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# Differences in Cannabis Perceptions among Canadian Adolescent Boys and Girls

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# Introduction

## Key Findings

- There are gender-specific harms and risks associated with cannabis use that have implications for prevention and public education.
- Boys and young men reportedly use cannabis more frequently and heavily than girls and young women.
- Girls and young women are less likely to purchase cannabis openly or publicly than boys and young men.
- Girls and young women are concerned about social disapproval of their cannabis use and may attempt to hide their use.
- Both young men and women are aware of the evidence-based harms of cannabis use.
- Young men and women are not comfortable going to parents or school counsellors about their concerns with cannabis use.
- Legalization has been a catalyst for cannabis conversations in the home.

A regulatory system for the legal sale of non-medical cannabis in Canada has been in place since October 2018, with the legal purchasing age ranging from 18 to 21, depending on province or territory. The legal, social and health impacts of this change should be monitored. Emerging evidence shows that cannabis use patterns differ across sex and gender groups, including differences in frequency and modes of use (Statistics Canada, 2020; Friese, Slater, Annechino, & Battle, 2016). Gender norms, roles and relations affect cannabis use patterns among men, women, boys and girls (Hemsing & Greaves, 2020) and evidence suggests that adhering to traditional gender norms can put youth at increased risk for potentially harmful behaviours. For example, an adolescent male who is more adherent to gender-typical behaviour is more likely to binge drink<sup>1</sup> and use substances earlier than one who is less adherent (Wilkinson, Fleming, Halpern, Herring, & Harris, 2018). Gender norms evolve over time, so cannabis use patterns among Canadian young people should be assessed with a sex and gender lens on an ongoing basis.

This report is on a study, the objectives of which were to identify how gender differences in cannabis perceptions and behaviours contribute to the risk for harms of cannabis use in young women and young men.<sup>2</sup> Identifying these differences will increase the understanding of how gender roles, norms and relations may affect patterns of cannabis use, with the goal of tailoring public education and prevention messaging to gender groups. The report is intended for a diverse audience including prevention specialists, educators, researchers, policy makers and youth allies.<sup>3</sup>

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1 Binge drinking is defined as four or more drinks in one sitting for women and five or more for men.

2 This study was unable to include other genders and planning is underway to conduct further research with youth of other genders.

3 Youth allies are people in the lives of young people with the opportunity to support and nurture open discussions with them about topics such as cannabis. Youth allies can include parents, family members, teachers, coaches, counsellors, healthcare professionals or any other person trusted by young people.



## Methods

We conducted ten focus groups with youth ages 14 to 18 across Canada. Two of the groups were in French. Groups were divided by those who identified as boys or young men and those who identified as girls or young women. A total of 89 young people participated in the study. Almost 80 per cent of the sample was between the ages of 15 and 17. Just over half of the participants identified as boys or young men. Over 50 per cent of participants reported they had never used cannabis. Almost a quarter said they had tried it once or twice and may or may not try it again. Fifteen per cent reported what they perceived as occasional use while seven per cent reported what they considered frequent use.

The data were analyzed using qualitative research methods (Braun & Clarke, 2006; Frith & Gleeson, 2004) with the assistance of NVivo 12 software. Researchers applied sex- and gender-based analysis (SGBA) to the data to examine the impact of gendered factors and dynamics in youth cannabis use that may contribute to behaviours that could cause harm. (For more information about SGBA, see [Sex, Gender and Equity Analyses](#).)

**Sex**, which is not discussed in this report, refers to biological factors such as metabolism, hormones, anatomy or organ function that differ among males and females. These factors can impact the effects of cannabis. While less is known about sex and cannabis, there are indications that females may be more sensitive to its effects and may transition to cannabis use disorder faster than males (Kerridge, Pickering, Chou, Saha, & Hasin, 2018; Fogel, Kelly, Westgate, & Lile, 2017). Both sex and gender interact to affect cannabis use patterns (Greaves & Hemsing, 2020; Brabete, Greaves, Hemsing, & Stinson, 2020).

This study received ethics approval from Advarra Institutional Review Board.

## Findings

### Cannabis Use Patterns

When discussing frequency of use, the majority of focus group participants agreed that boys and young men use cannabis more often and in larger amounts than girls and young women. This finding is consistent with national data (Statistics Canada, 2020; Chen, Martins, Strain, Mojtabai, & Storr, 2018). Young women suggested this difference might be because there is more social disapproval attached to girls using cannabis frequently and they are more likely to be labelled or judged negatively for their use. Participants felt girls are more likely to use cannabis in a social setting such as a party, where boys use cannabis any time during the week, in any environment and while alone, which is also supported by research (Goncy & Mrug, 2013). One female participant described this difference:

“Girls use [cannabis] more as a group activity. I have that impression while guys will be more regular, or it is something that they do on a daily basis. But girls are more like, it’s like going to the bathroom with a group of girls.”

Both girls and boys noted that youth mix their cannabis use with other substances such as alcohol, a practice called “crossing.”

**Gender** refers to the socially constructed roles, behaviours, expressions and identities of girls, women, boys, men and gender diverse people. It influences how people perceive themselves and each other, how they act and interact, and the distribution of power and resources in society. Gender is usually conceptualized as a binary (girl/woman and boy/man) yet there is considerable diversity in how individuals and groups understand, experience, and express it (Canadian Institutes of Health Research, [Definitions of Sex and Gender](#)).



The ways in which youth use cannabis, as described by participants, included bong<sup>4</sup>s, vapes, joints, blunts, dabs, edible cannabis, poppers and pipes. Both boys and girls agreed that edible cannabis is not popular among their age group. They reasoned that this was because edible cannabis is harder to find than dried cannabis. Furthermore, young people are concerned with the unknown contents of illicit, pre-made edible cannabis.<sup>5</sup> They also said that edible cannabis takes too long to start working, putting them at risk for overconsumption. However, participants felt girls were more likely than boys to use edible cannabis because eating edible cannabis is more discreet than smoking, an observation that is also supported in the literature. For example, Friese and colleagues (2016) found that males and females agreed that females are more likely to use edible cannabis to avoid the smell and ensure they are not publicly identifying themselves as “cannabis users.”

Bongs were the method of use most often mentioned, including hand-crafted bongs such as those made from apples.<sup>6</sup> Participants agreed that bongs were more commonly used among boys and young men and noted the competitive nature of “bong hits.” Specifically, young men were considered “wusses” if they did not “hit a bong hard.” On the contrary, girls were not expected to take part in this type of heavy use. This detail is supported in research where females reported being intimidated by bong use (Dahl & Sandberg, 2015). Girls and young women also noted they were not under the same pressure as boys and young men to consume large amounts of cannabis as often. Young men felt young women used cannabis in more “feminine” ways, such as joints or vapes, which allowed for easier consumption of smaller amounts.

Many participants emphasized vaping nicotine is pervasive among teens. The increase in popularity of vaping both nicotine and cannabis in Canada and in the United States has been confirmed by quantitative studies (Hammond et al., 2019; Johnston et al., 2020). Both young men and women reported that vaping was “huge” in their high schools, most often taking place in bathrooms. One participant said her school had resorted to removing bathroom doors and implementing vaping fines to deter the activity. Vaping nicotine was reported to occur on the bus, in cafeterias and in classes. Participants felt vaping devices were popular because they are easier to use and do not require a person to go outside to light the device. They are also easier to conceal since they are small and do not smell. Participants reported that those who use vapes could hide their use by exhaling vapor in their shirt sleeves and behind desks.

Participants were unclear on the harms of vaping nicotine and cannabis. They were aware of the negative reports in the media about vaping deaths, but only some thought that these were related to illegal cannabis vaping cartridges. Male participants noted that vapes were sold on Snapchat and some participants theorized that vaping nicotine is a gateway to vaping cannabis and using other substances. One male participant reasoned this was owing to tolerance to nicotine dosages:

“He started off as a good kid, but then he went and started not smoking weed but he started vaping. And he started vaping a lot, went from like one per cent to two per cent, three per cent to five per cent to six per cent nic. So, he went and ended up at like 50 nic. And he said, you know, I guess I’m bored, so I’m going to try weed. And from there, he went to weed.”

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4 Also known as a water pipe, where the smoke is drawn through water to cool it and filter out small particles before inhaling it.

5 Of note, participants were not specifically asked about the use of regulated (licit) or non-regulated (illicit) cannabis. A majority of participants were not of legal age to purchase cannabis when participating. If youth specified a cannabis source, it is noted in the text.

6 This method involved drilling holes in apples, placing cannabis inside and smoking it using the holes.



## Buying Cannabis

Some participants thought it was traditionally young men who were “most responsible” for purchasing cannabis, but others felt that gender might not play a role. Some young men and boys suggested that young women and girls may be “smarter” and have a male purchase their cannabis because buying cannabis can be “sketchy” or dangerous. They noted purchasing illicit cannabis can be a safety issue, especially for girls. That said, girls noted they had been put in positions at social events where they were required to make a purchase, even though boys were present. One female participant said that a girl she knew who frequently uses cannabis would consistently purchase her own cannabis using the same dealer. These observations are less consistent with previous qualitative findings, which found that females relied on males for access to cannabis (Dahl & Sandberg, 2015).

One gender difference reported by girls and young women about cannabis acquisition was that girls are more discreet than boys when making cannabis purchases and boys are more open. Both groups noted that social media were often used to advertise when a young man was selling cannabis or to announce when someone wanted to purchase cannabis. Videos of popular methods of cannabis use were also posted (e.g., Snapchat, YouTube videos of cannabis vaping contests). One girl reported:

“I think that in terms of social media, from what I see, it is more the guys who are going to sell, and even put it on Snapchat. They are going to sell it publicly; they will put it on their story, saying that they sell this. Girls might [purchase cannabis], but more discreetly. That is perhaps why we do not necessarily know [if a girl uses cannabis]. I do not think there are great differences for guys and girls, it really depends on your environment.”

## Reasons for Use

Youth were asked why their peers may choose to use cannabis. Both boys and girls reported similar reasons for cannabis use and did not feel these reasons varied greatly by gender. The most popular reasons for use included the influence of peers and peer pressure, as well as the need to connect with or fit in with a social group. Another popular reason for use was for relief from stress or mental health issues. Specifically, many participants said youth use cannabis to escape from stress, anxiety and depression, to help them sleep and manage chronic pain. As one female participant reported, both young men and women may use for these reasons:

“I know both – guys and girls; I know a guy who smokes up to forget his problems, but does it to look cool, and even hides that he smokes weed. I know a girl who does this regularly because she has anxiety and it helps her to sleep.”

Other reasons to use included curiosity, to increase the enjoyment of an activity and because cannabis use is portrayed positively in the media and online. These reasons are consistent with a previous qualitative study (McKiernan & Fleming, 2017). A few female participants noted the use of cannabis for “weight loss,” while a couple of males mentioned the use of cannabis to solidify someone’s status or reputation.

## Reasons Not to Use

There was also agreement among the participants about some of the reasons youth might not use cannabis. Both young men and young women participants cited permanent negative effects on the body, such as the lungs and the brain. One young woman said:



“There are other studies that say [cannabis] can kill up to 10 per cent of your brain, your memory. And it will be damaged for life. So, I think it is an uncertain domain and people do not want to take that risk.”

Participants also noted that young people might not use cannabis because it is against their beliefs or they fear family disapproval, legal consequences or becoming “addicted.” Participants agreed with the assumption that some young people might not use cannabis because their friends do not use it or would look down upon this behaviour.

However, there were some differences as well. Young men more often mentioned the cost of cannabis and difficulty in buying cannabis as barriers to use. Young women reported concerns around a “bad trip” due to cannabis and the issue of their safety while impaired, such as risk of sexual assault. Interestingly, young men more often mentioned judgment or getting a bad reputation as a reason not to use cannabis, as well as the effect of use on their future endeavours (e.g., school performance and sport scholarships).

## Perceived Harms

When probed more specifically about the potential harms of using cannabis, the girls and young women provided more examples than the boys and young men. However, the nature of the harms was agreed upon by both genders and included effects on brain development, damage to lungs and the potential for use to trigger a mental illness. They also agreed on the dangers of driving “high” and the effects of cannabis on reaction time and decision making. Finally, the risk of cannabis being laced with something dangerous and “sketchy situations” inherent to buying illicit cannabis were mentioned by both genders as among perceived harms.

## Harmful Use

When participants were asked what constituted harmful or problematic cannabis use, both young men and young women agreed on several qualifications. They considered cannabis use harmful if the person:

- Uses every day;
- Is addicted to or “needs” cannabis;
- Cuts school or other activities due to use or uses cannabis before work or school;
- Uses cannabis to “get through the day” or to self-medicate for sleep or anxiety issues;
- Builds tolerance to effects;
- Experiences negative effects on motivation and relationships;
- Prioritizes purchasing cannabis over other necessities or sells possessions to buy cannabis;
- Engages in risky behaviour like impaired driving or purchasing from a “sketchy” dealer; and
- Experiences mental health issues due to use.

The young women also mentioned that using cannabis alone or in isolation, looking forward to use and becoming aggressive if they could not use as concerning, while young men noted that passing out or vomiting (“greening out”) due to cannabis use was a sign that the behaviour had become harmful. Of note, these are symptoms of chronic cannabis use or cannabis use disorder (Patel & Marwaha, 2020), illustrating that youth can identify some of the features of clinically harmful use.



## Addressing Use

Participants were asked how they would help a friend who they felt was experiencing problematic cannabis use or what they would do if they themselves were experiencing problematic use. Both groups said they would take such issues to a doctor or therapist, a close friend, someone their own age or an adult they trusted and with whom they were comfortable. Their main concern was preventing parents from finding out about their own problematic use or that of a friend.

In general, to curb cannabis use respondents suggested distracting themselves or others from using cannabis by filling their time with activities unrelated to cannabis use. Tactics suggested by the young women to help someone with problematic use included showing their friends disturbing images of the harms of use or suggesting harm reduction approaches, such as switching to vaping. The young men had a different approach and said they would simply offer to be there for that person by offering them a place to stay or a shoulder to lean on, as it is not an option to go to a person of authority to address the issue. They would not try to push their friend to stop as they felt this approach is not effective. However, some young men suggested more aggressive approaches, such as cutting their friend off from their dealer, breaking their dab pen or calling them names.

## Prevention and Public Education

Participants noted that substance use information was available in their schools via posters or substance use programming delivered through the curriculum. Many participants mentioned that school counsellors were available to discuss cannabis concerns, but they did not seem comfortable with this option. Instead, they would access external resources like a Kids Helpline or community treatment.

In terms of discussions in the home about cannabis use, there were clearly conversations happening between parents and young people, but the types and frequency of the conversations varied greatly. Both youth and parents are influenced by their exposure to medical cannabis use by adults, with some youth mentioning that their parents, family members or family friends were using cannabis to address an ailment. This medical use was often the starting point for a family discussion about cannabis use. Legalization was also a catalyst to discussions about cannabis between youth and parents, with some parents becoming more open to cannabis use due to legalization, while others remained staunchly against it.

## Interpreting the Findings

These results highlight gender-related patterns of cannabis use that should be taken into account in prevention and public education approaches. The data showed that boys and young men use cannabis more often, in a riskier manner and more openly. Compared to young women, this puts them at risk in a number of ways. Young men are more likely:

- To advertise when they sell or purchase cannabis, potentially exposing them to criminal consequences;
- To use more frequently and in larger amounts, putting them at a greater risk for harms to their physical health<sup>7</sup> (Phillips, Evans, Hughes, & Ogeil, 2020); and

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<sup>7</sup> See [Clearing the Smoke on Cannabis: Highlights](#) (ccsa.ca) for more.



- To use alone, putting them at a greater risk for harms such as mental illness and cannabis dependence (Spinella, Stewart, & Barrett, 2019).

Young women are at an increased risk for other types of harms, such as:

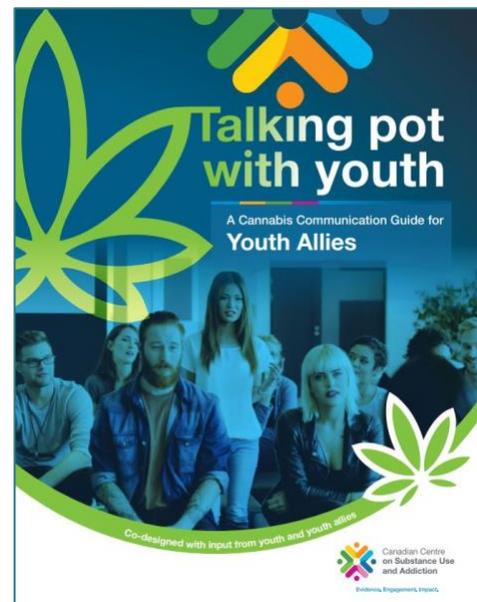
- Reduced safety due to purchasing illicit cannabis while alone; and
- Increased social disapproval that may cause young women to hide use, resulting in fewer opportunities for identifying problematic use and a decreased likelihood they will seek treatment (Agterberg, Schubert, Overington, & Corace, 2020).

## Key Considerations

These findings indicate that gender plays a role in the ways in which young people perceive and use cannabis and their corresponding risk for harms. Understanding these gendered factors can help ensure that prevention, public education and harm reduction efforts are tailored appropriately. Tailored messaging for boys and young men could include messaging about the legal ramifications of underage cannabis selling, purchasing and use, as well as the risk of heavy and frequent use on the body and brain. Girls and young women could be made aware of the safety risk of purchasing cannabis while alone or in unknown environments, and should be encouraged to seek treatment if they feel their use is becoming problematic.

Other considerations include:

- Youth are still uncomfortable talking to parents or teachers about cannabis use. There needs to be continued efforts to encourage conversations around cannabis use with youth, including in the home and by non-authoritarian trusted others.
- Most participants felt there needed to be a serious problem before help or intervention was appropriate. This points to the need for increased education on the early identification of cannabis use disorders.
- Peers play an important role in cannabis use among youth. Young people are using social media to promote and sell cannabis and to communicate with peers about cannabis. There may be an opportunity to target those at-risk for substance use using social media and advertising (Nhean et al., 2014; Sawdey, Hancock, Messner, & Prom-Wormley, 2017).



## Limitations

This study is limited to data from two genders: young women and young men. No participants in the study identified as non-binary or transgender. Data is not meant to be representative of the Canadian population. Due to the small sample size for the study, caution must be taken before generalizing results.<sup>8</sup> The size of the sample does not allow for the ability to identify findings based

<sup>8</sup> Acknowledgment of the small sample size is not meant to undermine the potential impact of the data as there was no evidence indicating that participants were in some manner unique from other youth across Canada.



on participant sex, race, culture or frequency of cannabis use, which can impact cannabis perceptions (Cunningham, 2020). Finally, gender roles, norms and relations change over time, and are differently experienced by different cultural groups. Hence, the perceived gendered factors reported in this report might change within groups or be different among groups, both of which possibilities need to be monitored.

## Conclusion

This qualitative study identified how gendered factors can contribute to the risk for harms of cannabis use in young people and suggests that young men and women face risks for different harms. The study supports the continued monitoring of gendered factors in cannabis use and the tailoring of prevention and public education efforts to gender and gender roles (Hemsing & Greaves, 2020). Future qualitative research could explore cannabis usage patterns among non-binary genders, and by sexual orientation, race, culture and ethnicity.

## Other Resources

- [The Brain Story](#)
- [Clearing the Smoke on Cannabis: Highlights](#)
- [Sex, Gender & Vaping](#)
- [SGBA+ Cannabis Routes of Administration](#)
- [Sex, Gender and Cannabis](#)
- [The High Way Home?](#)



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