



EASTERN ONTARIO PHYSICAL ACTIVITY NETWORK

RURAL YOUTH'S AFTER-SCHOOL EXPERIENCE RELATED TO PHYSICAL ACTIVITY & SEDENTARY BEHAVIOUR

2015 DISCUSSION PAPER



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The Eastern Ontario Physical Activity Network (EOPAN) membership includes physical activity promoters working in public health units across the Eastern Ontario region. We share geographic similarities in that most of our districts cover large rural areas. As a group, we are concerned that our unique issues are not being addressed within the current provision of physical activity programs and services. For the purpose of this project, five local public health units formed a working group to focus on the rural youth's after-school experience as it relates to sedentary behaviour and physical activity.

The following public health units and staff participated in the EOPAN working group for this project:

- Eastern Ontario Health Unit – Chantal Lalonde, France Brunet;
- Hastings Prince Edward Public Health – Jennifer Ronan (Lead);
- Kingston, Frontenac, Lennox & Addington Public Health – Mary Jean Short;
- Leeds, Grenville & Lanark District Health Unit – Danielle Shewfelt, Rianne Macdonald; and
- Renfrew County and District Health Unit – Brian Brohart.

The following individuals provided support to the EOPAN working group during the project:

- Greg Killough – Heart & Stroke Foundation;
- Beverley Bell-Rowbotham (consultant); and
- Heather Sansom (initial project consultant).



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The Ontario Public Health Standards 2008 establish the minimum requirements for fundamental public health programs and services to be delivered by provincial public health units. Within the Chronic Diseases and Injuries Program Standard, the requirements for promoting physical activity and creating supportive environments for active living are outlined. Under these requirements, public health units are required to assess surveillance data, work to develop and implement regional communication strategies for the promotion of physical activity, build community capacity to address barriers to , and support the creation of environments that enable physical activity where people live, learn, and play – including municipal and community settings.

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RURAL YOUTH

All youth need opportunities to engage in regular, structured and unstructured physical activity and to have access to activities that decrease their time spent being sedentary. The benefits of physical activity are well known. Participation in regular physical activity is not only related to reduced risk of a number of chronic diseases, but there is also mounting evidence demonstrating its role in improving mental health and self-esteem.^{1,2,3} In addition, physical activity and physical fitness have been directly correlated with improved academic performance.⁴

Currently, only 5% of 12- to 17- year olds in Canada are meeting the national recommendation of at least 60 minutes of moderate to vigorous intensity physical activity per day.⁵ At the same time, this age group spends over 9 hours each day being sedentary.⁵ Emerging research highlights the physical and mental health risks linked to sedentary activity independent of a person's physical activity levels.⁶

Evidence also suggests that rural youth are significantly more sedentary than their urban counterparts.⁷ This is in stark contrast to the active and healthy rural life envisioned by many. Rather than days filled with long bike rides, pond swims, and endless nights of tag in the fields, rural youth face unique barriers which may make sedentary past times the easier option. Barriers such as dependency on others for transportation (e.g. school buses and parents), lack of public transportation options, fewer options for supervised and accessible recreation programs and activities, increased safety concerns, and isolation may mean that rural youth do not have the same opportunities as their urban counterparts. There is evidence to suggest that analyzing the after-school time period (between 3-6 p.m.) may be important in addressing the barriers to participation as well as helping to improve physical activity levels and decrease the time youth spend being sedentary.⁸

RURAL EASTERN ONTARIO

The Eastern Ontario region which spans from Hastings & Prince Edward counties to the West, Renfrew County to the North, and to the Quebec border to the East is a vast and unique area of the province. Almost half of the population in Eastern Ontario (excluding the City of Ottawa) is considered rural, compared to 14.1% of the population for Ontario as a whole [TABLE 1: URBAN-RURAL POPULATION DISTRIBUTION EASTERN ONTARIO & ONTARIO (%)].⁹ The Eastern Ontario Physical Activity Network (EOPAN) recognizes physical inactivity in rural youth as an important public health issue. With the ultimate objective of improving strategies for addressing youth physical inactivity in Eastern Ontario, the EOPAN set out to survey youth to gain a better understanding of their physical activity experiences during the after-school time period.

Statistics Canada defines "rural" as any area with a population of less than 1,000 and a population density of less than 400 persons per square kilometre.⁹

- Rural can include small hamlets and scattered pockets of population as well as large stretches of farmland or woodland.
- Compared to the urban area of Ottawa, rural Eastern Ontario has higher mortality rates of heart disease and cancer.¹⁰
- In 2014, the south east region also has significantly higher rates of diabetes, obesity, poorer physical and mental health, participation and activity limitations, hypertension, COPD and smoking than in the Province of Ontario as a whole.¹¹
- Students in Eastern Ontario, compared to the provincial average, are more likely to be physically inactive, to report a high level of screen time and to rate their physical health as poor.¹²
- Suicide in female and male youth under 20 years old is 4 and 6 times more likely to occur in rural-living youth than urban-living youth, respectively.¹³
- Living in a rural area can mean long distances to get basic needs and services, fewer employment opportunities and lower incomes.¹²

TABLE 1:
Urban-Rural Population Distribution of Eastern Ontario & all of Ontario

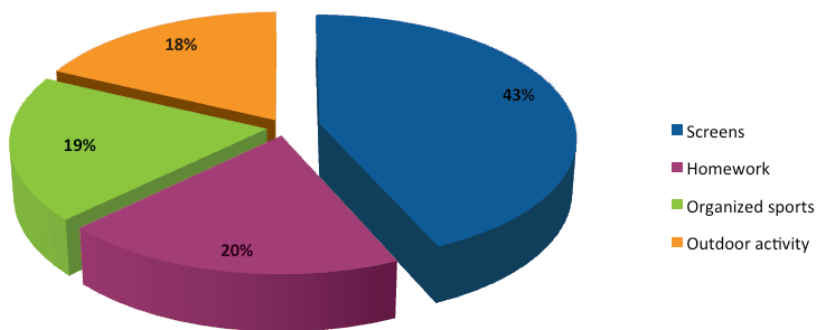
	RURAL	POPULATION CENTRES WITH 1,000 - 29,999	POPULATION CENTRES WITH OVER 30,000
Leeds, Grenville & Lanark	58.5 %	41.5 %	N/A
Stormont, Dundas, Glengarry, Prescott and Russell (EOHU)	48.6 %	26.3 %	25.1 %
Hastings & Prince Edward	48.9 %	11.1 %	39.9 %
Renfrew	47.9 %	52.1 %	N/A
Kingston, Frontenac, Lennox and Addington	34.2 %	4.3 %	61.5 %
TOTAL EASTERN ONTARIO (excluding Ottawa)	47.2 %	24.5 %	28.3%
PROVINCE OF ONTARIO	14.1 %	9.2 %	76.7

THE AFTER-SCHOOL TIME PERIOD

The survey asked Grade 7 and 8 students to identify all of the activities that they do in the period between the end of the school day and supper time. They were also asked to specify one activity that they spend the most time engaging in after school. When reviewing the responses, it becomes clear that over three-quarters of the students participate in both sedentary activities (e.g. homework, computers, and television) and some level of physical activity (e.g. bike riding, soccer, and outdoor chores) during this time period. Of the remaining respondents, 10% percent of respondents were involved in only active pursuits and 12% were involved in only sedentary activities.

Across Eastern Ontario, excluding Ottawa, the most common after-school activities include screen time, homework, organized sports and outdoor activity. Sedentary activities – screen time and homework – take up the bulk of respondents after-school time at 63% [FIGURE 1: REPORTED ACTIVITY DURING AFTER-SCHOOL TIME PERIOD].

Figure 1: Reported Activity During After-School Time Period



SCREEN TIME - 43%

Rural youth in Eastern Ontario, as all youth across Canada, are spending a large portion of their after-school time period engaged in screen time activities. Television, video games, social media and other electronic pastimes had the highest ranking of their after-school experience. As a whole, our rural regions have a statistically higher level of screen time when compared to the provincial and national averages.¹⁴ Over 40% of our survey respondents said that they used screens more than any other activity.

HOMEWORK - 20%

A very high percentage of youth responded that they spend a large part of the after-school time period completing homework; which can be classified as a sedentary activity. Research indicates that parents identify “completing homework” as the most important issue after-school and the priority around school work increases with a child’s age.¹⁵ It is also interesting to note that females significantly reported doing more homework than males during the after-school period. The question remains as to how much time youth are actually spending engaged in academic activities. This could be explored further along with the reason for the gender difference.

ORGANIZED SPORTS - 19%

Youth also indicated that they participated in organized sports in the after-school time period. This would need more investigation as they probably do not participate in organized sports every day.

OUTDOOR ACTIVITIES - 18%

Many youth indicated that they participate in some outdoor activities such as playing pick-up hockey, fishing, and skateboarding. Females were less likely to choose outdoor activities as an option in their after-school experience, and more likely than boys to do indoor chores. Since outdoor activities are in abundance in rural Ontario, it is important to explore this option closely. It would be helpful to understand why females are more likely to stay indoors (is it an issue of security, interest, socialization, expectations).

PROJECT OVERVIEW

This project sought to gain a better understanding of rural youth’s after-school experience particularly as it relates to sedentary behaviours and physical activity. The target population was grade 7 and 8 students in the geographic area of rural Eastern Ontario. A non-random sample of the target population was selected (n=1000) to complete the online survey during school time instruction. The sample population was selected based on rural setting of the schools and access to both grade 7 and 8 students.

In consultation with a research student, the EOPAN working group developed a survey comprised of 13 questions. In addition to demographic questions, the survey included a mix of qualitative and quantitative questions.

Schools (and participants) were invited to take part in the project once research ethics approval was received from Queen’s University and formal approval from participating school boards was completed. Letters and consent forms were distributed to all potential participants. Only those students whose parents and/or guardian provided consent were eligible to complete the online survey and all participants were instructed that they could withdraw from the project at any time.

The survey was made available online via Fluid Surveys and was open between February 9, 2015 and April 24, 2015. A total of 576 surveys were completed by the sample population.



THE AFTER-SCHOOL TIME PERIOD CONTINUED

ISOLATION

Almost half of the youth responded that they spend some time alone after-school, almost 40% of which also reported spending 1-2 hours alone and over 30% responded being alone for over 2 hours. Youth also ranked “not having anyone to do it with” as the number one primary reason they were not participating in other activities after-school. If involvement with friends is facilitated through social media, the youth’s own efforts to overcome their isolation may be directly related to high levels of sedentary behaviour. Because isolation may be a significant barrier to active participation and involvement, consideration of its impact will require further investigation in order to determine how to successfully engage youth in after-school activities.

TRANSPORTATION

The results demonstrated that most rural youth surveyed relied on others to drive them to their after-school activities. Most of the respondents indicated that they relied on their parents to drive them. Knowing that many parents are still at work during this time period, this may mean that youth must avoid choosing after-school activities for lack of transportation.

SELF-REPORTED FEELINGS ASSOCIATED WITH AFTER-SCHOOL EXPERIENCE

Overall, more youth reported being happy or satisfied with their current after-school experience. Very few youth identified experiencing negative feelings (e.g. being sad or angry) during this time. This is an interesting result given the sedentary nature of their after-school period. This result will require further exploration.

TAKE AWAY MESSAGES

CURRENT AFTER-SCHOOL ACTIVITIES

The results highlight that youth have many different priorities between the end of the school day and supper time. Strategies should emphasize the need to balance the activities taking place during this specific time period that would support the overall health and well-being of youth.

TRANSPORTATION

Most youth are dependent on others for transportation. This may also mean they are reliant on others’ schedules for organized sports and activities. Addressing transportation challenges in rural communities is important to improve access. However, knowing that most children in Eastern Ontario are bussed to and from school, physical activity promoters must consider shifting perspectives to highlight the important role that unstructured play may have in increasing physical activity levels.

FEELINGS AND COMFORT LEVELS

Overall, more youth reported being happy or satisfied with their current after-school experience. Although many youth responded that they participate in a mix of physical and sedentary activities after-school, sedentary activities were in the majority. This demonstrates that youth may feel their current level of physical activity is adequate and may not be aware that the amount of time they are spending sedentary during the after-school period is a concern. This interesting finding warrants more research and exploration to reach a better understanding of youth’s health knowledge. This provides insight into not only the physical barriers to physical activity opportunities, but also to the social and generational barriers experienced by rural youth in accessing physical activity opportunities.

DEVELOPING YOUTH ENGAGEMENT STRATEGIES

Results of the survey highlighted technology as being frequently used by youth. Although technology can often lead to more sedentary behaviours, there is also evidence that points to the need for strategies to also embrace technology rather than attempt to limit it.¹⁶ In addition, technology is a means by which youth use to socialize with their peers and our survey results highlights the value placed on socialization. There is also evidence that youth require encouragement to participate in after-school physical activity with parents and peers having the strongest impact on participation levels.¹⁷ Thus, moving forward in developing strategies and programs to engage youth in physical activity, it is important to consider technology and socialization as key facilitators. Another important aspect to consider is the unique needs and experiences of boys and girls as highlighted in the survey results.

CONCLUSION

Overall, the results of the survey provided the EOPAN working group with a glimpse of the after-school experience and activity habits of youth living in rural Eastern Ontario. Some of the findings were unsurprising and not necessarily unique to rural areas (e.g. screen time and homework); however, in order to develop strategies to increase physical activity levels and decrease sedentary behaviour for rural youth, it would be helpful to investigate these factors using a settings approach with a rural focus.

Uniquely rural factors impacting youth physical activity and sedentary behaviour levels (e.g. dependence on transportation and isolation) require specific strategies that may not pertain to urban areas. These need to be developed in consultation with the target populations, emphasizing a very real need for youth involvement in identifying how they could be more physically active. Beginning to consult with children earlier in after-school program planning is crucial to ensure, over the years, their after-school experiences remain engaging and developmentally appropriate. Also encouraging youth to explore unstructured physical activity, such as outdoor play and chores, in the rural setting is needed.

The self-reported high levels of satisfaction with current after-school experiences may be the most poignant finding of all and the most important take away from this project. As outlined in the 2014 Active Healthy Kids Canada report card, "there is a tendency to build more, do more and impose more structure, but perhaps these efforts are somewhat misguided". It may be necessary to reconsider approaches and beliefs about how to change physical activity behaviours in youth. Engaging youth to further investigate the relationship between their feelings and experiences could provide insight to increase physical activity levels and decrease sedentary levels in rural youth.

NEED FOR ADDITIONAL RESEARCH

In order to better understand the issues related to rural youth's after-school experience, further research is required. It is our hope that others concerned about rural youth health issues may consider exploring additional questions to help clarify the needs of this population.

KEY THEMES FOR FUTURE RESEARCH

- » Retrospective experiences in after-school programs/care;
- » Gender differences related to activity preferences;
- » Assessment of perceived physical activity, physical inactivity and sedentary behaviour levels (from youth / parents);
- » The impact of transportation dependency on rural youth;
- » The impact of social media and technology on rural youth activity choices; and
- » The impact of isolation on rural youth activity choices.

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