the researchers used grey lines with arrows to denote those relationships highly likely to be unidirectional and causal. All other paths in the figure are shown with black lines indicating that bidirectional processes are probably operating.

The NLSCY data were analyzed using a technique which yields coefficients that range from -1.0 to 1.0, with negative coefficients implying an inverse relationship. Coefficients closer to 1 or -1 mean that variables are more closely related than variables with coefficients closer to 0.

The finding of a direct relationship between social class and achievement-related behaviour may imply that SES has an effect beyond what the family brings to the child. Certainly, higher SES families will probably associate more with other people who are also at higher SES levels. As a consequence, the child's social network is comprised of a greater number of people involved in intellectual and cultural activities from who the children will assume, in part, their values and goals. No doubt there are many more extra-familial variables and processes at work. The important point in the context of the present study, however, is that it is probably unlikely that simply strengthening family processes themselves will be sufficient to entirely overcome an unfavourable social address.

Family dysfunction plays a role in a child's academic achievement

Higher levels of social support are associated with lower levels of parental depression and lower levels of family dysfunction, but higher levels of ineffective parenting. Higher levels of parental depression are associated with more family

dysfunction and higher levels of ineffective parenting. Higher levels of dysfunction are associated with lower levels of positive parenting and higher levels of ineffective parenting. Some parents who are in a dysfunctional family and are depressed may overburden those around them, with the result that their supports are fewer. Others with strong and reliable supports may feel less depressed and receive the kind of assistance needed to reduce the degree of dysfunction in their families.

Ineffective parenting leads to lower grades in children

Parents burdened by depression simply do not have the energy to deal with many of the complexities of parenting and are pushed by circumstances or by their children into aversive strategies. The very fact that ineffective interactions with their children are so frequent may make parents feel more depressed and contribute directly to overall family dysfunction beyond the parent-child relationship. Finally, ineffective parenting in the NLSCY sample is associated with reduced academic skill and learning effectiveness, a finding that is consistent with previous research. Children might, indeed, be less academically focussed and effective because the parents are acting in ineffective ways, but it is also easy to imagine that when a child is consistently exhibiting poor schooling skills; the parents might be driven to less-effective parenting strategies.

Social support may not help decrease ineffective parenting

As mentioned earlier, higher levels of social support are associated with lower levels of parental depression and family dysfunction but higher levels of ineffective parenting. The positive relationship between the level of perceived social support for the parent and the level of ineffective parenting is not readily explained. It is possible that parents who engage in ineffective acts also seek out and receive assistance from others. If this is so, it is disturbing that the presence of help may not be effective in moving the parent toward lower levels of ineffective parenting.

The authors suggest child, parent and family interventions

The authors of the study suggest several different policy directions and possible clinical/educational interventions relevant to efforts aimed at enhancing the school performance of children. First, the large impact of the socio-economic status variable on achievement revealed in this study leads the authors to suggest that it is important for every family to have sufficient economic resources. The general quality of family life is strongly affected—directly and indirectly—by economic well-being. Assuring adequate family income and educational learning opportunities for parents are almost essential objectives if the educational success of children in those families is to be enhanced.

The data suggest that the most potentially useful policy direction may come from educationally oriented efforts to promote the development of more effective academic skills and work habits in children. It is possible that when the narrow outcome of school achievement is targeted, working directly with children on skill development will enable them to overcome most of the negative effects of poor parenting and disadvantaging economic conditions. While it is likely that interventions of this nature can most easily be mounted within schools, efforts by parents to hire tutors or otherwise provide assistance to their children could also strengthen these school skills.

The effects on family processes of the depression variable identified in this study lead the authors to suggest that some interventions might need to be targeted at parents themselves — either through the provision of medication or access to psychological counselling or psychiatric services. Parent education programs or parenting classes could be used to change ineffective and unproductive parent-child interactions that appear to make it more difficult for children to develop the skills needed for school success. In summary, the mobilization of resources at several levels within this complex system of interactions through economic, community, educational, and individual interventions may be necessary to effect change in the educational performance of some children.

Work, Money, Time and Learning Development

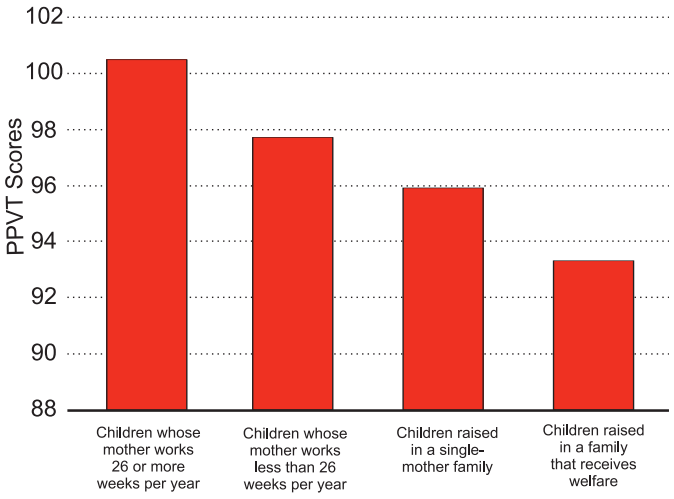
Most children in Canada are physically, emotionally and socially healthy. However, a number of children are experiencing problems developing learning capacity. According to the National Longitudinal Survey of Children and Youth (NLSCY), a quarter of preschoolers in Canada have some delays in the development of vocabulary skills and at least 10 percent are at critically low levels. These children are at risk of experiencing serious problems when they enter school. They will be more likely to repeat grades, drop out of school and have difficulty finding work later in life.

While many factors are generally thought to affect the development of learning capacity, there is little agreement as to the dominant factors. Pierre Lefebvre and Philip Merrigan of the University of Quebec at Montreal, in a paper based on the 1994 NLSCY, postulate that family labour force activity and income are two dominant determinants of the vocabulary skills of preschoolers. Labour force activity generates income—a positive effect—but reduces the amount of time a mother has to spend with her child—presumed to be a negative effect.

Lefebvre and Merrigan chose, as their measure of learning capacity, the Peabody Picture Vocabulary Test (PPVT), a measure of receptive vocabulary—the ability to understand words that are spoken to one by others—available for 3,000 children aged four and five. This measure is widely used as a predictor of future academic achievement. Family labour force activity is proxied by a calculation of the weeks-worked-per-year by the mother. Economic resources are measured as total family income as well as income from welfare.

The authors conclude that the mothers' time spent working had very little effect on children's learning capacity. Preschoolers scored about the same on the PPVT whether or not their mothers worked more or less than 26 weeks in the previous year. In fact, children with mothers strongly attached to the labour market scored slightly above the national average and those with mothers less attached to the labour market scored slightly below.

Preschool Children's Vocabulary Varies According to their Mother's Situation



Note: PPVT (The Peabody Picture Vocabulary Test) is a measure of receptive vocabulary and is used as a predictor of future academic achievement.

Mothers strongly committed to the labour market read as frequently to their children as mothers less attached to the labour market

The authors explain this unexpected result by noting that mothers strongly committed to the labour market read as frequently to their children as mothers who are less active in the labour market. It turns out—not surprisingly—reading to a preschooler has been found to greatly improve a child's PPVT score. Children whose parents read little or almost never to them, all other factors being equal, score 5.8 percent lower than children whose parents read to them several times per day, and 3.9 percent lower than children read to once per day. A further implication of this result is that mothers, who are time constrained due to work and family responsibilities, are spending less time on activities other than interacting with their children.

Maternal education is also important to preschool vocabulary skills. The authors found a strong positive correlation between a mother's level of education and her preschooler's vocabulary skills. In fact, the mother's education is a more important factor than earned family income. A consensus explanation for this important effect—an effect that has

also been found in other studies—has not emerged. One theory is that mothers with higher education talk more frequently to their children in the very early years, resulting in a significant head start in vocabulary. Another theory is that higher education is an indication of higher innate capacities of the mother, which she passes on genetically to her child. The authors do not deal with this question in their paper.

The importance of income to preschoolers' vocabulary skills is not found to be strong in the Lefevbre and Merrigan paper. An increase in income in the order of $20,000 will barely increase PPVT scores by one percent. However, where a part or the whole of that income is derived from welfare, a preschooler's vocabulary score decreases by about 3.5 percent. The authors conclude that increasing income could have much stronger effects for the very poor (children with mothers on welfare) than for the working poor, for example, and note that the National Child Benefit directed its additional support to the working poor.

Several interpretations of the importance of welfare income are possible and these lead to different policy implications. More research using longitudinal data will be done on this issue by the Applied Research Branch.

Poverty, Civic Communities and Children's Participation in Supervised Sports

Children need to play in different ways. When structured through organized sports programs, play becomes an effective channel to develop social skills. Short-term benefits of structured play include enhanced social relationships and reduced emotional and behavioural problems. Some long-term benefits associated with supervised participation include improved social adjustment, lower rates of school dropout and improved self-esteem. Children participating in supervised sports are more apt to reap these associated social benefits and this, in turn, enhances the overall social fabric of the Canadian society. However, the children who would most likely benefit from these programs are also the least likely to get access to them.

In 1994, over one-third of children aged 4 to 11 "almost never" participated in supervised sports. It has generally been recognized that children from economically disadvantaged homes have reduced rates of participation in sports and this has often been associated directly with the costs involved. One area that has been largely ignored, however, is the impact of neighbourhood characteristics on participation in supervised sports. Using data from the National Longitudinal Survey of Children and Youth (NLSCY), researchers David Offord, Ellen Lipman and Eric Duku of the Canadian Centre for Studies of Children at Risk examine these two important factors—poverty and community characteristics—for participation in supervised sports.

Poverty is a barrier to participation

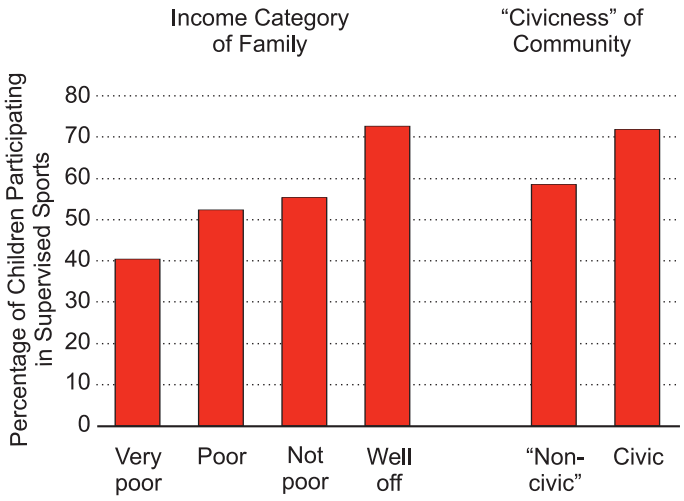
The strongest predictor of children's participation rates in supervised sports is income level, which was identified through the use of Statistics Canada's Low Income Cutoffs (LICOs).

Distribution of Children Living in Poor Families, 1994

Income Category	Low Income Cutoffs (LICOs)	Percentage of Children Living in These Families
Very Poor	Less than 75% of LICO	14%
Poor	75-100% of LICO	8%
Not Poor	101-125% of LICO	10%
Well Off	More than 125% of LICO	67%

Over 60 percent of children from very poor homes "almost never" participated in supervised sports compared to 27 percent for their counterparts from well-off homes. According to the authors, constraints on participation include the relatively high cost of supervised sports, the lack of adult involvement and the absence of available community recreation facilities in poorer neighbourhoods.

Poverty and Neighbourhoods As Barriers to Children's Participation in Supervised Sports



Civic communities increase children's participation rates

In order to examine the hypothesis that civic communities encourage sport, communities were rated on a seven-point scale to deem their level of "civicness." Determining factors included whether it was safe for children to play outside during the day, if there were adults in the community that the children could look up to, and if adults watched out for the children's safety. Seventy-two percent of children living in civic communities have participated in supervised sport over the previous year, leaving a full 28 percent of children who had "almost never" participated. However, the rate of non-participation for communities that are characterized as "non-civic" is 42 percent.

Therefore, poor children living in a good, civic community would be more apt to engage in supervised sports than children living in a doubly disadvantaged situation: being poor and living in a less-civic community. Good communities lessen the harmful effect of being poor and increase children's opportunities to reap the benefits of participation.

Targeted programs would enhance participation rates and social benefits

Given the benefits of participation, the authors suggest the need for universal and targeted programs to offer all children the opportunity to engage in and benefit from participation in supervised sports. The authors advocate instituting targeted programs to reach subgroups of children with particularly low participation rates, such as poor children. Researchers also recommend that further studies be undertaken to identify barriers and strategies in reaching high-risk groups. This study demonstrates the validity of investing in communities — good communities grow healthy kids.

Both Families and Neighbourhoods Impact on the Problem Behaviour of Children

In Canada, approximately 10 percent of children have a problem with hyperactivity, 9.7 percent have a conduct disorder, and 8.7 percent have emotional problems. Children with behavioural or emotional problems don't do as well academically or socially as their peers without these problems. The factors that influence the development of problem behaviour in children are multifaceted and complex. Explanations of these factors arise from a combination of theory and empirical evidence that usually include both characteristics of the child, his/her family and peer groups. In addition, contextual influences associated with neighbourhoods and organizations such as schools are also considered to explain the problem behaviours of children. However, despite strong theoretical arguments that neighbourhood variables are important determinants of maladaptive behaviour in children, these factors have not been studied sufficiently.

Michael H. Boyle and Ellen L. Lipman, of the Canadian Centre for Studies of Children at Risk, used data from the National Longitudinal Survey of Children and Youth (NLSCY) to study the impact that neighbourhoods have on the hyperactivity and conduct and emotional problems of children aged 4 to 11. The researchers studied a range of family and neighbourhood characteristics that could have an impact on behavioural and emotional problems in children. Family characteristics included: family status, family income, family socioeconomic status (SES - a composite index of income, mother's education and occupational prestige, father's education and occupational prestige). Theory suggests that neighbourhood level characteristics have an impact on child development beyond the impact of these same characteristics at the family level. For example, the overall proportion of lone-parents in a neighbourhood is thought to have an effect on child development beyond the direct effect of a child living in a lone-parent family. This is thought to be due to the difficulties facing lone-parents in becoming involved in community activities. The resulting decrease in social interaction leads to a variety of behaviours and attitudes by all, or any, members of the community which weaken collective responsibility for children.

Family characteristics play a larger role in explaining child problem behaviour than neighbourhood factors

The researchers used NLSCY data to study whether a child's neighbourhood impacts on his/her problem behaviour over and above the impacts of the child's family. The researchers found that family impacts have a greater effect on child problem behaviour than neighbourhood factors, but that neighbourhoods still play a role in explaining this behaviour. One family characteristic related to increased child problem behaviour is lone-parent status, which is correlated strongly with conduct problems, emotional problems and hyperactivity. However, behaviour problems decrease as SES increases.

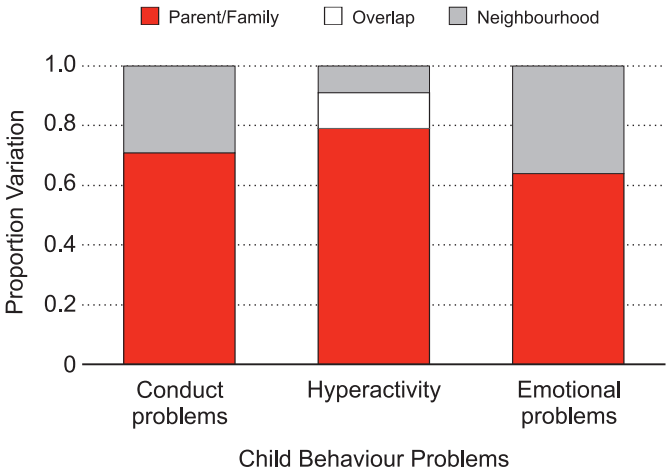
Proportion of lone-parents in neighbourhood impacts on child problem behaviour

The only neighbourhood factor empirically associated with all categories of problem behaviour is the proportion of one-parent families in the neighbourhood. The association at the individual level between lone-parent families and problem behaviour in children is well known. Much less is known about the effects of increasing the concentration of lone-parent families in neighbourhoods.

Neighbourhood poverty is not correlated with child problem behaviour

There are no statistically significant associations between income poverty measured in families or neighbourhoods and child problem behaviour. This finding indicates that neighbourhood income poverty has no additional influence on child problem behaviour over and above the effects of income that are associated with factors such as leading a one-parent family, occupying low SES, and living in neighbourhoods with a high percentage of one-parent families.

Parental and Family Factors Play a Larger Role in Child Behaviour Problems than Neighbourhood Factors



Note: The allocation of behaviour problems is expressed as a proportion of the variation between neighbourhoods. It adds up to 1.0. The effects of age and sex have been removed.

This study suggests that raising the proportion of lone-parent families in a neighbourhood will have a detrimental impact on child behaviour over and above that attributable to one-parent family status. Past research suggests that most one-parent families are exposed to numerous stressors including low-income, unemployment, interpersonal strife and step-parenting demands.

The authors arrive at two key conclusions concerning the behavioural problems today's children are experiencing. It would be more effective to focus analysis on disadvantaged families rather than neighbourhoods. Further, lone-parent families deserve special attention from policy and research perspectives.

Children's School Readiness Is Influenced by their Neighbourhood

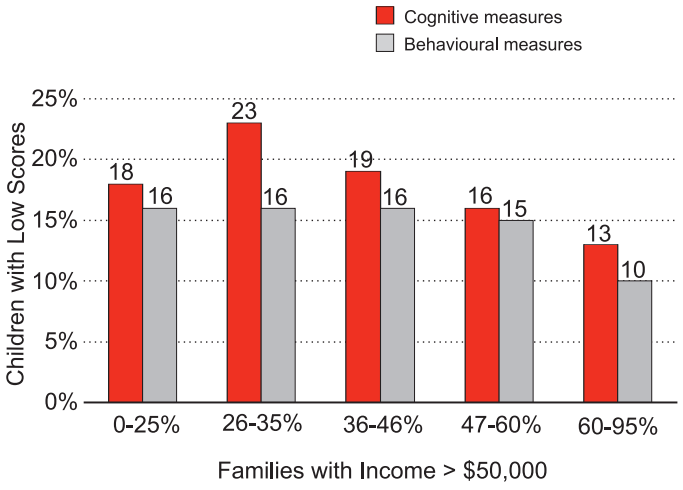
While the majority of Canadian preschoolers are ready to enter school with their peers, some children are not as well prepared to fully benefit from their formal education. These children are more likely to experience problems such as low achievement and grade failure in the early years of school. Many factors have been studied in explaining variations in the degree of school readiness among children. One area that has been ignored until recently is the impact of neighbourhood characteristics.

Theory suggests that a quality neighbourhood can help prepare children for school by providing families and individuals with supportive networks, accessible services and reinforcement of accepted norms of behaviour. In addition, due to possible lack of resources at the individual and family level, strong neighbourhoods could be important particularly for poor children.

Neighbourhood affluence is beneficial to young children

Dafna E. Kohen, Clyde Hertzman, both of the University of British Columbia, and Jeanne Brooks-Gunn of Columbia University, New York, found that an increased incidence of affluent families in a neighbourhood had a positive effect on the cognitive and behavioural competencies of children living there. The researchers used the National Longitudinal Survey of Children and Youth (NLSCY) to study the impact that neighbourhoods and families had on the competencies of toddlers (aged 2 and 3) and preschoolers (aged 4 and 5). They studied a variety of neighbourhood measures including: neighbourhood affluence, ratings of safety, percentage of single female-headed families, and ratings of neighbourhood cohesion and safety. The family characteristics they measured included: family income, level of maternal education, and lone-mother status.

The Percentage of Children with Low Cognitive and Behavioural Competence Scores Decreases As Neighbourhood Affluence Increases



Neighbourhoods with more single female-headed households have fewer children who are ready for school

Single family headship is an important influence on child outcomes, particularly in the early years of life. When family status and other family level socio-economic characteristics are taken into account, neighbourhoods with the largest number of single-parent families are associated with the highest incidence of children obtaining low cognitive and negative behavioural competence scores. This means that similar children do better in neighbourhoods with fewer single parents. Only 10 percent of children living in neighbourhoods with 0 to 5 percent single female-headed families obtain low cognitive competence scores as compared to more than twice as many children (22 percent) obtaining low scores who live in neighbourhoods characterized by the largest percentage of single female-headed families. The pattern is similar for behavioural competence. The highest percentage of children obtaining poor behavioural competence scores live in the neighbourhoods with the highest percentages of single female-headed families.

Children living in neighbourhoods described by mothers as "low in cohesiveness" are less likely to be ready for school

Support provided by neighbours and the sense of community felt within the neighbourhood (indicators of cohesive neighbourhoods) are other factors contributing to children's competence and well-being. Children living in the least cohesive neighbourhoods are the least likely to be ready for school: 27 percent obtain low cognitive competence scores and 19 percent obtain low behavioural competence scores. Fewer children living in neighbourhoods rated high on cohesiveness obtain low cognitive (13 percent) and behavioural scores (12 percent).

Overall, the researchers found that neighbourhoods do influence the school readiness of children. Neighbourhoods with less affluence, lower ratings of safety, more female-headed families, low levels of neighbourhood cohesion, and lower levels of maternal education have more children who have lower cognitive scores and more behaviour problems.

Family characteristics reduce the effects of neighbourhoods for toddlers, so that as expected, neighbourhood effects are stronger at older ages.

Intervention programs should be targeted at both the neighbourhood and the family

The authors argue that resources within the community that are important for healthy development could be improved. These may include: the availability of recreational spaces such as parks and community centres; and the accessibility and availability of programs and services such as mother-toddler programs, quality childcare arrangements, and after-school programs.

The authors argue that all children must have equal access to nurturing, stimulating, supportive, caring and safe environments. Efforts to improve conditions that maximize all children's healthy development and well-being will have a positive impact not only on those living in the worst socio-economic conditions, but will also serve to enhance the quality of life across the entire social spectrum.

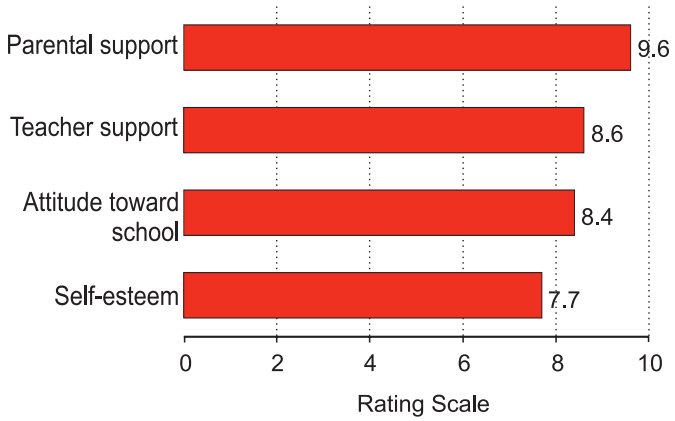
Elementary School Is a Positive Time for Boys and Girls

Success in school is a critical component of the ability to participate fully in contemporary society. Youth without high school education suffer from high levels of unemployment and limited job opportunities. The costs to society of school failure and short-lived academic careers in terms of lost tax revenue and increased social spending are substantial. Early adolescence is a critical time for school achievement because it initiates a time when youth, particularly girls, are considered to experience marked declines in academic interests. These declines are often long-lasting and influence poor achievement throughout high school.

Jennifer Connolly, a psychologist at York University, examined the National Longitudinal Survey of Children and Youth (NLSCY) to see how the transition to early adolescence is occurring in schools. She reviewed the self-report questionnaires of 1241 boys and 1277 girls aged 10 and 11 in 1994. The children completed a mathematics skill test and teachers rated their school achievement and work habits. The children described their attitudes toward school, homework, and achievement, and their level of self-esteem. They evaluated the support they received from their teachers and parents and the amount of pressure to succeed they felt from their parents. Parents themselves described how far they expected their children to progress in school.

According to the 1994 NLSCY, children in grades five and six felt good about themselves, had a positive attitude toward school, and believed their parents and teachers supported their academic efforts. These positive experiences in school are facilitating better academic achievement and providing a foundation for future success.

Early School Learning Experiences Are Generally Positive



Note: 10- and 11-year-old children rate their parent and teacher support, attitude toward school and self-esteem on a scale of 0 to 10.

Girls and boys are doing well in the late elementary school years

Both boys and girls have good academic outcomes in grades five and six, scoring around 78 percent on a 10-question math skills test. However, teachers perceived girls to be doing much better than boys in their schoolwork. It is generally thought that girls start a decline in academic achievement in the late elementary school years that follows them into the high school years. From these data, we see that girls are performing quite well. Perhaps the decline in school performance that occurs for girls may not manifest itself until high school.

Previous research has also detected a decline in girls' self-esteem in these early adolescent years which, again, is not supported by this data. Both boys and girls scored high on a 10-point scale of self-esteem — around 8 out of 10. This high level of self-esteem and a positive attitude toward school are important explanatory factors in school achievement for girls.

Boys seem more dependent on parental support

Both girls and boys rated their parents as quite supportive of their academic efforts (9.6 and 9.5 out of 10 respectively). Girls also tend to view their teachers as slightly more supportive of their efforts than do boys (8.7 and 8.5 out of 10 respectively). For the girls, teacher support, parent support and positive school attitudes all contribute to academic success. For the boys, only parent support is an important predictor, with teacher support and personal attitudes playing less significant roles. Since boys seem more dependent on parental support, and are less likely to develop independent attitudes that support school, they may be vulnerable to school problems if parental support is diminished in any way. Given that adolescence is most typically accompanied by a distancing between parents and children, boys' difficulties with school may be anticipated.

What are the opportunities in early adolescence?

Early adolescence appears to be a positive time for youth. However, this is somewhat contrary to other findings for this age group and particularly for girls. Other studies, as well as the NLSCY, have found that a significant number of young

preschool-aged children experience learning and behavioural problems, problems known to have long-term consequences. Could it be that these problems are dealt with by early adolescence? Or are these problems "hibernating" at this point? Researchers will need to determine the factors at play here and monitor this trend over the long term. The NLSCY will be a valuable tool in this endeavour.

If this period of adolescence proves to be a good phase for many cohorts of Canadian children, perhaps it could be an opportunity for intervention — intervention that would build upon this solid foundation to buffer against more difficult times in late adolescence.

Changing Children's Environments—New Opportunities or Added Stressors?

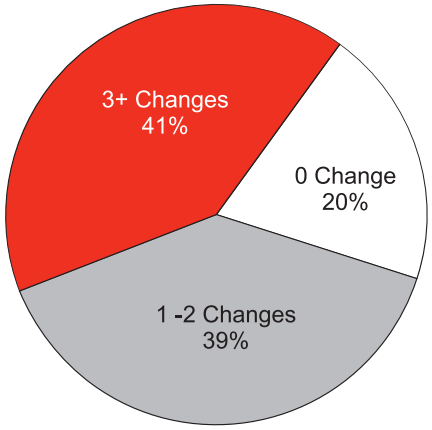
Changes are a part of the normal human experience and adaptation is an important life skill. However, there are indications that today's children experience too many changes, too early in life, and these transitions (particularly those that occur simultaneously) can have important impacts on their development. Repeated residential moves, changes in care arrangements, and moves from one school to another are examples of common changes in children's lives. These environmental disruptions can have a considerable impact on young children who are in the formative years of building identities and social skills, developing peer relations, and acquiring competencies to ensure their future academic achievements and well-being.

A recent study by Dafna Kohen, Clyde Hertzman and Michele Wiens of the University of British Columbia examined the consequences of changes in care arrangements, schools, and residential mobility on the competencies of Canadian children. The study examined all children aged 0 to 11 who took part in the first collection of the National Longitudinal Survey of Children and Youth (NLSCY). Children were clustered into three groups according to age: toddler (0-3), preschoolers (4-5) and school-aged children (6-11). Where sample size was large enough, gender differences were also examined.

Transitions are common among children

The analysis revealed that children in Canada are experiencing numerous environmental changes. Eighty percent of school-aged children experienced one or more changes in schools or residence (in their lives) or care arrangements (in the last year), with 41 percent of children in this age group experiencing three or more changes. Eighty-one percent of preschoolers had experienced changes, with 58 percent having undergone only one or two changes, while 23 percent had experienced three or more. Among infants and toddlers who were using childcare, 23 percent had experienced a change in their care arrangement in the last year.

Changing Children's Environments



Total Number of Changes for School-Aged Children

Notes: Canadian children experience numerous changes in their environments - new schools, new neighbourhoods, different childcare arrangements.

Data indicate the number of changes in schools or residence in their lives, plus the number of changes in childcare arrangements in the past year.

Changes have consequences

Experiencing a transition was associated with family socio-economic characteristics such as low levels of maternal education, low levels of household income and single female headship. Children of disadvantaged families, therefore,

experienced more changes than those from more advantaged backgrounds. Across every transition and each age grouping, more numerous changes were associated with poor maternal mental health.

Changes in childcare arrangements are associated with poor vocabulary scores, difficult temperament, and higher ratings of problem behaviours. For instance, infants and toddlers who changed care arrangements one or more times in the previous year had 33 percent greater chance of obtaining difficult temperament scores as compared to children who were using care but had not experienced any changes. School and residential changes are linked to lower math scores, increased grade failure, and more behavioural problems. Of the children who had changed schools three or more times, 20 percent obtained low math scores and 16 percent repeated a grade as compared to the rates of these outcomes in non-movers, which were 13 percent and 4 percent respectively. In addition, residential mobility is also associated with poor vocabulary scores (e.g., preschool children who had moved three or more times had 33 percent greater odds of obtaining poor receptive vocabulary scores than children who had never moved). The more numerous the changes, the higher the risk for poor performance.

The effects of environmental changes showed similar patterns for boys and girls. When sample sizes were large enough to examine gender interactions for school-aged children, for example, both boys and girls obtained poorer achievement and higher behaviour problem scores if they had experienced numerous school changes or residential moves. However, when compared to girls, boys exhibited lower competencies and more behaviour problems.

How can the effects of environmental changes be lessened?

It may not always be possible for families to control the number of changes they experience. It also may not be possible or desirable for public policy to try to reduce the number of transitions, but policies encompassing income or other support programs (e.g., childcare) should aim to minimize avoidable moves.

The authors suggest that awareness about the negative effects of environmental changes on children should be increased. School programs can be developed to increase teachers' awareness of the difficulties of children who experience numerous residential and school changes. Guidance counsellors, remedial educators and parents need to work together to ease the transitions young children face.

Since stability within the family could protect a child experiencing change, family services are important. Prevention approaches starting with families who have young children should provide adequate prenatal care and support, demonstrate supporting and trusting relationships for both children and their families, and address family stress. Supportive initiatives are needed on an individual basis within and between communities so that consistent forms of support will be maintained when families move.

Communities can have a large impact on children — fostering stable and supportive communities would have benefits for both children and their families and may offset some of the stressors associated with moving to a new environment.

Bully and Victim: Child's Play or Unhealthy Schoolyard Behaviour?

Bullying and victimization are sources of concern for children, parents, and the educational system. Research indicates that these problems are prevalent in Canada: 15 percent of Canadian children report bullying others more than twice a school term, while 9 percent of children report bullying others on a weekly basis. Bullying and victimization between and among children are anti-social behaviours with serious implications for the social, psychological and emotional development of all those involved: bullies, victims and the peer group. Children who are bullies tend to be bullies as adults and have children who are also bullies. Similarly, children who are victimized tend to have children who are also victimized.

A growing body of research exists on the factors associated with being a bully and a victim, as well as the relationship between both. Wendy Craig, Ray Peters and Roman Konarski of Queen's University engage a number of important questions with the aim of increasing understanding of the process by which some children become bullies and others become the objects of aggression. The questions they ask include: What is the prevalence of bullying and victimization in Canada? And what is the relationship between family socio-demographic characteristics, family functioning, and behavioural problems in determining bullying and victimization?

The analysis focuses on the responses of parents of boys and girls between the ages of 4 and 11 who were attending school and participated in the first cycle of the National Longitudinal Survey of Children and Youth (NLSCY). In addition, children aged 10 and 11 reported on how frequently they bullied or were bullied by others. For the purposes of the research, the researchers define bullying as social interaction in which a dominant individual — the bully — repeatedly exhibits aggressive behaviour intended to cause distress to a less-dominant individual — the victim.

A large percentage of Canadian children are bullies or victims

The authors observe that a significant number of Canadian children bully others or are bullied at school. About 1 in 7 boys in Canada between the ages of 4 and 11 (14 percent) bully others and approximately 1 in 20 (5 percent) are victimized by others sometimes or very often. For girls, approximately 1 in 11 girls between the ages of 4 and 11 (9 percent) bully others, while 1 in 14 are victimized (7 percent).

The self-reports of 10- to 11-year-olds demonstrate a high prevalence of bullying behaviour and victimization as well as large differences between the sexes. Overall, 17 percent of boys engage in bullying as compared to 9 percent of girls; 14 percent of boys are victimized as compared to 8 percent of girls.

Prevalence of Bullying and Victimization in Canada

	Parent's Report		Children's Self-report	
	Boys	Girls	Boys	Girls
Ages 4-6				
Bullying	14.4%	9.4%	-	-
Victimization	4.9%	4.4%	-	-
Ages 7-9				
Bullying	14.8%	7.9%	-	-
Victimization	4.0%	7.4%	-	-
Ages 10-11				
Bullying	13%	9.2%	17.2%	8.7%
Victimization	8.6%	9.1%	13.6%	8.1%

Note: Self-report data were not collected in the 4-6 and 7-9 age groups.

Bullying and victimization are associated with other related mental health problems

The researchers highlight several important trends from their analysis. For both boys and girls at all ages, bullying is associated with other anti-social behaviours such as physical aggression, indirect aggression, hyperactivity, and engaging in property crimes. On the other hand, children who are victims also exhibit the behaviour problems that bullies experience, in addition to anxiety, depression, unhappiness, and emotional problems. The authors suggest that the high levels of anxiety among children who are victims make them particularly susceptible to displaying extreme emotional reactions. They tend to cry easily, are manifestly anxious, lack humour, lack self-confidence, and self-esteem, and "reward" their attackers by being submissive.

Furthermore, victimization and its associated problems increase with age, suggesting that these problems are more likely to be present among older children. The problematic behaviour of victims is also more diverse than bullies and may not be as easily identified. For example, since problems such as anxiety and depression are not readily observable, they may be more likely to go undetected compared to behaviours such as aggression and disruptive behaviour.

Family factors contribute to bullying and victimization

Family demographics and family socialization processes seem to have an indirect effect on bullying and victimization. Low socio-economic status, unemployment, and age of parents were related to negative parenting practices and anti-social behaviour among children. According to Craig, Peters and Konarski, family stress (as measured by family socio-economic status) is related to increased negative and hostile interactions between parents and their children, and inconsistent and harsh punishment practices. The researchers theorize that these types of interactions serve to perpetuate aggressive behaviour and bullying through several processes. First, parents who are aggressive toward their children are teaching their children that the use of aggression and power is normal social behaviour. Second, harsh parenting practices encourage children to develop hostile attitudes and orientations to others in their social environments. The aggressive behaviours may then be generalized to the school where they are manifested in the form of bullying and other aggressive behaviours.

Bullying and victimization can be addressed through policy intervention

Bullying and victimization have some long-term implications for children experiencing them. Children who are bullies and victims are at risk for developing problems as youth and adults. This research raises some serious questions for parents, schools and policy-makers about the psychological and physical safety of children in and around their schools. School administrators should enforce zero tolerance policies towards violence in schools. A supporting strategy would be to encourage victims to report bullying incidents and to train teachers to be vigilant for signs of both bullying and victimization behaviours.

Children who are victims have other mental health problems that need to be addressed. Programs such as counselling would be useful for their healing process. Victims can also be taught the skills to resist and assert themselves in situations where they are being victimized — the skills to enhance their self-image and confidence, and when and where to go for help when they are victimized.

Family socialization processes also need to be targeted to ensure that children who are victims or bullies get the assistance they require to mature into healthy adults. Programs need to be developed to support both children and parents. This can be achieved by providing children with individual and group counselling, which may give them the means to express their concerns and build appropriate social skills. For parents, support could come from increasing the range of community programs available. Community support could be found by offering parenting courses and community outreach services.

Aggressive Girls: Also a Problem

Aggression in children has serious consequences—for children, their families and society. Aggressive children will experience costs both now and in the future. The aggressive child often has more emotional, academic and social problems than other children, and is at greater risk of being victimized. In addition, it is unlikely that these children will outgrow their problems, but rather may experience a range of adjustment problems in adolescence and adulthood including school drop out, teen parenthood, parenting difficulties, harsh punishment, and criminality. The families in which these children live most likely suffer from parent-child and sibling conflicts. The short- and long-term costs to society range from the physical and psychological suffering of victims of aggression to the monetary costs of criminal and anti-social behaviour.

Aggression has typically been studied in boys and, indeed, the incidence of aggression is higher among boys than girls. Girls can also be aggressive, however, and the consequences could be serious. Although girls and women currently commit much less violent crime in Canada than boys and men, the prevalence of violent offending among adolescent girls has increased much faster than for adolescent boys.

While less likely to be arrested for violent offences, girls may experience significant dysfunction, violence, and victimization, including violent relationships with men and difficulties in child rearing. Using data from the National Longitudinal Survey of Children and Youth (NLSCY), Debra Pepler and Farrokh Sedighdeilami of York University examined the hypothesis that aggressive girls have more problems than non-aggressive girls, leading to risks and long-term consequences. They concluded that aggressive behaviour among girls needs to be considered an important policy issue and merits attention and intervention. As future mothers, these girls are a potential pivotal point in the intergenerational transmission of violence.

Using NLSCY data, the authors compared highly aggressive and non-aggressive girls and boys aged 10 and 11, based on both parent and child ratings of physical and indirect aggressive behaviour. They also looked at emotional and psychosocial difficulties, as well as factors within the family and the peer group which are associated with aggression.

Problems related to aggression

The authors found that, in general, girls are not as aggressive as boys—5.7 percent of girls were identified as aggressive, compared to 10.8 percent of boys. But those girls who are aggressive experience problems similar to aggressive boys. Both appear to face a number of adversities in personal, family and peer contexts, with more emotional and self-concept problems than non-aggressive children. Aggressive boys are more physically aggressive than aggressive girls, while aggressive girls are more indirectly aggressive (e.g., verbally aggressive, or exhibiting behaviour aimed at damaging self-esteem and peer relations).

Personal problems

Both boys and girls were found to have more hyperactivity and inattention problems than non-aggressive children, although boys had higher ratings of hyperactivity and inattention. Aggressive children (both boys and girls) also had more emotional problems, lower self-esteem, fewer pro-social behaviours, more difficult behaviour and academic problems. The authors noted that further research on longitudinal data would be necessary to determine whether psychosocial difficulties are determinants or consequences of aggressive behaviour.

Family problems

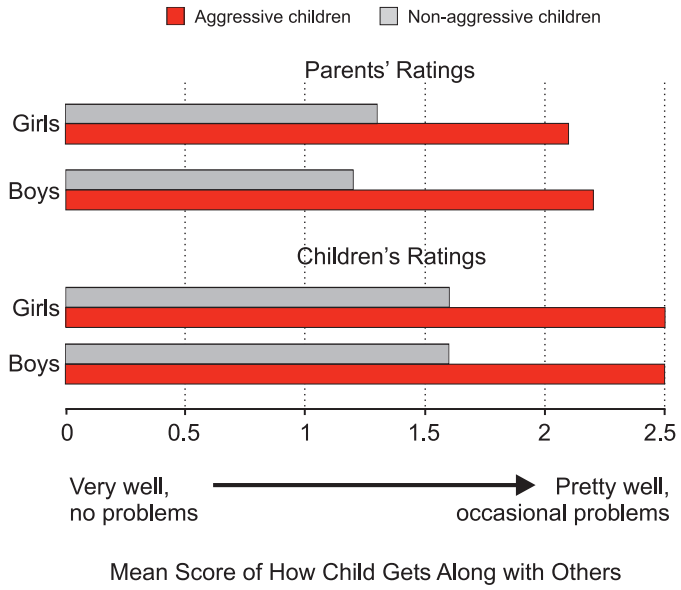
Many experiences within the family are associated with the development of boys' aggression. These include family violence, ineffective parenting, parent-child conflict and sibling conflict. The NLSCY data indicates that, like aggressive boys, aggressive girls came from families with higher levels of all these problems than non-aggressive girls. Family violence, parent-child conflict and sibling conflict were significantly associated with aggression for both girls and boys.

Peer problems

Of particular interest for girls, given the potential for problems in adulthood with child rearing and violent relationships with men, is their relationship with their peers. The peer group plays an important role in the development of aggressive behaviour problems. Children who are aggressive are generally not liked by their peers. Therefore, aggressive children may have more conflicts with their peers and have fewer friends. If they are not liked by many children in their class, aggressive children may form friendships with each other in deviant peer groups. Children who are disliked by their peers are often victimized. Thus, aggressive children may be at higher risk for victimization. The NLSCY data shows that aggressive girls experienced more of these peer problems than non-aggressive girls and were similar to aggressive boys; this held true for both parent and child ratings. Peer conflict, poor peer relations, lower peer contact, associations with deviant peers, and victimization were all significantly associated with aggression for both girls and boys.

Ratings of Peer Conflict

The Different Perspectives of Parents and Children



What steps can we take?

The authors suggest that these analyses contribute to the understanding of girls' aggression and permit the early identification of girls (as well as boys) at risk for aggressive behaviour. Their recommendations include the following:

- supportive interventions for girls in families with family violence, ineffective parenting and high levels of conflict,
- support for both aggressive girls and their peers in developing positive peer relations through skills and understanding, and
- multidimensional assessments and interventions (considering the likelihood of other problems being present).

By uncovering the problems experienced by aggressive girls, we can begin to plan effective intervention for the optimal development of Canadian girls, who hold the future in their hands as the mothers of the next generation.

More Immigrant Children Enjoy Good Mental Health than Canadian Children

Every year almost a quarter of a million people immigrate to Canada. About 20 percent of them are children under the age of 12. Their experiences during their early years in Canada have an impact on their life chances. Immigrant families must overcome their uprooting, adapt to a new culture, perhaps learn a new language and apply their skills and talents in a new environment.

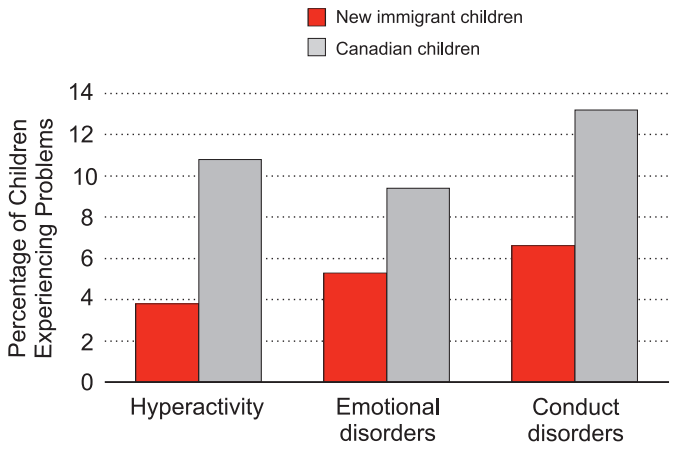
Research indicates that 30.7 percent—almost one-third—of immigrant families are poor, compared to only 13.2 percent of Canadian families. Immigrant families may suffer a higher rate of poverty for a variety of reasons. Parents trained in a foreign country often encounter obstacles having their credentials recognized in Canada. Immigrants who apply for jobs may not be selected because they lack Canadian experience. Those who do not speak English or French fluently may find it difficult to qualify for jobs for which they are trained and may have to accept low-pay employment until their language proficiency improves. Discrimination may play a role. Once in low-pay jobs, they may be less mobile and have less opportunities for advancement. Whatever the reasons, immigrants typically experience a period of unemployment or underemployment when they start working in Canada. During the first 10 years or so in Canada, a high proportion of immigrant families tend to be poor. Once they adapt to Canada and the demands of the labour market, however, the average income of immigrant families exceeds that of Canadian families.

The initial period of adaptation can be stressful for both parents and children. One would expect the mental health of immigrant children to be negatively affected, which in turn may jeopardize school performance. Such negative outcomes could have consequences for their future success in Canada.

Even though more immigrant children are poor, more of them enjoy better mental health than Canadian children

However, according to research carried out by Morton Beiser, Feng Hou, Ilene Hyman, all of the Clarke Institute of Psychiatry/University of Toronto, and Michel Tousignant, University of Quebec at Montreal, using the National Longitudinal Survey of Children and Youth (NLSCY), immigrant children have better mental health than Canadian children. The three most common mental disorders of childhood are hyperactivity, conduct disorder and emotional disorders.

Mental Health Outcomes in New Immigrant and Canadian Children



Only 3.8 percent of immigrant children have severe symptoms of hyperactivity compared to 10.8 percent of Canadian children. Fewer immigrant children (5.3 percent) had emotional disorders compared to other children in Canada (9.1 percent). Canadian children had double the rate of conduct disorders (13.2 percent), compared to immigrant children (6.7 percent).

Immigrant children also appear to do well at school after the initial period of adaptation. Studies suggest that immigrant children consistently outperform native-born children in school and are more likely to be class valedictorians or salutatorians.

What protects immigrant children from some of the pernicious effects of poverty?

Poverty affects the mental health of all children. Economically disadvantaged children have higher rates of hyperactivity, emotional disorders and conduct disorders. Research shows that poverty has a stronger impact among native-born children than on immigrant children. Why does this difference exist? Poor Canadian families are more likely than non-poor families to be dysfunctional, to be headed by a single, often depressed parent with poor parenting skills. Statistical analysis indicates that most of the mental health problems of Canadian children stem from these family characteristics associated with poverty rather than resulting directly from material deprivation. By contrast, poor new immigrant families seem to be able to provide an environment more conducive to emotional support and stability. The mental health problems suffered by immigrant children are more likely to be solely due to poverty.

Unemployment and poverty are initial conditions of adversity in a new land—the promise of a better life sustains immigrant families. For poor Canadian families, poverty tends to be part of a negative spiral of family dysfunction, single-parent family structure, alcohol abuse and parental mental illness—all of which affect parenting practices as well as the mental health of children. The context of poverty modifies the effect that it has on the mental health of immigrant and Canadian children, resulting in different rates of well-being.

Decreasing the rates of poverty for both immigrant and Canadian families is an important step, if families are to nurture children for success in school and beyond

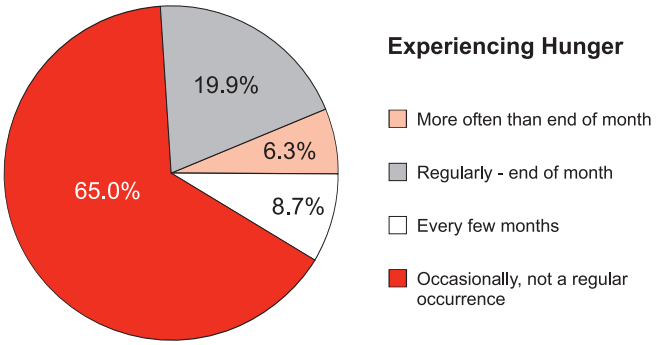
Almost one-third of immigrant children start their lives in Canada in poverty. This condition of disadvantage can potentially damage their mental health and their school performance, compromising their contribution to their adopted country in the future. Although the period of poverty is often temporary, 10 years can cover the entire formative period of a child. Programs to ease the transition of immigrant families into the Canadian labour market could

substantially reduce both the rates and duration of poverty, with positive results for immigrant parents, their children and, eventually, Canadian society as a whole.

Coping with Child Hunger: Mothers Do Without

Canada is a rich country in global terms and is ranked first in the United Nations' Human Development Index. Canada has also enjoyed more than 50 years of social development since the Second World War to build a post-industrial society that has a strong social framework. Yet poverty remains a reality in Canada and growing child poverty is a matter of national concern. For children, the consequences of growing up in poverty too often mean ill-health, poor nutrition, unhealthy development, and poor school readiness. Hunger is a universal symbol of deprivation and an important indicator of extreme poverty.

Hungry Families in Canada



Note: Even in a rich country like Canada, hunger remains a real problem for many families. In 1994, some 57,000 Canadian families with children are considered to be "hungry families."

An analysis of National Longitudinal Survey of Children and Youth (NLSCY) data conducted by Lynn McIntyre, Sarah Connor, and James Warren of Dalhousie University examined the experience of hunger in Canada by determining the characteristics and coping mechanisms of families who had reported running out of food or lacking money to buy food. The data for this study were derived from the first cycle of data collection, and included families with children aged 0 to 11 years. Results indicate that in 1994, some 57,000 Canadian families with children (1.2 percent of all families sampled) experienced hunger. For over a third of these families, hunger was a frequent occurrence (happening at least every few months).

How are families coping?

The two most common coping strategies in the face of hunger are seeking help from the food bank and turning to relatives for assistance. Very different types of families seem to use these two strategies. Food bank users are more likely to be single parents (mothers mostly). Families likely to seek help from relatives are generally characterized by having two biological parents, fewer children aged 0 to 17, and household incomes that are not among the very low. Reliance on food banks as opposed to relatives is consistent with the idea that single-parent families may lack social support and may also suffer the higher stigma of using food banks.

A mother sacrifices—feeding her children before herself...

Not all families are always able to cope with food shortages. A major finding of this study is that when faced with a food shortage, mothers sacrifice their own food consumption in order to feed their hungry children. Of the families reporting hunger, 34 percent reported that the parent skipped meals or ate less when the family had run out of food. In fact, parents are seven times more likely to go hungry than are their children. Families that have experienced hunger are most likely to consist of a hungry mother and a barely fed child.

Furthermore, because 26.7 percent of hungry mothers reported that they cut down on the variety of food the family usually ate when food ran low, it is possible that even when children are being fed, the nutritional adequacy of their diets is less than ideal. And this lack of food is not without consequence. Children of hungry families were reported to

have significantly poorer health than other children. Whereas 87.2 percent of other children were reported to have very good or excellent health, only 70.9 percent of children from hungry families enjoyed this health status.

Who are these hungry families?

Single-parent families, families relying on social assistance, and off-reserve Aboriginal families (on-reserve populations were not sampled) are over-represented among the hungry in Canada. Very low-income families are at high risk of going hungry. The difference in annual income between those who experience frequent hunger and those who experience occasional hunger is about $5000 a year.

More than half of hungry mothers (58 percent compared to only 42 percent of those who do not report experiencing hunger) suffer from a chronic health condition. Hungry mothers also report high levels of activity limitation, which indicates the severity of their condition and how their quality of life is affected by it. Over two-thirds of mothers reporting hunger had completed high school and over 50 percent had some post-secondary schooling indicating that education is clearly insufficient to ward off either hunger or extreme poverty in women with children.

Tobacco use was also very high among those who report having experienced hunger and higher still among those reporting frequent hunger. One of the primary effects of smoking, however, is stress reduction and studies have shown that the fear of running out of food is very stressful in low income families. Stress must be even higher in families that actually encounter hunger.

What can be done about hunger in this country?

Hunger in Canada is a marker of extreme disadvantage and has long-term consequences for children's health and development. The relationship between poverty and food insecurity is simple: less money means less food is procured, and food is of poorer quality. One study of economically disadvantaged women in urban Nova Scotia reported that for women living partially or fully on social assistance benefits, money allocated for food was being depleted to meet other needs. Adequate public benefits are critical to allow families to meet their basic and food and other needs.

Although food banks and feeding programs began as community-based responses to the increasing number of low-income people unable to meet their food needs, their proliferation and the ways they are used indicate that they are becoming institutionalized. The authors suggest that food banks are clearly not an adequate public policy response to hunger—either in terms of their accessibility, availability, desirability, or in terms of the nutritional support they provide. Reliable non-charitable models of food assistance are recommended.

Close Relationships Reduce Difficult Behaviours in High-Risk Children

Not all children's lives are supportive and problem-free. Some children have to cope with risk factors such as poverty, divorce, and alcoholism in their daily lives. When these risks accumulate, coping becomes a challenge and behavioural difficulties may develop. However, many children in stressful home situations cope and function as well as children in non-stressful life circumstances. Why is this so? One factor consistently shown to be helpful to adults and children in stressful circumstances is the quality of their relationships with others.

In their study of risk and resilience in 6- and 10-year-old children, Jenny Jenkins and Daniel Keating of the Ontario Institute for Studies in Education, University of Toronto, explored the hypothesis that affectionate non-parental relationships would be associated with low levels of difficult behaviours for children in high-risk environments. They tested this hypothesis by comparing the level of behavioural difficulties of high-risk children to levels for children in low-risk circumstances. The data showed that 10-year-olds in multiple-risk situations but with good relationships with

siblings, friends or teachers had fewer behavioural difficulties than 10-year-olds with poor relationships. Levels of difficulties were similar to 10-year-olds with no risks.

Using data from the National Longitudinal Survey of Children and Youth (NLSCY), the researchers compared teachers' assessments of the behaviour of 6- and 10-year-old children living in situations of high and low risk. The quality of three types of non-parental relationships (with teachers, friends and siblings) was examined for its association with the behaviour at different levels of risk.

High-Risk 10-Year-Olds with Good Friendships Have Decreased Behavioural Difficulties

A child with an externalizing behavioural difficulty was defined to be a child who demonstrated distress by "acting out" against others (in ways such as lying, stealing, and fighting, or trying to get others to dislike another person) or through hyperactivity (by not being able to sit still and acting without thinking, for example). A risk index was developed to assess the riskiness of each child's environment. Ten factors known to be related to increased behavioural difficulties in children made up the index. A child was considered to be in a low-risk situation if he or she experienced no risks. A child experiencing three or more risk factors was identified as being in a high-risk situation. Data on each child's non-parental relationships was provided by the parent's impression of how well the child got along with his/her teacher, friends and siblings.

What were the results?

The researchers found that about four percent of Canadian 6- and 10-year-olds live in very stressful situations. While many of these children were functioning satisfactorily, nearly half of those exposed to four or more risk factors exhibited behavioural difficulties. This was five times the rate for children not exposed to any risks.

Good relationships with siblings, friends and teachers seemed to provide a buffer for 10-year-olds against the impact of a risky environment. Those with good connections to people other than their parents had much lower levels of behavioural difficulties—closer to those of children in non-stressful environments—than those with poor relationships. It is not clear why this pattern was not nearly as evident among 6-year-olds. Future longitudinal data will allow a closer examination of the apparent differences.

The Children's Risk Index

The factors listed here are known to be related to increased behavioural difficulties in children. For the purposes of this study of risk and resilience, a child experiencing more than three of these risk factors was identified as being in a high-risk situation:

- The child's parents are experiencing a high level of dissatisfaction in their marriage.
- The child has experienced divorce.
- Income is inadequate for the family's needs.
- The primary caregiver is experiencing depression.
- More than four children are in the family.
- The mother was 19 years of age or under when the child was born.
- The parents are employing an ineffective parenting style.
- The mother abuses alcohol.
- The father abuses alcohol.
- The child is diagnosed as having a learning disability.

Adults other than parents are important for 10-year-olds. Of the three types of relationships studied, those with teachers had the strongest associations with 10-year-olds' behaviour. Good relationships with teachers were associated with lower levels of difficult behaviours at all risk levels, particularly for boys. Across all levels of risk, if boys had a poor relationship with their teacher, they showed high levels of difficult behaviours. It is not obvious why boys at low risk also show elevated levels of problem behaviours when the teacher-student relationship is not positive. Schools require students to work quietly and to be verbal not physical. Since boys have more difficulty meeting these school requirements than girls, they may have a special need for understanding and supportive teachers.

To compound their need for good connections to their teachers, boys were found to be less likely than girls to form close relationships of any kind. This fact, coupled with the higher likelihood of boys showing behavioural difficulties, increases their vulnerability in stressful environments.

Along with the quality of relationships, the number of close relationships that were helpful varied for high-risk children of different ages. The data showed that, for 10-year-olds, one close relationship was not nearly as helpful as two or more. Six-year-olds needed only one (teacher, friend or sibling). This is an indication that, as children grow up, their world becomes larger, making their need for support greater.

What are the implications of these findings?

The quality of children's social relationships is important in allowing children to deal with stresses in their lives. People other than parents do make a difference. We assume that getting along with friends is important. Closeness with siblings, on the other hand, is often not seen as a necessity. The acceptance of sibling rivalry may be robbing children of a natural source of support. The relevance of the teacher-student relationship indicates that teachers need the time, knowledge and empathy to develop a good rapport with all of their students, particularly the boys. Children need communities, which facilitate these close and supportive connections.

Developing good relationships with adults and other children is a skill that begins to be learned at a young age. Children need to be guided in this learning process. This study points to the need to assist young boys. Intervention and prevention programs that focus on helping children develop supportive relationships with individuals other than their parents can be done at home, at school and in the community.

This study opens many avenues for future research. Questions such as "Why does the quality of certain relationships have a stronger association with behaviour in high-risk situations than in low-risk situations?" and "How do relationships lessen the effects of adverse circumstances for children?" require thoughtful answers. Other issues of interest include consideration of how children (rather than a parent or teacher) describe good relationships and the differences between girls and boys in their interactions with others. Answers to these and other questions will shed light on what can be done to strengthen children's connections with others.

List of Studies Presented in the *Bulletin*

All of the working papers were published by the Applied Research Branch, Strategic Policy, Human Resources Development Canada, Ottawa, October 1998.

Beiser, Morton, Feng Hou, Ilene Hyman and Michel Tousignant. *Growing Up Canadian: A Study of New Immigrant Children,* W-98-24E.

Boyle, Michael and Ellen Lipman. *Do Places Matter? A Multi-level Analysis of Geographic Variations in Child Behaviour in Canada,* W-98-16E.

Connolly, Jennifer Virginia Hatchette, Loren McMaster. *School Achievement of Canadian Boys and Girls in Early Adolescence: Links with Personal Attitudes and Parental and Teacher Support for School,* W-98-14E.

Craig, Wendy, Ray Dev. Peters and Roman Konarski. *Bullying and Victimization Among Canadian School Children,* W-98-28E.

Haddad, Tony. *Custody Arrangements and the Development of Emotional or Behavioural Problems by Children,* W-98-9E.

Jenkins, Jenny and Daniel Keating. *Risk and Resilience in Six- and Ten-Year-Old Children,* W-98-23E.

Kohen, Dafna, Clyde Hertzman and Jeanne Brooks-Gunn. *Neighbourhood Influences on Children's School Readiness,* W-98-15E.

Kohen, Dafna, Clyde Hertzman and Michele Wiens. *Environmental Changes and Children's Competencies,* W-98-25E.

Lefebvre, Pierre and Philip Merrigan. *Family Background, Family Income, Maternal Work and Child Development,* W-98-12E.

McIntyre, Lynn, Sarah Connor and James Warren. *A Glimpse of Child Hunger in Canada,* W-98-26E.

Offord, David Ellen Lipman and Eric Duku. *Sports, the Arts and Community Programs: Rates and Correlates of Participation,* W-98-18E.

Pepler, Debra and Farrokh Sedighdeilami. *Aggressive Girls in Canada,* W-98-30E.

Ross, David, Paul Roberts and Katherine Scott. *Mediating Factors in Child Development Outcomes: Children in Lone-Parent Families,* W-98-8E.

Ross, David, Paul Roberts and Katherine Scott. *Variations in Child Development Outcomes Among Children Living in Lone-Parent Families,* W-98-7E.

Ryan, Bruce and Gerald Adams. *Family Relationships and Children's School Achievement*, W-98-13E.

Publications of the Applied Research Branch focusing on child development
Publications de la Direction générale de la recherche appliquée qui porte sur le développement des enfants

The "s" at the end of a paper number signifies that these documents are not available in hard copy.
Le « s » qui suit un numéro indique que ces documents sont disponibles seulement en copie papier.

All working papers are available on the ARB Internet site: http://www.hrdc-drhc.gc.ca/arb/
Tous les documents sont disponibles sur le site Internet de la DGRA : http://www.hrdc-drhc.gc.ca/dgra/

W-98-7Es How Do Lone-Parent Children Differ From All Children?

W-98-7E Variations in Child Development Outcomes Among Children Living in Lone-Parent Families

W-98-7F Variation des résultats développementaux chez les enfants des familles monoparentales
David P. Ross, Paul A. Roberts, Katherine Scott October/Octobre 1998

W-98-8Es Comparing Children in Lone-Parent Families: Differences and Similarities

W-98-8E Mediating Factors in Child Development Outcomes: Children in Lone-Parent Families

W-98-8F Facteurs médiateurs influant sur les résultats du développement des enfants de familles monoparentales
David P. Ross, Paul A. Roberts, Katherine Scott October/Octobre 1998

W-98-9Es Do Children in Post-Divorce Custody Have More Problems Than Those in Intact Families?

W-98-9E Custody Arrangements and the Development of Emotional or Behavioural Problems by Children

W-98-9F Les modalités de garde et l'émergence de problèmes affectifs ou comportementaux
Tony Haddad October/Octobre 1998

W-98-10Es Growing Up with Mom and Dad? Children and Family Instability
Published by Statistics Canada/Publié par Statistique Canada
Nicole Marcil-Gratton June/Juin 1998

W-98-11Es What About Children in Lone-Mother Families?

W-98-11E Children and Lone-Mother Families: An Investigation of the Factors Influencing Child Well-being

W-98-11F Les enfants et les familles gynoparentales : Étude des facteurs influant sur le bien-être de l'enfant
Ellen L. Lipman, Michael H. Boyle, Martin D. Dooley, David R. Offord October/Octobre 1998

W-98-12Es Working Mothers and their Children

W-98-12E Family Background, Family Income, Maternal Work and Child Development

W-98-12F Les antécédents familiaux, le revenu familial, le travail de la mère et le développement de l'enfant
Pierre Lefebvre, Philip Merrigan October/Octobre 1998

W-98-13Es How Do Families Affect Children's Success in School?

W-98-13E Family Relationships and Children's School Achievement
Bruce A. Ryan, Gerald R. Adams October/Octobre 1998

W-98-14Es Academic Achievement in Early Adolescence: Do School Attitudes Make a Difference?

W-98-14E School Achievement of Canadian Boys and Girls in Early Adolescence: Links with Personal Attitudes and Parental and Teacher Support for School
Jennifer A. Connolly, Virginia Hatchette, Loren E. McMaster October/Octobre 1998

W-98-15Es Affluent Neighbourhoods and School Readiness

W-98-15E Neighbourhood Influences on Children's School Readiness
Dafna E. Kohen, Clyde Hertzman, Jeanne Brooks-Gunn October/Octobre 1998

W-98-16Es Do Places Matter?

W-98-16E Do Places Matter? A Multi-level Analysis of Geographic Variations in Child Behaviour in Canada
Michael H. Boyle, Ellen L. Lipman October/Octobre 1998

W-98-17Es What Does Moving Do To Your Children?

W-98-17E The Relationship Between Geographic Relocation and Childhood Problem Behaviour
David J. DeWit, David R. Offord, Kathy Braun October/Octobre 1998

W-98-18Es Which Children Don't Participate in Sports, the Arts and Community Programs?

W-98-18E Sports, the Arts and Community Programs: Rates and Correlates of Participation
David R. Offord, Ellen L. Lipman, Eric K. Duku October/Octobre 1998

W-98-19Es Growing Up Male and Female in Canada
Virginia Caputo, Katherine Kelly October/Octobre 1998

W-98-20Es How Healthy Are Immigrant Children?

W-98-20E Healthy Immigrant Children: A Demographic and Geographic Analysis
Audrey Kobayashi, Eric Moore, Mark Rosenberg October/Octobre 1998

W-98-21Es A Healthy Start for Canadian Children -Does Universal Health Care Meet the Challenge?
Satya Brink, Peter J. Smith October/Octobre 1998

W-98-22Es Understanding the Contribution of Multiple Risk Factors on Child Development As Children Grow

W-98-22E Understanding the Contribution of Multiple Risk Factors on Child Development at Various Ages
Sarah Landy, Kwok Kwan Tam October/Octobre 1998

W-98-23Es The Importance of Sibling, Teacher and Friendship Relationships for Children Experiencing High Levels of Stress

W-98-23E Risk and Resilience in Six- and Ten-Year-Old Children

W-98-23F Les risques et la résistance chez les enfants de six et de dix ans
Jenny Jenkins, Daniel Keating October/Octobre 1998

W-98-24Es New Immigrant Children: How Are They Coping?

W-98-24E Growing Up Canadian: A Study of New Immigrant Children
Morton Beiser, Feng Hou, Ilene Hyman, Michel Tousignant October/Octobre 1998

W-98-25Es Environmental Changes and Children's Competencies

W-98-25E Environmental Changes and Children's Competencies
Dafna E. Kohen, Clyde Hertzman,
Michele Wiens October/Octobre 1998

W-98-26Es A Glimpse of Child Hunger in Canada

W-98-26E A Glimpse of Child Hunger in Canada

W-98-26F Aperçu de la faim chez les enfants au Canada
Lynn McIntyre, Sarah K. Connor,
James Warren October/Octobre 1998

W-98-27Es Children With Mothers Who Drink a Lot

W-98-27E Alcohol and Parenting: The Effects of Maternal Heavy-Drinking

W-98-27F L'alcohol et les pratiques parentales : Les effets d'une forte consommation de la mère
Robert O. Pihl, Pierre McDuff,
Wendy Strikler, Jean-Marc Assaad,
Etienne Dubreuil,
Richard Tremblay October/Octobre 1998

W-98-28Es Bullying and Victimization Among Canadian School Children

W-98-28E Bullying and Victimization Among Canadian School Children
Wendy M. Craig, Ray Dev. Peters,
Roman Konarski October/Octobre 1998

W-98-29Es Can Problem Behaviours in Childhood be an Introduction to Future Delinquency?

W-98-29E Who Are the Most Violent 10- and 11-Year-Olds? An Introduction to Future Delinquency
Jane B. Sprott,
Anthony N. Doob October/Octobre 1998

W-98-30Es Aggressive Girls in Canada: Should We Worry About Them?

W-98-30E Aggressive Girls in Canada

W-98-30F Les filles agressives au Canada
Debra J. Pepler,
Farrokh Sedighdeilami October/Octobre 1998

W-98-31Es Myths of Balancing Work and Family
Cynthia D. Cook,
J. Douglas Willms October/Octobre 1998

W-98-32Es Do Parenting Practices Make a Difference?
Ruth K. Chao,
J. Douglas Willms October/Octobre 1998

W-98-33Es The Importance of Quality Child Care
Dafna E. Cohen,
Clyde Hertzman October/Octobre 1998

W-98-34Es How Tobacco and Alcohol Affect Newborn Children
Sarah K. Connor,
Lynn McIntyre October/Octobre 1998

Other NLSCY Publications
Autres documents de l'ELNEJ

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Catalogue No. 89-550-MPE96001
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Statistique Canada 89-550-MPF96001 1996

Investing in Children: Ideas for Action
Investir dans nos enfants : Idées à retenir 1999

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