

# Vulnerable children and youth



A difficult task in this work was to define “vulnerable children”. The term “vulnerable” connotes susceptibility – that one is *exposed*, or liable to experience some undesirable life outcome in the future.

Many Canadian children must cope with unduly negative life experiences, such as racial and ethnic prejudice, severe learning and behavior problems, inadequate parenting, family violence, and poverty. These children are vulnerable. They are children whose chances of leading healthy and productive lives are somewhat reduced unless there is a concerted and prolonged effort to intervene on their behalf. In 1994, Human Resources Development Canada, in cooperation with Statistics Canada, launched the National Longitudinal Study of Children and Youth (NLSCY), a study of a nationally representative sample of over 20,000 Canadian children and their families. When the NLSCY data became available, I had the opportunity to work with scholars from across Canada in analysing the data to examine several questions concerning childhood vulnerability: How many children in Canada can be considered vulnerable? Where do the majority of them reside? Can we help them meet the difficult challenges they face, thereby significantly improving the quality of their lives? Can we provide avenues for success, so that more children will lead healthy, productive lives? Can we identify schools and local communities that are particularly successful in improving the life chances of vulnerable children, and determine what it is that they are doing differently? We brought the research findings together in an edited volume entitled, *Vulnerable Children: Findings from Canada’s National Longitudinal Study of Children and Youth* which was published this spring by University of Alberta Press.

A difficult task in this work was to define “vulnerable children”. The term “vulnerable” connotes susceptibility – that one is *exposed*, or liable to experience some undesirable life outcome in the future. Our definition was based on children’s cognitive and behavioural outcomes, rather than on “risk factors” that predict negative life outcomes. A child was considered vulnerable in the cognitive domain if he or she had a low score on a standardized test of motor and social development at ages 0 to 3, a low score on a test of receptive vocabulary at ages 4 and 5, or a low score on a standardized mathematics test at ages 6 to 11. Children were considered vulnerable in

the behavioural domain if they were rated by their parents as having a difficult temperament at ages 0 and 1, or were classified as having any one of six behaviour disorders (anxiety, emotional disorder, hyperactivity, inattention, physical aggression, or indirect aggression) at ages 4 to 11. For each measure we used well-established criteria to set the threshold that defined vulnerability. With vulnerability defined in this way, we developed of a “vulnerability index” for Canada, which provides a means of estimating the prevalence of childhood vulnerability and describing the extent of variation in childhood vulnerability among jurisdictions and over time.

We estimated that 28.6% of Canadian children are vulnerable. The high prevalence of childhood vulnerability is not due solely to children living in poverty: we found that vulnerability was only weakly associated with family income and other socioeconomic factors. Rather, four factors emerged as strong predictors of whether or not a child is vulnerable: the “style” of parenting in the home, the cohesiveness of the family unit, the mental health of the mother, and the extent to which parents engage with their children in learning and play activities. Families that were strong on these factors were found in rich and poor families alike.

The study also revealed that the prevalence of childhood vulnerability varied considerably among provinces, cities, schools, and neighbourhoods. The provision of high-quality early childhood education is an important factor: children living in poor families had superior language skills if they were attending a day-care rather than being cared for at home by their parents or a relative. Prior research has shown that the development of strong language skills is an important determinant of school success during the primary years, and sets the stage for later skill development. The school a child attends also makes a difference. Our findings indicated that schools and classrooms tended to be more successful where class sizes were small and students were taught by teachers who specialized in their subject area. Achievement scores were also better when children were taught by teachers who did not practice ability grouping and were able to successfully maintain classroom discipline. Finally, the study also found that the prevalence of childhood vulnerability varied significantly among communities and neighbourhoods, but it was difficult to determine what specific factors are most important.

While the research on childhood vulnerability was being conducted, Canada participated in the Programme for International Assessment (PISA), a large-scale international survey of the reading, mathematics, and science skills of 15-year old youth among member countries of the Organisation

We estimated that 28.6% of Canadian children are vulnerable. The high prevalence of childhood vulnerability is not due solely to children living in poverty.

for Economic and Cultural Development (OECD). Canadian students fared exceptionally well on this assessment compared with students in other OECD countries: they ranked 2nd in reading, 6th in mathematics, and 5th in science. I examined the relationship between performance on the PISA achievement tests and socioeconomic factors for all countries that participated in the study (see Chapter 8 of the international report<sup>1</sup>). Canada was one of seven countries, including Finland, Iceland, Ireland, Japan, Korea, and Sweden, which not only had high levels of academic achievement overall, but also had relatively high scores for students from lower socioeconomic backgrounds.

The success of Canadian students on the PISA seem to contradict the findings pertaining to vulnerable children based on the NLSCY, and may cause the policy community to question whether we should increase our investments in programs aimed at reducing childhood vulnerability. However, when one examines the distribution of achievement scores for children from differing socioeconomic backgrounds, several consistencies become apparent. Figure 1 shows the socioeconomic gradients – the relationship between the PISA reading scores and socioeconomic status (SES) – for Canada and for all OECD countries combined. The small black dots are students' scores on the PISA reading test plotted against their SES for a representative sample of 2000 Canadian students. The vertical axis has two scales: the left-hand scale is the continuous scale for the reading scores, which is scaled to have a mean of 500 and a standard deviation of 100 for all students in participating OECD countries. The right-hand axis depicts reading levels, defined by the OECD, which range from 0 to 5. Socioeconomic status is on the horizontal axis. It is a composite measure derived from data describing the education and occupation of the students' parents, and the educational and cultural possessions in the home. SES was scaled to have a mean of zero and a standard deviation of 1 for all OECD students. The gradient line for Canada was drawn from the 5th to the 95th percentile of the SES scores for all Canadian students; the same applies for the OECD gradient.



Longitudinal studies that have followed children with **behaviour disorders** into adulthood have found that nearly half of them continue to suffer from psychological and social difficulties as adults.

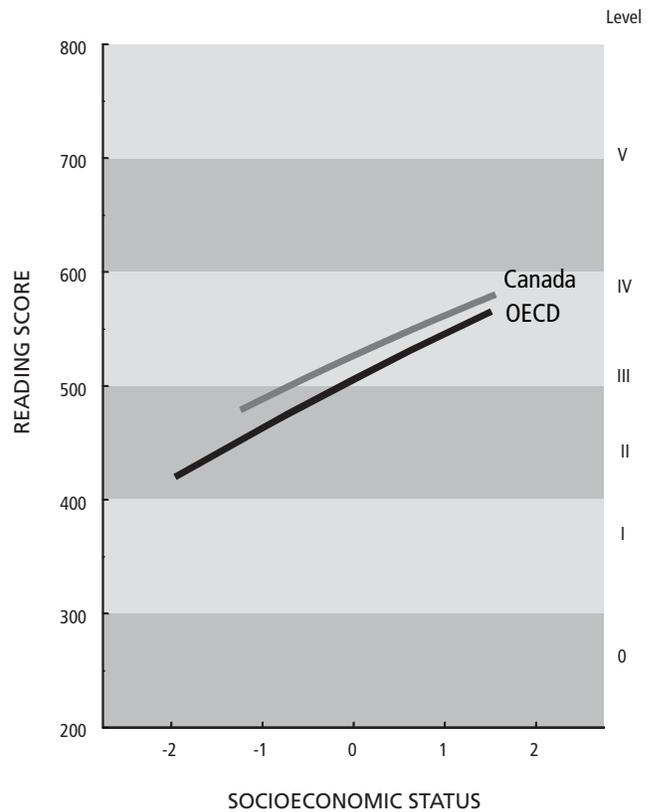


FIGURE 1  
SOCIOECONOMIC GRADIENTS FOR READING SCORES AT AGE 15  
*Programme of International Student Assessment, 2000*

This figure makes several important points:

- On average the reading scores of Canadian students are higher at all levels of SES;
- The Canadian advantage is slightly larger at the lower end of the SES range, indicating that Canada seems to do comparatively well in educating its less advantaged youth;
- Nevertheless, there is a substantial gap in achievement between children from low and high SES backgrounds: the difference is almost 100 points between the average score of a student at the 5th percentile in SES and a student at the 95th percentile in SES.
- There is a wide range in reading scores at all levels of SES. 27% of Canadian students scored at Level 2 or lower, and although many of these students are from low SES backgrounds, most of them are from average or above-average SES families. Similarly, not all youth with high skills – at Levels 4 and 5 for example – are from high SES backgrounds. Many of these youth are from relatively disadvantaged families.

## EN BREF

Cette étude a permis de constater que la vulnérabilité n'était que faiblement associée au revenu familial et à d'autres facteurs socio-économiques. Les chercheurs ont repéré quatre facteurs qui sont de bons prédictors de la vulnérabilité d'un enfant, à savoir : le style d'éducation au foyer, la cohésion du groupe familial, la santé mentale de la mère et l'aptitude des parents à engager leurs enfants dans des activités d'apprentissage et de jeu.

An earlier study of literacy skills in Canada – the International Adult Literacy Study – showed that there are very real costs to those with poor literacy skills: youth and adults who scored at Level 2 or lower in their literacy skills were more likely to be unemployed, in receipt of social benefits and transfers, and living in poverty. Moreover, longitudinal studies that have followed children with behaviour disorders into adulthood have found that nearly half of them continue to suffer from psychological and social difficulties as adults. Both the NLSCY and the PISA findings suggest that at least one in four Canadian children and youth are vulnerable. They are vulnerable in the sense that unless there is a concerted and prolonged effort to intervene on their behalf, they are likely to encounter serious challenges as adults, and are less likely to lead healthy and productive lives.

The findings regarding vulnerable children present a serious challenge to the “culture of poverty” thesis, which maintains that children from poor families do not fare well because of the way they are parented. Instead, what matters most is that children are cared for throughout the day by warm and responsive care-givers, in environments rich with opportunities to learn. An important message of this research is that the nature of children's environments within the family, and in their schools, neighbourhoods, and communities, has very strong effects on children's development and the prevalence of childhood vulnerability. This requires us to shift our thinking from childhood vulnerability as being a problem stemming primarily from poverty to it being a problem arising from the environments in which children are raised. It requires us to focus less on ameliorating risk factors and more on creating environments that support children's development. It calls for us to create a *family-enabling society*.<sup>1</sup>

1 Organisation for Economic Cooperation and Development, *Knowledge and Skills for Life: First Results from the OECD Programme for International Student Assessment (PISA) 2000*. (Paris:OECD, 2001)

**J. Douglas Willms** is the Director of the Canadian Research Institute for Social Policy and the CRC Chair in Human Development at the University of New Brunswick. He is a Fellow of the Canadian Institute for Advanced Research and a winner of the 2001 CEA-Whitworth Award for Educational Research.

## STUDENTS, TEACHERS, AND THE INTERNET



### Canadian school boards and teachers call for progressive digital copyright legislation

The federal government spent hundreds of millions of dollars supporting the wiring of Canadian public schools to the Internet. Yet current copyright legislation makes many routine uses of the Internet by Canadian students and teachers illegal.



Call or write your federal  
Member of Parliament.

Demand fair and balanced  
copyright legislation that  
respects the needs of students,  
educators and creators.

*A message from the*  
Canadian School Boards Association  
representing 350 school boards and the  
Canadian Teachers' Federation  
representing more than 240,000 elementary and secondary teachers

