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What's Happening in After-school Programs?

Findings from an Environmental Scan of After-school Programs in Alberta



ALBERTA CENTRE FOR
Active Living

Research and education
for the promotion of physical activity

Introduction

The purpose of this project was to learn about physical activity participation, physical activity opportunities, sedentary behaviour and caregiver role modeling in after-school programs across Alberta. The Alberta Centre for Active Living surveyed after-school program managers across Alberta and conducted two focus groups. Key findings from these assessments are included in this brief report.

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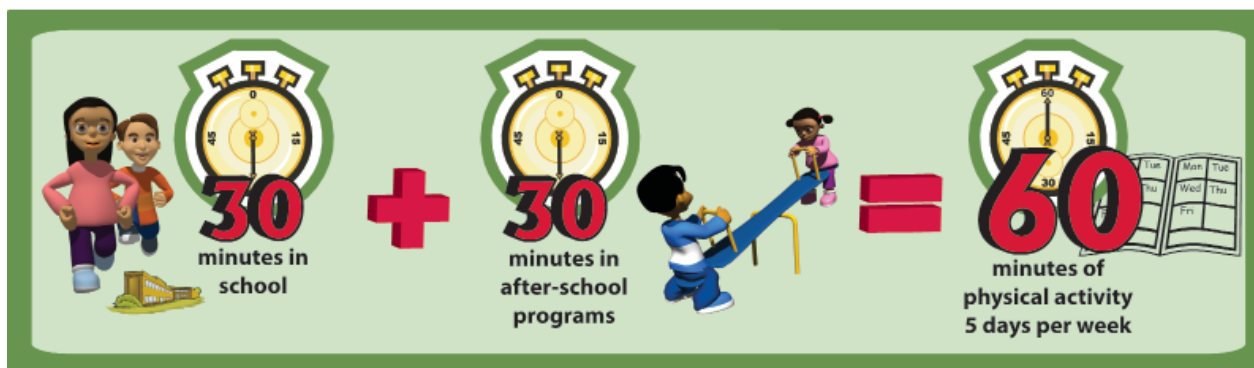
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According to the Canadian Physical Activity Guidelines (2011), children and youth need at least 60 minutes of moderate-to-vigorous physical activity on a daily basis.

Currently, Alberta Education is committed to supporting a minimum of 30 minutes of daily physical activity (DPA) for children and youth in grades 1 through 9 (Alberta Education, 2012).

One promising strategy for providing children and youth with the opportunity to accumulate an additional 30 minutes (for a total of 60 minutes of physical activity per day) is to promote and support a minimum of 30 minutes of moderate-to-vigorous physical activity (MVPA) **during the after-school hours.**



Most after-school programs are well-positioned to provide daily physical activity by tailoring programs to include a minimum of 30 minutes of MVPA.

The combination of DPA in schools and daily MVPA in after-school programs could help Alberta children meet the Canadian Physical Activity Guidelines.

Understanding Moderate-to-Vigorous Physical Activity (MVPA)

Physical Activity:

- movement that increases heart rate and breathing
- any bodily movement produced by skeletal muscles that requires energy expenditure

Moderate Physical Activity:

4.0 to 5.9 times the intensity of rest. On a scale from 0 to 10 of an individual's personal capacity, moderate-intensity is a 5 or 6. Examples include:

- walking at a moderate pace,
- bicycling,
- dancing,
- badminton,
- frisbee,
- active recreation, and
- playing on school playground equipment.

Vigorous Physical Activity:

greater than 7.0 times the intensity of rest. On a scale from 0 to 10 of an individual's personal capacity, vigorous intensity is a 7 or 8. Examples include:

- jogging and running,
- jumping rope,
- most competitive sports,
- running and chasing games, and
- vigorous dancing or aerobics.

(Canadian Society for Exercise Physiology, 2011)

Champions for Physical Activity

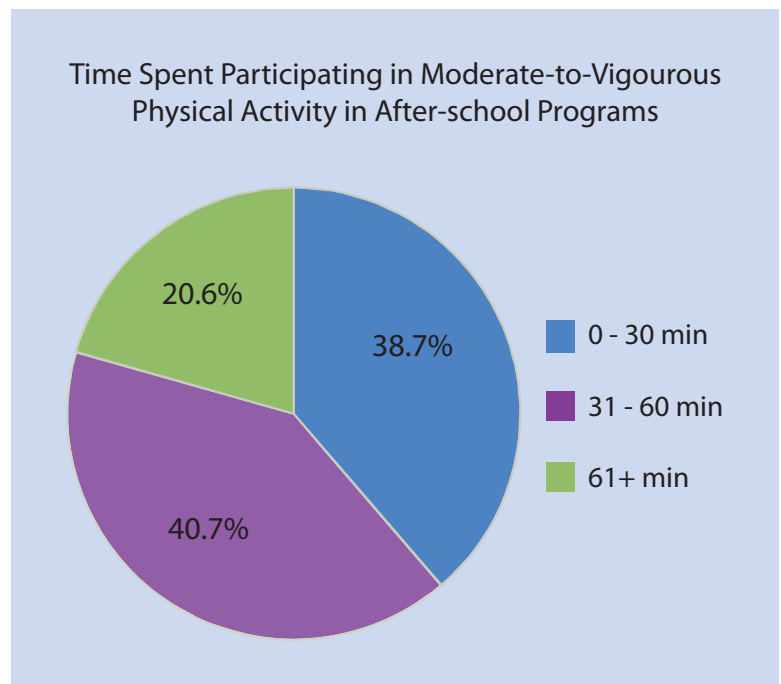
Moderate-to-Vigorous Physical Activity

61% of after-school programs offer more than 30 minutes of moderate-to-vigorous physical activity per day.

79% of after-school program managers identified that it is possible to provide daily moderate-to-vigorous physical activity in Alberta after-school programs.

Based on the results noted above, further encouragement, promotion and support for daily MVPA in after-school programs appears to be a good strategy for increasing physical activity levels. More after-school programs/providers could be encouraged to structure their daily schedule to include at least 30 minutes of MVPA. In this way, after-school care providers could be physical activity “champions” for Albertan children and youth.

Currently, many programs offer more than 30 minutes of daily MVPA.

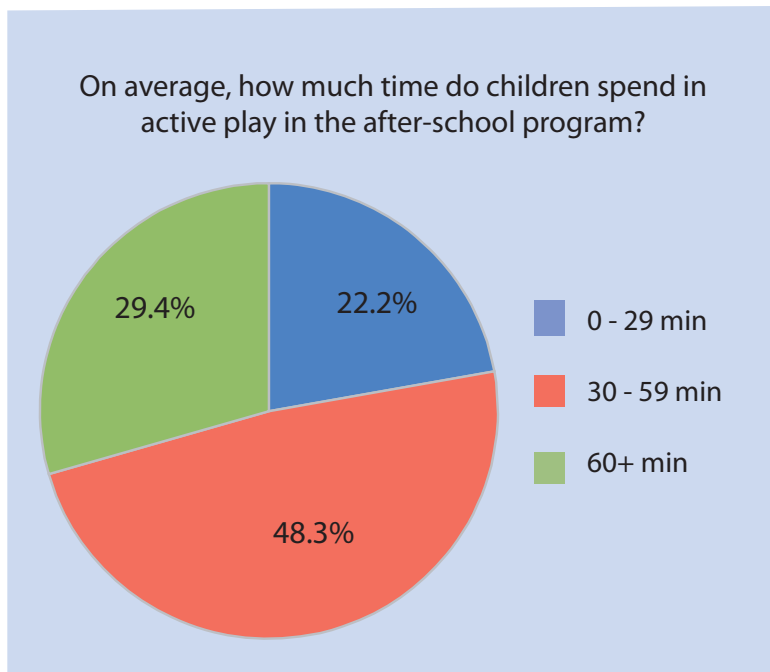


Physical Activity and Play

78% of after-school programs include 30 minutes or more of active play.

Active play contributes to the accumulation of MVPA. Active play often includes small and sporadic bouts of MVPA with frequent rest periods (Bailey, Olson, Pepper, Porszasz, Barstow & Cooper, 1995). These bouts of activity contribute to the total accumulation of MVPA and reduce sedentary time.

Furthermore, active play contributes to cognitive, social and emotional benefits that are not achieved during organized and structured play (Brockman, Jago & Fox, 2010; Brockman, Fox & Jago, 2011). Some examples include developing creativity, resolving conflict among peers, and building resiliency.



Play

Play is an activity that is freely chosen, personally directed and intrinsically motivated (Playwork Principles Scrutiny Group, 2005). The benefits of play include increasing the physical, emotional and social well-being of children (Gleave & Cole-Hamilton, 2012).

Active Play

Active play includes the qualities of play, such as being fun, freely chosen, personally directed and spontaneous, in addition to having an energy cost greater than at rest (Active Healthy Kids Canada, 2012; Bergen, 2009). More specifically, active play may include regular bursts of MVPA, such as crawling, jumping, or running. Active play raises children's heart rate and makes them "huff and puff" (Murdoch Childrens Research Institute and Royal Children's Hospital, 2008).

Active Opportunities

Active opportunities are unique aspects of the childcare setting that increase the likelihood of MVPA engagement (Bower, Hales, Tate, Rubin, Benjamin, & Ward, 2008). The amount of scheduled, structured and free physical activity (indoor and outdoor) was assessed and identified as active opportunities.

Organized Play

This type of play includes planned, adult-directed activities that may vary in the degree of structure.

Free Play

Children choose “what they want to do”, “how they want to do it”, and “when to stop and try something else”.

No goals are set by adults and the play does not include adult-imposed curriculum.

Adults may provide the space and resources, and may be involved in the play, but the child takes the lead and the adult responds to the child’s cues (Santer, Griffith, & Goodall, 2007).

Outdoor Play

36% of after-school programs offer 30 minutes or more of organized outdoor play per day.

43% of after-school programs offer 30 minutes or more of free outdoor play per day.

Indoor Play

45% of after-school programs offer 30 minutes or more of organized indoor active play.

54% of after-school programs offer 30 minutes or more of free indoor play.

According to the CANPLAY data, 69% of children and youth participate in outdoor play during the critical hours between 3 to 6 p.m. In Alberta, after-school program managers schedule less outdoor play than the average child and youth participate in across Western Canada during those hours (CFLRI, 2010).

Outdoor play has been identified as a method of accumulating MVPA, as well as lowering stress, increasing creativity, improving imagination and developing respect for oneself and others (Burdette & Whitaker, 2005).

Barriers and Facilitators



After-school program managers identified several improvements that would facilitate having daily MVPA in their after-school programs. These improvements included:

- improvements/alterations to indoor space (50%),
- physical activity training or workshops for staff (47%),
- resource manuals for staff, with lesson plans (42%), and
- portable equipment, e.g., balls, pylons, ropes, mats, etc. (41%).

The focus group sessions identified the most common barriers to physical activity as space (lack of space or proper space for activity) and a lack of specialized staff training and workshops.

Other barriers or factors included the program priorities, lack of interest by the children/youth, and lack of equipment.

A lack of space, especially indoor space in the cold winter months, was the greatest barrier to MVPA according to the focus group data. During the cold winter months, after-school programs struggle to provide safe, MVPA. After-school programs often attempt to address this issue by leasing school gymnasiums. According to the focus group data, programs that have successfully negotiated a “joint-use agreement” with a school are generally able to maintain a physical activity program throughout the school year.

Those schools that don’t offer joint-use agreements require after-school programs to lease the gymnasium, which requires the program to have their own liability insurance for the space. This becomes very costly for the after-school program and is often identified as the main reason that after-school programs do not use this space.

During the warmer months, after-school programs take advantage of green space and playgrounds in nearby neighborhoods.

Recently, some licensed after-school programs have been instructed on physical literacy and have incorporated these activities into their programs.

Specialty instructors and workshops from sport organizations have been used in some after-school programs to introduce children and youth to a variety of activities, e.g., field hockey, hip hop dancing, and yoga.

The next page includes some of the barriers and facilitators that were explored during the follow-up focus group sessions.

Barriers

Space

- Lack of gym space is a concern. Getting access to gym space in schools is difficult and not available on a consistent basis.
- There is not enough space for safe, moderate-to-vigorous physical activity.
- Cold weather limits the use of outdoor space in the winter.
- After-school programs are required to have a craft area, eating area, reading area, etc. Therefore, the space for physical activity is limited due to other competing needs within childcare centres.
- Leaving the after-school program property to use local fields and parks creates confusion for parents at pick-up time.

Time

- Parents pick up children at different times; there is not always time to fit in physical activity, especially if the children go off-site.
- Parents want the children to have homework time and craft time; they want to see what the child has been doing.

Interest of the Children

- Not all of the children want to participate in physical activity.
- It can be difficult keeping the attention and focus of all the children when participating in physical activity.

Facilitators

Staff Training

- Have lesson plans that are ready to use, with little or no equipment requirements.
- Provide workshops and/or online resources for staff concerning:
 - ◆ physical activity in small spaces,
 - ◆ physical activity options in the winter months,
 - ◆ engaging children with different skills, motivation and competencies, and
 - ◆ motivating kids that don't like being active.

Sedentary Time



Sedentary environments are those which discourage physical activity, such as television or computer rooms (Brower et al., 2008).

On average, after-school programs in Alberta schedule 60 minutes of sedentary time.

The most common types of sedentary activities included in after-school programs were:

- doing crafts (93%),
- eating (90%),
- reading (87%),
- making art (86%), and
- doing homework (82%).

The number of after-school programs that allowed screen-time activities (such as watching television or movies, playing video games, and computer activities) was limited.

Why are Children Sedentary?

Purpose (focus) of the program

According to the comments from the survey respondents, many programs successfully incorporate physical activity as a daily aspect of the after-school program curriculum.

Other programs identified that physical activity was not the focus of the program, but children were not sedentary for long, even during homework time. Many respondents identified that children were allowed and encouraged to move around, rather than being confined to doing their crafts or homework. In one case, the children were encouraged to stand while drawing.

Activity preferences of children

At many after-school programs, children are able to choose their preferred types of activities. Some children choose physical activities, while others choose more sedentary activities. Those children that were already achieving the appropriate amount of physical activity were choosing to do more physical activity, whereas those that could benefit most from being physically active chose sedentary activities.



Logistics

There were different logistical factors that contributed to the amount of sedentary time experienced by children in the after-school programs.

Some of these factors included: space (indoor and outdoor), range of ages, number of children and staff members, weather conditions, UV index, accessibility to active spaces such as gyms and parks, and the level of physical activity expertise of staff.

Lack of space to safely participate in physical activity was a concern. Staff members found it challenging to find physical activities that a large group of children of various ages can play together.

Environmental factors such as wet or cold weather, early onset of darkness in the late fall and winter months (during after-school hours), and days with high UV index ratings were related with more sedentary activities being scheduled indoors.

Focus Group Findings

Focus group findings mirrored the survey responses. According to the focus group data, contributors to sedentary activity included:

- lack of space,
- lack of interest in physical activity by some children, and
- the primary focus of the after-school program was not physical activity (e.g., homework might be the main focus).

The majority of the after-school programs did not allow the use of personal gaming devices or cell phones. Where such usage was allowed, limits were set, such as 20 minutes per day or one hour per week. It was noted that while children were using or playing with these devices, they were completely sedentary and quiet, which is a desired state in many after-school programs.

Survey and Focus Groups

Respondents

After-school program managers from both urban and rural communities in Alberta completed an online survey in the fall of 2011 (n=168 complete surveys). This was followed by two focus group sessions that further explored physical activity and sedentary behaviour in after-school programs.

Program Description

The number of children engaged in each of the surveyed after-school programs varied.

On average, after-school programs included 10 children aged five or six, 16 aged seven or eight, 12 aged nine or ten, and 6 aged eleven or twelve.

The majority of the after-school programs took place in schools (45%), childcare centres (28%) and non-profit organizations (18%).

Of the 168 respondents, 89% managed registered programs and 32% percent managed drop-in, after-school programs. Paid fees were associated with 86% of the programs.

Objectives of the After-school Programs

The most prominent objectives of after-school programs were fun, physical activity participation, and the development of self-esteem, coping and self-efficacy.





Policies

40% of the after-school programs had physical activity policies,

16% of the after-school program managers offered staff training on physical activity curriculum.

Transportation to the Program

A variety of transportation methods were used by children to reach the after-school program including: walking on their own (43%), walking with supervision (44%), or taking a school bus (31%).

After-school Program Workers

The front-line staff working for the surveyed after-school programs had an average of 7.5 years of after-school program experience.

The workers were predominantly female. On average, the after-school programs had five women working as front-line staff and employed less than one male per program.

Front-line employees were predominantly in their twenties. On average, after-school programs employed front-line workers in the following age categories:

- 20 years or less = less than 1 per program
- 21 - 29 years = 2 to 3 per program
- 30 - 39 years = 1 worker per program
- 40 - 49 years = 1 worker per program
- 50 years or greater = less than 1 worker per program

Overall, after-school programs employ 2 to 3 full-time workers, 2 to 3 part-time workers and less than 1 casual front-line worker. For the most part, the front-line staff had college diplomas or university degrees, though all employees had a minimum of a high school diploma.

According to the focus group findings, most of the front-line workers were young adults who were university or college students, or teachers in a transitional period before starting their teaching careers.

Due to the short shifts at the end of the day and/or split shifts (7:00 - 9:00 a.m. and 3:00 - 6:00 p.m., weekdays), students are often good candidates for these positions. The program managers highlighted that younger staff generally connect well with children and youth, have a lot of energy, and are able to keep up with the physical demands of working with children. In addition, program managers considered that most younger staff sincerely enjoy their time with the children.

One of the shortcomings, identified by the program managers, of having a youthful staff was the immaturity surrounding some issues (e.g., cell phone usage) and poor communication styles when conversing with parents.

Positive and Negative Role Models

Program managers identified that most of their front-line workers were positive role models, due to factors such as:

- positive employee attitudes about physical activity,
- prior physical activity training,
- participation in physical activity outside of the workplace, and
- positive messaging about physical activity via their interactions and engagement with the children in a physically active context.

According to the program managers, some front-line workers were poor physical activity role models, due to factors such as:

- not having the confidence to participate in or lead physical activity,
- not maintaining a healthy body weight, and
- having a health condition that prevented participation or leadership in physical activity.

Recommendations

For after-school program managers:

Provide quality physical activity programming:

- Incorporate programs or initiatives that have already been created (e.g., Cool Moves, Move and Play through Physical Literacy, ActiveAte).
- Encourage and plan for outdoor play.
- Tailor or re-tailor programs to include or boost physical activity (indoor and outdoor).
- Provide a permanent outdoor play space for the after-school program, if possible.
- Provide resources that support physical activities, e.g., balls, skipping ropes, sports equipment, music.

Focus on staff training/behaviours:

- Aim to ensure all staff participate in interactions with children that may promote physical activity behaviour, e.g., joining in physical activities, making positive statements about physical activity, etc.
- Encourage staff to be good physical activity role models and motivate children to participate in physical activity.
- Seek ways to develop physical literacy training for all staff.

Adjust staff positions/shifts:

- Encourage and promote career development in after-school positions. For instance, aim to offer more full-time positions and reduce the number of split shifts; this can help provide income stability and advancement/professional development opportunities for long-time staff.

Be innovative:

- Explore unique forms of physical activities with the children, e.g., hip hop dance, yoga, cultural or traditional games.
- Include time to get up and move around, and/or play a short game, even if this is only for a short period of time, particularly if the after-school program focuses on sedentary behaviours (e.g., homework clubs).
- Create standing stations for play or other activities (such as painting, arts/crafts, reading or homework). Encourage children to do their chosen activity while standing (rather than sitting/being sedentary).

Promote active transportation:

- Promote active transportation to children, parents, and schools.
- Encourage families (when possible) to have their children use active transportation (walking, cycling) to get from school to the after-school program.
- Support relevant programs such as the Safe Routes to School program.



Collaborate:

- Build relationships with other programs or organizations to complement each other rather than compete (e.g., sport organizations, recreation centres).

Educate:

- Promote employee and parent education and awareness about the Canadian Physical Activity Guidelines and Sedentary Behaviour Guidelines.
- Post guidelines in the after-school centre, along with other information about physical activity.
- Post a daily schedule that includes the amount of time children are scheduled to be sedentary or physically active.

For after-school employees:

- Be active with children and youth, to help promote physical activity behaviour, e.g., by joining or leading physical activities, making positive statements about physical activity, etc.
- Self-monitor your behaviours, e.g., in relation to physical activity, sedentary behaviours, and healthy food choices. Aim to be an excellent role model and encourage all children to participate in physical activity.
- Seek ways to develop your own physical literacy; work with management and other staff on physical literacy and program development that encourages children and youth to be active.

For decision-makers:

- Develop written policies that support the Canadian Physical Activity Guidelines and Sedentary Behaviour Guidelines. For instance,
 - ◆ allot minimal time for sedentary activity, especially screen time, and
 - ◆ support and provide incentives for indoor and outdoor play environments that support physical activity.
- Build new schools with space for an after-school program within the school.
- Support or develop “joint-use agreements” for school space (e.g., gymnasiums) that both larger and smaller after-school programs can afford and access.

For parents:

- Choose after-school programs that support physical activity and healthy lifestyles.
- Talk with your kids about their after-school program activities on the walk or ride home.

Limitations of this Scan

The survey and focus group participants included managers and supervisors of after-school programs. Therefore, some respondents may have not worked directly with the children. However, they were aware of the after-school program details offered by multiple programs within their organization. The physical activity and sedentary behaviours of children and youth attending after-school programs were assessed at a program level rather than an individual level.

References

Active Healthy Kids Canada. (2012). Is active play extinct? 2012 Active Healthy Kids Canada report card on physical activity for children and youth. Retrieved from <http://dvqdas9jty7g6.cloudfront.net/reportcards2012/AHKC%202012%20-%20Report%20Card%20Long%20Form%20-%20FINAL.pdf>

Alberta Education. (2012). Daily physical activity initiative. Retrieved from <http://education.alberta.ca/teachers/resources/dpa.aspx>

Bergen, D. (2009). Play as the learning medium for future scientists, mathematicians, and engineers. *American Journal of Play*, 1, 413-428.

Be Fit for Life. (2012). Move and play through physical literacy. Retrieved from <http://www.provincialfitnessunit.ca/bffl-k-6-school-programs/#a>

Bower, J. K., Hales, D. P., Tate, D. F., Rubin, D. A., Benjamin, S. E., & Ward, D. S. (2008). The childcare environment and children's physical activity. *American Journal of Preventative Medicine*, 34, 23-29. doi:10.1016/j.amepre.2007.09.022

Burdette, H. & Whitaker, R. C. (2005). A national study of neighbourhood safety, outdoor play, television viewing and obesity in preschool children. *Pediatrics*, 116, 657-662. doi: 10.1542/peds.2004-2443

Burdette, H. L. & Whitaker, R. C. (2005). Resurrecting free play in young children. *Archives of Pediatric & Adolescent Medicine*, 159, 46-50.

Canadian Fitness and Lifestyle Research Institute. (2010). Children's active pursuits during the after school period. Retrieved from <http://72.10.49.94/media/node/922/files/PAM%202010%20Bulletin%204%20-%20Active%20Pursuits%20EN.pdf>

Canadian Society for Exercise Physiology. (2011). Canadian Physical Activity Guidelines glossary of terms. Retrieved from http://www.csep.ca/CMFiles/Guidelines/PAGuidelinesGlossary_E.pdf

Murdoch Childrens Research Institute and Royal Children's Hospital, Melbourne, Centre of Physical Activity Across the Lifespan, and Australian Catholic University. (2008). Kids go for your life. Retrieved from [http://www.goforyourlife.vic.gov.au/hav/admin.nsf/images/Hidden_treasures_of_play.pdf/\\$File/Hidden_treasures_of_play.pdf](http://www.goforyourlife.vic.gov.au/hav/admin.nsf/images/Hidden_treasures_of_play.pdf/$File/Hidden_treasures_of_play.pdf)

Santer, J., Griffiths, C., & Goodall, D. (2007). Free play in early childhood: A literature review. Retrieved from <http://www.playengland.org.uk/media/120426/free-play-in-early-childhood.pdf>

Other Reports

Alberta Recreation and Parks Association. (2012). Developing after school partnerships and programs: A resource guide for community groups. Retrieved from <https://s3.amazonaws.com/s3.arpaonline.ca/docs/After-School-Resource-Guide.pdf>

Alberta Recreation and Parks Association. (2010). Stone soup: The recipe for an after school recreation strategy in Alberta. Retrieved from <http://s3.arpaonline.ca/docs/Stone-Soup-After-School-Rec-Strategy.pdf>

Canadian Association for the Advancement of Women and Sport and Physical Activity. (2012). Active after school programs for girls and young women: Policy recommendations. Retrieved from http://caaws.ca/onthemove/e/after-school/documents/CAAWS_Active_After_School_Policy.pdf

Canadian Fitness and Lifestyle Research Institute. (2010). Children's active pursuits during the after school period. Retrieved from <http://www.cflri.ca/node/922>

Canadian Fitness and Lifestyle Research Institute. (2010). Sedentary pursuits during the after school period. Retrieved from <http://www.cflri.ca/node/924>