

Focusing on the Health of the “Whole Child” to Inform a National Child Poverty Reduction

Strategy

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### **Executive Summary**

Poverty remains a fact of life for many Canadians. Child poverty in particular is of grave concern, as persistent economic disadvantage can negatively impact outcomes in later life. We believe that Canada needs to better support (1) quality early childhood education and care (ECEC), (2) high quality education (3) improved food and nutrition, and (4) access to mental health services to support the development of the whole child and have a truly profound impact on reducing child poverty. In this brief, we discuss how these four key determinants of health are linked to and can help reduce the negative impacts of child poverty. We would like to take this opportunity offered by The Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities to support the significant reduction of child poverty in Canada.

Our brief provides a unique outlook on child poverty by promoting a comprehensive “whole child approach”: an approach that effectively addresses child poverty in its complexity. We identify several positive initiatives that warrant further expansion, and are especially relevant to our home region, the Atlantic provinces.

Ultimately, further action to combat child poverty needs to be taken. We have compiled a list of general recommendations relevant for all stakeholders, as well as suggestions related to the four determinants of health, and have also tailored recommendations to specific stakeholders interested in ECEC, education, nutrition and mental health. The overarching themes of our recommendations are to:

1. focus on increasing federal funding to initiatives that will reduce child poverty
2. further engage provinces/territories to support the reduction of child poverty
3. utilize comprehensive approaches and collaborative partnerships that reflect a “whole child” approach.

## **Introduction**

Child poverty is a persistent and pressing issue that affects our nation as a whole. Poverty can be described as being unable to obtain the necessities of life, i.e. being “worse off” than the average population <sup>1</sup>. More specifically, child poverty is of particular concern to Canadians, as persistent economic disadvantage can negatively impact later life outcomes <sup>2</sup>. Recent reports indicate that child poverty affects 1 in 5 children living in Canada, and that these rates have remained alarmingly high for several decades <sup>3,4</sup>.

As graduate students studying in the Masters of Applied Health Services program in the Atlantic provinces, we would like to thank The Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities for the opportunity to address the issue of child poverty in Canada. This call to action has enabled us to recognize positive initiatives currently in place in Atlantic Canada and to suggest impactful recommendations that would support impoverished children in this region and the nation as a whole. Using the “whole child approach,” we will discuss the negative outcomes associated with child poverty in Atlantic Canada. This will be done by addressing the Public Health Agency of Canada’s 12 determinants of health, with an in-depth focus on four determinants, specifically: early childhood and child care, education, nutrition, and mental health and their complex relationship with child poverty. We believe that by addressing these four determinants together, we can more accurately depict the whole Canadian child living in poverty, and can suggest effective strategies for the reduction of child poverty.

## **Child Poverty in the Atlantic Provinces**

Unfortunately, poverty remains prevalent in Canada<sup>2</sup>, including in the Atlantic provinces where efforts to reduce child poverty have fallen short<sup>5,6</sup>. Nova Scotia recently reported that 8.7% of their child population is considered to be low income, and approximately 21% of children in New Brunswick, Prince Edward Island, and Newfoundland

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and Labrador are reported to be living in poverty<sup>7,8,9,10,11</sup>. New Brunswick in particular is ranked as the fourth highest child poverty stricken province; with a high concentration in certain areas<sup>12</sup>. In the city of Saint John, for example, the disparity among rates of child poverty is acute: whereas two wards in the city have rates of 41.1% and 48.5%, rates in two other wards are 18.8% and 18.0%<sup>13</sup>.

### **The “Whole Child” Approach and Child Poverty**

The “whole child approach” is defined by policies, practices and relationships that ensure the wellbeing of the entire child<sup>14</sup>. Within education systems, the “whole child approach” has often been used to ensure that children are healthy, safe, engaged and supported throughout their communities<sup>14</sup>. It engages all stakeholders: family members, policymakers, and community members. The “whole child approach” also raises the bar of accountability in improvement strategies, moving projects beyond single-issue initiatives to ensure that projects reflect the broad array of the determinants of health<sup>14</sup>. The “whole child approach” truly aims for the longevity of successful programs, while keeping in mind the child’s entire experience. In addition, when implementing recommendations from the “whole child approach,” program sustainability is at the forefront, ensuring that they are continuous and have long-term impacts. This is complementary to how the determinants of health are addressed, as both of these approaches strive to promote extended health through the consideration of a variety of factors.

### **Using the Determinants of Health: Addressing Child Poverty**

The negative health outcomes experienced by children living in poverty are heavily documented. Child poverty has been associated with activity-limiting illness, poor health status, acute and recurrent infections, high body mass index (BMI), and increased hospitalization<sup>15</sup>. The determinants of health challenge current and future health issues using a relatively new approach, as healthcare providers, decision makers, and others aim to

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address and prevent these issues. The approach involves addressing the root of the problem, by using inter-professional collaboration, engaging the community, and focusing on society as a whole with special consideration for the health needs of vulnerable sub-populations<sup>16</sup>.

Taking this broad approach has the potential to influence many Canadians, in addition to supporting the enhanced health of future generations. The table below (Table 1) lists each determinant of health and provides examples of how the determinants are impacted by poverty.

**Table 1: Linking the Determinants of health to health status and poverty.**

<b>Determinant of Health</b>	<b>Link to Health</b> <sup>17</sup>	<b>Link to Poverty</b>
<b>Income and Social Status</b>	Higher social and economic status may provide better living conditions and a greater degree of control over life's circumstances.	Living in poverty often means having insufficient income to live a prosperous life and having lower social status in society.
<b>Social Support Networks</b>	Support from social relationships with families, friends, and communities can help people problem solve and overcome adversities.	Children living in poverty are more likely to live with a parent who shows signs of depression, which would impact the support a child receives in their early years <sup>18</sup> .
<b>Education and Literacy</b>	Childhood education and lifelong learning for adults equips individuals with knowledge and problem solving skills, increases sense of control, and leads to opportunities for job and income security.	Low-income children experience more preschool, cognitive and behavioral delays, and impaired cognitive skills related to human capital affect grade retention and high school dropout rates <sup>19</sup> .
<b>Employment/Working Conditions</b>	Unemployment, underemployment, and stressful or unsafe working conditions are related to poor health outcomes.	A child lacking human capital and/or education will negatively impact their likelihood of obtaining and keeping work.
<b>Social Environments</b>	Social stability, recognition of diversity, safety, positive working relationships, and cohesive communities in the broader community are associated with better health.	Impoverished children may be more likely to live through family turmoil in the home, and in communities characterized by crime and poor community supports <sup>20</sup> .

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<b>Physical Environments</b>	Air, water, food, and soil contaminants, as well as poor housing, indoor quality, community design, and transportation systems negatively impact health.	Impoverished children are more likely to be exposed violence as well as more crowded, noisy, and low-quality households <sup>20</sup> .
<b>Personal Health Practices and Coping Skills</b>	Actions that promote self-care, coping with challenges, and skills for self-reliance and problem solving support health.	A disadvantaged childhood has been linked to later health problems such as vascular conditions <sup>17</sup> .
<b>Healthy Child Development</b>	Influences on early brain development, school readiness, and health have a great influence on later-life health status.	Exposure to adverse physical and social environments has the potential to alter the physical structure of a child's DNA <sup>21</sup> .
<b>Biology and Genetic Endowment</b>	The genetic makeup of an individual provides an inherited predisposition to one's health status.	Early years spent in a non-stimulating, nurturing, or supportive environment negatively impacts brain development, which can lead to social, cognitive, and behavioral delays <sup>22</sup> .
<b>Health Services</b>	Having access to health services that promote and restore health, as well as prevent disease supports the health status of the population.	Negative influences on other determinants of health will lead to requirements for greater access to health services.
<b>Gender</b>	Gender includes the various society-determined roles, personality traits, attitudes, behaviors, values, relative power, and influence. Gender-based social status and roles are associated with different health outcomes.	21% of single mothers are more likely to raise children living in poverty compared to only 7% of single fathers <sup>18</sup> .
<b>Culture</b>	Persons or groups of non-dominant cultures may experience greater health risks	Aboriginal, immigrant, and visible minority families experience over double the rate of poverty compared to the national average <sup>23</sup> .

It is clear that the 12 determinants of health are interconnected, and poverty impacts each of them greatly. While all the determinants link to poverty, we found evidence that early childhood education and care, mental health, nutrition, and education truly have a profound impact and are determinants that are amenable to improvement. By fully addressing these

specific determinants, the child (as a whole) will be adequately described, resulting in a comprehensive depiction of a child's life in poverty.

### **Introduction to Early Childhood Education and Care (ECEC) and Child Poverty**

Early childhood education and care (ECEC) are programs designed for young children, which are offered using a play-based pedagogy, and led by qualified educators with a post-secondary education. Such programs involve regular attendance by the child, and may or may not include accompaniment by a parent or caregiver. ECEC may be offered in a variety of settings, including nurseries, child care centers, pre- or junior kindergarten, kindergarten, and family centres<sup>24</sup>. ECEC supports child development, wellbeing and learning, while allowing parents to work, study, and/or care for other family members<sup>24</sup>.

Investing in services for disadvantaged children promotes fairness, social justice, and productivity in the greater society and economy<sup>25</sup>. Early-life programs for disadvantaged children have been associated with higher levels of high school completion, higher salaries, fewer individuals on social assistance, fewer out-of-wedlock births, and lower rates of criminal activity in adulthood compared to disadvantaged children who did not receive the high quality childcare intervention<sup>26</sup>. High quality ECEC also provides respite for parents, supports social and cognitive growth in the child, and allows for monitoring by educators for signs of maltreatment. Therefore, ECEC also acts as a preventative strategy as it promotes the overall resilience for vulnerable families at risk of maltreatment, who constitute a notable proportion of those living in poverty<sup>27</sup>.

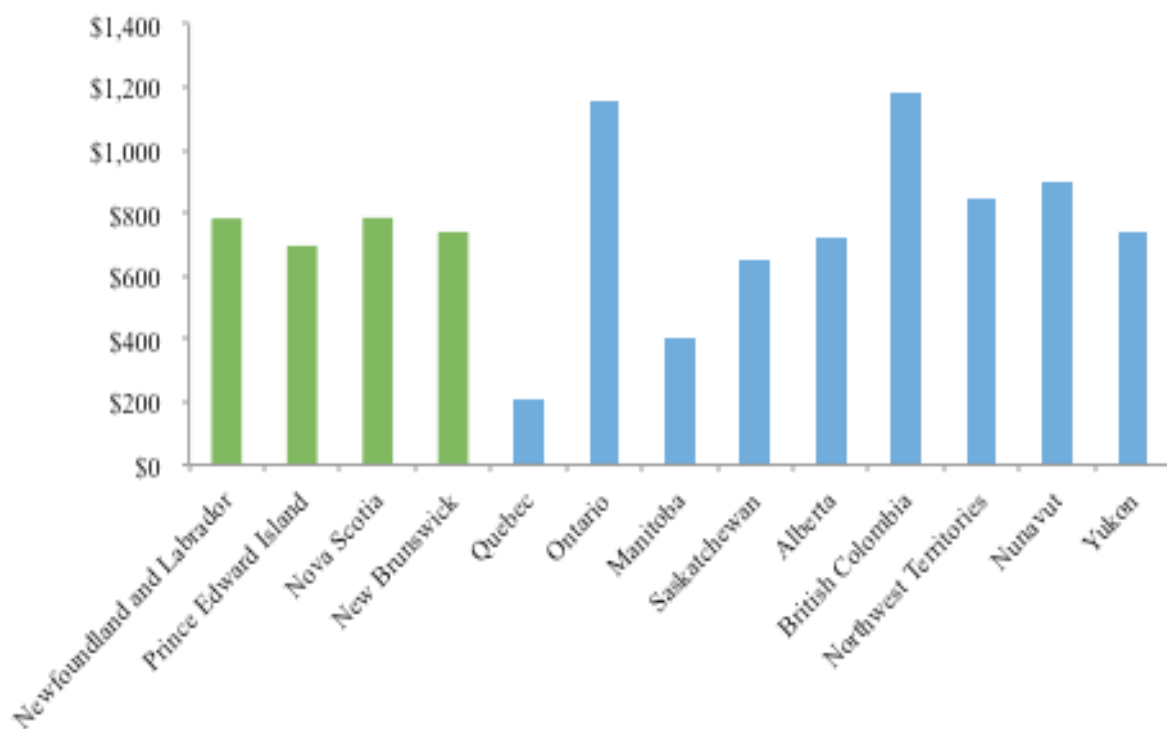
In Canada, ECEC has received significant attention due to various challenges experienced by today's families. Two barriers are key to consider, including high costs and limited spaces. High costs are considered a barrier to accessing ECEC all across Canada, with different provincial subsidization regimes contributing to cost disparities<sup>28</sup>. For example, the highest median cost of full-day preschool childcare was found in Toronto, Ontario at \$1,033

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per month<sup>28</sup>. In Nova Scotia, licensed child care can cost families \$10,000-\$12,000 per year for each child, with the provincial government contributing only about \$3,000 in assistance<sup>29</sup>. Further information on the cost of childcare for each Canadian province and territory can be found in Figure 1 below.

*Figure 1: Average cost of child care per month for each Canadian province and territory<sup>30, 31</sup>.*

This figure illustrates the Atlantic Provinces in green, and the other Canadian provinces and



territories in blue.

Limited spaces also act as a barrier to accessing ECEC, leading to difficulty in locating good-quality ECEC and potentially leading to parents sitting on a waiting list, opting for unregulated child care, or choosing regulated, for-profit child care services<sup>28</sup>. In 2014, for example, there were only enough regulated center-based spaces allotted for 25.5% of children in Nova Scotia<sup>32</sup>. Meanwhile, Newfoundland and Labrador and Prince Edward Island only have enough center-based child care spaces available for 18.9% and 32.4% of children aged 0-5 years, respectively<sup>33,34</sup>. The current system encourages parents to seek unregulated ECEC



options, yet doing so can compromise the quality of their child's ECEC, which is so important for development and later life economic and health outcomes. Additionally, if parents need to "settle" for child care options that are not ideal, depending on the parent's work schedule, it may compromise their ability to work at all. This barrier impacts the parent's ability to participate in the workforce and to provide a livable income for their families. Due to the fact that child poverty does not exist separately from family poverty, such parental consequences are important to consider<sup>11</sup>.

### **Introduction to Education and Child Poverty**

Education can be described as a body of knowledge acquired while receiving or giving systematic instruction, typically in school or university<sup>35</sup>. According to the Public Health Agency of Canada, education is considered a key determinant of health, as it improves an individual's ability to access and understand information which promotes a healthy lifestyle<sup>17</sup>. Effective education also equips people with the knowledge and skills required for problem solving, as well as providing them with additional opportunity for employment, income security and job satisfaction<sup>17</sup>. While education level can greatly influence income, family income can also influence an individual's opportunity and access to education<sup>2, 36, 37</sup>. Unfortunately, the negative effects that poverty has on education are well documented; Canadians who attain lower levels of education are more likely to experience poorer health outcomes, including a reduced life expectancy<sup>17</sup>.

In this brief, education will focus on the experience of children in poverty from preschool to high school completion. When looking at five-year-old children's school readiness, researchers concluded that children coming from lower income families were less ready to learn than children from wealthier homes<sup>38</sup>. A strong correlation between school readiness and the child's home environment has been reported, with one example being that higher measures of readiness are associated with increased positive interactions between

child and parent<sup>38</sup>.

Likewise, the gap in school achievement between high and low income families could very well be related to the home environment<sup>2</sup>. Canadian and American research alike have found that poverty and other risk factors associated with low income have a negative effect on cognitive development and academic success<sup>2</sup>. Research has shown a link between parent academic achievement and that of their children, as well as a link between individual education level and income<sup>16,39</sup>. A child living in poverty is at a disadvantage beginning from when they start school, as neither they nor their parents likely have the means to support post-secondary education, and therefore, the child is more likely to have a low income as an adult<sup>40</sup>.

### **Introduction to Food, Nutrition and Child Poverty**

Canada has one of the highest rates of obesity in the world<sup>41</sup>, with obesity being defined as excess body fat that can severely threaten or affect your life<sup>42</sup>. Obesity is increasingly seen as a disease of the poor within our nation<sup>43</sup>, which is directly related to the lack of nutrition and healthy food intake in this population<sup>44</sup>. Nutrition is defined as the intake of food, in relation to the body's dietary needs<sup>45</sup>. Good nutrition is an adequate, well balanced diet, and is a cornerstone of good health. Poor nutrition can lead to compromised immunity, increased susceptibility to disease, and impaired physical and mental development<sup>45</sup>.

The rates of obesity among adults and children have been continuously increasing over the past three decades<sup>41</sup>, with one in three children having clinical obesity, or requiring immediate assistance in managing their weight<sup>41</sup>. Obesity is also the leading cause of type-2 diabetes, high blood pressure, heart disease, stroke, arthritis and is associated with certain types of cancer<sup>41,44</sup>. These conditions impact individuals, communities, families and the Canadian healthcare system immensely.

Families living in poverty struggle to afford healthy alternatives of food, resulting in

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families purchasing foods high in salt, sugar and fat<sup>46</sup>. In fact, 62% of the Canadian diet consists of processed and ready-to-eat foods<sup>41</sup>. This situation contributes to the lesser health status experienced by families and children living in poverty. When children become obese or overweight, their risks of these adverse health effects is exponentially higher. Recent studies have suggested that obesity also puts children at a higher risk for other health issues such as attention deficit disorders, allergies and ear infections<sup>47</sup>.

While other countries have tried to combat the issue of inadequate child nutrition by implementing school food programs, Canada is the only country in the G7 group of leading economics of the OECD nations without a national school food program<sup>46,48</sup>. Instead, school food programs in Canada are strictly provincial or local or district or school level. Many of the budgets for these programs are too small to provide healthy foods or are not inclusive of all students (i.e., they target specific students), leaving some to fall between the cracks<sup>46</sup>.

### **Introduction to Mental Health and Child Poverty**

When considering a “whole child” approach to child poverty, mental health is a topic that needs to be under key consideration, as stable mental health is linked to many positive outcomes for both children and adults<sup>49,50,51</sup>. Positive mental health is important, as it leads to a balanced and happy mental state, and the ability to cope with stress<sup>52</sup>. This section of the policy brief will focus on providing viable information by outlining what mental health is, and its prevalence and relationship to children in Atlantic Canada.

Optimal mental health is necessary to ensure the proper development of a child<sup>53,54,55</sup>. While a set definition of mental health has not been established<sup>56</sup>, a working definition provided by the World Health Organization describes mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community”<sup>57</sup>. Thus, mental health is a complex but key component in the development of

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any child<sup>55</sup>, yet the relationship between mental health and poverty is rarely discussed, despite the evidence that suggests that mental health and poverty are linked<sup>53, 58, 59, 60</sup>.

While good mental health is needed for healthy child development, there is evidence to suggest that the mental health status of the child population in Atlantic Canada is cause for concern. As an example, many young individuals in New Brunswick have indicated that they experience mental health issues, and in addition many are living in poverty<sup>61</sup>. Furthermore, stress from food insecurity and poverty, as well as social and geographical isolation, are contributing factors to poor mental health<sup>62</sup>. Thus, it can be implied that children in poverty from isolated areas (such as parts of Atlantic Canada) may be at even greater risk of experiencing a mental health issue, as compared to their peers. There is evidence that supports this logic, with estimates suggesting that children in poverty are three times more likely to have a mental health issue,<sup>53, 63</sup> and that impoverished children are at the greatest risk for behavioral disorders, specifically conduct disorder<sup>59, 64, 65</sup>.

Mental health can be linked to child poverty in an abundance of ways, but the most logical association seems to be that youth are more likely to have high unemployment rates, engage in low-wage work, and have restricted access to income supports<sup>66,67</sup>. Without an income and lacking financial supports, many children may find it hard to pursue educational and social opportunities, as well as safe housing, the existence of which can lead to a successful and healthy life. For children living in poverty, lower social status and increased exposure to unsafe environments may lead to more psychological stress, anxiety, or depression<sup>68,69,70,71</sup>. These relationships may provide some insight into why worsened mental health may be experienced by a child living in poverty. Additionally, research indicates that those living in poverty during their childhood are more likely to experience continued poverty into adulthood, with heightened risk of experiencing substance dependence and cardiovascular problems<sup>70,72</sup>.

### **Current Initiatives in Atlantic Canada Addressing Child Poverty**

When discussing the current situation of child poverty in Canada, we recognize that these issues are complex and challenging in their own way. However, other Canadian researchers and organizations have previously investigated factors pertaining to child poverty, and have taken strides to implement reduction strategies. The following section demonstrates some of the initiatives currently in place that are having a positive impact on Canadian children and families living in poverty, with specific attention to initiatives in Atlantic Canada.

#### **Early childhood education and care (ECEC) Initiatives**

In recent years, both the federal and provincial/territorial governments have taken steps to address the challenges that Canadians face in providing children access to good quality ECEC. Quebec is cited often as a leader in ECEC initiatives. Today, the province takes pride in a publicly funded child care program. Starting at \$7.75 per day for families with a net income of \$50,000, an additional contribution is indexed according to family income. The highest maximum daily rate is \$21.20 for a family making \$161,380, and for a second child each additional contribution is reduced by 50% while completely waived for subsequent children.<sup>73</sup>

Quebec has remained focused on meeting the needs of their children and youth with various initiatives, and this has previously led to Quebec women being more likely to complete post-secondary education, enter the workforce, more fathers participating in child rearing, and child poverty rates decreasing by 50%<sup>74</sup>.

Although there is still room to improve, the Atlantic provinces are focusing their attention on improving access to ECEC services. The provincial government of Prince Edward Island now devotes 1.9% of their budget to ECEC, and imposes a maximum fee cap so as to ensure consistent child care fees across the province<sup>75</sup>. In July 2016, the provincial

government of Nova Scotia implemented changes to: increase the number of regulated childcare spaces, the amount of childcare subsidies, broadened the criteria to qualify for these subsidies, imposed a fee cap for ECEC services, and increased wages of the lowest paid ECEC staff<sup>32</sup>. New Brunswick invests \$13 million each year to both child care staff and creating new child care spaces along with implementation of a new early learning and child care curriculum<sup>76</sup>.

In 2006, Newfoundland and Labrador introduced *Reducing Poverty: An Action Plan for Newfoundland and Labrador*, as a comprehensive strategy for reducing poverty<sup>77</sup>. The strategy includes five goals, one of which is alleviating poverty through emphasizing early childhood development. Specific strategies to support this goal include: strengthening early childhood education systems, supporting healthy development through family resource centers, and strengthening early intervention programs for children with disabilities<sup>77</sup>.

With the hopes of further improvement in child care support programs, an additional report called *Caring for Our Future: Provincial Strategy for Quality, Sufficient and Affordable Child Care in Newfoundland and Labrador* was released in 2013. The strategy for this report focused on the province's fiscal and ECEC regulating responsibilities. This aimed to address the quality, sufficiency, and affordability of child care services, and to support parental participation in the workforce<sup>78</sup>.

### **Education Initiatives**

It is important to note that problems associated with child poverty cannot be resolved by schools alone. While effective school staffing and class size reduction can have a positive impact on student learning, we must ensure broader social and economic policies are in place to support the education initiatives, and increase their effectiveness<sup>38</sup>. Multi-systematic interventions, for example, have been successful in both primary and secondary school settings, as seen in the Promise Partnership Program, Youth Peer, and the Pathways to

Education project. These interventions support the “whole child approach” to addressing child poverty, as they ensure the wellbeing of each child through their school and their community<sup>14,38</sup>.

The Promise Partnership program is coordinated by the University of New Brunswick campus in Saint John, and supports youth from priority neighborhoods between grades K-8 through tutoring and mentoring<sup>79</sup>. Not only does the program inform these young students about post-secondary education, it also provides them with an opportunity to bond with a university student, who serves as a positive role model<sup>79</sup>.

Youth Peer is a free peer-mentoring and tutoring program that runs Monday-Friday throughout the school year in Sydney, Nova Scotia<sup>80,81</sup>. Designed for students aged 9-18, Youth Peer provides a supportive environment for at-risk students in the community<sup>81</sup>. Sessions take place in two parts; the first hour provides students with one-on-one tutoring, followed by a second hour of educational games, music, creative arts, socializing and nutritious snacks<sup>81</sup>.

The Pathways to Education project, founded in Ontario, targets the secondary education age group, striving to help adolescents succeed in high school<sup>2</sup>. The project involves four nights of weekly tutoring, as well as career mentoring and financial support for public transit and university scholarships<sup>2</sup>. This collaboration between the community, health center and school board has proven to be successful, as the number of students that graduate and go on to post-secondary studies has nearly doubled<sup>2</sup>.

### **Food and Nutrition Initiatives**

Research has shown that it is important to take an education-integrated approach, involving children in growing and preparing food<sup>82</sup>. The research demonstrates how program sustainability plays an important role in food preparation and food waste, and how school meals can help promote healthy behaviors<sup>82</sup>. Multi-faceted interventions are necessary for

implementing positive changes in regards to healthy eating habits and nutrition. For example, the Boys and Girls Club in Saint John is piloting a school food program with a healthy lunch option<sup>83</sup>. This initiative is being supported by Stone Soup, another not-for-profit organization, and together they are providing nutritious, hot meals on school days to over 100 students throughout the Saint John area<sup>83</sup>.

Newfoundland and Labrador have also made strides in their school food programs, and are now leaders throughout the country in providing children with nutritious meals<sup>84</sup>. In fact, through their Kids Eat Smart program, the province serves over 25,000 nutritious meals across the province every day<sup>84</sup>. Nova Scotia has attempted to follow suit with their own school food programs. As an example, Nourish Nova Scotia provided five million nutritious breakfast meals to children in 2015-2016<sup>85</sup>. The government of Prince Edward Island also funds school food programs.

The province of British Columbia has had success with their provincial school food programs. They have implemented a wide array of school food programs including a fresh fruit and vegetable program that provides free, locally produced snacks for students for part of the school year and a farm-to-school program that promotes the consumption of local foods and connections with the agricultural community<sup>46</sup>

### **Mental Health Initiatives**

While the evidence is clear that child poverty is a pronounced problem in Canada, steps are being taken across the Atlantic provinces to combat the issue, with mental health as a priority. In order to address their high rate of child poverty, New Brunswick has established a program called Peers Engaged in Education and Recovery (PEER) 126, which is located in the city of Saint John. PEER 126 is unique, in that it provides support to young people experiencing mental health issues<sup>86</sup>. Services are centered around what the patient needs, and provides them with treatment and community-based services. The program is one



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of the first of its kind in the area, and addresses key elements that can affect mental health, by including services, such as: counselling, education, employment programs, and peer engagement<sup>87</sup>. PEER 126 is able to not only address mental health, but can also provide services which aid the person in addressing any additional issues which may result from living in poverty. Program coordinators are able to do this by helping the individual return to school, and finding employment and a safe, affordable place to live<sup>86,87</sup>.

Other provinces have also begun to address poverty while focusing on mental health. One example is Prince Edward Island, which in 2012, committed \$4 million dollars towards enhancing programs and services that were poverty-reducing<sup>88</sup>. One of the specific elements of the plan was to strengthen mental health and addictions services for residents, and the province has since begun to implement a province-wide Wellness Strategy<sup>89</sup>.

### **Recommendations**

Taken together, these four determinants have a profound impact on the overall development of a child and his/her success as an adult. A strong program in early life can support positive nutrition and mental health of a child, which can continue during their years at school. Educational settings that foster strong relations with parents, and communities that support positive health and opportunities for citizens also contribute to the whole child approach – it truly takes a village to raise a child. Thus, strategies that emphasize the whole child and social determinants of health must be considered in order to combat all the negative outcomes associated with child poverty. This section focuses first on general recommendations that are relevant for all stakeholders, followed by more specialized recommendations related to each determinant of health.

### **General Recommendations**

Our recommendations are as follows:

1. Increase funding to child poverty strategies:

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- a. Increased government funding (federal, provincial and municipal) in the Atlantic Provinces, to specifically address direct and indirect consequences of child poverty. Neighborhoods or regions that are considered to be a “priority”, or with the highest rates of child poverty, should be focused on first.
  - b. More scholarly and professional funding (from granting agencies like SSHRC and CIHR) should be dedicated to research and evaluate child poverty itself and the efficacy of programs currently in place and innovative and comprehensive strategies. This research and evaluation will help improve societal understanding of the aspects child poverty programs should target, and aspects of established programs that are effective.
2. Providing more comprehensive treatment:
- a. Recognizing first and foremost that health promotion and disease prevention are central during this stage of the lifecycle, treatment is also important. Developing and implementing a national strategy for the expansion of Community Health Centers across Canada needs to be considered and located where they can be easily accessed by families in need. Multi-sector and social service organizations provide high-quality, primary care and can promote health through a collaborative team that can include: family physicians, social workers, nurse practitioners, nurses, registered dietitians, exercise specialists, psychologists, dental hygienists, employment counselors, physiotherapists, and other clinicians. Encouraging interdisciplinary primary care that has a preventative, community-, and patient-centered approach will support the whole child and their experience living in poverty<sup>90</sup>.
  - b. Encouraging communication between the federal, provincial and/or territorial governments to provide extended healthcare coverage to uninsured children

and families<sup>91,92,93</sup>. These services could include but are not limited to: ambulatory services, dentistry, optometry, pharmaceuticals, psychology, and podiatry.

- c. Increased access and readily available homecare services for children and their families need to be considered, as many areas in Atlantic Canada and across the country are geographically isolated. Having designated and trained professionals travel to the homes of at-risk children may provide needed support for parents, and can also help monitor for signs of child maltreatment<sup>94</sup>.

- 3. An additional amount of financial supplementation should be allocated to provinces where the cost of living, food and/or household operation are above the Canadian average. One suggestion would be that the Canada Child Benefit should be indexed to inflation based upon these conditions<sup>95</sup>.

#### 4. Specific Recommendations for Early Childhood Education and Care (ECEC)

- a. Strive to follow the OECD standard of spending 1% of GDP on early child care and learning<sup>96</sup>. While a step in the right direction, the current \$500 million in the federal budget that is allocated to early learning and child care for 2017-2018 falls short of the OECD recommendation, as it only makes up approximately 0.03% of Canada's GDP<sup>96, 97, 98</sup>.
- b. When developing *A National Framework on Early Learning and Child Care*, consider supporting a publicly-funded, Pan-Canadian ECEC strategy and funding plan<sup>96</sup>. Equitable access to ECEC services should be offered to all Canadian families.
- c. Implement caps on fees for ECEC services.
- d. Increase the number of licensed ECEC spaces. This will help to reduce wait lists, and decrease the likelihood of a family turning to unregulated or expensive private, for-

profit child care services<sup>95</sup>.

#### 5. Specific Recommendations for Education

- a. Building on current localized successes, implement multi-systematic interventions nation-wide to address priority neighborhoods, as seen in the Saint John area for example. These multi-systematic interventions provide both educational and social support<sup>99</sup>.
- b. Educate parents about the influence they have on their child's educational attainment. Parents serve as a role model to their children and play an important role in helping them succeed later in life.

#### 6. Specific Recommendations for Food and Nutrition

- a. Increased funding for school food programs and improved coordination among existing program providers are needed to improve, expand, and sustain food programs for all Canadian students and to promote adequate nutrition for the students<sup>100</sup>.
- b. Promote affordable, healthy food choices by making healthy foods accessible to low-income families is extremely important to lowering obesity rates<sup>101</sup>.
- c. Education on gardening, cooking, food literacy, food choices and nutrition factors of food should be incorporated within schools across the country.
- d. Cooking classes should be offered both in schools and to lower-income neighborhoods, to teach both children and families how to make appealing, economical and nutritious meals without spending large amounts of money on groceries. Additionally, school and community gardens initiatives can teach children and families about gardens and locally grown food, while also reaping the benefits of increased consumption of fruit and vegetables.

#### 7. Specific Recommendations for Mental Health

- a. Increase mental health programs for children and adolescents who are under 18 years

of age. Services for this age group should be offered in collaboration with other health services, as to incorporate the “whole child” approach<sup>102</sup>.

- b. Improved access and information on available services and increased awareness of the importance of positive mental health for children and youth. There needs to be a strategy put in place for those struggling with mental health and child poverty to know where to go for help<sup>103</sup>. As an example, schools could offer pamphlets or contact information for shelters, counselors, food banks, and other potential services related to child poverty and mental health.

### **Conclusion**

As graduate students we have had the opportunity to study health related issues in relation to the significant and complex issue of child poverty. Due to our background and interests, we were motivated to take action against child poverty in Canada. Throughout this brief, we discussed negative impacts of child poverty, acknowledged existing Canadian initiatives, and provided recommendations for future approaches. This brief not only highlighted shortcomings of current federal and provincial government efforts, but more importantly has identified positive initiatives taking place in various provinces, with a special focus on Atlantic Canada. It is important to celebrate the programs and policies that are currently effective, and to suggest feasible and impactful recommendations to continue combating the harsh realities of child poverty. With ongoing commitment from the federal government of Canada, along with specific attention towards the determinants of the “whole-child,” we believe that our recommendations can lead to the attainment of sustainable and significant change.

### **About the Authors**

Hailey Arsenault, Emma Boulay, Katherine Houser, and Patricia Malinski are students in the Masters of Applied Health Services Research program, offered in collaboration by the Atlantic Regional Training Centre and multiple Atlantic Canadian Universities. This policy brief represents a collaborative initiative involving support and guidance from Dr. Mary McKenna (at the University of New Brunswick). Initially as a project for a course on the Social Determinants of Health, the students developed a deep interest for child poverty and its close and complex relation with the many aspects that impact health and well-being. Through this brief, the authors hope to have uniquely contributed to the Canadian Poverty Reduction Strategy as both Canadian youth and residents of the Maritime provinces. The authors hope that the federal government continues to provide opportunities for the engagement of Canadian youth through multiple ways, such as inclusion in the brainstorming for national strategies and opportunities for contributing their own valuable perspectives.

## References

1. Parliament of Canada. (n.d.). *Chapter 2: Overview of Poverty Reduction Strategies in Canada and Other Countries*. Retrieved from <http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4770921&File=81>
2. Ferguson, H.B., Bovaird, S., & Mueller, M.P. (2007). The impact of poverty on educational outcomes for children. *Paediatrics & Child Health, 12*(8), 701-706.
3. Campaign 2000. (2015, November). *Let's do this: Let's end child poverty for good. 2015 Report Card on Child and Family Poverty in Canada*. Toronto, ON: Campaign, 2000. Retrieved from <http://campaign2000.ca/wp-content/uploads/2016/03/C2000-National-Report-Card-Nov2015.pdf>
4. The Conference Board of Canada. (2013, January). *International ranking: Child poverty*. Retrieved from <http://www.conferenceboard.ca/hcp/details/society/child-poverty.aspx>
5. Fleury, D. (2008). Perspectives: Low-income children. *Statistics Canada, 75-001-X*, 14-23. Retrieved from <http://www.statcan.gc.ca/pub/75-001-x/2008105/pdf/10578-eng.pdf>
6. UNICEF Innocenti Research Centre. (2012). Measuring Child Poverty: New league tables of child poverty in the world's richest countries. *Innocenti Report Card 10*. Florence Italy: UNICEF Innocenti Research Centre.
7. Canada Without Poverty. (2016a). *New Brunswick poverty progress profile*. Retrieved from <http://www.cwp-csp.ca/wp-content/uploads/2016/12/NB-Report-Fixed.pdf>
8. Canada Without Poverty. (2016b). *Newfoundland and Labrador poverty progress profile*. Retrieved from <http://www.cwp-csp.ca/wp-content/uploads/2016/12/NL-Report-Fixed.pdf>
9. Canada Without Poverty. (2016c). *Nova scotia poverty progress profile*. Retrieved from <http://www.cwp-csp.ca/wp-content/uploads/2016/12/NS-Report-Fixed.pdf>
10. Canada Without Poverty. (2016d). *Prince Edward Island Poverty Progress Profile*. Retrieved from <http://www.cwp-csp.ca/wp-content/uploads/2016/12/PEI-Report-Fixed.pdf>
11. Frank, L. (2016). *The 2016 report card on child and family poverty in nova scotia: Another year, no improvement*. Canadian Centre for Policy Alternatives, Nova Scotia Office. Retrieved from [http://sociology.acadiau.ca/tl\\_files/sites/sociology/resources/pdf%20documents/Report%20Card%20on%20Child%20and%20Family%20Poverty%202016.pdf](http://sociology.acadiau.ca/tl_files/sites/sociology/resources/pdf%20documents/Report%20Card%20on%20Child%20and%20Family%20Poverty%202016.pdf)
12. Human Development Council (HDC). (2014). *A Poverty Outline for Saint John, NB*. Retrieved from [http://vibrantcanada.ca/files/a\\_poverty\\_outline\\_for\\_saint\\_john-\\_fact\\_sheets.pdf](http://vibrantcanada.ca/files/a_poverty_outline_for_saint_john-_fact_sheets.pdf)
13. Human Development Council (HDC). (2016). *2016 New Brunswick child poverty report card*. Retrieved from [http://0104.nccd.net/1\\_5/024/06f/2a3/2016-NB-Child-Povert-Report-Card.pdf](http://0104.nccd.net/1_5/024/06f/2a3/2016-NB-Child-Povert-Report-Card.pdf)
14. ASCD. (2016). *Whole Child*. Retrieved from <http://www.ascd.org/whole-child.aspx>
15. Spencer, N., Thanh, T.M., & Louise. (2013). Low income/socio-economic status in early childhood and physical health in later childhood/adolescence: a systematic

- review. *Maternal and Child Health Journal*, 17(3), 424-431.
16. Public Health Agency of Canada (PHAC). (2008, June 6). *Social and economic factors that influence our health and contribute to health inequities*. Retrieved from <http://www.phac-aspc.gc.ca/cphorsphc-respcacsp/2008/fr-rc/cphorsphc-respcacsp07a-eng.php>
  17. Public Health Agency of Canada (PHAC). (2013). *What Determines Health?* Retrieved from <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php#determinants>
  18. Cool, J. (2009, February 5). Child Poverty in Canada. *Parliament of Canada*. Retrieved from <http://www.lop.parl.gc.ca/Content/LOP/ResearchPublications/prb0862-e.htm>
  19. Baker, M. (2011). Innis Lecture: Universal early childhood interventions: What is the evidence base?. *Canadian Journal of Economics/Revue Canadienne d'Économique*, 44(4), 1069-1105.
  20. Evans, G.W. (2004). The environment of childhood poverty. *American Psychologist*, 59(2), 77.
  21. National Research Council. (2004). *Children's health, the nation's wealth: assessing and improving child health*. Washington, D.C.: National Academies Press.
  22. Maggi, S., Irwin, L.J., Siddiqi, A., & Hertzman, C. (2010). The social determinants of early child development: An overview. *Journal of Paediatrics and Child Health*, 46(2010), 627-635.
  23. Canada Without Poverty. (2017). *Poverty: Just the facts*. Retrieved from <http://www.cwp-csp.ca/poverty/just-the-facts/>
  24. McCuaig, K., & Bertrand, J. (2017, January 20). *Premier's Taskforce on Improving Education Outcomes*. Retrieved from [http://www.oise.utoronto.ca/atkinson/UserFiles/File/Presentations/NL\\_PREMIERS\\_TASKFORCE\\_ON\\_IMPROVING\\_EDUCATION\\_OUTCOMES\\_-\\_Jan\\_2017.pdf](http://www.oise.utoronto.ca/atkinson/UserFiles/File/Presentations/NL_PREMIERS_TASKFORCE_ON_IMPROVING_EDUCATION_OUTCOMES_-_Jan_2017.pdf)
  25. Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, 312(5782), 1900-1902. doi:10.1126/science.1128898
  26. Schweinhart, L., Montie, J., Xiang, Z., Barnett, W., S., Belfield, C., R., & Nores, M. (2005). *Lifetime effects: The high/scope perry preschool study through age 40*. Retrieved from [http://works.bepress.com/william\\_barnett/3/](http://works.bepress.com/william_barnett/3/)
  27. Ellenbogen, S., Klein, B., & Wekerle, C. (2014). Early childhood education as a resilience intervention for maltreated children. *Early Child Development and Care*, 184(9-10), 1364-1377.
  28. Klinger, T., & Macdonald, D. (2015). *They go up so fast: 2015 child care fees in Canadian cities*. Retrieved from [https://www.policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2015/12/They\\_Go\\_Up\\_So\\_Fast\\_2015\\_Child\\_Care\\_Fees\\_in\\_Canadian\\_Cities.pdf](https://www.policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2015/12/They_Go_Up_So_Fast_2015_Child_Care_Fees_in_Canadian_Cities.pdf)
  29. Findlay, T., & Saulnier, C. (2015). *From patchwork quilt to sturdy foundation: Build a seamless early learning and child care system now*. Retrieved from Child Care Canada website: <http://www.childcarecanada.org/documents/research-policy-practice/16/06/patchwork-quilt-sturdy-foundation-build-seamless-early-lear>.



30. MacDonald, D., & Friendly, M. (2016). *A growing concern: 2016 child care fees in Canada's big cities*. Retrieved from <http://www.childcarecanada.org/documents/research-policy-practice/16/12/growing-concern-2016-child-care-fees-canada's-big-cities>
31. Statistics Canada. (2015). *Educational attainment of a person*. Retrieved from <http://www.statcan.gc.ca/eng/concepts/definitions/education02>
32. Children Resource and Research Unit & Canadian Union of Postal Workers. (n.d.a). *Nova Scotia*. Retrieved from <http://findingqualitychildcare.ca/nova-scotia>
33. Children Resource and Research Unit & Canadian Union of Postal Workers. (n.d.b). *Newfoundland and Labrador*. Retrieved from <http://findingqualitychildcare.ca/newfoundland-and-labrador>
34. Children Resource and Research Unit & Canadian Union of Postal Workers. (n.d.c). *Prince Edward Island*. Retrieved from <http://findingqualitychildcare.ca/prince-edward-island>
35. Education. (2017). In *Oxford Dictionary online*. Retrieved from <https://en.oxforddictionaries.com/definition/education>
36. Bryce, R., Blanco Inglesias, C., Pullman, A., & Rogova, A. (2016, January 19). *Inequality Explained: The hidden gaps in Canada's education system*. Retrieved from <https://www.opencanada.org/features/inequality-explained-hidden-gaps-canadas-education-system/>
37. Goldin, C., & Katz, L.F. (2008). *The Race between education and technology: The evolution of U.S. educational wage differentials, 1890 to 2005*. Retrieved from <http://www.nber.org/papers/w12984.pdf>
38. Canada Teachers Federation (CTF). (2009). *Supporting education... building Canada: Child poverty and schools*. Retrieved from [http://www.ctf-fce.ca/Research-Library/FINAL\\_Hilldayleavebehind\\_eng.pdf](http://www.ctf-fce.ca/Research-Library/FINAL_Hilldayleavebehind_eng.pdf)
39. Statistics Canada. (2016). *Education and occupation of high-income Canadians*. Retrieved from [http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-014-x/99-014-x2011003\\_2-eng.cfm](http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-014-x/99-014-x2011003_2-eng.cfm)
40. Statistics Canada. (2011, December, 16). *postsecondary education participation among underrepresented and minority groups*. Retrieved from <http://www.statcan.gc.ca/pub/81-004-x/2011004/article/11595-eng.htm>
41. Senate of Canada. *Obesity in Canada: A Whole-of-Society Approach for a Healthier Canada*. (2016). *Report of the Standing Senate Committee on Social Affairs, Science and Technology*. Retrieved from: [http://www.parl.gc.ca/content/sen/committee/421/SOCI/Reports/2016-02-25\\_Revised\\_report\\_Obesity\\_in\\_Canada\\_e.pdf](http://www.parl.gc.ca/content/sen/committee/421/SOCI/Reports/2016-02-25_Revised_report_Obesity_in_Canada_e.pdf)
42. Childhood Obesity Foundation. (2015). *What is childhood obesity?*. *Childhood Obesity Foundation*. Retrieved from: <http://childhoodobesityfoundation.ca/what-is-childhood-obesity/>
43. Taylor, B. (2010). *Poor and fat: The link between poverty and Canadian children*. *CBC News: Technology & Science*. Retrieved from: <http://www.cbc.ca/news/technology/poor-and-fat-the-link-between-poverty-and-obesity-in-canadian-children-1.972762>

44. Levine, J. (2011). Poverty and obesity in the U.S. *American Diabetes Association*, 60(11), 2667-2668. doi: <https://doi.org/10.2337/db11-1118>
45. World Health Organization (WHO). (2017). *Nutrition*. Retrieved from: <http://www.who.int/topics/nutrition/en/>
46. Hyslop, K. (2014). Does Canada need a national school food program? *Tyee Solution Society*. Retrieved from <https://theyee.ca/News/2014/10/13/Canada-School-Food-Program/>
47. Ferraras, J. (2015). Obesity in Canada is growing steadily worse: Statistics Canada. *Huffington Post*. Retrieved from: [http://www.huffingtonpost.ca/2015/06/23/obesity-canada-statistics\\_n\\_7640466.html](http://www.huffingtonpost.ca/2015/06/23/obesity-canada-statistics_n_7640466.html)
48. Food Secure Canada. (2016, March 22). *federal budget falls behind on school meal funding*. Retrieved from <https://foodsecurecanada.org/resources-news/news-media/press-releases/federal-budget-falls-behind-school-meal-funding>
49. American Psychological Association. (2017). *Children's mental health: Why is children's mental health important?*. Retrieved from <http://www.apa.org/pi/families/children-mental-health.aspx>
50. Herman, H., Saxena, S., & Moodie, R. (2005). *Promoting Mental Health: Concepts, Emerging Evidence, Practice*. Geneva, Switzerland: World Health Organization.
51. HM Government. (2011, February 2). *No health without mental health: A cross-government mental health outcomes strategy for people of all ages*. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/213761/dh\\_124058.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213761/dh_124058.pdf)
52. Canadian Institute for Health Information. (2009). *Improving the Health of Canadians: Exploring Positive Mental Health*. Ottawa, ON: CIHI.
53. Davy, D. (2014, February 19). Kids, poverty and mental health: Anxiety is a growing problem. *CBC Hamilton*. Retrieved from <http://www.cbc.ca/news/canada/hamilton/kids-poverty-and-mental-health-anxiety-a-growing-problem-1.2542001>
54. Schwartz, C., Waddell, C., Barican, J., Garland, O., Nightingale, L., Gray-Grant, D., & Pauls, N. (2011). Early childhood development and mental health. *Children's Mental Health Research Quarterly*, 5(4), 1-16.
55. Stagman, S., & Cooper, J.L. (2010). *Children's mental health: What every policymaker should know*. Retrieved from [http://www.nccp.org/publications/pdf/text\\_929.pdf](http://www.nccp.org/publications/pdf/text_929.pdf)
56. Manwell, L.A., Barbic, S.P., Roberts, K., Durisko, Z., Lee, C., Ware, E., & McKenzie, K. (2015). What is mental health? Evidence towards a new definition from a mixed methods multidisciplinary international survey. *BMJ Open*, 5(e007079), 1-11.
57. World Health Organization (WHO). (2001). *Strengthening mental health promotion*. Geneva, World Health Organization (Fact sheet, No. 220).
58. Brooks-Gunn, J., & Duncan, G.J. (1997). The effects of poverty on children. *The future of children, Children and Poverty*, 7(2), 55-71.
59. Costello, E.J., Compton, S.N., Keeler, G., & Angold, A. (2003). Relationships Between Poverty and Psychopathology. *JAMA*, 290(15), 2023-2029.

60. Evans G.W., & Cassells, R.C. (2013). Childhood poverty, Cumulative Risk Exposure, and Mental Health in Emerging Adults. *Clinical Psychological Science*, 2(3), 287-296.
61. New Brunswick Health Council. (2016, January). *Protective factors as a path to better youth mental health*. Retrieved from [https://www.nbhc.ca/sites/default/files/brief\\_%20protective\\_factors\\_as\\_a\\_path\\_to\\_better\\_youth\\_mental\\_health.pdf](https://www.nbhc.ca/sites/default/files/brief_%20protective_factors_as_a_path_to_better_youth_mental_health.pdf)
62. Muzychka, M. (2007). *An Environmental Scan of Mental Health and Mental Illness in Atlantic Canada*. Prepared for the Public Health Agency of Canada: Atlantic Region. Retrieved from [http://www.multiculturalmentalhealth.ca/wp-content/uploads/2013/10/Mental\\_Health\\_Scan\\_2007\\_Atlantic\\_Canada.pdf](http://www.multiculturalmentalhealth.ca/wp-content/uploads/2013/10/Mental_Health_Scan_2007_Atlantic_Canada.pdf)
63. Canadian Teachers' Federation (CTF). (2013). *Child and youth mental health*. Retrieved from [https://www.ctf-fce.ca/Research-Library/HillDay2013\\_MentalHealth.pdf](https://www.ctf-fce.ca/Research-Library/HillDay2013_MentalHealth.pdf)
64. Meltzer, H., Gatward, R., Goodman, R., & Ford, T. (2000). *Mental health of Children and Adolescents in Great Britain*. The Stationery Office: London, UK.
65. Roberts, R.E., Roberts, C.R., & Xing, Y. (2007). Rates of DSM-IV psychiatric disorders among adolescents in a large metropolitan area. *Journal of Psychiatric Research*, 41, 959-967
66. Annapolis Valley Poverty Coalition. (2012, September). *Rural poverty in Nova Scotia: A position paper. Differences in the experience of poverty in rural settings in Nova Scotia*. Retrieved from [http://www.avdha.nshealth.ca/sites/default/files/rural\\_poverty\\_in\\_ns.pdf](http://www.avdha.nshealth.ca/sites/default/files/rural_poverty_in_ns.pdf)
67. Burns, A., Bruce, D., & Marlin, A. (n.d.). *Rural poverty discussion paper*. Retrieved from [http://www.agr.gc.ca/resources/prod/rural/doc/poverty\\_pauvrete\\_e.pdf](http://www.agr.gc.ca/resources/prod/rural/doc/poverty_pauvrete_e.pdf).
68. Evans, G.W., Wells, N.M., & Moch, A. (2003). Housing and mental health: A review of the evidence and a methodological and conceptual critique. *Journal of Social Issues*, 59(3), 475-500.
69. Kawachi, I., & Berkman, L.F. (2001). Social ties and mental health. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 78(3), 458-467.
70. Lipman, E. L., & Boyle, M.H. (2008, September). *Linking poverty and mental health: A lifespan view*. Retrieved from [http://www.excellenceforchildand youth.ca/sites/default/files/position\\_poverty.pdf](http://www.excellenceforchildand youth.ca/sites/default/files/position_poverty.pdf)
71. Mikkonen, J., & Raphael, D. (2010). *Social Determinants of Health: The Canadian Facts*. Toronto, ON: York University School of Health Policy and Management.
72. Melichior, M., Moffitt, T.E., Milne, B.J., Poulton, R., & Caspi, A. (2007). Why do children from socioeconomically disadvantaged families suffer from poor health when they reach adulthood? A life-course study. *American Journal of Epidemiology*, 166, 966-974.
73. Finances du Québec (2015, April 22). Daily daycare costs. Retrieved from [http://www.budget.finances.gouv.qc.ca/budget/outils/garde\\_en.asp](http://www.budget.finances.gouv.qc.ca/budget/outils/garde_en.asp)
74. Fortin, P., Godbout L., & St- Cerny, S. (2012). *Impact of Quebec's universal low-fee childcare program on female labour force participation, domestic income, and government budgets*. Retrieved from

- [https://www.oise.utoronto.ca/atkinson/UserFiles/File/News/Fortin-Godbout-St\\_Cerny\\_eng.pdf](https://www.oise.utoronto.ca/atkinson/UserFiles/File/News/Fortin-Godbout-St_Cerny_eng.pdf)
75. McCain, M. N., Mustard, J. F., & McCuaig, K. (2011). *Early years study 3: Making decisions, taking action*. Toronto: Margaret & Wallace McCain Family Foundation.
  76. Atkinson Centre. (2017). *Prince Edward Island 2014 – early childhood education report*. Retrieved from [http://ecereport.ca/media/uploads/profiles-eng-2016/pei\\_profile-eng.pdf](http://ecereport.ca/media/uploads/profiles-eng-2016/pei_profile-eng.pdf)
  77. Province of New Brunswick. (2008, June). *Be ready for success: A 10 year early childhood strategy for new brunswick*. Retrieved from <http://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/ELCC/ECHDPE/ELCCStrategy.pdf>
  78. Government of Newfoundland and Labrador. (2005, June 10). *Reducing poverty in Newfoundland and Labrador: Working towards a solution, background report and workbook*. Retrieved from <http://www.gov.nl.ca/publicat/povertydiscussion-final.pdf>
  79. Post-Secondary Education, Training and Labour (PETL). (2016). *Investment in promise partnership*. Retrieved from [http://www2.gnb.ca/content/gnb/en/news/news\\_release.2016.12.1201.html](http://www2.gnb.ca/content/gnb/en/news/news_release.2016.12.1201.html)
  80. Nova Scotia Department of Community Services. (2015, May 21). *Government strengthens supports for youth at risk*. Retrieved from <https://novascotia.ca/news/release/?id=20150521003>
  81. Educational Program Innovations Charity (EPIC). (2016). *Youth peer*. Retrieved from <http://www.epiccharity.com/projects/youth-peer/>
  82. Food and Agriculture Organization (FAO). (2005). *Nutrition education in primary schools*. Retrieved from <http://www.ascd.org/ASCD/pdf/siteASCD/policy/CCSS-and-Whole-Child-one-pager.pdf>
  83. Trainor, S. (2016). Saint John students taste test healthier lunch options. *CBC News*. Retrieved from: <http://www.cbc.ca/news/canada/new-brunswick/saint-john-students-healthy-lunch-stone-soup-1.3505479>
  84. Kids Eat Smart (Newfoundland and Labrador). (2014). *About us*. Retrieved from: <http://www.kidseatsmart.ca/about-us-2>
  85. Nourish Nova Scotia. (2017). *Our story*. Retrieved from <https://nourishns.ca/our-story>
  86. Horizon Health Network. (2017). *P.E.E.R. 126*. Retrieved from <http://en.horizonnb.ca/home/facilities-and-services/services/addictions-and-mental-health/peer-126.aspx>
  87. Horizon Health Network. (2012, June 8). *Unique mental health program for young adults officially opens in Saint John*. Retrieved from <http://en.horizonnb.ca/home/media-centre/horizon-news/unique-mental-health-program-for-young-adults-officially-opens-in-saint-john.aspx>
  88. Canada Social Report. (2016, June). *poverty reduction strategy summary, Prince Edward Island*. Retrieved from <http://www.canadasocialreport.ca/PovertyReductionStrategies/PE.pdf>
  89. Canada Without Poverty. (2015). *Prince Edward Island poverty progress profile*. Retrieved from [http://www.cwp-csp.ca/wp-content/uploads/2012/05/2015-Province-Poverty-Profiles\\_PEI.pdf](http://www.cwp-csp.ca/wp-content/uploads/2012/05/2015-Province-Poverty-Profiles_PEI.pdf)

90. Canadian Association of Community Health Centres. (2017). *About community health centres*. Retrieved from <http://www.cachc.ca/about-chcs/>
91. New Brunswick Canada. (2017). *Healthy smiles, clear vision*. Retrieved from [http://www2.gnb.ca/content/gnb/en/departments/social\\_development/promos/healthy\\_smiles\\_clear\\_vision.html](http://www2.gnb.ca/content/gnb/en/departments/social_development/promos/healthy_smiles_clear_vision.html)
92. Green Shield Canada- Nova Scotia Canada. (2016, January). *provincial health coverage guide 2016*. Retrieved from <http://assets.greenshield.ca/greenshield/Plan%20Members/Benefits%20Dictionary/Provincial%20coverage%20summaries%20ENG/Nova%20Scotia.pdf>
93. Sharma S., & Ford-Jones, E. (2015). Child poverty. Ways forward for the paediatrician: A comprehensive overview of poverty reduction strategies requiring paediatric support. *Paediatrics & Child Health*, 20(4), 203.
94. McMillan, T. (2014, November 12). Royal College Calls for Action to Address Canada's Inadequate Support for Early Childhood. *Canada NewsWire*. Retrieved from <http://search.proquest.com/docview/1622580887>
95. Cleveland, G. (2015). *ECEC Policy in Canada: Availability, affordability and quality*. Retrieved from [https://www.policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2015/09/osos120\\_ECEC\\_Policy.pdf](https://www.policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2015/09/osos120_ECEC_Policy.pdf)
96. Government of Canada. (2017, March 22). *Budget plan*. Retrieved from <http://www.budget.gc.ca/2017/docs/plan/toc-tdm-en.html>
97. Statistics Canada. (2017, March 31). Gross domestic product (GDP) at basic prices, by North American Industry Classification System (NAICS) (*Table 379-0031*). Retrieved from <http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=3790031>
98. Bennett, J. (2008, August). *early childhood services in the OECD countries: A review of the literature and current policy in the early childhood field*. Retrieved from [https://www.unicef-irc.org/publications/pdf/iwp\\_2008\\_01\\_final.pdf](https://www.unicef-irc.org/publications/pdf/iwp_2008_01_final.pdf)
99. Buffum, A., Mattos, M., & Weber, C. (2010, October). The why behind RTI. *Educational Leadership*, 68(2), 10-16.
100. Van Cauwenberghe, E., Maees, L., Spittaels, H., van Lenthe, F.J., Brug, J., Oppert, J.M., & De Bourdeaudhuij, I. (2010). Effectiveness of school-based interventions in Europe to promote healthy nutrition in children and adolescents: systematic review of published and “grey” literature. *British Journal of Nutrition*, 103(6), 781-797.
101. Oostindjer, M., Aschemann-Witzel, J., Wang, Q., Skuland, S.E., Egeland, B., Amdam, G.V., Schjoll, A., Pachuki, M.C., Rozin, P., Stein, J., Lengard Almli, V., & van Kleef, E. (2016). Are school meals a viable and sustainable tool to improve the healthiness and sustainability of children’s diet and food consumption? A cross-national comparative perspective. *Critical Reviews in Food Science and Nutrition*. Doi: 10.1080/10408398.2016.1197180
102. Institute of Medicine of the National Academies. (2006). *Improving the quality of health care for mental and substance-use conditions*. The National Academies Press: Washington, DC. Retrieved from [https://www.ncbi.nlm.nih.gov/books/NBK19830/pdf/Bookshelf\\_NBK19830.pdf](https://www.ncbi.nlm.nih.gov/books/NBK19830/pdf/Bookshelf_NBK19830.pdf)
103. Mental Health Commission of Canada. (2012). *Changing directions, changing lives:*

*The mental health strategy for Canada.* Retrieved from  
<http://strategy.mentalhealthcommission.ca/pdf/strategy-images-en.pdf>