

**Ian Janssen**, SKHS Professor discusses the cost of sedentary behaviour in Canadians and the associated economic impact / **Veronica Poitras**, SKHS PhD Graduate, says research shows even moderate physical activity may be important for health promotion

## **Scanlan: Kids are now heavier, rounder and weaker — the fix ought to be simple** *(snipped from the Ottawa Sun)*

*Wayne Scanlan* / First posted: Thursday, March 23, 2017 07:00 PM EDT | Updated: Thursday, March 23, 2017 08:54 PM EDT



12-year-old David Laurin laughs while getting bombarded with snow during a snowball fight with friends at the Dominion Arboretum on Friday, December 28, 2007.

A 12-year-old millennial is taller, heavier, rounder and weaker than a typical child a quarter-century earlier. So says a professor of pediatrics and a leading expert on childhood obesity. Part four of a four-part series by Wayne Scanlan on youth fitness and sports specialization.

Here's a doctor who gives the diagnosis straight up.

The patient, in this case, is the country of Canada.

Asked to rate Canadian youth on their health and fitness levels, Dr. Mark Tremblay, a professor of pediatric medicine at the University of Ottawa, speaks bluntly, almost sadly.

“Statistically, we’re not doing so well,” says Tremblay, director of the Healthy Active Living and Obesity Research Group (HALO) based at the Children’s Hospital of Eastern Ontario Research Institute. “Not just statistically, but meaningfully.”

Several years ago, Tremblay published a scientific paper comparing a 12-year-old boy and girl from 1981 to a typical 12-year-old in 2007 (based on Statistics Canada data collected from 2007-09). The changes were telling, if hardly surprising.

“It’s profound, just to summarize, that a 12-year-old is taller, heavier, rounder, weaker, less flexible and less aerobically fit than a generation ago,” Tremblay says.

CANADIAN YOUTH	GRADE
Overall physical activity (9% of kids get 60 minutes daily exercise)	D-
Active play (37% of 11-15 yr-olds play outside 2 hours/day)	D+
Organized sport participation (77% aged 5-19 are in the game)	B
Active Transport (24% of kids walk or wheel to school).	D
Sedentary Behaviour (High school students average 8 hours/day screen time)	F

SOURCE: PARTICIPATION REPORT CARD ON PHYSICAL ACTIVITY FOR CHILDREN AND YOUTH

WAYNE SCANLAN AND DENNIS LEUNG

*Click graphic to enlarge*

One can surmise the fitness gap would be even larger today, based on the ‘F’ grade doled out by Participation — a non-profit that promotes active living — under the Sedentary Behaviour category in a 2016 report card on youth fitness.

According to Tremblay’s report, the waist circumference of a 12-year-old girl increased by six centimetres in the 1981/2007 comparison. The grip strength of a boy declined by 10 per cent. As Tremblay says, these findings make sense when we imagine the cultural shift in childhood activities over the past 30 years.

Children were outside every free moment, climbing trees, throwing balls and wrestling after school. They gripped sticks and fired snowballs.

“Just thinking about grip strength, children today grip, very gently, their smart phone, not a tree branch, and not the scruff of someone’s neck,” says Tremblay. At 55, he grew up playing outside, as did most of his generation.

“These are very profound and from a health perspective, very important changes we’ve seen over time.”

According to the World Health Organization, physical inactivity is the fourth leading risk factor for mortality, contributing to an estimated 3.2 million deaths world-wide each year.

**Ian Janssen of Queen’s University** reported that sedentary behaviour cost the Canadian economy an estimated \$6.8 billion in 2009. Continuing down this path with climbing rates of Type 2 diabetes and heart disease, the resulting hit to the economy due to health costs and absenteeism will be massive.

On the flip side, the Conference Board of Canada notes in a 2014 report that a simple intervention of increased physical activity and reduced sedentary behaviours would reduce health care spending by more than \$2 billion by the year 2040.

And still we sit idle.

The data on adult fitness is even more grim. In 2015, Health Canada reported that 54 per cent of Canadian adults were considered overweight or obese, compared to 23.1 per cent of adolescents 12-17.

“Scientifically the fitness of our nation has declined,” Tremblay says. “We’ve demonstrated quite recently that aerobic fitness in children around the world has declined, in a systematic way across the last several decades. Again, not that surprising.

“The decline is slower in mid and lower-income countries where they walk to school, do their chores, and need to lift things.”

Get outdoors

How to change this picture? Dr. Tremblay draws a sigh, based on years of delivering a message unheeded.

A culture change is required, as fundamental as a glance back to Canada’s past, a simpler time when we spent hours outside engaged in work and play. Those same electronic devices holding adults and children in a spell deliver overwrought tales from around the globe of danger lurking around the corner.

“If you send your eight-year-old out to play on his own some nosy neighbour is going to call child services and a whole orchestration is involved,” Tremblay says.

In the 1960s if a child wasn't outside playing, neighbours would have thought that family strange.

Fear permeates our culture, and not just because of the latest terrorist attack.

Dr. Tremblay notes dryly, "you can't go out in the morning because of mosquitoes and the risk of West Nile (virus). Later in the day, there is rush hour traffic . . . pollution. Sun causes skin cancer.

"So, you can't go out at any point in time."

The solution seems simple. Shake the fear and open the door. Instantly, activity levels rise, sedentary behaviours wane. Bone density improves. Stress evaporates. Texting and walking becomes difficult, but the smart phone will dutifully record an active step count. Later in the day, sleep should be better.

"Incidental eating is reduced," Tremblay says, of the bi-products of going outdoors. "Steps increase. Connection with the environment is improved. The chances of authentic interaction with people, animals, plants is infinitely greater. And on it goes."

Tremblay calls the widespread opportunity of an activity outdoors, as rudimentary as a walk, the "low hanging fruit" against a building health care crisis.

"I'm looking out my back window right now," says Tremblay, watching his dogs wrestle playfully. "It's there. It's free. I can go there right now and do something and so can everyone."

The majority of Canadians live within a kilometre of a public park.

There is a movement, gaining strength, of advocating not just outdoor play but slightly more risky play, such as running UP a slide or climbing trees. Activities of yore. Dr. Mariana Brussoni led a study in British Columbia that showed risky outdoor play promoted health, but also creativity, social skills and resilience in youth.

We have the doctor's diagnosis. Now, the summation of a remedy:

"You've got to eat well, move well, sleep well and avoid toxins. It's as simple as that," Tremblay says. "We can make it as complicated and as sexy as we want. Sell supplements and fancy gadgets or whatever, but the basics always rise to the top."

Frontier reputation

Two weeks ago, Tremblay delivered the keynote closing address at the 2017 Canadian Parks conference in honour of Canada's sesquicentennial celebrations. He was struck by the irony presented to him, marking an active, glorious past during this period of inertia.

“As we reflect back on 150 years, we have a heritage as frontiers people — nature and the outdoors are almost synonymous with what it was like to be Canadian, whether it’s canoeing across a lake or snowshoeing through a forest,” Tremblay says.

“And the great outdoors is still there. We are the second biggest country in the world, probably the most beautiful, and physical activity opportunities are endless.”

### **But wait: There’s good news for Canadians who can’t find the time to exercise**

Vacuuming the family room counts.

**Dr. Veronica Poitras, (SKHS PhD Graduate - sic)** a researcher with CADTH, a not-for-profit health care resource, led a comprehensive review by the Healthy Active Living and Obesity Research Group (HALO) in 2015 that illustrated how even a modicum of exercise delivers health benefits.

Focusing on school-aged children and youth (5-17), the review included findings from 162 studies, representing more than 200,000 participants from 31 different countries around the world.

The punchline:

“There’s new evidence that’s beginning to show that all intensities of physical activity may be important for health promotion and disease prevention, and this includes lighter intensity activities we might not think of – playing with a pet, going for a walk, helping with household chores,” Poitras says.

The review offered four key findings:

1. A range of physical activity has a significant positive impact on physical, social and cognitive health. This includes body composition, cardiovascular health, bone density, fitness, motor skills, well-being and quality of life.
2. While higher intensity activity resulted in greater health benefits, ALL levels of intensity improved health indicators.
3. Physical activity can be collected throughout the day, like rain in a barrel. Intermittent movement contributes to the total. Exercise doesn’t have to come in one longer bout.
4. More physical activity – in terms of duration, intensity and frequency – was superior for health promotion than lighter levels.

The massive collection of data was encouraging to health care providers who can relay a message that improving fitness levels doesn’t have to rely on an expensive gym membership or sports program.

“When it comes to physical activity, something is better than nothing,” Poitras says, “and more is better than less.”

Participation gives Canadian communities high marks for providing facilities (an A- grade in a 2016 health report card). About 95 per cent of parents report they have facilities – pools, arenas, and sports programs in their neighbourhood.

“But we see time and again that having access to these kinds of supports isn’t enough to get kids moving more,” Poitras says. “We need different strategies. We have to create a climate in Canada where the active choice is the default.”

Poitras recommends positive role modelling at home and sharing an active lifestyle. Screen time should be limited to two hours per day for school-age children along with at least 60 minutes of moderate to vigorous exercise. Currently, just 24 per cent of youth 5-17 meet the two-hour screen time limit.

Kids under two should be kept from screens (including TV), yet according to Poitras, 80 per cent of children under two do get screen exposure and the average screen time for three- and four-year-olds is two hours a day.

“Over the past decade, physical activity has decreased, sedentary behaviours have increased and sleep deprivation has become common,” Poitras said.

A comprehensive healthy study on children under four is scheduled to be released this fall.

[wscanlan@postmedia.com](mailto:wscanlan@postmedia.com)