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Understanding Cannabis Consumption in Canada

What We Heard from Frequent Consumers of
Cannabis

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CCSA, 500–75 Albert Street
Ottawa, ON K1P 5E7
613-235-4048
info@ccsa.ca

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Conflict of Interest

The authors have no conflict of interest to declare.



Executive Summary

- People in Canada between the ages of 18 and 65 who use cannabis frequently have a wide range of reasons for use. The majority of focus group participants report consuming for recreational purposes, including relaxation and in social settings. Others report prescribed and self-diagnosed medicinal purposes such as to manage pain and improve sleep.
- Many participants report a shift from initially consuming cannabis for social reasons to consuming alone for therapeutic benefits.
- The most popular formats for consuming cannabis are joints and vaporizers.
- Participants do not have issues accessing legal cannabis and enjoy the convenience, wide selection available and perceived safety of purchasing cannabis through government-regulated dispensaries.
- Some participants report continuing to purchase cannabis from non-regulated sources because of already established and trusted relationships, as well as competitive prices and quality.
- Negative health impacts from consuming cannabis, particularly the impact of smoking on the lungs, are of concern to some participants. However, these participants report that their concerns have not had an impact on their consumption patterns.
- Many participants feel that the positive health benefits of consuming cannabis outweigh potential or even recognized negative impacts.
- Further research is needed to examine the psychosocial and pharmacological ramifications of cannabis use, as well as the sources of ongoing stigma and the social consequences of legalization.
- The demographic of frequent consumers of cannabis requires a more tailored approach to harm reduction than average recreational consumers.



Introduction

Legalization of cannabis use for nonmedical purposes in Canada has spurred interest in understanding the harms and benefits associated with cannabis. This report is among the first qualitative exploratory studies to examine frequent cannabis consumption by examining the motivations and preferences of people who use cannabis frequently, as well as their perceptions of health risks. For the purposes of this report, we define a frequent cannabis consumer as someone who uses cannabis daily or almost daily. This group of consumers is distinct from average recreational consumers.

Since the legalization of cannabis in 2018, more people living in Canada have been consuming it, whether for the first time or as frequent consumers (Rotermann, 2020). However, frequency of use has remained stable from 2020 to 2021. For example, 19% of those who reported previous 12-month cannabis use in 2021 reported daily use, compared with 18% who reported daily use between 2018 to 2020. A greater percentage of male participants (29%) reported daily cannabis use in 2021 than female participants (23%) (Government of Canada, 2021). The majority of these respondents in 2021 reported consuming cannabis once per day on a typical use day (54%), followed by twice per day (20%) and five or more times per day (11%). These figures are unchanged from 2020. This data contributes to the limited understanding we have of this subset of cannabis consumers and the harms associated with cannabis use proportional to frequency and quantity of use. Frequent or heavy cannabis consumption is typically defined as daily or almost daily use (Gabrys & Porath, 2019; Kroon et al., 2020; Rotermann, 2019), but has also been defined as consuming cannabis five to six days a week (Henry et al., 2014) and three to four days a week (van der Pol et al., 2013).

Consuming cannabis more frequently is associated with an increased risk of cannabis use disorder (Kroon et al., 2020; National Academies of Sciences, Engineering, and Medicine, 2017), depression (Feingold & Weinstein, 2021) and use of other substances (World Health Organization, 2016). Evidence also shows that cannabis use can harm developing adolescent brains (Renard et al., 2014; Renard et al., 2018) and that when initiated at a younger age, cannabis use can increase the likelihood of developing cannabis use disorder (Hasin et al., 2016; National Academies of Sciences, Engineering, and Medicine, 2017; Renard et al., 2014). Despite these findings, limited research focuses exclusively on individuals who consume cannabis frequently in Canada, including understanding their reasons for use, perceptions of risk and purchasing behaviours.

With more people reporting more frequent consumption, this area is important to those working in public health and to policy makers seeking to understand whether legalization is meeting the primary goals of the *Cannabis Act* (Government of Canada, 2018). These goals include protecting public health and safety with a focus on young people, deterring illicit activities and providing access to a quality-controlled supply of cannabis. Further, this research will help inform cannabis-related health promotion and prevention initiatives, as well as educational messages about frequent cannabis consumption.

This report is primarily intended for policy makers, cannabis researchers, government representatives and substance use treatment and prevention specialists.



Objectives

The purpose of this study was to examine perceptions of the health, mental and social impacts of cannabis use among people who use it frequently. It also examines how legalization of nonmedical cannabis use has influenced consumption and purchasing patterns among these individuals. Findings from this research will address knowledge gaps and guide policy and public health approaches to reduce the harms associated with frequent and heavy cannabis consumption.

The study explored the following questions:

- What are the reasons and motivations behind frequent cannabis consumption?
- Has the legalization of cannabis affected consumption patterns of frequent or heavy consumers (e.g., levels of consumption, new methods of use)?
- Has legalization affected purchasing patterns and preferences for frequent or heavy consumers? Where do frequent consumers buy their supply?
- Do frequent consumers recognize harms associated with their cannabis consumption? Do they use strategies to minimize harms?

Methods

Focus Groups

The research consisted of 10 online focus groups with people 18 years of age and older living in Canada who self-reported consuming cannabis an average of three days or more a week. A total of 61 individuals participated in the groups, and they received an incentive of \$100 to participate. The sessions took place online using the Zoom web platform between November 29 and December 7, 2021, with sessions lasting about one and a half hours. The Canadian Centre on Substance Use and Addiction (CCSA) contracted Quorus Consulting Group to help conduct the research, and report on and analyze the findings. CCSA and Quorus collaboratively developed the study design and research instruments, which included an ethics protocol, a recruitment screener (Appendix A) and a semi-structured moderation guide (Appendix B). Quorus conducted the focus groups, which were observed by a CCSA researcher. The ethics protocol was approved by the Advarra Institutional Review Board.

Participants

Sessions were distributed across four regions: Atlantic Canada, the Prairies, Central Canada and Western Canada. Groups were segmented by age, with young adult (18–34) and adult (35–65) groups in each region; sessions with Quebec residents were conducted in French. To promote diversity among respondents, recruitment efforts aimed for a mix of settings (rural and urban), ages, gender and ethnicity.

All participants were emailed a consent form (Appendix C), which described the study. Participants were also asked to give written consent at the start of each session by responding in the chat feature in Zoom.



Recruitment

Participants were recruited by CRC Research (a Canadian market research firm with expertise in participant recruitment for qualitative research projects), through telephone calls using their proprietary database, referrals and social media. Potential participants were screened by telephone. During recruitment, individuals were asked several profiling questions that were used to ensure a diverse range of participants and to address analytical considerations. Participant characteristics were collected through the screening process, including region, gender, age, frequency of cannabis consumption and main purpose of cannabis use (medical or nonmedical).

Data Collection

Two Quorus researchers moderated the focus groups. Data was collected from the 10 focus groups using interview questions and probing by the moderators. The focus groups took place online and were recorded using the Zoom web platform, which allowed for observation as well as audio-video recordings. The recordings were transcribed and used to assist the researchers with data analysis and reporting.

Analysis

The researchers used a deductive qualitative analysis approach. They created an evidence matrix based on the structure of the moderation guide. The evidence matrix organized participant comments according to the group in which they participated and other participant characteristics (e.g., cannabis user type, gender). The transcripts were cross-referenced with the characteristics of each participant provided in their recruitment profiles and recorded in the evidence matrix. Each topic in the matrix was manually analyzed for themes through a co-analysis process. One Quorus researcher established an initial list of themes for each research question and a second Quorus researcher reviewed the identified themes. Analysis continued through discussions and an iterative review of the data.

What We Heard

Consumption Patterns and Preferences

What Participants Enjoy About Cannabis

When asked what they enjoyed about consuming cannabis, participants across the focus groups agreed on several factors. Notably, relaxation or unwinding was a desirable effect of consuming cannabis mentioned by most participants. Many also mentioned the medicinal benefits of cannabis use, such as pain management, sleep support or anxiety relief, which motivate them to regularly consume.

“I think it’s a good way to unwind at the end of the day. I normally use it after a hard day’s work sometimes to go to bed.”

“It just gives me a better quality of life in terms of day-to-day pain, sleeping better at night. I guess you could tell I use it recreationally similar to how some people unwind at the end of the day and maybe have a scotch or some sort of drink of choice. I tend to go towards cannabis.”



A few participants explained how cannabis helps them focus or be more efficient. Adult participants discussed how they use distinct strains¹ to benefit from the energy and physiological effects they provide. One female participant explained how cannabis helps her stay focused on specific house chores rather than be overwhelmed by everything she needs to get done in a day. Other participants explained how it helps their “overstimulated” or scattered minds stay on task.

“I actually smoke sativa a lot because it helps to bring my productivity up.”

“I work nights on the weekends, so the sativa I smoke during the day just to keep me alert.”

“With cannabis, it’s kind of helped us to mellow out so we can actually get stuff done, and ironically help us focus.”

“I can’t concentrate without being high.”

“I do have ADHD and so it does make it a little bit easier to function sometimes.”

Additionally, in the young adult groups, some mentioned how they use cannabis for social situations to keep them awake and energized.

“If I know I’m going out with friends and I need a little bit of energy, sometimes it can help.”

Several others discussed how they enjoy consuming cannabis as an alternative to drinking alcohol, for the social aspect such as when spending time with close friends, as well as consuming to make other activities more enjoyable such as eating food, watching movies or television, playing video games, playing a sport, or listening to music. Some of these participants would defer to consuming cannabis to heighten their senses.

“[...] with alcohol there’s some amount of enjoyment, but once you reach that point, you’re going to be waking up feeling rough and with weed there’s not really that point. You can still wake up the next morning after having smoked too much and go to work.”

“It can turn an ordinary situation into an extraordinary one, right?”

“I just kind of like to do it for fun. Like I’m watching a movie or something, I might as well smoke some cannabis to enjoy it a little more or playing video game... It’s just more entertainment purposes.”

“I just enjoy the social aspect of it. Getting together with friends and having a puff or two.”

Male participants more often than females reported consuming cannabis for recreational purposes such as to have fun with friends, and to enjoy other activities more. Female participants were more likely to report consuming cannabis for medicinal benefits including pain relief, to help with sleep and to cope with mental health issues.

What Participants Dislike About Cannabis

While participants could easily explain what they enjoyed the most from consuming cannabis, explaining what they disliked did not come as easily. The most common drawbacks of consuming cannabis were the price and the loss of productivity that can occur after consuming.

¹ Cannabis strains are either pure or hybrid varieties of the plant genus *Cannabis*, which encompasses the species *C. sativa*, *C. indica* and *C. ruderalis*.



The topic of price was mentioned in the focus groups, with those who consume frequently or in higher concentrations, and particularly those who purchase from dispensaries, discussing how the cost adds up and becomes an expensive activity. This was said to be especially true as tolerance increases and thus the amount needed to achieve the same effect increases.

“The cost definitely adds up with your tolerance buildup and what would’ve cost a lot less when you would first start it up, now costs a lot more.”

The unproductiveness that can be experienced when consuming cannabis and achieving a “high” was considered a disadvantage for many. Some mentioned feeling lazy or sluggish, particularly from certain strains of cannabis. A few brought up how this loss of productivity requires them to plan ahead to ensure they have no obligations for the rest of the day or the following morning, especially if those obligations require them to be clearheaded.

“You kind of have to plan ahead. If you’re going to do anything later or tomorrow... It’s a lot harder to get out of bed in the morning.”

“When I smoke at the start of the day, I cannot count on being productive for the rest of the day.”

Another dislike when it comes to consuming cannabis is the associated stigma. Many participants feel that there is still stigma around cannabis, despite it being legal. Some mention worrying about what others will think or say while some have dealt with comments or teasing from family and friends regarding their cannabis use. A few participants also reported that their use of cannabis has negatively impacted their dating life.

“The stigma of marijuana versus alcohol and feeling the need to explain yourself as a marijuana smoker when you’re in a room full of people who are perfectly okay with getting drunk, always was something that annoyed me.”

“And the stigma is still kind of there around it... in the dating world, it can often be a deal-breaker.”

Some mention that after they consume cannabis, they find it difficult to be in social settings (depending on “the strain”, as reported by some participants). Another reported dislike is that they do not always enjoy the feeling of being high, with some mentioning paranoia, or loss of impulse control (for example, with food). Others agreed that getting “the munchies” can be an issue as it tends to lead to snacking on unhealthy foods or large quantities of food which could potentially result in weight gain.

“I find that my impulse control goes out the window when I smoke. In terms of munchies, I will eat a whole bag of chips and not realize it until there’s just crumbs at the bottom.”

While some consume cannabis to help reduce pain or to improve sleep or anxiety, contrarily, others in contrast report experiencing negative effects such as headaches, anxiety/panic attacks, or trouble falling asleep, or still feeling drowsy/tired the morning after consuming.

“Sometimes I can experience anxiety, my heart beats faster, I am a little bit more anxious, I start thinking too much.”

A few mentioned difficulties when trying to stop or reduce their consumption, or report feeling a reliance on cannabis. Another unique dislike that came out was the smell, with a few saying they do not enjoy the odour of cannabis and dislike having the smell linger on their clothing or because it exposes their use in public. Some choose to use particular formats of cannabis such as oils in order to prevent this, with no notable difference between males or females.



"I don't like the smell ... I take my distances from people; I don't want them to know that I smoked."

"I dislike the smell, that's why I use oil."

Reasons for Starting to Consume Cannabis

Participants were asked to share how long ago they started consuming cannabis and the reasons they started. Many participants in the young adult groups started consuming cannabis with friends in high school out of curiosity ("just to try it"), or for social reasons when spending time with friends or attending parties or music events, or because of social pressure to try to fit in. A few mentioned starting initially to help quit smoking cigarettes or to cope with recovering from addiction to other drugs. Others mentioned starting to consume cannabis or consume it more regularly in college or university to help reduce stress.

"I think I was like 15, mainly just like peer pressure or whatever, just like in school."

"The reason that I started was to stop smoking cigarettes."

Some participants in the adult groups mentioned beginning to consume cannabis many years ago when they were young and having started for social reasons, with some also mentioning peer pressure. Some said they only tried it recently looking for pain relief or as a way to relax.

"Everybody else was doing it around me. It was recreational, like a social thing."

How Reasons for Cannabis Use Have Changed

Participants were asked to share their reasons for consuming cannabis and whether these reasons have changed since they first started consuming. Many of the young adults mentioned a shift from consuming cannabis socially with friends and peers to now doing so alone for relaxation or recreation, or for the therapeutic effects.

"It was just to have fun with friends. Now it's more to deal with pain and stress."

"Back then I didn't even really like it that much. I would just kind of do it just to fit in ... Now that it's legal and everything, it's just more just for fun."

"Now I use it as like an anxiety medication specifically as well as something to calm me down at the end of the day."

Similarly, several participants in the adult groups reported a shift from consuming socially to consuming therapeutically for pain, stress relief, anxiety relief or to help with sleep. Several participants acknowledged they needed to adjust their consumption routines in response to lifestyle changes such as school semester deadlines (reported in young adult groups) or having children (reported in adult groups). For the few who mentioned this adjustment, they reported consuming cannabis less or not at all while their children were younger or ensuring that they only consume in the late evenings. A few participants also mentioned their frequency of use depends on seasons and reported consuming more during winter months when there is less opportunity for enjoyable activities due to the cold.

"I guess it's gotten more (frequent) as an adult, but stress has gotten more as an adult too, right?"

"I started when I was about 15, in high school and just to be cool basically ... Now I only smoke when I get home after work, just to relax."



To address increasing tolerance, some participants across the groups discussed the concept of a “tolerance break” in which they strategically take short breaks from consuming cannabis to lower their tolerance before they resume regular consumption. These breaks are taken to lower the quantity of cannabis required to achieve the desired effect, which in turn saves money.

“I found that I could take a couple (pills) at first and then I started having to take three or four to get the same pain relief that I was getting previously. So, then I actually went off of taking any at all for a couple of weeks. And then when I started taking them again, I found I was getting a better result again with less than previously.”

“If I cut back a little, I enjoy it more. Whereas if I’m just smoking and smoking all day long, then I don’t get the same effect.”

A majority of participants from all groups described a shift from consuming for recreational purposes to consuming for more therapeutic reasons such as sleep or pain. A few mentioned not particularly enjoying consuming cannabis, but that they continue to consume it to reap the therapeutic benefits or because it is a major part of their daily routine. One male participant discussed having tried to quit consuming cannabis a few times, but described his use as an addiction and that he continues to consume so as to not experience symptoms of withdrawal.

When asked to share one or two words to describe their current use of cannabis, some participants chose words that reflect the routineness of their use: “daily,” “frequent,” “moderate,” “addiction,” “sporadic,” “chronic,” “regular” and “casual.” Others chose words that reflect the purpose of their use: “recreational,” “relaxation,” “social,” “creative,” “medication,” “therapeutic,” “de-stress,” “reset” and “stimulation.” The word cloud below captures the words used. The words in larger font were used more frequently than the words in smaller font. As illustrated in the word cloud, participants were most apt to describe their use as “relaxing” and “daily.”





Preferred Methods for Consuming Cannabis

Focus group participants shared several methods through which they prefer consuming cannabis. Some have a single method they rely on, while for others the method of choice varies depending on the situation or the desired effects. A few participants said they did not have a preference and will consume cannabis through whichever method is available to them.

One of the most mentioned methods for consuming cannabis was through vaporizer pens, which use a concentrated THC² cartridge. This method was the preferred method for many and was favoured particularly for the convenience and discreetness. Some also mentioned enjoying this method because the effects are felt quickly and it is easy to control the amount consumed.

“Just before the vaping I just, I used to smoke the plant itself and joints and a bong and pipe, just like that, but that was really hard on my lungs and my throat. Vaping is really, it’s way easier for me.”

“I used to buy flower and then put it in a pipe, but I found that would be too harsh and then over winter, I didn’t want to be going outside all the time and then same, I used to do pre-rolls as well, but it’s just a lot more convenient with vaping.”

“It’s so discreet, it smells a little bit, but not to the same extent that smoking it regularly would.”

Some participants mentioned drawbacks of vaporizer pens, including that they are expensive, do not last very long, and for some they can cause coughing or can be hard on the lungs or throat.

“I find the vape is really, really harsh for me too [...] the oil to me is so harsh for the back of my throat that I would just so much rather do it but get more out of it.”

“I always found when I smoke with a vape, I would have like throat pains.”

“So, I’m not really attracted to vaping, and it really makes you cough.”

Others enjoy smoking cannabis in the form of joints, either rolling themselves or purchasing pre-rolled joints from a dispensary. For those who smoke cannabis through joints, this method is preferred in social situations with friends, with some switching to joints as an alternative to smoking from a pipe, which they found too harsh on their lungs.

“So, the joint is just ideal, especially now you can go to a dispensary and you can get a pack of joints, like a pack of smokes and just toss it in your pocket. It’s the easiest thing ever.”

“If I’m smoking a joint, it’s usually shared with someone.”

As mentioned earlier, some also view the process of rolling their own joints as a routine or ritual that they enjoy.

“I think that’s a big part of what I like about cannabis, it’s like a little ritual, rolling my joints, I’m calm when I smoke it, I’m on my own, and the action of smoking it keeps you busy.”

“It’s automatic. The fact of rolling, lighting, it’s a habit.”

² THC (Δ -9-tetrahydrocannabinol): The most abundant cannabinoid and principal psychoactive compound in cannabis, responsible for producing the characteristic intoxication and high. Effects of THC increase with concentration. Research into the potential therapeutic and harmful effects of THC is ongoing.



Smoking through bongs was also mentioned as a popular method for social situations with friends, however most mentioned using this format more when they were younger due to it being cheap and being able to induce a strong effect. These individuals mentioned having shied away from using bongs due to the harshness, difficulty of cleaning and the availability of several other options.

"I don't really like hitting bongs anymore because it kind of hurts my throat and I'm like, yeah, this is not the point. It's not to get as high as you can. It's just to kind of enjoy the trip."

Some participants enjoy consuming edibles such as chocolates, cookies, or gummies as well as cannabis infused drinks. Those who choose to consume edibles enjoy the effects as well as having an alternative to smoking which can be hard on the lungs. Some also mention consuming capsules of THC or CBD³ as well as oils. Others shared more neutral feelings towards this method stating that they find dosages inconsistent and find it hard to know how it will affect them, even when using the same product or dose they have tried before. A few reported from their perspective that edibles are not as effective, or they need to consume a large amount to feel the effects.

"I like them because I don't have to inhale anything."

"Once it hits you, it hits you and you're like chilling and your throat doesn't hurt the next day and stuff."

"I've tried the edibles a couple of times, but I don't get the effect that I was looking for."

"The one thing I don't like about edibles is that it seems like it changes from day to day as to how they hit. I can take the same brand, the same quantity. And sometimes they hit immediately and other times it'll take a couple of hours and then all of a sudden it hits and it lasts way longer."

When it comes to gender differences, many women shared using multiple formats to consume cannabis depending on the situation or desired effect whereas men more often had only one or two preferred methods. Many women in the focus groups reported consuming edibles, but many also frequently used vaporizers or joints as their preferred method, whereas men most often reported joints as their main preference.

When asked about product flavours, the majority of participants were either neutral, or did not care for flavoured items. Some mentioned how the flavour from certain cannabis strains can be more enjoyable than others, but this would not make them more or less likely to buy a product nor would it impact the frequency of their consumption. Only a few mentioned that they actively avoid certain flavours such as lemon or pepper.

Impacts on Consumption Habits

Legalization of Cannabis

Legalization of cannabis in Canada in 2018 has had an impact on some aspect of cannabis consumption for most participants. These impacts included how others view their consumption, how,

³ Cannabidiol (CBD): A cannabinoid that does not produce intoxication or a high. There is some evidence that CBD inhibits the effects of THC's psychoactivity. Research into the properties of CBD is ongoing to identify potential therapeutic uses (Health Canada, 2018a; Konefal et al., 2019).



where and what they consume, where they obtain their cannabis and their own level of comfort consuming cannabis.

Those who do not feel their consumption habits have been changed since legalization shared that they had dependable methods for accessing cannabis prior to it becoming legal, and thus they did not change their frequency of consuming afterwards. A few reported that they have continued to purchase from non-regulated sources and will continue to do so as they are not satisfied with the prices and quality of government-regulated cannabis.

Other participants shared that while they had access to cannabis prior to legalization, they have been impacted positively by the new laws. Many report the convenience and selection offered at dispensaries has improved their experience.

Participants also like that they no longer need to have a “connection” to buy cannabis and that they no longer worry about getting caught or arrested with an illegal substance. Particularly for some female participants, this has increased their comfort from a personal safety aspect as they can purchase cannabis from a store rather than meeting “a guy” in a private location, unsure of if and how the transaction will happen. Additionally, several feel a sense of safety knowing that the cannabis they are consuming is regulated and there is no risk of it potentially being laced with other drugs. This has resulted in an increase in cannabis consumption for some participants.

“I can pop by the cannabis store and just grab some, bring it over, it’s not really a big ordeal. I don’t need to know a guy. I can just go and pick it up.”

“Before legalization, my biggest concern was it being laced, because you would hear that happening everywhere...But for me, that kind of concern was taken as soon as I knew that I was getting it from a reliable source.”

For many, the reduced stigma has been a huge relief that has come with legalization. Participants shared that they are much more comfortable consuming cannabis in public, purchasing from physical storefronts, and openly talking about their use with friends or family. Some even report that when having conversations about their use of cannabis, they learned that their friends or family were also consuming cannabis which led to more comfort speaking about the topic and even another person to consume with in some cases. For adults in the group, some described having feelings of guilt when consuming cannabis before legalization, including embarrassment of concern over doing something wrong when consuming cannabis, but now no longer need to worry. Finally, a few participants explained that without legalization, they would not have even tried cannabis and discovered the therapeutic benefits. For these participants, the legal and social acceptance of the substance convinced them of its legitimacy.

“I find there are more people open to it just because of the fact that it’s legalized.”

However, with that being said, a few participants mentioned that they are still not very open about their own use of cannabis, so legalization has not changed their consumption habits and they still opt to consume cannabis alone or with close friends only.

Some express excitement that there will likely be more research and knowledge on cannabis now that it is legal and becoming more accepted. One participant mentions the opportunity for better understanding what they considered to be the potential therapeutic and medicinal benefits of cannabis – they reported having read research that suggests cannabis is a safer alternative to some medications for pain which can be harsh on the body.



COVID-19 Pandemic

The COVID-19 pandemic has also altered consumption habits for some. The young adults mentioned changes in their frequency of consumption more than the adults. Some reported that they were consuming cannabis more, particularly during the early stages of the pandemic when many places were closed and there were stay-at-home orders as they felt bored and did not have much else to do. This was especially the case for one participant who mentioned living with roommates who also consume cannabis regularly as they were confined together.

“I don’t think anyone realized the seriousness of the pandemic and everyone kind of thought it might be like a one-month thing and we’re going to be out of it. So at the time we were like, oh yeah, you know, like a little vacation. We were all picking up quite heavily, but then as life continued, we had to adjust.”

A few young adult participants mentioned changes in consumption due to moving back home with parents, with some reporting increased usage to cope with family tension, while others decreased their usage as they were not really open with their cannabis use and did not have a way to hide it from their parents. Others also mentioned increased cannabis consumption to cope with the pandemic overall, some describing it as a “crutch” during these times. Another participant experienced increased workplace stress due to COVID-19 and thus began consuming cannabis more. Many also expressed that their consumption habits had not changed.

When asked how they see their habits changing as things “return to normal”, some mention that they find themselves smoking more socially again as public places begin to open up. Participants were also asked if they foresee a change in their consumption if their job requires them to return in person. Some mentioned that they do not think their routine will change since they only consume outside of work hours anyways, while a few others were not concerned with needing to adjust their consumption since they see cannabis use as legal and it does not change their ability to do their job.

Anticipated Future Consumption

Many participants felt that their cannabis consumption would not change much over the next 5-10 years. These participants feel that their level of consumption is under control and does not interfere with their day-to-day life. They also have not experienced ill effects on their health or read any research that suggests there are negative health impacts.

“I think it’s going to be the same. I don’t see why it would change.”

One participant in the adult group could see an increase in consumption as they will likely have more time and fewer responsibilities.

“I think long term...retirement...I could see it increasing, because I’ll suddenly have more time on my hands to kind of just do me and not really need to worry about the responsibilities of day-to-day life.”

Alternatively, some participants could foresee a decrease in consumption. A few participants in the young adult group explained that they would prefer to decrease their use of cannabis, mostly due to the cost. Others would like to cut back a little bit to increase productivity, or to adapt to different life stages (e.g., having children).

“I would like to have a couple of days where you’re clearheaded and there’s nothing going on or whatever and see if you can still tackle the day like that. And financially, I think it would be



nice to not be having to spend that nice chunk of cash every couple of weeks, but a little bit less.”

“I don’t plan on stopping but I plan on making it more difficult for me to consume in order to like slow me down.”

“I do want to have kids and I don’t think I want to have that around them. So, I think it will be something I don’t do as often as I do now.”

A few young adult participants who had earlier mentioned feeling reliant on cannabis also discussed intentions to consume less over the next few years and use cannabis only on occasion rather than relying on it daily.

“I figure maybe two or three times a year, maybe a little bit more, maybe once a month. I don’t know where I’m going to be. But definitely, I don’t want to be smoking every day, and in any case, that’s not my plan for the next two years, in my mind. Even the next year.”

“In five years, I hope to stop completely or maybe once every six months or just once in a while...Because I don’t want to hurt my health, my physical health mostly.”

This view was also shared by an adult participant who wishes to stop consuming cannabis.

“I’m eventually just going to quit, that’s my goal right now that I’m older.”

Purchasing Patterns and Access

Where Cannabis Is Being Accessed

Focus group participants shared a variety of sources for purchasing cannabis. The most popular place to purchase cannabis among participants was at dispensaries, or in some regions, the liquor store which also sells government-regulated cannabis. Many visit the store in-person and some also opt to order online and have their products delivered to their home. Those who purchase at dispensaries or liquor stores typically do not have to travel far at all, with most saying their local store is only a few minutes drive away. Even those living in more rural areas report having dispensaries nearby.

Participants shared a range of reasons that explain why they prefer to shop at dispensaries. Some of the more common reasons included the convenience, the high knowledge of staff who can make recommendations, the perceived safety of the product, and the large product selection, including items that may be harder to get from other sources. Those who shop at dispensaries typically have “go to” products that they buy each time. This does not preclude them from talking to the employees on occasion and ask for a recommendation that will produce the effects that they desire or to discover new products. Some also mention taking advantage of the promotional prices to try different items when they are on sale.

“I say what I’m looking for and then I just go off of their recommendations.”

“There’s a couple standard things that I like to get, but then every now and then I’ll see what either is on sale or they might have something interesting rotating through.”

While many had positive experiences with dispensaries, some participants mentioned that the prices are too high and the quality of products they have tried did not meet their expectations. These participants prefer to purchase their cannabis from a local “dealer”, grow cannabis themselves, or some have family or friends who grow and will get cannabis from them. Some also report finding



better prices online, although one participant mentioned that the quality from online products has not been as fresh as when purchased in store.

“Until the liquor store can provide me premium bud for under a hundred dollars an ounce, I just don’t see me buying it there.”

Some participants also discussed other methods of purchasing cannabis such as online distributors or on social media platforms that accept e-transfer payment and either deliver directly to their home, or in some cases set a meet-up spot. These participants were unsure of the legality of these sources but purchased from these distributors due to the convenience, competitive prices and the ability to buy in bulk.

Access to Legal Cannabis

Participants reported that they had not experienced any difficulties accessing legal cannabis, however some mentioned that their local stores sometimes experienced shortages of product.

“There’s a lot of shortages of a product. So, like things that I want, I can’t always get them in the store.”

When asked if there was anything that could improve access to legal cannabis, participants offered several suggestions. Many would like to see lower prices, less taxes and improved quality. Numerous participants brought up the packaging used and complained that not only can it be difficult to open at times, but it is not environmentally friendly and cannot be recycled, which is frustrating for those concerned about their environmental impact.

“The packaging is very annoying. I’m sort of a green in person. I like to recycle as much as I can and the packaging is insane. I have so many containers and I don’t know what to do with them. My dispensary doesn’t recycle them. I’ve asked in the city. It just feels like unnecessary packaging compared to what was on the streets.”

Several participants voiced the need for more research on the effects of cannabis, particularly on the effects of different strains. There was a consensus that medical professionals require more knowledge on the potential medicinal and therapeutic benefits of cannabis use, as well as the opportunity to have some costs covered by insurance when the cannabis is being used for potential therapeutic benefits such as for pain or for mental health purposes.

Potential Associated Harms

Perceptions from Others

Participants shared their experiences with the reactions they have gotten from family, friends, peers and co-workers regarding their use of cannabis.

For many young adult participants, their parents are against cannabis, with some saying their family views it as a “gateway drug”. Most young adult participants report that they choose not to discuss their use of cannabis with their parents or consume cannabis when around family as they do not share the same views. In some cases, their parents are unaware of their consumption since they do not live together so they are able to hide it.

“My mom is a little more open, but my dad is like really, really old school. So, I’ve never really talked about it with him...we just never really get into it, because I don’t, I guess I’d rather avoid the confrontation that it’s really going to arise there because like different opinions.”



For a few, their family is accepting or also consumes cannabis which makes it easy to discuss openly.

“Me and my mom...we both found out that each other smokes at the same time. So, we kind of put in, put us both in our place to not be able to say anything to each other.”

In the adult groups, some mentioned that they will actively surround themselves with people who are okay with their use of cannabis and thus they have not had issues. For one participant living in a more rural area, despite having local access to cannabis, they feel the subject is still quite taboo in their region and do not share their use of cannabis with anyone outside of their immediate family. For one participant, they still enjoy spending time with friends who do not consume cannabis as it helps them cut back on their consumption. When it comes to the workplace, a few participants discussed how they will avoid the topic with co-workers to avoid any potential judgment or stigma.

“I don’t smoke at work, but pretty much everyone I know is pretty okay with it and does it themselves. It’s pretty important to me to like, be around people that are cool with it.”

“Now that I want to be shifting to a more sober less cannabis smoking everyday lifestyle, I find that I specifically look out for people who are more sober to surround myself with so that I’m not feeling pressured or feeling tempted.”

“It’s not even something that I would talk about ever at work... I’m very cognizant still about talking about it freely and I would never openly.”

Since legalization, some of the young adult participants report observing others around them are more accepting of cannabis, however they still find that there is stigma around cannabis use.

In the adult groups, many mention how legalization has made the topic of cannabis more normalized. Some discuss how documentaries on cannabis are also beginning to come out which has helped make cannabis less of a taboo subject. One explained that while their family initially had a negative perception of those who used cannabis, they have become more open and now view it to be on the same level as alcohol. Overall, many now feel comfortable opening up about their own views and use of cannabis, while before legalization they refrained from discussing the subject or sharing their own use.

Those who have dealt with opposing views from family and friends typically did not take it personally or alter their use of cannabis. Many will ignore comments from family and keep their use of cannabis private, but also do not feel that they need to hide their use. A few will avoid certain friends or family when they are consuming cannabis or surround themselves with people who are accepting. Some have also tried to help others become more open and diminish the stigma surrounding cannabis.

“I don’t think it really matters, because I feel like everyone should be free to whatever they want, unless they’re actually damaging someone.”

Health-related Concerns About Consuming Cannabis

Participants felt comfortable with their use of cannabis and shared few concerns. A common sentiment was that as long as it is consumed responsibly and does not affect productivity, they are not worried about consuming cannabis.

When probed specifically on health concerns, the conversation was more animated. Many mentioned slight concerns over the impacts of smoking and vaping on lung health. Numerous participants were aware of the risks of carcinogens when smoking joints, or from a bong or pipe due to combustion. A few were not concerned about these risks however, as they explained that they only



consume cannabis in the form of edibles, so no inhalation or combustion is required. Those who did mention health concerns from smoking and vaping did not change their consumption habits due to this. Some felt that since they are healthy in other ways, the risks of smoking and vaping is more balanced.

“Your lungs are not meant for smoke; they’re meant for air. But I do think is there’s the counteraction that you can do in terms of like taking care of yourself, eating well, exercising regularly, all these things where you won’t feel the effects.”

“It definitely has an impact on my lungs, because when I’m walking out in the cold I can barely breathe. I think that’s a lot to do with the heavy use of cannabis. But it has really improved my mental health, it’s improved my anxiety and my depression. So, there’s a good and a bad side to it.”

Other health concerns that were brought up pertained to unhealthy habits that occur after consuming cannabis such as overeating or eating unhealthy foods due to getting the “munchies”. This was mentioned more among those who opt to consume cannabis in the form of edibles.

Lastly, some participant’s concerns were more likely to be legal or child related rather than health related. For example, some raised the issue of kids having easier access to cannabis. Those with kids at home take precautions to ensure that their own cannabis products are kept away from their children. Others brought up issues such as consuming cannabis and driving and felt that this would need to be closely monitored as a safety concern.

Participants were asked whether they felt their use of cannabis has had any health impacts, good or bad. Some shared that they had noticed some negative effects on their breathing and lung health. One mentioned having asthma and felt that their use of cannabis could be contributing to this. Many were inclined to focus on the positive impact cannabis was having on their health, especially their mental health. As well, being able to rely on cannabis instead of medications was seen as a positive for some. A few who noted experiencing some minor negative health impacts felt that the positive health effects outweighed the negatives.

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Experiencing negative health effects did not change consumption habits for most, however, some will consume using certain formats such as edibles to avoid damaging their lungs.

Efforts to Address Concerns Surrounding Cannabis Use

Focus group participants were given an exercise where they assigned a number between 1 and 10 to represent their familiarity with the risks associated with cannabis use. A score of 10 represented “extremely familiar” whereas a score of 1 meant “not at all familiar”. Overall, participants scored themselves fairly high on their familiarity with the risks, with nearly all participants selecting a number between 6 and 10.

Young adults who felt they were more familiar with the risks (scores closer to 10) explained that they had mostly learned about cannabis and the associated risks in school or had discussions with friends. Some mentioned having worked at a cannabis dispensary and learning about risks and gaining other knowledge through the training provided by the dispensary. Young adults who reported



being less familiar with the risks said they did not know or care as much about the risks and thus had not sought out information.

“I’m not familiar at all, and I don’t use enough for me to be worried enough for me to start doing research on the risks.”

“I haven’t looked anything up, it’s from other people. People that are older than me, that have smoked longer than me or more (often).”

In the adult groups, scores tended to range from the mid-point (5) to higher (closer to 10), with several reporting familiarity with the risks. Participants who felt they were more familiar with the risks mentioned a variety of sources for their information. Some mentioned using the internet to research specific risks such as how cannabis consumption can negatively impact mental health or physical health such as the lungs.

“I also read on the internet that when you consume cannabis, it brings up any underlying like mental illness or schizophrenia or anything like that, too.”

A few participants felt that research studies had conflicting results. One participant knew there was information about the risks of cannabis available on the Government of Canada website, as well as from other sources. However, this participant was not interested in doing research or accessing this information. One mentioned asking a few doctors about the use of cannabis for pain management and finding that some medical practitioners were not supportive of cannabis use while others lacked knowledge on the subject. With the recent legalization of cannabis, participants are optimistic that more research will be published.

Participants seemed to have some familiarity with the risks of consuming cannabis on brain development in youth and teens, the general effects of inhalation on the lungs and the ill effects of consuming illegal cannabis that could be laced with other drugs.

“Most of my knowledge comes from just the health risks of smoking in general, and I would just associate the smoking risks with cannabis smoking.”

Participants were especially uncertain and curious about the long-term risks of cannabis use given that research in this area is limited. Others would like to learn about the impacts of cannabis on mental health. Some were interested in learning the positive effects on mental health, while others discussed the potential negative effects, including risks of developing schizophrenia, a risk they had previously heard about. Some also mentioned issues such as memory loss, as well as various physical health impacts from consuming cannabis.

Not all participants were eager to learn more. Not having experienced any negative effects from their consumption of cannabis, some were not interested in broadening their knowledge of the health effects beyond their own experience. Others said they see the value in more research or feel that this knowledge is important, but they have not felt the need to seek it out.

“I don’t think I use it to the point where it would affect me negatively so I haven’t been proactive in seeking out this information ... it’s always good to have this knowledge and I wouldn’t be opposed to learning it, but it’s just not something that I’ve actively searched out.”

When it comes to learning more about the risks of cannabis consumption, a few of the young adult participants mentioned brochures, advertising in public transportation, government resources, documentaries, YouTube videos and TED talks or other webinars as potential sources they could use.



Many participants would trust the government to conduct cannabis research, but they expressed the importance of having unbiased researchers as well as transparency in the research process.

"I feel like the government should do it, but also for people to know that they're getting the information from trustworthy sources, they should have like a proper citation letting you know where they got the information from."

"I want a multi-part series on Netflix (laughs) that's highly produced, that is funded by the government and is not funded by an independent body that has a vested interest in the positive or negative effects of weed, because they are either trying to sell it or they're trying to get it banned."

Some said they would prefer to have research conducted outside the government either because they did not trust the government to provide unbiased information or because they thought research should be done by researchers who specialize in the area.

"Rather than the government, have more like a drug and addiction specialist."

"I don't know if I'd trust it coming from the government."

Several participants said they trusted information coming from medical professionals. Others, however, said they feel doctors lack information on cannabis or the information is inconsistent from doctor to doctor. They said they would benefit from having doctors with more education and knowledge on the topic.

"I tend to listen to anything my doctor tells me ... but they're all over the board, some of them are for it, some of them are against it. Some of them they don't dare ask. So, if they could kind of get on the same page with it and get educated so that they can pass it on to us."

Key Considerations and Implications

Legalization of cannabis use for nonmedical purposes in Canada has been accompanied by increased interest in understanding the harms and benefits associated with cannabis consumption. In general, the current evidence indicates that the impacts of cannabis use on various aspects of health and social functioning is at least partly proportional to frequency of use (Johnson-Ferguson & Di Forti, 2021; Rotermann, 2019). People who use cannabis frequently, therefore, represent an important population as they are most likely to experience the harms associated with cannabis. However, there are relatively few qualitative studies examining this demographic of consumers, including how their attitudes, perceptions and methods of use differ from the average recreational consumer. The goal of this study was to collect perceptions of health, mental and social harms associated with cannabis consumption among people who use cannabis frequently and to examine the impact of legalization on them. Findings from this research will help address knowledge gaps and guide policy and public health approaches to reduce the harms associated with frequent or heavy cannabis consumption.

Demographics: The demographics of participants in this study should be considered when interpreting its findings. Frequent cannabis consumption is becoming apparent in the cannabis market and society generally. While much of the current research literature identifies frequency of use as an indicator of associated harms (Gabrys & Porath, 2019; Hango & LaRochelle-Côté, 2018; Swan et al., 2021), there is little research that reconciles the motivations and perceptions of this group of consumers and the potential harms compared with benefits. Compared to the average recreational cannabis consumer who accesses cannabis in a transitional way, the participants in these focus groups were clear in demonstrating the unchanging patterns of use engrained before



legalization in this population of consumers. This information is crucial for understanding how heavy cannabis consumers access the market and consume cannabis, and for guiding future policy and harm reduction strategies.

Methods of consumption: Vape pens and joints were the preferred methods of cannabis use among frequent consumers, for different reasons, such as rapidity of effect (both methods), ritual (joints) and convenience or discretion (vape pens). This information should be taken into account by healthcare professionals and policy makers. First, because of the well-known potential for harm to the lungs and airways (Renard, 2020), effective and evidence-informed initiatives should continue to promote knowledge of the respiratory and cardiovascular risks of smoking cannabis. Second, harm reduction strategies should be implemented to provide alternatives to cannabis smoking and vaping. Finally, as people might perceive vaping as a safer alternative to smoking cannabis, further research to examine the long-term safety of cannabis vaping is fundamental.

Mixed reasons for use: Our findings show that consuming cannabis can serve opposing functions among frequent consumers. Some participants, especially in the young adult groups, prefer the energizing effects of cannabis in social settings, whereas other participants prefer cannabis for its calming and sleep-inducing effects. Across all groups, participants described a shift away from consuming in social settings with friends and peers and more toward consuming alone, mostly for relaxation or to cope with other substance use or health problems, including pain, anxiety, stress and sleep difficulties. Interestingly, some participants described using cannabis to help replace or as a substitute for other substances that they consider more toxic, such as cigarettes, or intoxicating, such as alcohol. The replacement of other substances with cannabis is an important observation given the physical and mental health risks associated with polysubstance use, especially in young adults (Bailey et al., 2019), and warrants further investigation. One recent qualitative study shows that analyzing simultaneous substance use is complex and depends on various factors such as patterns of use, external and internal context, and consequences experienced (Boyle et al., 2021).

The contrasting functions of cannabis consumption are an important factor for public health professionals, policy makers and practitioners to consider in assessing the benefits and harms of cannabis use, especially among frequent consumers, and one on which previous research has not focused. Given the rapid change in legal frameworks and the increasing use of cannabis for both medical and nonmedical purposes, more research is needed to examine the motivations for use among this subgroup of frequent consumers, as well the health benefits related to cannabis use (Boyle et al., 2021; Sabioni, P., & Le Foll, B. (2018); Steiner et al., 2019).

Impacts of legalization: The majority of participants favoured the convenience and selection of regulated products obtained through legal dispensaries, as is also reflected in the growing Canadian retail market (Government of Canada, 2022). Female participants in particular expressed more comfort in their personal safety when accessing cannabis through a store versus meeting a dealer in a private location. Data from the National Cannabis Survey supports some of these findings, where female respondents reported more often paying for cannabis from legal sources than male respondents did (Government of Canada, 2019). It is therefore important for ongoing research to further tease out gender differences in how consumers, specifically frequent consumers, seek out and purchase cannabis. This information is key in understanding the impacts of the expanding market and developing more targeted policy measures.

Stigma: The findings of this study reveal that legalization has helped reduce stigma, resulting in more open and comfortable consumption in public, purchasing in retail stores and honest conversations with family and friends around cannabis use. However, the majority of participants still observe a divergence in views or tension with family members around cannabis use. They also experience



stigma from medical professionals and within the workplace. This lingering stigma is an important finding from this study that is similarly reflected in other qualitative work seeking to identify sources of stigma, stereotypes and other social consequences of legalization as cannabis continues to be normalized (Melnikov et al., 2021; Reid, 2020;).

Associated harms and education messaging: Several participants said they have experienced or are concerned about the negative effects cannabis smoking may have on their lung health. This concern is consistent with findings from the Canadian Cannabis Survey showing that the majority of people know or believe that cannabis smoke can be harmful, particularly to teenagers (Government of Canada, 2021). Few participants in our study mentioned plans to switch to other formats such as edibles as a harm reduction strategy. For most participants, experiencing or being concerned about negative respiratory effects did not change their consumption habits. Many participants were inclined to focus on the perceived positive impact cannabis was having on their health, especially their mental health. A common sentiment among all participants was that as long as cannabis is used responsibly and does not affect productivity, they are not worried about their consumption. Rather, they feel that they are healthy in other ways and this balances or counteracts the risks of smoking.

From the unchanged consumption rates reported by frequent consumers, there appears to be a cognitive disconnect between what consumers know and the risk behaviours they continue to report. This information points to a growing need for a more tailored approach to harm reduction education rather than a “one size fits all” public health approach that currently takes into account new users and those unfamiliar with cannabis (Kruger et al., 2021; Stevens, 2021). Further, some participants described a lack of information, guidance or communications about cannabis use from online sources as well as their healthcare practitioners. Improved communications and guidance from healthcare providers and resources addressing the effects of cannabis on health, as well as its potential therapeutic benefits, are therefore needed. There is also a need for person-centred harm reduction and trauma-informed approaches to discussing cannabis use and for building non-judgmental and trusting relationships between healthcare providers and people who use cannabis frequently (Boehnke et al., 2019; González-Ponce et al., 2022).

COVID-19: The COVID-19 pandemic has affected the ways in which some participants access and consume cannabis. Most participants reported increased use of cannabis, especially during lockdowns when more time was spent indoors. This trend is confirmed in recent literature showing increased use of cannabis during the pandemic (Imtiaz et al., 2021; MHCC & CCSA, 2021). Interestingly, many other participants insisted that their consumption patterns remained unaffected by the pandemic, especially if dependable methods of access, including trusted illicit sources, were already established before legalization. The unchanging nature of the consumption behaviours of frequent consumers is an important implication when considering the impact of the COVID-19 pandemic.

This exploratory study sets the groundwork for future research to further refine our understanding of frequent cannabis consumers. Future work can consider a more granular analysis of specific areas, including accessibility (urban compared with rural), socioeconomic factors and stigma. Future research can also specifically look at the impacts of age and how different age cohorts vary or connect in their consumption patterns and perceptions of cannabis use.

Limitations

When considering the findings of this study, it is necessary to understand its limitations. This study was exploratory in nature and offers a snapshot of some frequent cannabis consumers. The findings



cannot be generalized to the larger population and are not representative of all cannabis consumers living in Canada. The focus groups did not have any representation from people living in the territories. Focus group research may be limited in self-selection bias as participants chose whether to participate. Participants may choose not to disclose certain information in a group setting or participants may agree with others to avoid expressing an opposing opinion. Future research should seek to build on the findings of this study.

Conclusions

The findings of this exploratory study give us an inside look at the motivations, perceptions and preferences of people who use cannabis frequently, how they access and consume cannabis, their perceptions of health risks, and how legalization has impacted their consumption patterns and access to cannabis.

Participants in the focus groups shared many reasons for consuming cannabis frequently, whether it be solely for recreational purposes or as a form of self-medication. People who use cannabis frequently have not had difficulty accessing legal cannabis and feel legalization has made this process more convenient and safer. Legalization has also improved their perceptions of the stigma surrounding cannabis. Some participants still opt to purchase cannabis from non-regulated sources as they feel that the quality of regulated cannabis is inferior and the price too high.

Finally, participants in the focus groups are aware of some risks and health impacts of cannabis. Nonetheless, most report not having experienced any ill health effects aside from minor lung irritation and typically believe that the benefits outweigh the risks or any ill effects they may experience. Most focus group participants would be interested in learning more about the short-term and long-term effects of cannabis use. Many feel research and information are lacking on these topics and perceive what is available to be biased or inconsistent. Participants are optimistic that with the legalization of cannabis more research will follow.



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Appendix A: Recruitment Screener

A. Introduction

Hello/Bonjour, my name is [NAME] and I am with Quorus Consulting Group, a Canadian market research company. We're planning a series of online discussion groups with people in your area on behalf of the Canadian Centre on Substance Use and Addiction. Would you prefer to continue in English or French? / Préférez-vous continuer en anglais ou en français?

[INTERVIEWER NOTE 1: FOR ENGLISH GROUPS, IF PARTICIPANT WOULD PREFER TO CONTINUE IN FRENCH, PLEASE RESPOND WITH, "Malheureusement, nous recherchons des gens qui parlent anglais pour participer à ces groupes de discussion. Nous vous remercions de votre intérêt." FOR FRENCH GROUPS, IF PARTICIPANT WOULD PREFER TO CONTINUE IN ENGLISH, PLEASE RESPOND WITH, "Unfortunately, we are looking for people who speak French to participate in this discussion group. We thank you for your interest."]

[INTERVIEWER NOTE 2: During the recruiting, if someone from the Quebec region asks to participate in English, or if someone from another region outside Quebec asks to participate in French, efforts will be made to include them in a group in their preferred language in the nearest time zone to where they live.]

As I was saying, we are planning a series of online discussion groups with people in your area on behalf of the Canadian Centre on Substance Use and Addiction. This is to help develop health-related resources that people in Canada can access. The groups will last up to one and a half hours (90 minutes) and people who take part will receive a cash gift to thank them for their time.

Participation is completely voluntary. We are interested in your opinions. No attempt will be made to sell you anything or change your point of view. The format is a group discussion on Zoom. The discussion will be led by a research professional and include about five to seven other participants invited the same way I am inviting you. The use of a computer or a tablet (not a smartphone) in a quiet room is preferred for participation. All opinions will remain anonymous and will be used for research purposes only following privacy laws.

[INTERVIEWER NOTE: For more information about this project, please contact the CCSA Research Analyst and Coordinator, [NAME], at [PHONE NUMBER] or [EMAIL]]



- Before we invite anyone to attend, we need to ask you a few questions to ensure that we get a good mix of people in each of the groups. This will take 5 minutes. May I continue?

Yes 1 CONTINUE
No 2 THANK/DISCONTINUE

B. Qualification

- We are looking to include people of various ages in the group discussion. May I have your age please?
RECORD AGE: _____

AGE	GROUP	RECRUITMENT SPECIFICATIONS
18-24	YOUNG ADULT GROUPS	Under 18 THANK/DISCONTINUE 18-24 MIX OF AGES
25+	ADULT GROUPS	<div> <div> } </div> <div> MIX OF AGES </div> <div> 25-34 35-44 45-54 55-65 66 and older THANK/DISCONTINUE </div> </div>

- [CONFIRM WITH RESPONDENT] In which province or territory do you live?

Newfoundland and Labrador	1
New Brunswick	2
Nova Scotia	3
Prince Edward Island	4
Quebec	5
Ontario	6
Manitoba	7
Saskatchewan	8
Alberta	9
British Columbia	10
Nunavut	11
Northwest Territories	12
Yukon	13

Participants from the three territories should be recruited for the focus group which best aligns with the time zone in which they live (e.g. a participant from Yukon would be part of the group with British Columbians)

- I'd like to now ask a few questions about the various alcohol and drugs that you might consume in a typical week. For each one, please let me know how many days in a typical week the given item is consumed.



For this question, alcohol use includes beer, wine, wine coolers and liquor, either in a mixed drink or straight.

- a) Smoke a cigarette, cigar or cigarillo
- b) Vape
- c) Drink at least one alcoholic drink
- d) Drink at least three alcoholic drinks
- e) Consume cannabis in any form, for nonmedical or medical purposes
- f) Consume cocaine or amphetamines
- g) Consume heroin, methadone, oxycodone or fentanyl

Never	1
1 or 2 days in a typical week	2
3 or 4 days in a typical week	3
5 or 6 days in a typical week	4
Every day in a typical week	5

QUALIFIED PARTICIPANT = Consumes cannabis at least 3 or 4 days in a typical week. **If less often, thank and discontinue.**

5. Is the cannabis that you consume entirely for recreational purposes, also for medical purposes or entirely for medical purposes? By “medical purpose” we mean that your physician has prescribed cannabis for you.

Entirely recreational	1
Partly medical	2
Entirely medical	3

6. What is your gender?

Man	1
Woman	2
Non-binary	3
Other gender identity	4

AIM FOR A 50/50 GENDER SPLIT AND RECRUIT OTHER GENDER IDENTITIES AS THEY FALL

Do you currently live in... [READ LIST]

A city or metropolitan area with a population of at least 100,000	1
A city with a population of 30,000 to just under 100,000	2
A city or town with a population of 10,000 to just under 30,000	3
A town or rural area with a population of less than 10,000	4



FOR EACH GROUP, RECRUIT A MIX OF INDIVIDUALS WHO LIVE IN A CITY OR TOWN WITH A POPULATION OF AT LEAST 30,000 AND THOSE WHO LIVE IN SMALLER TOWNS OR RURAL AREAS

7. What is your ethnic background?

RECORD ETHNICITY: _____

8. Participants in group discussions are asked to voice their opinions and thoughts. How comfortable are you in voicing your opinions in an online group discussion with others your age? Are you... **READ OPTIONS**

Very comfortable	1	MIN 5 PER GROUP
Fairly comfortable	2	
Not very comfortable	3	THANK and DISCONTINUE
Very uncomfortable	4	THANK and DISCONTINUE

9. Do you have access to a stable internet connection, capable of sustaining a 90-minute-long online video conference?

Yes	1	
No	2	THANK and DISCONTINUE

10. Participants will be asked to provide their answers through an online web conferencing platform using a computer or a tablet in a quiet room. Is there any reason why you could not participate (e.g., no access to computer or tablet, internet)? If you need glasses to read or a device for hearing, please remember to wear them.

Yes	1	THANK and DISCONTINUE
No	2	

DISCONTINUE IF RESPONDENT OFFERS ANY REASON SUCH AS DIFFICULTIES PARTICIPATING IN A WEB CONFERENCE, A SIGHT OR HEARING PROBLEM, A WRITTEN OR VERBAL LANGUAGE PROBLEM, A CONCERN WITH NOT BEING ABLE TO COMMUNICATE EFFECTIVELY.

RECRUITER NOTE: WHEN DISCONTINUING AN INTERVIEW, SAY: “Thank you very much for your cooperation. We are unable to invite you to participate because we have enough participants who have a similar profile to yours.”

C. Invitation to Participate

11. I would like to invite you to participate in an online focus group session where you will exchange your opinions in a moderated discussion with other people from your region. The discussion will be led by a researcher from the national public opinion research firm, Quorus Consulting. The



session will be recorded, but your participation will be confidential. The group will be hosted using a web conferencing platform, taking place on **[DAY OF WEEK]**, **[DATE]**, at **[TIME]**. It will last 90 minutes. People who attend will receive \$100 to thank them for their time.

Would you be available and interested in taking part in this study?

Yes	1	
No	2	THANK and DISCONTINUE

12. The discussion group will be video-recorded. These recordings are used to help with analyzing the findings and writing the report. The results from the discussions will be grouped together in the research report, which means that individuals will not be identified in anyway. Is this acceptable?

Yes	1	
No	2	THANK and DISCONTINUE

13. There will be some people from the Canadian Centre for Substance Use and Addiction involved in this project observing the session. They will not take part in the discussion, and they will not know your name. Is this acceptable?

Yes	1	
No	2	THANK and DISCONTINUE

To conduct the session, we will be using a screen-sharing application called **Zoom**. **We will need to send you the instructions to connect by email.** The use of a computer or tablet in a quiet room is ideal. You cannot be on the road, walking around, in transit, etc. while participating. You should be in a quiet area of your home or office to participate.

We recommend that you click on the link we will send you a few days prior to your session to make sure you can access the online meeting. You should repeat these steps at least 10 to 15 minutes before your session.

As we are only inviting a small number of people to attend, your participation is very important to us. If for some reason you are unable to attend, please call us, so we can get someone to fill your spot. You can reach us at **[INSERT NUMBER]** at our office. Please ask for **[INSERT NAME]**.

So that we can contact you to remind you about the focus group or in case there are any changes, can you please confirm your name and contact information for me? **[READ INFO AND CHANGE AS NECESSARY.]**

First name _____



Last Name _____

Email _____

Day time phone number _____

Nighttime phone number _____

Thank you!

If the respondent refuses to give his/her first or last name or phone number please assure them that this information will be kept strictly confidential. It is used strictly to contact them to confirm their attendance and to inform them of any changes to the focus group. If they still refuse **THANK and DISCONTINUE.**



Appendix B: Moderation Guide

A. Introduction to Procedures (10 minutes)

Thank you all for joining this online focus group!

● **Introduce moderator and firm, and welcome participants to the focus group.**

- My name is [INSERT MODERATOR NAME] and I work with Quorus Consulting. Today, we are conducting research for the Canadian Centre on Substance Use and Addiction (or CCSA).
- We will be talking about different health-related matters including what people in Canada think about certain products, including cannabis, and how they use these products.
- The discussion will last about 90 minutes.

● **Describe focus group**

- This focus group will be a round table discussion. I will also ask you to answer a few survey questions to help guide the discussion.
- My job is to facilitate the discussion, keeping us on topic and on time.
- Your job is to offer your opinions and experiences. Your honest opinion is valued.
- There are no right or wrong answers. This is not a knowledge test.
- Everyone's opinion is important and should be respected.
- We want you to speak up even if you feel your opinion might be different from others. Your opinion may reflect that of others.
- To participate in this session, please make sure your webcam and your microphone are on and that you can hear me clearly. If you are not speaking, I would encourage you to mute your line to keep background noise to a minimum. Just remember to remove yourself from mute when you want to speak!

IF NEEDED:

- I will share my screen to show you some things.
- We will be using the chat function regularly. To access that feature, please move your mouse over the bottom of your screen until the command bar appears. There you will see a function called "chat." Clicking that will open a chat screen on the right of your screen. Please use chat throughout our discussion today. Let's do a quick test right now. Please open the chat window and send the group a short message (e.g., Hello everyone). If you have an answer to a question and I don't get to ask you specifically, please type your response in there. We will be reviewing all chat comments at the completion of this research project.



● Explanations

- Please note that anything you say during these groups will be held in the strictest confidence by the research team. We do not attribute comments to specific people. Our report will summarize the findings from the 10 focus groups, but it will not mention anyone by name.
- The session is being audio-video recorded for report writing purposes and to produce a transcript of the session. The recordings remain in our possession and will not be released to anyone without your written consent.
- Some of my colleagues from CCSA who are involved in this project are watching this session. This is only so they can hear the comments first-hand.

● Please note that I am not an employee of CCSA, and I may not be able to answer questions about what we will be discussing. If questions come up that I cannot answer, we will try to get answers for you before we wrap-up the session.

● VERBAL CONSENT

- You should have all received a document that summarized everything I just explained as well as the purposes of the study and how the findings will be used. The research process requires me to obtain your consent to participate – I will enter a question in the chat and I need to obtain a yes or no answer from each of you: “Do you agree to participate in this research?” **[PARTICIPANTS WHO ENTER “NO” ARE EXCUSED FROM THE SESSION]**

Any questions?

INTRODUCTIONS: Let’s go around. Please tell us your name and a little bit about yourself, such as where you live, who lives with you, what you do for a living, etc.

B. Questions (75 minutes)

Consumption Patterns and Preferences (40 minutes)

As you know, the main topic for today is cannabis. Just so we are clear, when I refer to cannabis, I am referring to all it’s shapes and forms, irrespective of where or how you get it and irrespective of what name you might use instead of cannabis. As well, everyone in this group uses cannabis so I’ll be eager to hear from all of you on the many questions I’ll have today even though we may not have time to hear from everyone on every single question.

1. So let’s start with a really broad question: What do you enjoy about using cannabis?
 - a) In what way has your enjoyment of cannabis changed over the years? Do you believe your answer would have been different if I had asked you this 2 or 3 years ago?
2. Now what, if anything, do you dislike about using cannabis?



3. I'd like to explore language a bit... using your own words how would you describe your use of cannabis? (Use the chat to enter one or two words)
4. Just so I can get a sense of how much experience we have around the table – how long ago did you start using cannabis?
 - a) Why did you start using cannabis?
 - b) And have the reasons for using cannabis changed over time? ...why do you use cannabis nowadays?
 - **AS NEEDED:** Help me understand why your reasons have changed.
 - **AS NEEDED:** Do you consume for medical purposes (e.g., insomnia, depression)?
5. How about how often, with whom and where you consume cannabis – what does this look like today and has any of this changed at all over time?
 - a) First, **how often** do you use cannabis NOW versus BEFORE it was legalized?
 - b) And **where** do you use cannabis?
 - c) And finally, **with whom** do you use cannabis?
6. Let's turn our attention to how you consume cannabis – by this I mean smoking it, vaping, edibles, etc. Do you just consume one way or do you use different formats?
 - a) What is your preference? Help me understand that choice.
 - **IF MULTIPLE FORMATS:** How do you decide? What determines one approach versus another?
 - **IF VAPES:** Which vaping method do you typically use (**IF NEEDED:** do you use an electronic device or vaporization?) and what kind of product are you using when vaping? (e.g., oils, extracts, flower, etc.)
 - b) Has any of this changed at all over time? What explains this change over time? Do you remember at all what triggered any of these changes?
 - c) What are your thoughts on product flavours? Have these had any impact at all on what you consume or how often you consume?
7. So far we've talked about what you like and dislike about cannabis, why you use it, how often, where and how you use it. What impact did legalization have on any of this? Do you have a sense that there was a change in any of this once cannabis was legalized?

EXPLORE AS NEEDED: What impact, if any, did legalization have on...

 - a. ...what you like or dislike about cannabis?
 - b. ...why you use cannabis?
 - c. ...how often you consume?



- d. ...your preferred method of using cannabis?
- e. ...when, where or with whom you consume cannabis?
- f. Has legalization had any impact on your opinions of cannabis and how you view using cannabis?

8. What about the pandemic - what impact did the pandemic have on any of this?

- a. **IF NEEDED:** How has working from home impacted how (and/or how much) you use cannabis?
- b. Have you considered or do you expect any changes in your behaviours or routines as things “return to normal”?
 - how about when you go back into the workplace (instead of working from home)?

9. How do you see your usage in 5-10 years? Do you see your usage changing?

Purchasing Patterns and Access (10 minutes)

- 1. Let's talk a little bit about where or how you typically get your cannabis. Do you buy your own, grow your own, does someone get it for you, is it retail or do you get some or all of it somewhere else? Walk me through this.
 - a) **AS NEEDED:** Just so we are clear – when you say you buy it at or from a store – is that a “brick and mortar” store or do you buy online?
 - b) And when you do purchase at a store, how do you know what to buy? Do you just keep buying the same product or do you speak with a store rep to get information/recommendations?
 - c) Has any of this changed at all over time? ...and in particular, help me understand how legalization has had an impact, if at all, on where you get your cannabis.
 - d) What is/are your preferred way(s) to get your cannabis? Help me understand that preference. Has this changed since legalization?
- 2. Have you experienced any difficulties in getting cannabis? If so, what are they?
 - a) Has legalization improved your access?
 - b) How could access to legal cannabis be improved?

Potential Associated Harms (25 minutes)

3. How do your family, friends, peers and co-workers view your cannabis use?

- a) What word(s) would they use to describe your use of cannabis?
- b) Have their views changed since legalization?
- c) How do you feel about their views? Do you respect them? Do you ignore them?



d) Do their views affect the way you use cannabis, whether around them or not?

4. If anything, what are any concerns you have about consuming cannabis?

EXPLORE AS NEEDED: What about...

- a) Legal consequences?
- b) Your job?
- c) Family or friends' judgment?
- d) Your health?

5. Do you feel your use of cannabis has had any impact on your health, good or bad?

- a) How serious would you consider those impacts?
- b) Has any of this already had an impact on your use of cannabis (i.e., have you changed how you use cannabis out of concern for your health)? ...if so, in what way?
- c) Is any of this going to have an impact on your use of cannabis moving forward? ...if so, in what way?
- d) Have you had any conversations with anyone or looked up information specifically regarding the health concerns you have around cannabis? Who or what have you consulted?

6. Earlier, some of you said you have some concerns about using cannabis. What have you done to address those concerns? What are some of the strategies you have used?

7. How familiar are you with the types of risks associated with cannabis use? Let's use a 10-point scale where 10 means you are extremely familiar and 1 means you are not at all familiar. Use the chat to rate yourself on that scale.

- a. Help me understand your rating. What has contributed to your understanding of the risks?
- b. What are some of the risks you feel you might not know well?
- c. What can be done to close that gap? What do you believe could be done so you each feel you score a 10 on this scale?
 - Are you even interested in "closing the gap"?
- d. Knowing about the risks is one thing, but being able to manage them is something else. What could be done so you are in a better position to manage whatever risks you feel are associated with cannabis use?
 - What kind of resources would you find helpful or want to see? How best would you like to see or receive this information?
 - Is there anyone you feel comfortable speaking with about this?
 - How could education programs better meet your needs?



C. Wrap-Up (5 minutes)

With the time we have left, I am wondering if anyone has any additional thoughts on what we've discussed today.

Thanks again! The team that invited you to participate in this session will contact you about how you can receive the incentive we promised you.

On behalf of CCSA and Quorus, thank you for participating today.

Stay healthy and safe.



Appendix C: Participant Information and Oral Consent Form

Participant Information and Oral Consent Form

The Canadian Centre on Substance Use and Addiction (CCSA) is conducting a study to better understanding cannabis consumption in Canada. You are invited to participate in this study by sharing your thoughts and experiences about your cannabis use.

The study will consist of 90-minute small group discussions. Open and informal conversations will focus on particular themes provided by the facilitator (e.g., cannabis use preferences, purchasing patterns, perceived benefits and harms)

Below we provide important information about the study. If you have any questions about the focus groups, please contact Rick Nadeau at rick@quorusconsulting.com. If you have any questions about the study overall, please contact Karen Pacheco at kpacheco@ccsa.ca.

What

The researchers want to better understand people in Canada who are aged 18 years and older who use cannabis. We want to hear your thoughts, perceptions and motivations about your patterns of use and perceived harms.

You will be asked questions like:

1. What do you enjoy about using cannabis?
2. How has your ability to buy cannabis changed since legalization?
3. What impacts, positive and negative, have you experienced from your cannabis use?

Who

People living in Canada who are aged 18 years and older are invited to participate in the study. Focus groups will be conducted in English or French depending on the region.

Why

- Information gathered from the study will help us understand some of the ways you and other people living in Canada use cannabis.
- This information will help us understand how and why people use cannabis, and what the impacts of use are. This can inform better policy and information for consumers of all ages, including those who consume and those who do not consume cannabis.
- Information gathered in the focus groups may also be used in reports and to publish scientific papers. Only pseudonyms (not real names) will be used in these documents.



What You Need to Know

- Participation in the study is voluntary. You may choose not to participate. You will not be penalized if you do not participate.
- Even if you choose to participate, you do not have to answer any questions with which you are uncomfortable. You may also withdraw from the study at any time.
- If you choose to leave before the completion of the study or during the focus group discussions, please let us know if you do not want to have your contributions as part of this study. In that case, your insights will not be included in the research results.
- Because of the general nature of the questions asked during the focus group, there are no anticipated risks to you. However, because of the nature of focus groups, absolute confidentiality cannot be guaranteed.
- Besides the financial honorarium that focus group participants will receive after their session, there is no direct benefit to you for participating. Information learned from the study may help other people in the future.
- This research study is for research purposes only. The only alternative is to not participate.
- Any new important information that is discovered during the research study and which may influence your willingness to continue participation will be provided to you in a timely manner.
- The facilitator or CCSA may stop your participation at any time even if you want to stay in the study, for reasons such as the following:
 - If you fail to follow directions for participating in the study, including exhibiting disrespectful behaviour toward the moderator or other focus group participants, demonstrating persistent inattentiveness to the conversation, or being disruptive or unruly;
 - If it is discovered that you do not meet the study requirements; or
 - If the study is cancelled.

Focus Group Logistics

- Each focus group will be virtual, last about 1.5 hour and consist of six to eight participants plus the moderator and observers.
- Focus groups will be facilitated by Rick Nadeau (Quorus Consulting Group Inc.), working with CCSA.
- Anything you say during these groups will be held in the strictest confidence by the research team. We do not attribute comments to specific people. Our report will summarize the findings from the groups, but it will not mention anyone by name. To help protect confidentiality, those participating in the focus groups will be asked not to share the other participants' responses.
- For note-taking purposes, the discussion will be recorded. All notes, video and audio files will be kept in a protected and confidential manner.
- Representatives of the research ethics review board Advarra IRB (an independent ethics committee that reviewed the ethical aspects of this study to help protect the rights and welfare of study participants) may have access to the information collected for this study.



- By verbally agreeing to this information and consent form, you consent to the collection, access, use and disclosure of your information as described above.

Questions?

If you have any questions about the study, please contact Rick Nadeau at rick@quorusconsulting.com or Karen Pacheco at kpacheco@ccsa.ca.

An institutional review board (IRB) is an independent committee established to help protect the rights of research participants. If you have any questions about your rights as a research participant, or concerns or complaints about this research study, please contact:

By mail:

Study Subject Adviser
Advarra IRB
6100 Merriweather Dr., Suite 600
Columbia, MD 21044
United States

By phone: 1-877-992-4724

By email: adviser@advarra.com

Please reference the following number when contacting the Study Subject Adviser: Pro00053902.

Additional Information

In recognition of the time needed for you to participate in the study, you will receive \$100 following completion of the focus group.

Do You Want to Participate?

You will be asked at the beginning of the focus group whether you agree to participate in this research. When prompted by the moderator, verbally state or use the chat feature to provide your consent to participate.

If you know ahead of time that you want to withdraw from the research, please contact the recruitment team that invited you to participate, so that they may find someone to fill your spot.

Thank you for your time,

Sincerely,

Rick Nadeau, Quorus Consulting Group Inc., rick@quorusconsulting.com

Karen Pacheco, Canadian Centre on Substance Use and Addiction, kpacheco@ccsa.ca