

## HEARTSMAP CME – EDUCATION AND ACTIVITIES

HEARTSMAP Domain	Education and activities
Number of articles	2
General Theme	Clinician Bottom Line
<p><b>Truancy</b></p> <ul style="list-style-type: none"> <li>Severe truancy is robustly associated with higher odds of developing anxiety or depression, externalizing behaviors such as substance use, physical conflict, delinquency, low school engagement, and low academic performance. It is also associated with low parental involvement. (Level of Evidence: II.1)</li> <li>Truancy is strongly associated with elevated substance use, with higher truancy corresponding to increased substance use. (Level of Evidence: II.1)</li> </ul>	<ul style="list-style-type: none"> <li>Truancy is a strong risk factor for substance use, mental health problems, and externalizing behaviors. It is important to identify truant youth and connect the teen to an educational support services that can mitigate truancy.</li> <li>See articles #1 and 2</li> </ul>

1. Vaughn, M. G., Maynard, B. R., Salas-Wright, C. P., Perron, B. E., & Abdon, A. (2013). Prevalence and correlates of truancy in the US: Results from a national sample. *Journal of Adolescence*, 36(4), 767–776. <http://doi.org/10.1016/j.adolescence.2013.03.015>
  - a. **Objective:** to identify the prevalence, sociodemographic characteristics, and mental health problems associated with truancy
  - b. **Method:**
    - i. **Population:** 68,736 youth aged 12-17 as part of 2009 National Survey on Drug Use and Health (NSDUH).
    - ii. **Design:** Cross-sectional study involving multiple self-report questionnaires that measure the rate of truancy, sociodemographic characteristics and mental health correlates, school engagement, parental involvement, and externalizing behaviours.
    - iii. **Primary outcome measure:** prevalence of truancy; odds ratios of externalizing behaviours and mental health concerns in youth who demonstrate truancy vs. those who do not.
  - c. **Result:**
    - i. 11% of adolescents between ages 12-17 in the US have reported skipping over the past 30 days. Youth who exhibited severe truancy (4 or more skips per month) were three times more likely to self-report depression and 2.5 times more likely to report anxiety than moderate skippers (1-3 times per month). In addition, severely truant individuals were also 1.5~2 times more likely to engage in substance use, fight at school, carry a handgun, and steal than moderate skippers. Both the moderately and severely truant youth reported lower school engagement and lower grades than youth who do not or minimally skip. Finally, youth who are moderately and severely truant exhibited significantly less parental involvement than those who do not skip, with the absolute odds ratio ranging from 0.4 to 0.7.
  - d. **Conclusion:** Despite limitations inherent to a cross-sectional study, the size and stability of the sample, as well as the magnitude of odds ratios, provides strong evidence to the study's conclusion that truancy is robustly associated with mental health concerns, externalizing behaviours, low school engagement, low grades, and less parental involvement. Educational interventions aimed at reducing truancy can potentially reduce these negative outcomes.
  - e. **Level of evidence:** II.1 (well-designed cross-sectional study)

2. Henry, K. L., & Thornberry, T. P. (2010, January). Truancy and escalation of substance use during adolescence. *Journal of Studies on Alcohol and Drugs*, 71(1), 115+. Retrieved from <http://go.galegroup.com/ps/i.do?id=GALE%7CA218598600&sid=summon&v=2.1&u=ubcolumbia&it=r&p=HRCA&sw=w&asid=9f3bfee91738f0de572eb45d5ed23aed>
  - a. **Objective:** to examine the association between truancy and escalation of substance use during adolescence
  - b. **Method:**
    - i. **Population:** 971 youth and their primary caregivers as part of Rochester Youth Development Study
    - ii. **Design:** a retrospective cohort study
    - iii. **Primary outcome measure:** the association between truancy and elevated substance use using a growth model, chi-squared, and p value.
  - c. **Result**
    - i. Greater degree of truancy was associated with greater involvement in substance use ( $b = 0.20$ ,  $SE = 0.01$ ,  $p < 0.01$ ). Moreover, truancy within the previous 6 months was associated with higher level of substance use 6 months later, even after accounting for all potential confounding variables (including present truancy). This demonstrates a lagging effect ( $b = 0.12$ ,  $SE = 0.02$ ,  $p < 0.02$ ). Finally, substance use escalated during the time of elevated truancy ( $b = 0.16$ ,  $SE = 0.02$ ,  $p < 0.01$ ).
  - d. **Conclusion**
    - i. Given the size of the sample, size of association, and the longitudinal nature of the cohort study, the conclusion that truancy is strongly associated with escalation of substance use, with higher truancy corresponding to higher substance use is well-supported. Clinically, an educational intervention aimed at preventing truancy could be a possible intervention point in reducing substance use among youth who show truant behaviours.
  - e. **Class of evidence:** II.1 (well-supported retrospective cohort study)

Appendix: Guide for Level of Evidence

Canadian Task Force on the Periodic Health Examination's Levels of Evidence\*

Level	Type of evidence
I	At least 1 RCT with proper randomization
II.1	Well designed cohort or case-control study
II.2	Time series comparisons or dramatic results from uncontrolled studies
III	Expert opinions