

Substance Use, Sport and Youth: Canadian Surveys

The Issue

Sport settings are often viewed by Canadians as promising opportunities to foster positive youth development. However, research suggests that sport participation has both positive and negative outcomes with respect to substance use (Kwan, Bobko, Faulkner, Donnelly, & Cairney, 2014). The Canadian Centre on Substance Abuse (CCSA) has recently identified the need to better understand the relationship between youth participation in sports and patterns of substance use. The two activities appear to peak during the same age range (Young et al., 2011). Improving awareness and understanding about the relationship among youth, sport participation and substance use is important to ensuring the benefits of sport participation can be maximized and the risks minimized.

Background

To begin framing the issue, CCSA commissioned a systematic review of the literature to examine the relationship between sport participation and substance use among youth ages 10 to 24 (Kwan et al., 2014). This review found some evidence showing that participation in sport might prevent illicit drug use. However, participating in sport was also found to be associated with increased alcohol use. The review also identified a number of research and knowledge gaps in this area, including:

- No published Canadian studies on the impact of sport on substance use and no research examining the factors that affect the nature of the relationship;
- Mixed results on the relationship between substance use, sport and youth; and,
- Limited availability of research regarding the consideration of risk and protective factors.

CCSA consulted with stakeholders from a variety of related sectors (e.g., health, research, education and sport) about these findings and their implications for practice in each field. CCSA then convened a meeting of stakeholders to discuss these findings, identify areas for action and design a research plan to address known gaps. As a result of these discussions, CCSA commissioned two key research projects that aimed to fill in the research gaps identified by stakeholders (Sztainert 2015 & Thake 2015). These projects are discussed in the following pages.

Surveys of Sport Participation and Substance Use among Canadian Youth: An Environmental Scan

CCSA conducted an environmental scan of population surveys of Canadian youth ages 10 to 24 that have been conducted within the last five years with a focus on health, substance use or sport. The purpose of this scan was to identify potential sources of data that could be used to explore the link between sport participation and substance use among Canadian youth.



The results of this scan identified five Canadian surveys (two national, one provincial and two regional) that met the criteria for data mining (see Table 1). These surveys involved youth between the ages of 13 and 18 and asked about substance use or abuse, behaviour and sport participation. The scan also assessed the potential for using these existing data sources for the purposes of examining the relationship between these variables.

Work on this scan revealed several issues related to data gaps in this area, including:

- Variations and limitations of current sport definitions;
- Self-report of data and possible overestimation of reported levels of physical activity; and
- A lack of surveys that captured detailed data on both sport participation and substance use.

In sum, this environmental scan successfully identified surveys that can be used as possible sources of data for exploring the association between youth, substance use and sport. Research using identified data sources will help to increase understanding of the association between substance use and abuse, and sport in Canada.

Table 1: Canadian Surveys that Address Sport Participation and Substance Use

National Surveys
Canadian Community Health Survey (2013)
National Longitudinal Survey of Children and Youth (2008–2009)
Provincial and Regional Surveys
British Columbia Adolescent Health Survey (2013)
East Kootenay Adolescent Drug Use Survey (2013)
Eastern Ontario Youth Risk Behaviour Survey (2011)

Note: The years represent the version of the survey that was examined.

Sports Participation and Substance Use in Canada: Analysis of the Effects of Sport Type, Self-Esteem and Peer Use

In March 2014, CCSA conducted a quantitative analysis of data from the 2008–2009 cycle of the National Longitudinal Study of Children and Youth. This analysis examined the relationship between sport participation and substance use among a sample of Canadian youth, as well as the effects of self-esteem and peer substance use on this relationship.

Results revealed that sport participation, in general, was associated with the following effects:

- a) Increased experience with alcohol use,
- b) Decreased experience with marijuana use, and
- c) Decreased experience with other drug use (e.g., hallucinogens, prescription pill abuse and illicit drugs such as cocaine).

These results are consistent with other literature and illustrate that the relationship between sport and substance use is not direct.



Further, the analysis revealed that in-school sports participation and participation in sport where a coach was present were associated with less substance use, while out-of-school sport participation was associated with increased marijuana use. However, the relationship between sports without a coach and substance use was mixed (see Table 2).

Table 2: Summary of the relationships between sports participation and alcohol, marijuana and other drug use

	Alcohol Use	Marijuana Use	Other Drug Use
Overall Sports Participation	Increased	Decreased	Decreased
In-school sports participation	Decreased	N/A*	N/A*
Out-of-school sports participation	N/A*	Increased	N/A*
With a coach sports participation	N/A*	Decreased	N/A*
Without a coach sports participation	Increased	N/A*	Decreased

* No significant relationship found

The analysis further revealed that peer substance use was a significant predictor of youth use of alcohol, marijuana and other drugs. However, peer substance use did not interact with sport participation, meaning peer substance use does not have an effect on the relationship between sport participation and substance use.

On the other hand, youth who participate in sport, are likely to have a stronger sense of self (Babiss & Gangwisch, 2009). Results from this study found that sports participation was related to self-esteem, which in turn was related to decreased substance use. This finding suggests that sports programs might be able to harness the protective effects of self-esteem.

What Do These Results Mean for You?

The research CCSA has conducted to date has shown that sport in a school context or with a coach might be particularly beneficial in limiting substance abuse, and has also identified self-esteem as a factor that could be leveraged to decrease the use of alcohol and illegal drugs among youth.

- **Sport program professionals** can use the identified surveys as sources of Canadian information to help support the importance of sport programs and policies that address the prevention of substance use.
- **Researchers** can use the survey data to build the Canadian research on the relationship between youth substance use and sport in a Canada.
- **Substance use prevention and health promotion professionals** can become familiar with the Canadian data around sport participation and substance use and can consider ways that sport can be used as a vehicle for the prevention of substance abuse and related harms in young Canadians.

Questions?

For more information on the Canadian surveys, please email info@ccsa.ca and request to connect with the Sport and Youth Substance Abuse Prevention Coordinator.



References

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