Nurturing early childhood development in times of austerity in BC

Summary

EARLY CHILDHOOD DEVELOPMENT plays a critical role in a person's health and welfare throughout their life, affecting everything from scholastic success to employment to physical health. This translates to significant consequences for the economy: It's estimated that every new dollar invested in programs that support healthy childhood development (e.g., parental leave, income support, child care) returns \$6 to the GDP over a child's lifetime.

Unfortunately, Canada has the weakest public funding for early childhood development among wealthy countries. The consequences of this lack of investment can be seen in the state of early childhood development in British Columbia.

The Early Development Instrument (EDI) is widely considered one of the best tools for measuring early childhood development, vulnerability and school readiness. A designation of "developmental vulnerability" means that a child has not developed the critical skills required to participate in and benefit from their school experience. Vulnerability is assessed in five categories: physical, social, emotional, language/cognitive and communication skills.

The Early Development Instrument (EDI) was developed at McMaster University by Dan Offord and Magdalena Janus in the late 1990's,¹ supported by a nationwide advisory panel which included Clyde Hertzman from the Human Early Learning Partnership (HELP) at UBC, one of the co-authors of this study. Between 2000 and 2010, HELP carried out EDI testing among the province's kindergarteners four times. They found that overall vulnerability rose by 29.6 per cent over this period, ranging from 12 to 54 per cent depending on the school district. This was

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DECEMBER 2015



in spite of a range of initiatives created in response to the results of the first round of testing, including parenting support and child care programs.

At the same time, this study identified a number of communities with relatively high levels of vulnerability that managed to buck this trend. These communities had formed strong and stable policy coalitions, which became the resident experts on early childhood development and were powerful enough to persuade decision-makers to consider the impacts of their decisions on early childhood development. These coalitions included senior leaders from government, health authorities and other public agencies, and took a broad-based, collaborative approach to addressing vulnerability.

Our paper finds that in order to make significant improvements in early childhood development, there must be a significant change in approach, including:

- The federal and provincial government must take a strong leadership role in creating
 policies and funding for employment, income, housing, parental leave and child care.
 This sets a well-furnished stage for the work of local agencies and individuals.
- Initiatives to improve early childhood development outcomes must be broad-based and not simply targeted at low-income or high-risk families. Research shows that vulnerability occurs across all income levels, and that universal approaches are most effective.
- Government must provide leadership with policies and funding, but must also partner
 with local agencies and individuals. This type of partnership harnesses the power of active
 and engaged community members.
- Local committees that include representatives from all levels of government, schools
 and community agencies, are an ideal way to support improvements to early childhood
 development. Communities with this type of committee tend to have lower levels of
 developmental vulnerability.

Introduction

WHEN IT COMES TO human development, our early years are critical. The way children are parented, the neighbourhood where they grow up, and the early educational programming that they are exposed to can provide advantages or disadvantages that have lasting impacts into the adult years. At first, these impacts are most noticeable in a child's ability to use and understand language, practise empathy and self-control, demonstrate a sense of belonging and focus on complex tasks.² But the impacts of early life persist. After age 10, early experiences affect individuals' risk of school failure, teen pregnancy and criminality. After age 20, early life influences obesity, blood pressure and depression. After age 40, early life affects the development of coronary heart disease and diabetes. And in late life, early experiences can cause or prevent premature aging and memory loss.³ The evidence is as clear as it is compelling. Early human development matters.

As a society, we cannot afford to ignore the costs of developmental inequality among children. In British Columbia, for example, the vulnerability of individual children has been linked to their school achievement and to their "end-of-school qualifications." These qualifications have immense

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² Barker, 1994; Bronfenbrenner, 1979; Wadsworth, 1997.

³ Harkonmäki et al., 2007.

economic impacts. It is estimated that for every 1 per cent reduction in vulnerability among a group of students starting school together, a 1 per cent increase in gross domestic product can be expected over that group's working life, after accounting for inflation.⁴ According to this estimate, every new dollar spent enhancing policies related to parental leave extension, income support expansion, high-quality child care and education for both parents and young children will return \$6 over a child's working lifetime. No other conceivable investment could produce such a large economic return.⁵ If nothing else, government funding for evidence-informed policies and programs benefitting young children and their parents simply makes good economic sense.

Unfortunately, this is at odds with Canada's contemporary policy climate. Currently, Canadians live in a neoliberal era—one where governmental assistance in the form of resources and programming is becoming less and less available. As a result, the pressure on individuals, families and communities to meet their own needs is rising steadily. The question this paper seeks to address is: when it comes to achieving healthy development among young children, are communities able to succeed even in the face of reduced public sector supports? This question speaks to what is called *social resilience*—the ability of a community to adapt, reorganize and even thrive despite reductions in support from traditional government programs and services.

Social resilience is a potential solution to a complex but crucial problem. Early childhood development for *all* children—regardless of parental income—depends not only on individual children and families but also on interacting local, national and even international circumstances that promote or inhibit developmental success. And when early childhood development is inhibited, it leads to what is called "developmental vulnerability," meaning that a child has not developed the critical skills required to participate in, and gain full benefit from, his or her experience at school. Since school experience lays the groundwork for future social, intellectual and economic success, developmental vulnerability creates a shaky foundation for an individual's entire life.

The factors contributing to early childhood development are highly complex and interrelated. As a result, it is difficult to achieve positive developmental outcomes without governments funding programs and implementing policies that support it. In Canada, this kind of funding and supportive policymaking has been on the decline since this mid-1990s. This is in direct contrast to a country like Sweden, profiled later in this paper. However, while it is difficult for communities to weather regressive policy changes and reductions in government funding, it is not impossible. The penultimate section of this paper demonstrates that while social resilience is no replacement for governmental involvement, certain communities in the province of BC have demonstrated that it is possible to minimize the damage to early childhood development that occurs in the absence of public sector support.

Indeed, BC offers an excellent example of what happens when communities' social resilience is put to the test. First, its provincial government formally recommended civil society initiatives to replace a lack of governmental support in areas affecting early childhood development. Second, BC was home to the widespread deployment of the Early Development Instrument (EDI), arguably the best tool in the world for measuring early childhood development, vulnerability and school readiness. The EDI was developed at McMaster University by Dan Offord and Magdalena Janus in the late 1990's, supported by a nationwide advisory panel that included Clyde Hertzman from the Human Early Learning Partnership (HELP) at UBC, one of the co-authors of this study. HELP carried out EDI testing among the

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⁴ Kershaw et al., 2009.

⁵ Carneiro and Heckman, 2003.

⁶ Forget-Dubois et al., 2007; D'Anguilli et al., 2009.

province's kindergarteners four times between 2000 and 2010, so there is enough useful data to see how trends in early childhood development are affected by the reduced availability of public sector resources.

In BC, kindergarten teachers conduct the EDI assessment after getting to know their students for six months. It uses checklist-style questions to identify individual children's developmental vulnerability in five different areas: physical, social, emotional, language/cognitive and communication skills. By 2004, every school district in BC had completed EDI testing at least once, and 26.1 per cent of kindergarten children demonstrated vulnerability in one or more of the five areas. Geographically, the children's EDI results were mapped across the province's 59 school districts and the 484 neighbourhoods within them. Some school districts on these maps had vulnerability levels as low as 14 per cent or as high as 37 per cent. Similarly, some neighbourhoods had vulnerability levels as low as 10 per cent or as high as 60 per cent.

When this data reached the public in BC, the creation of some 500 initiatives—most of them local—swiftly followed in all areas of the province.⁸ These initiatives were inspired in whole or in part by the EDI assessment findings and included the expansion of parenting support programs, decisions on where to place new community centres and new capital spending on child care.

Because of all the new activities supporting early childhood development, hopes were high that the second province-wide round of EDI measurement—conducted between 2004 and 2007—would reveal great improvement. But these hopes were dashed. Overall vulnerability rose to 29.6 per cent. The range of vulnerability in school districts expanded and was now as low as 12 per cent for some and as high as 54 per cent for others. And the number of neighbourhoods classified as "high vulnerability"—where over one-third of children were found to be developmentally vulnerable in one or more areas on the EDI—increased from 86 to 142.

Indeed, the expected improvements never came. Vulnerability remained stuck between 28.5 and 30 per cent between 2007 and 2010, meaning that, over the course of a decade, vulnerability actually increased. By September 2009, there were about 1,200 additional vulnerable children starting school each year, compared with the four school cohorts who started between 2000 and 2004.

And all of this occurred with widespread local initiatives for early childhood development in place.

Whose kids are at risk?

TO UNDERSTAND WHAT HAS happened to early childhood development outcomes in BC, it is important first to understand what exactly determines developmental success. Interestingly, the early childhood conditions that produce advantages and those that produce disadvantages are not polar opposites. The differences are subtle. For instance, even the number and variety of words spoken directly to a child before the age of three have major developmental effects. Children's ability to use and understand language improves incrementally alongside the number and diversity of words they hear early in life. In the US, by the time a child reaches school age, the child who has heard the most language has actually heard about 30 million more words than the child who has heard the least. But what about the children whose exposure to language falls somewhere in between?

Rates of vulnerability increase gradually, relative to race, ethnicity, sex, neighbourhood, immigration status, parental income, birth weight, gestational age, family mental health history or a combination of these and other factors.

Janus et al., 2007.

Mort, 2004.

Hart and Risley, 2003.

This example illustrates the continuum, or gradient, that we see among children who are developmentally vulnerable. However, children do not fall neatly into vulnerable and not-vulnerable groups. Instead, rates of vulnerability increase gradually, relative to race, ethnicity, sex, neighbourhood, immigration status, parental income, birth weight, gestational age, family mental health history or a combination of these and other factors. As a result, it is impossible to identify any one particular group of children in need of special attention to reverse signs of vulnerability. It is akin to offering language programming only to children who have heard 300,000 words or fewer before the age of three. What about the child who has heard 300,001?

Traditionally, the public sector's approach has been to provide targeted programming for children from low-income backgrounds but to leave the needs of middle-class children to their families. The assumption is that wealthier parents can simply purchase the conditions necessary to reduce developmental vulnerability in their children. However, evidence suggests that this tactic is not effective in improving early childhood development on a large scale. In fact, the largest number (i.e., the numerical majority) of vulnerable children is actually to be found within the densely populated middle class. Consequently, public programs that target only low-income children, for example, miss the majority of young children who face challenges with school readiness.

While this may come as a surprise at first, it is important to understand that financial security alone does not insulate against a child's developmental vulnerability. The early development of middle-class children is impacted by other conditions. How much time do parents spend with them? Is the mother affected by postpartum depression? What is their child care like? Are they parented in a way that is inconsistent, detached or authoritarian? Given the diversity of conditions that produce developmental vulnerability, and the gradients that make at-risk groups of children so hard to pinpoint, Canadian children need a more holistic approach to reduce differences in their classroom readiness. We must aim to flatten these gradients and increase the quality of the early development experience among *all* children, regardless of their individual backgrounds.

This is because of the multiple and diverse conditions that can encourage or inhibit early childhood development. The Total Environment Assessment Model of Early Child Development (TEAM-ECD) illustrates that these conditions occur at different levels, starting with the individual child and expanding outward to include the child's family, the family's immediate community, the community's regional and national context and even the global environment. In addition, conditions at different levels interact. Changes in conditions at the regional or national level often have a trickle-down effect on local communities and individual families, even though these levels are generally thought to be separate. It is unreasonable to expect communities to singlehandedly withstand the numerous and multi-tiered conditions that produce vulnerability in children. Although some communities can, most cannot. This reality underscores the benefits of uniformly high-quality early childhood development and the need for government support.

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¹⁰ Irwin, Siddiqi and Hertzman, 2007.

The determinants of early human development: TEAM-ECD

The individual child

The qualities of a child's early environment, including nutrition, bonding and attachment, stimulation and opportunities for participation,¹¹ have an immense impact on biological and brain development.¹² Shockingly, a child's early experiences even have impacts at a genetic level, altering the way that genes express themselves.¹³ Effective policymaking must take into account how critical these early experiences are.

The family

Families control the extent of a child's interaction with the outside world and determine the availability of economic resources and social resources like parenting skills or family members' health. To produce large-scale improvements in early childhood development, policymakers must address the differences in social and economic resources among Canadian families and aim to flatten those gradients.

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To produce large-scale

Residential and relational communities

Also relevant is *where* early childhood experiences occur. Children in poorer neighbourhoods cannot access the same quality of child care, food and medical services as wealthier children, and they are likelier to be exposed to harmful air and water pollution, excessive noise or poor housing quality.¹⁴ However, children from poorer families living in economically mixed areas often do better in their development than children from similar backgrounds living in poor areas.¹⁵ The limitations of the family can be offset by the offerings of the community.

Relational communities, defined by language, religion or parental occupation, are also relevant, giving children and families a primary identity. The wider community's acceptance of these relational communities can also grant access to additional social resources, which is especially relevant for ethno-racial minorities.

Civil society

Governments are increasingly calling upon communities to devise their own strategies to support early childhood development. This civil society approach encourages the development of local "intersectoral coalitions" to address the needs of families with children. Especially when combined with governmental involvement, active and engaged local communities have immense potential for strengthening early childhood development outcomes.

¹¹ Mayall, 1994; Grantham-McGregor et al., 1997; Boyden and Levison, 2000; Irwin and Johnson, 2005; Irwin, 2006.

¹² Hertzman and Boyce, 2010.

¹³ Ibid.

¹⁴ Evans and Katrowitz, 2002.

¹⁵ Kohen et al., 2002.

Early childhood development programs and services

High-quality early childhood development programs—addressing nutrition, parenting, developmental monitoring, early learning, child care and community strengthening—support parents in their parenting roles and prepare children to participate in society and the workforce, ¹⁶ building skills that assist physical, social, emotional and cognitive development. For optimal success, programs should co-ordinate different sectors of society (e.g., health, education, town planning). The cost of these programs, and the societal co-operation they require to have an impact, explains why they need public sector support. Regional and national governments can assist with funding through taxes and policies, helping to ensure the programs' effectiveness.

Regional and national contexts

Nations, and the regional bodies they are comprised of, also shape early childhood development in the way they value the needs of children. National wealth is not the only important factor. The way a nation or region prioritizes the needs of children and families in its policies is also important and can overcome national poverty. At the national level, five key policy areas make a difference: cash and tax benefits, employment policies, early childhood education and care, support for mothers in the workforce and teenage pregnancy prevention.¹⁷

For example, Sweden's excellent childhood development outcomes result from a robust system of income transfers; accessible, good-quality child care; and ready access to health care and contraceptives to reduce teenage pregnancy. In contrast, the United States has more stringent income transfer policies; underfunded early childhood education programming; and poorer access to health care and contraceptives, which leads to higher teenage pregnancy rates.¹⁸

In addition, regional policies related to public transit, housing costs and publicly funded early years programming also guard against the kinds of conditions that cause developmental vulnerability.

The global environment

The global environment influences early childhood development indirectly, affecting economic and social conditions within nations. The global political arena has also used international treaties to promote early childhood development. For example, the United Nations Convention on the Rights of the Child upholds the rights of children¹⁹ and their principal caregivers—women.²⁰ An appendix to that document holds signatory countries responsible for the physical, social, emotional, linguistic and cognitive development of their youngest citizens.²¹

Regional policies related to public transit, housing costs and publicly funded early years programming also guard against the kinds of conditions that cause developmental vulnerability.

¹⁶ Knudsen et al., 2006.

¹⁷ Kamerman et al., 2003.

¹⁸ Ibid.

¹⁹ UN General Assembly, 1989.

²⁰ UN General Assembly, 1979.

²¹ UN Committee on the Rights of the Child, 2006.

Case study: Sweden

Sweden's comprehensive, publicly supported approach to early childhood development offers a combination of features that work together to optimize developmental outcomes. For example, Sweden makes available high-quality prenatal care that improves low birth-weight rates. Its government offers nearly monthly developmental monitoring in the first 18 months of life in order to identify vision, hearing, speech, language and dental problems before children start school. Nationwide, there are high-quality, publicly funded, universal programs of early learning and care, funded and monitored nationally but organized and delivered locally. And the early education system gradually transitions children from play-based to formal learning at school age in a way that deliberately prevents favouritism toward January babies and girls at the expense of December babies and boys.

The Swedish government also seems to be aware of the interdependence of factors that we saw earlier. The above programs and services are accompanied by an incomes policy that brings virtually all families with young children above the poverty line. In addition, Swedish parents have access to 18 months of paid parental leave, with incentives for the father to take some of it. Indeed, Sweden offers a full suite of policies and programs that work in harmony to support early childhood development nationwide.

It is therefore unsurprising that Sweden sees such great success in child development outcomes. In 2008, Sweden was the only nation among the 25 members of the Organisation for Economic Co-operation and Development (OECD) to meet all 10 United Nations benchmarks for early childhood care and education.¹ The nation boasts an infant mortality rate of 2.4 per 1,000 live births, which is better than Canada's rate of 5.3 per 1,000 and is only slightly behind Iceland, the global leader, whose rate is 2.3 per 1,000. In addition, only 4.2 per cent of babies born in Sweden have low birth weights (below 2.5 kilograms), compared to 5.9 per cent in Canada and 3.9 per cent in Iceland (again the world leader). Furthermore, Sweden has one of the lowest rates of economic inequality in the world. In Sweden, the poorest children have access to disposable income that is 41.2 per cent lower than the median; however, this gap is only 1.8 per cent greater than in Norway, where the gap is the lowest in the world.² The developmental benefits afforded to Swedish newborns and infants have lasting benefits as well, resulting in a nation of children whose scholastic equality is above average in reading, math and science.

¹ UNICEF, 2008.

² UNICEF, 2010.

Implications of the TEAM-ECD model

THE TEAM-ECD MODEL CAN tell us a lot about the effectiveness we can expect from social resilience, in the absence of strong public sector support for early childhood development. First, it is clear that a child's non-dramatic daily experiences are critical in shaping early development. These experiences, however, do not happen without the collaboration of public funders and local service providers. Second, TEAM-ECD demonstrates that social conditions at different levels, from the individual child to the global environment, constantly interact with one other. As a result, addressing concerns at only one level can have only limited success on a large scale.

The interdependence of factors at different levels makes TEAM-ECD a classic complex system. The good news, then, is that what we know about adaptivity and resilience in other complex systems can be applied to TEAM-ECD in order to optimize early childhood development.²² One key finding from other complex systems that certainly applies to TEAM-ECD is the benefit of flattening gradients. As discussed earlier, the increases we see in developmental vulnerability in relation to characteristics like race, neighbourhood and parental income are gradual. There is no clear spike to identify a particular group of children at highest risk. Thus, introducing policies that reduce inequality is the most promising approach to effectively improving early childhood development on a large scale. Reduced inequality means flatter gradients, and flatter gradients mean less developmental vulnerability.

What changed in the mid-1990s was the policy climate in Canada, especially related to government assistance.

The sources of decline in BC's healthy child development index

SO WHAT HAPPENED? How could developmental vulnerability increase in BC in spite of so many new local programs supporting early childhood development? The EDI was used frequently enough in other areas of Canada to provide a meaningful picture of nationwide early childhood development trends. As it turns out, the problem was not unique to BC.

From 1971 until the mid-1990s, Canada outperformed the United States in terms of citizens' overall health. The poorest 20 per cent of Canadians enjoyed the same life expectancy as Americans of average income, ²³ and infant mortality among the poorest 20 per cent of Canadians was lower than infant mortality for the United States as a whole. But between 1996 and 2008, Canada's infant mortality—which had fallen steadily since the 1920s—stopped decreasing. This stagnation is unusual among wealthy countries. In 1992, Canada's infant mortality had been nearly tied with Sweden's for the lowest in the world. Sixteen years later, Canada's rate was almost twice as high. ²⁴

What changed in the mid-1990s was the policy climate in Canada, especially related to government assistance. It turns out that policies related to children are not the only things that affect early childhood development. In fact, policies in seemingly unrelated areas have trickle-down effects that have far greater impacts. One major change was to eligibility requirements for unemployment benefits, which dramatically reduced the number of people who could receive government assistance while unemployed. This change had a disproportionate impact on young Canadians who were of childbearing age but who were not yet rooted in the kind of job security that comes with years of seniority. Another drastic change affected the rules related to transfer payments from

²² Homer-Dixon, 2006.

²³ Singh and Siahpush, 2002; Wilkins et al., 2002.

²⁴ World Bank, 2010.

federal to provincial governments. Although the federal government had previously transferred funds to the provinces for health and social services, it capped these amounts (purportedly in order to bring the national deficit under control). This move forced provinces to cut programs for families with children to avoid increasing their own deficits. While the effect of these policy changes on early childhood development was entirely unforeseen, the impacts were felt nonetheless. It is a classic example of the kind of multi-level interactions illustrated in TEAM-ECD.

Other federal decisions also had impacts at the provincial level. When the Canada Assistance Plan (CAP) was eliminated in 1995, it gave provinces the ability to overhaul the social assistance programs under their jurisdiction.²⁵ CAP legislation had previously held provincial governments to certain minimum standards when administering social assistance—if a province did not offer adequate assistance, or if it forced welfare recipients to participate in training or work programs, the federal resources that funded these programs could be revoked. Without CAP, however, provinces were free to attach new eligibility restrictions to social assistance payments and reduce their amounts.

Changes were made to federal and provincial policies that had previously promoted job security, facilitated high-quality child care, and offered places to live and modest income support.

In BC, this is exactly what happened. Almost immediately, the provincial government tightened eligibility restrictions so that people who refused to work or who quit their jobs were denied social assistance. From 1995 until 1997, social assistance was also withheld from those who had lived in the province for less than three months. Although families with children could apply for "hardship benefits" during this waiting period, these benefits were repayable, placing newly arrived, struggling families into debt. And finally, BC introduced welfare-to-work programs, which had previously been prohibited under CAP legislation. At first, adults with children under age seven were exempt from these programs, but the definition of "employable" was changed in 2002 to require any adult with a child older than three to actively look for work. ²⁶ The results of this legislation would have manifested themselves in the province's kindergarten classrooms as early as 2004—right in the midst of EDI testing.

In 1995, monthly earnings up to \$200—previously permitted for welfare recipients—began to be clawed back dollar for dollar from social assistance payments.²⁷ This worsened in 2002 when child support payments up to \$100 also lost their exemption and were deducted from the welfare cheques of single parents,²⁸ a punitive policy that was finally reversed in 2015. This was accompanied by reductions in social assistance payments the same year, which saw single parents lose about \$51 per month.²⁹

In 1996, a new Family Bonus was introduced as part of the BC Benefits program but an equivalent amount was deducted from the social assistance payments of families on welfare. Since the BC Benefits program eliminated the child's portion of BC sales tax credits, the entire package effectively harmed families on social assistance, who actually lost \$50 per child per year. ³⁰ This made successful early childhood development even harder to attain, especially on monthly allowances that are not indexed to cost of living increases. ³¹

In addition, around this time the Canadian government abandoned its role in policymaking and funding around affordable housing. In the late 1980s, BC was partnering with the federal govern-

²⁵ Klein and Long, 2003.

²⁶ Klein and Pulkingham, 2008, 20.

²⁷ Klein and Montgomery, 2001, 19.

²⁸ Klein and Pulkingham, 2008, 20.

²⁹ Long and Goldberg, 2002, 4.

³⁰ National Council of Welfare, 1997, 97.

³¹ Klein and Long, 2003, 38.

ment to build about 1,800 units of social housing a year for low-income families.³² However, the federal government ceased its support in 1993, leaving provinces to make up this shortfall. BC was one of only two provinces to continue funding affordable housing, and the loss of federal funding had an immense and negative impact. The number of affordable housing units built each year fell from 1,800 to 600,³³ leaving many families in the lurch.

Given the significance of gradients, it is important to note that children from lowest-income households are not necessarily at the highest risk of developmental vulnerability, although this demographic does tend to experience greater harms from the kinds of policy changes discussed above and will likely require a greater amount of support to reverse the impact.

In 2002, while the province trimmed social assistance benefits, it also set in motion cuts to the Ministry of Children and Family Development, which decreased its operating budget by 22 per cent between 2001 and 2005.³⁴ These cuts had a direct impact on programming for BC's youngest residents and financial assistance for their families—changes that would have manifested themselves in the EDI testing for children born between the late 1990s and mid-2000s.

These federal and provincial policy changes combined to create extremely difficult conditions for many BC families. These policies had previously been available to promote job security, facilitate high-quality child care from both parents and community programs and offer places to live and modest income support. Now parents found it more difficult to provide food and housing for their young children, to spend time with them and to find high-quality child care. Canada was failing parents, and that was starting to show.

Indeed, these changes show prominently in the case study from BC, since the EDI data collected from 2000 to 2010 came from cohorts of children born between 1995 and 2005. During this time, developmental vulnerability and infant mortality both showed the same lack of improvement. And it gets worse. By 2005, Canadian children ranked 17th of 24 OECD countries on the UNICEF index tracking inequality and measuring material well-being. That same year, Canada was identified as the wealthy world's lowest investor in "early learning and care." And in 2008, Canada scored last among 26 wealthy countries on a UNICEF index of early learning and care, meeting only one of 10 benchmarks. It appears that the policy changes since the mid-1990s exposed the weakness of Canada's early childhood development infrastructure. When the sharp turn toward neoliberalism came about, there was nothing to cushion the jarring impact on most families and communities.

Most families and communities, however, are not *all*. There were some communities in BC whose EDI scores did not reflect the same overall declines in early childhood development as those in the rest of the province. These communities, termed "trend-buckers," had special residents and unique characteristics that acted as a buffer between harsh government cutbacks and resulting developmental vulnerability.

Policy changes since the mid-1990s exposed the weakness of Canada's early childhood development infrastructure.

³² Stern, 2007, 20.

³³ Ibid.

³⁴ Ministry of Children and Family Development, 2002, 5.

³⁵ UNICEF, 2010.

³⁶ OECD, 2006.

³⁷ UNICEF, 2008.

Trend-buckers at the community level

The history of Canada's policy climate only partly explains what happened to early childhood development in BC between 2000 and 2010. To understand why developmental vulnerability increased here, we must turn our focus toward trend-bucker communities—places where developmental trends went against the grain and where vulnerability results in all areas of the EDI improved continuously over the course of four testing periods.

The trend-bucker communities are either clusters of neighbourhoods or small geographic school districts, and there are fewer than 10 of them altogether in BC. Interestingly, however, the trend-bucker areas are not particularly similar in any political, social, geographic or economic sense. We take a closer look at two of these communities below.

Revelstoke is a small rural school district of about 10,000 people just west of the Rocky Mountains. The population is mostly of European descent, uniformly English-speaking, and has educational attainment on par with the rest of BC. Economically, the community is relatively stable by the province's standards, with child poverty levels that are below average. Over the course of four waves of EDI testing, the developmental vulnerability of children in Revelstoke dropped from 23 per cent to 10 per cent.

By identifying and addressing specific barriers, trend-bucker communities were able to positively impact all developmentally vulnerable children.

Queensborough is a neighbourhood in New Westminster, a working-class Vancouver suburb, and is home to approximately 15,000 people. The vast majority of residents are new immigrants from a variety of non-anglophone countries. About 20 per cent of adults in Queensborough have virtually no knowledge of English or French. While the area's family poverty and levels of parental education are average for BC, there is a high rate of turnover—more than one in five families moves out of the neighbourhood each year. During the first two waves of EDI testing, developmental vulnerability stood at about 47 per cent. On the third and fourth wave, however, developmental vulnerability fell to approximately 26 per cent.

Key informant interviews in both trend-bucker and comparison communities revealed a number of characteristics present in places like Revelstoke and Queensborough that were not present in other areas. The purpose of these interviews was to discover what made these communities different. Researchers wanted to know what kinds of social resources were available in these places that allowed early childhood development to thrive in the face of an unsupportive policy climate.³⁸

Trend-bucker communities, as it turns out, have many unique characteristics. Six in particular are worthy of attention.

First, trend-bucker communities had formed strong and stable policy committees, consisting of members who represented the different levels we saw in the TEAM-ECD model. These committees, called policy coalitions, brought people from child-serving agencies to the same table as people from the municipal and economic sectors. Some of these committees were formed in response to the EDI results, while others were already in place as a result of earlier programs: the province's Children First program or Success by Six, a partnership between the province, the United Way, Credit Unions of BC and aboriginal and community leaders. The funding for these committees generally comes from the BC government as well as grants from community foundations. In trend-bucker communities, these coalitions became the resident experts on early childhood development and

³⁸ Mort, 2004.

powerful enough to persuade decision-makers to consider the impacts of their decisions on early childhood development.

Second, the continued participation of senior leaders in these policy coalitions greatly strengthened their effectiveness. These senior leaders could be from local government or from other key tax-funded institutions (e.g., regional health authorities) and would stay with the coalition over time rather than, say, sending a junior staff member on their behalf. With these individuals came both resources and influence.

Third, community leaders in charge of programming for children and families actually used the outcomes of the EDI for their area to make planning decisions. Of the five areas of development tested by the EDI, these individuals focused specifically on the areas where local children scored lowest. As a result, an overarching, community-specific plan guided both the creation of new programs and alterations to existing ones.

Fourth, the local coalitions and other community decision-makers took steps to ensure that the benefits of policy recommendations and programming would reach all children—not just those at highest risk. A "barriers to access" approach turned out to be quite effective in this regard. Using this approach, community decision-makers were able to put all children on a continuum according to the number and intensity of barriers that stood between them and opportunities to support their development. For middle-class children, the biggest barrier is time pressure on their parents, but other barriers—like cost of programming, transportation and language barriers—arise for those lower on the income scale. This approach helped to overcome the problem posed by gradients, discussed earlier. By identifying and addressing specific barriers, trend-bucker communities were able to positively impact all developmentally vulnerable children—including the unexpected majority found in the middle class.

Fifth, trend-bucker communities cared more about what programs were available in their neigh-bourhood and less about which community agencies delivered them. The organizations delivering programming in these communities overlooked their own preferences in order to co-ordinate programming with other local institutions. As a result, parents had a better variety of programs to choose from, with little unnecessary duplication.

Finally, to facilitate this widespread co-operation, trend-bucker communities pursued collaborative or co-ordinated fundraising. This way, service providers were not in competition with one another for the funding they needed to run their programs. Interestingly, this community co-ordination made these neighbourhoods more attractive to provincial and federal funding bodies, since they could produce more value for money.

Overall, the key component responsible for the developmental successes of trend-bucker communities seems to be their formation of effective policy coalitions. To be effective though, these coalitions had to have certain features. For one thing, they had to have members who represented different societal levels. No agency or institution on its own has much impact on the process of early childhood development—real change happens when multiple levels work together. For another, these coalitions had to provide durable and enduring human and material resources. Coalition members needed to commit for the long term and to secure long-term financial resources and in-kind goods and services in order to be impactful. What these coalitions demonstrate is that social resilience—or success in the absence of government support—is established by what are called "collective implementation goods." These are outcomes that are possible only when actors from different societal levels co-ordinate their efforts toward a common goal.

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However, certain unique elements inherent to these communities are also worth mentioning. In Revelstoke, the school district superintendent was part of the early childhood development coalition, and she played an important role. She had a strong and longstanding reputation in the area, and her expertise in education formed a firm foundation on which she built new knowledge of the importance of early childhood development. After building this knowledge base through her work with the community's policy coalition, the school district superintendent was able to act as a bridge-builder, leveraging her role and reputation to connect the coalition with decision-makers in the regional school district. The coalition could then ensure more directly that families had unrestricted access to community resources that matter for early childhood development.

In Queensborough, which has a larger population, the key ingredient for success in early childhood development was the creation of a new multicultural community centre that supported families and housed early years programming. However, it was the co-operation among the members of this community's policy coalition that made the construction of the community centre possible. The coalition also had members representing provincial, municipal and local levels of government, all of whom shared an understanding that early childhood development was important. As a result, they were able to mobilize effectively. It was also helpful that two members of the coalition represented a provincial government ministry responsible for educational success among new immigrant families. They were therefore able to access funding that enabled the construction of the community centre. And while Queensborough did not have a strong leader like the school district superintendent in Revelstoke, its coalition was able to identify influential individuals within each of the area's ethnic groups.

Government policy must work in concert with the people who interact with children at the local level to ensure a co-ordinated approach to successful early childhood development.

It is true that Queensborough had a high population turnover during the time the EDI data was collected. However, the migration of individual children in and out of the area is unlikely to have had a major impact on the trends observed. In addition, it is likely that the children and families moving in to replace those moving out shared the most crucial characteristics of interest—namely parental education, income and immigrant status.

Trend-bucker communities show us that governments are not the only available source of social resources. Community members with high status, good reputations among their neighbours or unique abilities to access resources can increase a community's social resilience by strengthening its collective implementation goods. However, as successful as communities can be on their own, they cannot realize the full developmental potential of their children without governmental support. Indeed, public sector resources were used to form and assist the policy coalitions that were so helpful in trend-bucker communities. As we saw in TEAM-ECD, conditions at different societal levels will always interact, creating new and unexpected challenges for early childhood development. It is unreasonable to expect that individual communities and families on their own will be able to weather the collective impacts of circumstances at provincial, national and global levels.

Notably, while Queensborough showed strong improvement, its EDI vulnerability score remains very high, pointing to the vital importance of larger provincial and federal policy interventions if the score is ever to reach an acceptable level.

However, it is equally dangerous to rely solely on government for developmental success among young children, removing all responsibility from families and communities. Instead, government policy must work in concert with the people who interact with children at the local level to ensure a co-ordinated approach to successful early childhood development.

Conclusion

WITH THE WEAKEST PUBLIC FUNDING for early childhood development in the wealthy world, the Canadian government has undermined the efforts of local communities to reduce developmental vulnerability among young children. This shows clearly in BC, where early childhood development declined or remained stagnant in most places in the province despite a wide range of programming to support it. Although some communities were able to buck the trends seen throughout the province, successful early childhood development happens most reliably where senior governments and local service providers share responsibility for it and co-ordinate their efforts to achieve it.

Senior governments at the federal and provincial levels must use their influence to pass strategic policies—and allocate the resources necessary to support them—that will affect positive changes in areas like employment, income, housing, parental leave and child care. This kind of strong leadership creates a policy climate that prioritizes the developmental needs of the youngest Canadians and sets a well-furnished stage for the local agencies and individuals who interact with children and shape their development.

In addition, by avoiding narrowly focused policies designed to benefit only the children, families and communities that are conventionally thought of as developmentally vulnerable, governments stand a better chance of having a far-reaching, positive impact across the entire population. As we have seen, the majority of developmentally vulnerable children live in families with middle-class incomes. Part of a policy's strength is its ability to reach all children—not simply the ones at certain points on the gradient of developmental vulnerability.

However, while governments must lead by setting supportive policies, they cannot succeed single-handedly without a co-ordinated partnership with the local agencies and individuals who deliver programming to the youngest Canadians. We saw these kinds of co-ordinated partnerships in the policy coalitions of trend-bucker communities, which serve to illustrate the power of active and engaged citizens to improve early childhood development outcomes. Governments can learn profound lessons from the characteristics of effective local leaders and the infrastructures of agencies and organizations embedded in trend-bucker communities so that their successes may be replicated in other jurisdictions nationwide. The seeds of change may already be in the soil, and the role of government may simply be to provide community-level initiatives with the resources and policies that will nourish them and allow them to grow. Civil society and governmental involvement on their own will never be as effective as co-operation between the two in terms of achieving successful early childhood development. Shifting to this collaborative approach may take years, or even decades, but it is crucial for repairing the damage of poor early childhood development outcomes in Canadian communities.

References

- Barker, David J.P. Mothers, Babies, and Disease Later in Life. London: British Medical Journal Group, 1994.
- Boyden, J., and D. Levison. 2000. "Children as Economic and Social Actors in the Development Process." Working paper for Expert Group on Development Issues. Stockholm, Sweden.
- Bronfenbrenner, U. *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press, 1979.
- Carneiro, P.M., and J.J. Heckman. 2003. *Human Capital Policy*. IZA Discussion Paper No. 821. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=434544.
- D'Anguilli, A., W. Warburton, S. Dahinten and C. Hertzman. 2009. "Population-Level Associations between Preschool Vulnerability and Grade-Four Basic Skills." *PLOS One* 4(11): e7692.
- Evans, G.W., and E. Katrowitz. 2002. "Socioeconomic Status and Health: The Potential Role of Environmental Risk Exposure." *Annual Review of Public Health* 23: 303–31.
- Forget-Dubois, N., J-P. Lemelin, M. Boivin, G. Dionne, J.R. Séguin, F. Vitaro and R.E. Tremblay. 2007. "Predicting Early School Achievement with the EDI: A Longitudinal Population-Based Study." *Early Education and Development* 18(3): 405–26.
- Grantham-McGregor, S.M., S.P. Walker, S.M. Chang and C.A. Powell. 1997. "Effects of Early Childhood Supplementation With and Without Stimulation on Later Development in Stunted Jamaican Children." *American Journal of Clinical Nutrition* 66(2): 247–53.
- Harkonmäki, K., K. Korkeila, J. Vahtera, M. Kivimäki, S. Suominen, L. Sillanmäki and M. Koskenvuo. 2007. "Childhood Adversities as a Predictor of Disability Retirement." *Journal of Epidemiology and Community Health* 61: 479–84.
- Hart, B., and T.R. Risley. 2003. "The Early Catastrophe: The 30 Million Word Gap by Age 3." *American Educator* 27(I): 4–9. http://www.treehouselearning.com/pdf/The_Early_Catastrophe__The_30_ Million_Word_Gap_by_Age3.pdf.
- Hertzman, C., and T. Boyce. 2010. "How Experience Gets Under the Skin to Create Gradients in Developmental Health." *Annual Review of Public Health* 31: 329–47.
- Homer-Dixon, T. *The Upside of Down: Catastrophe, Creativity, and the Renewal of Civilization.* Washington, DC: Island Press, 2006.
- Irwin, L.G. 2006. "The Potential Contribution of Emancipatory Research Methodologies to the Field of Child Health." *Nursing Inquiry* 13(2): 94–102.
- Irwin, L.G., and J. Johnson. 2005. "Interviewing Young Children: Explicating Our Practices and Dilemmas." *Qualitative Health Research* 15(6): 821–31.
- Irwin, L.G., A. Siddiqi and C. Hertzman. 2007. "Early Childhood Development: A Powerful Equalizer." *Coordinators' Notebook* 29: 29–34.
- Janus, M., S. Brinkman, E. Duku, C. Hertzman, R. Santos, M. Sayers, and J. Schroeder. 2007. *The Early Development Instrument: A population-based measure for communities. A handbook on development, properties, and use.* Hamilton, ON: Offord Centre for Child Studies.

- Janus, M., and D. Offord. 2007. "Psychometric properties of the Early Development Instrument (EDI): A teacher-completed measure of children's readiness to learn at school entry." Canadian Journal of Behavioural Science 39, 1, 1-22.
- Kamerman, S.B., M. Neuman, J. Waldfogel and J. Brooks-Gunn. "Social Policies, Family Types and Child Outcomes in Selected OECD Countries." *OECD Social, Employment and Migration Working Papers*, No. 6. Paris, France: OECD Publishing, 2003.
- Kershaw, P., L. Anderson, W. Warburton and C. Hertzman. 15 by 15: A Comprehensive Framework for Early Human Capital Investment in BC. Report to the Business Council of BC Opportunity 2020 Project. Vancouver: Human Early Learning Partnership, 2009.
- Klein, S., and A. Long. *A Bad Time to Be Poor: An Analysis of British Columbia's New Welfare Policies*. Vancouver, BC: Canadian Centre for Policy Alternatives–BC Office and Social Planning and Research Council of BC, 2003.
- Klein, S., and B. Montgomery. *Depressing Wages: How Welfare Cuts Hurt Both the Welfare and Working Poor*. Vancouver, BC: Canadian Centre for Policy Alternatives–BC Office, 2001.
- Klein, S., and J. Pulkingham. *Living on Welfare in BC: Experiences of Longer-Term "Expected to Work"***Recipients. Vancouver, BC: Canadian Centre for Policy Alternatives—BC Office and Raise the Rates, 2008
- Knudsen, E.I., J.J. Heckman, J.L. Cameron and J.P. Shonkoff. 2006. "Economic, Neurobiological, and Behavioral Perspectives on Building America's Future Workforce." *Proceedings of the National Academy of Sciences USA* 103(27): 10155–62.
- Kohen, D.E., J. Brooks-Gunn, T. Leventhal and C. Hertzman. 2002. "Neighbourhood Income and Physical and Social Disorder in Canada: Associations with Young Children's Competencies." *Child Development* 73(6): 1844–60.
- Long, A., and M. Goldberg. *Falling Further Behind: A Comparison of Living Costs and Employment and Assistance Rates in BC*. Vancouver, BC: Social Planning and Research Council of BC, 2002.
- Mayall, B. Children's Childhoods: Observed and Experienced. London: Farmer Press, 1994.
- Ministry of Children and Family Development. 2002. *Service Plan Summary 2002/03–2004/05*. http://www.bcbudget.gov.bc.ca/2002/sp/sp_summaries/children_and_family_development.pdf.
- Mort, J.N. *The EDI (Early Development Instrument) Impact Study. BC School Districts: Embracing Young Children and Their Families*. Vancouver, BC: Human Early Learning Partnership, 2004.
- National Council of Welfare. *Another Look at Welfare Reform*. Ottawa, ON: National Council of Welfare, 1997.
- OECD. Starting Strong II: Early Childhood Education and Care. Paris, France: OECD Publishing, 2006.
- Singh, G.K., and M. Siahpush. 2002. "Increasing Inequalities in All-Cause and Cardiovascular Mortality Among US Adults Aged 25–64 Years by Area Socioeconomic Status, 1969–1998." *International Journal of Epidemiology* 31(3): 600–13.
- Stern, L. *Gaps and Changes in Affordable Housing Policy in B.C.* Burnaby, BC: Social Planning and Research Council of BC, 2007.
- UN Committee on the Rights of the Child (CRC). 2006. *General Comment No. 7 (2005): Implementing Child Rights in Early Childhood.* CRC/C/GC/7/Rev. 1. http://www.refworld.org/docid/460bc5a62.html.

- UN General Assembly. 1979. *Convention on the Elimination of All Forms of Discrimination Against Women*. United Nations, Treaty Series, vol. 1249: 13. http://www.refworld.org/docid/3ae6b3970.html.
- UN General Assembly. 1989. *Convention on the Rights of the Child*. United Nations, Treaty Series, vol. 1577: 3. http://www.refworld.org/docid/3ae6b38fo.html.
- UNICEF. The Child Care Transition: A League Table of Early Childhood Education and Care in Economically Advanced Countries. Innocenti Report Card 8. Florence: UNICEF, Office of Research–Innocenti, 2008.
- UNICEF. The Children Left Behind: A League Table of Inequality in Child Well-Being in the World's Rich Countries. Innocenti Report Card 9. Florence: Office of Research–Innocenti, 2010.
- Wadsworth, M.E. 1997. "Health Inequalities in the Life Course Perspective." *Social Science and Medicine* 44(6): 859–69.
- Wilkins, R., J-M. Berthelot and E. Ng. 2002. *Trends in Mortality by Neighbourhood Income in Urban Canada from 1971 to 1996. Health Reports* (Statistics Canada, Catalogue 82-003), 13 (Suppl.).
- World Bank. 2010. Data Catalog. http://data.worldbank.org/indicator/SP.DYN.IMRT.IN.

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Acknowledgements

The authors would like to thank Marcy Cohen and Seth Klein for their feedback on earlier drafts of this paper and three anonymous reviewers for their helpful comments.

The opinions and recommendations in this report, and any errors, are those of the author, and do not necessarily reflect the views of the publishers and the funders of this report.

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ISBN: 978-1-77125-251-5

Copyedit: Maja Grip Layout: Susan Purtell



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