MAKING DECISIONS ABOUT CANNABIS:

Issues Impacting Young People's Decisions About Cannabis in a Legalized Environment

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Abstract

In Canada about 29.5% of young people between 15-24 years of age report using cannabis in the past year (Statistics Canada, 2019a). Amongst post-secondary students in North America, approximately 15.4% of students use cannabis at least once a month (ACHA, 2016), while 2.5% report daily consumption. These numbers may exceed the general population's use patterns. Technological and legislative changes mean that young people have new forms of cannabis to consume and a variety of methods (e.g. waterpipes, joints, vaporizers) to assist in consuming their cannabis. While cannabis is far less harmful than alcohol (Nutt et al., 2007), the drug is not without potential harms and a robust public education effort is needed to promote safe consumption practices amongst the populations most likely to consume cannabis. In order to understand how to encourage safe consumption practices we need to understand how young people make decisions about how to consume cannabis, what sources of knowledge they used to make those decisions, and what activities they engage in once intoxicated. This research utilizes information gathered at eight focus groups comprised of post-secondary students from a Toronto area college, focusing on those between 19 and 30 years of age who have consumed cannabis in the past year, in order to ascertain how they made the above-mentioned decisions regarding cannabis. We identified that young people were keen to obtain health and product related knowledge about cannabis but had limited trust in school-based and government public health information. In addition, concerns about stigma were still central to many users despite the legalized status of cannabis in Canada. This research identified two important opportunities for future research. The first opportunity is to identify what sources of information are most trusted by young people who frequently consume cannabis, as reaching heavier users has the best potential to improve public health outcome. Secondly, further research is needed to understand the methods cannabis users prefer, and identify pathways to switch them to less harmful methods of consumption, such as switching from joints to vaporizers.

Introduction

Canada's legalization of the possession and sale of recreational cannabis dried leaf and buds, oils, and derivatives in October 2018 marked the first time a G20 country had legalized the drug, and the ensuing months have been a whirlwind of business development, policy formulation, and ongoing debate about how Canada should move forward after this entrance into the legalized paradigm. Of paramount concern to many has been the manner in which young people are provided information to influence their cannabis consumption patterns. Young people are more likely to use cannabis, use frequently, and have not yet necessarily become set in their ways of consuming cannabis as they tend to become consumers in their late teens or early twenties.

In Canada about 29.5% of young people between 15-24 years of age report using cannabis in the past year (Statistics Canada, 2019a). When isolated to just 18-24 year olds, this number jumps to 33% (Statistics Canada, 2019a). This compares to less than 10% of Canadian adults over the age of 25. Overall, about 5.3 million Canadians (about 18% of the population) report cannabis use within the last three months, while another 30% of Canadians report past but not current cannabis use.

Since legalization there has been an increase in reported cannabis use in Canada. In the first quarter of 2018, StatsCan reported only about 14% of Canadians consumed cannabis in the previous three months. In the first quarter of 2019 that number had risen to 18% (Statistics Canada, 2019a). This increase may not indicate new use, but rather more honest survey responses as the number of individuals reporting using cannabis for the first time in the past three months has not increased in most age groups. Amongst post-secondary students in Ontario, approximately 15.4% of students use cannabis at least once a month (American College Health Association, 2016), while 2.5% report daily consumption. This figure comes from before legalization took hold and may no longer be considered accurate given recent changes in usage figures seen since legalization. Recent data by Statistics Canada suggests that up to 6% of Canadian over the age of 15 report daily cannabis consumption (2019a).

Interestingly, 33% of young people 15-24 who use cannabis reported using a vaporizer to consume their cannabis (Statistics Canada, 2017), a form of consumption that is less harmful than other methods (Earleywine & Barnwell, 2007; Loflin & Earleywine, 2015). This is of particular interest as vaporizers are on average a more expensive method of consuming cannabis, with some vaporizers costing more than $600. With legalization and regulation of cannabis proceeding swiftly, the opportunity to purchase cannabis at one of the private retail brick and mortar outlets, government-owned retail brick and mortar outlets, or online will radically restructure the ways in which young people potentially access cannabis, the types of products available to them, and how they consume the product.

While cannabis is far less harmful than alcohol (Nutt, King, Saulsbury, & Blakemore, 2007), the drug is not without potential harms and a robust public education effort is needed to promote safe consumption practices amongst the populations most likely to consume cannabis. In order to understand how to encourage safe consumption practices we need to understand how young people make decisions about how to consume cannabis, where to purchase it, and what activities they engage in once high. This information is critical to post-secondary institutions' ability to develop effective on campus policies, student support mechanisms, and public education plans.

This research engaged students aged 19-30 at Humber College in Toronto, Ontario, in a series of focus groups to understand how they make decisions related to the areas listed above. This report represents preliminary findings and serves as a broad overview of the literature and initial themes emerging from the data. We identified that cannabis consumers in our sample did not clearly separate recreational and medical uses of cannabis, often seeking outcomes from their consumption that straddled both (e.g. stress relief as a recreational goal with medical benefits). It also highlights that cannabis users feel stigmatized and disconnected from many sources of public education and outreach about cannabis, and as such are less keen to trust those sources. While this is troubling information, there is also widespread desire from students to obtain and utilize relevant, non-biased, and transparently presented cannabis related information, and an opportunity exists for post-secondary institutions and other public bodies to meet this need.

Literature Overview

Cannabis Consumption Issues

Young people's cannabis use has remained relatively consistent for some time with about thirty percent of post-secondary students using cannabis (Johnston, O'Malley, Bachman, & Schulenberg, 2011), making it the most widely used drug in that group other than alcohol (Arria et al., 2008; Caffrey, Wright, & Maarhuis, 2018). Given the significant portion of young people using cannabis, it is worth understanding cannabis users' habits and influences on their decision-making processes.

It is important to note the age at which consumers began their relationship with cannabis. Reinarman, Cohen, and Kaal, (2004) identified that the age of onset for cannabis was largely similar in multiple locations, at about 16.5 years, and Williams (2014) identified a slightly later start at about 18; noting that the relationship with cannabis rarely starts after the age of 35. However legalization maybe be changing the age of initiation. Part of the increase in cannabis use has been attributed to Canadians aged 45-64 increasing their reported use in the past three months from 16% to 22%. Many of these individuals reported that they had not previously consumed cannabis in the recent past, indicating first time use, or previous use in their youth but not since. Canadian specific data on age of initiation is difficult to obtain as the government's regular survey on drug use has not recently contained questions about the this topic. The data show that when starting their time in post-secondary education many people who will eventually use cannabis are not yet cannabis consumers, and those that are consumers have generally only been consuming for a few years. This highlights the importance for post-secondary institutions to shape initial use patterns and practices.

Although cannabis consumption has been found to be more prevalent in males, the gap between genders has been decreasing since 1993 (Johnson et al., 2015). This research also demonstrates that cannabis use is not limited to any particular age range, race, or gender. Research in Canada has demonstrated that between 2004 and 2015 cannabis use amongst 18-24 year olds remained between 25-31%, but that those age 24-44 saw a surge from a consistent rate of 10% jumping to nearly 20% between 2012 and 2015 (Rotermann & Macdonald, 2018).

Use patterns also vary geographically. The province of Nova Scotia, on Canada's Atlantic coast has the highest use rates, topping 21% of adults 15 and older. Its neighbours, New Brunswick (18.9%), Prince Edward Island (17.9%), and Newfoundland and Labrador(19.2%), also report above average cannabis usage rates. Ontario, BC, and Quebec report about 15% of those 15 and over using within the last three months, while the prairies report slightly lower levels, at around 10% on average.

Since the first quarter of 2018, there has been a significant shift in where people purchase cannabis. A year ago, only 22% of cannabis users over age 15 reported purchasing their cannabis from a legal source. Since then, the number has increased to 47%, and is increasing rapidly as more retail stores open. However, this change may represent a population that does not consume large amounts of cannabis as frequent users are not shifting to legal sources as rapidly as infrequent users. Of the 18% of Canadians who consume cannabis, about 1/3 use only once or twice in three months, 1/3 use weekly, and 1/3 use everyday (Statistics Canada, 2019a). These daily or almost daily users may purchase up to 80% of all cannabis (Kilmer et al., 2014), and their continued reliance on the illicit market severely impacts sales in the legal market. Estimates for 2019 suggest that up to half of the total $7.17 billion in cannabis sales will come from the legal market (Deloitte, 2018).

The interaction of cannabis with other substance use can raise potential problems. Cannabis use amongst young adults has been identified with an increase un the likelihood of alcohol related issues, such as dependency while also increasing their likelihood of a dependency to nicotine, (Caldeira, Arria, O'Grady, Vincent, & Wish, 2008). As the use of prescription drugs increases amongst college students the inclusion of cannabis or other drugs in their consumption can increase risky behaviour, (Palmer, McMahon, Moreggi, Rounsaville, & Ball, 2012) This poly drug use may amplify the problems experienced by the user, and cloud the ability to concisely pinpoint which effects are from which substance. (Gledhill-Hoyt, Lee, Strote, & Wechsler, 2000). Poly drug use amongst college students that involved cannabis was associated with negative well-being: decreased agreeableness, extraversion and increased neuroticism (Allen & Holder, 2014). However, research has identified that many young Canadian cannabis consumers have never consumed other illicit drugs (Rotermann & Langlois, 2015). This may make drugs

education efforts targeted at the opioid crisis or alcohol abuse less impactful for cannabis users as the message may not be relevant to their experiences.

Midanik identifies that approximately ten percent of all alcohol users admit to using cannabis in conjunction with alcohol (2007), potentially increasing their overall risk. Research examining middle and high school students who consume cannabis identified that they are likely to also use tobacco and alcohol (Sampasa-Kanyinga, Hamilton, LeBlanc, & Chaput, 2018). Young adults justify mixing various substances due to the want to dissociate or numb a negative feeling or situation, (Shrier & Scherer, 2014). On the other hand, research performed by Jones, Jones and Piel indicates that post cannabis legalization in Colorado, the desire to mix substances decreased significantly (2018). This is in part due to their preferred substance being available and therefore not needing to mix substances to achieve their desired outcome.

Poly drug use appears to be linked to social setting. Furthermore, prior to legalization, cannabis was more difficult to obtain, and infrequent users may have 'saved' the experience for social gatherings like parties, where concurrent alcohol use may occur (C. B. Jones, Meier, & Pardini, 2018). However, Williams indicated that young adults who use cannabis and alcohol simultaneously in a context that is subjective to social setting do so in a way which complemented each other, hence using both substances at a party to achieve their desired feeling (Williams & Mahmoudi, 2004). On the other hand, the same research suggests that those who are using intoxicants as a coping mechanism for stress, or negative situations, are doing so in a substitutive way, and do not mix the substances (*IBID*). The understanding of how these substances are interconnected and how they work together is important when developing surrounding policies.

Amongst students, the most common reasons for use of cannabis included; social facilitation, peer acceptance, sex-seeking, and emotional coping (Beck et al., 2009). Students also reported using cannabis to relax, decrease boredom, enhance activities, and to help them sleep (Boys, Marsden, & Strang, 2001) These reasons may be interrelated, situational and vary dependent on the specific needs of the individual user, (Beck et al, 2009). Much of the previous research on cannabis use motives has utilized the Marijuana Motives Measure (MMM) (Simons, Correia,

Carey, & Borsari, 1998), a five-factor scale derived from research on drinking motives in adolescents by Cooper (1994). The MMM distinguishes five different motives for using cannabis; enhancement, social, coping, conformity, and expansion motives.

There are concerns that the MMM does fully capture the motivation of cannabis users given its origin as a measure for alcohol consumption. Motives unique to cannabis use may have been omitted in its adaptation from a drinking motives questionnaire. For example, sleep, boredom, relaxation and habit are reported as important reasons for cannabis use in several studies (Beck et al., 2009; Boys et al., 2001; Green, Kavanagh, & Young, 2003) and are not covered by the MMM. Providing recent high school graduates with the opportunity to self generate a list of motivations for cannabis use resulted in respondents most frequently identifying enjoyment/fun, conformity, experimentation, social enhancement, boredom, and relaxation as motivations for their cannabis use (Lee, Neighbors, & Woods, 2007). Lee et al argued that during emerging adulthood is a period rife with exploration across a variety of contexts, and as such young people's alcohol and cannabis use might be seen as normative, and therefore require different public health approaches than past iterations of the drug war have provided.
Alone, cannabis was associated with few negative consequences amongst college students, but patterns of use may influence that outcome. Covert cannabis consumption in cars and outdoors were connected to risky behavior including driving while high amongst college students (Jones, Meier & Pardini, 2018). Interestingly, vaping and edible consumption are often used in these risky situations despite being, on their own, potentially safer methods of consuming cannabis. This combination of potentially risky environments and protective consumption practices support the need for protective behavioral strategies and further research.

Concerns about the impact of cannabis use on GPA and educational attainment have led to several pieces of research on the subject. Some research has identified that participants who did not use cannabis had a higher GPA of almost half a point in comparison to students who used once a week, but no difference in GPA when comparing daily users and those who do not consume, (J. Jones et al., 2018). In addition, cannabis' psychopharmacological effects include drowsiness and difficulty concentrating, potentially impacting the ability of post-secondary students to study while intoxicated (Caldeira et al., 2008). Moreover, it is understood that the

earlier a person begins using cannabis, the fewer years of school they are expected to complete, (van Ours & Williams, 2007). Thus, translating to less formal education and potential impacts on long-term levels of economic wellbeing. On the other hand, a longitudinal study, of 1,200 students indicated there was minimal difference in GPA between users and non-users of cannabis in terms of overall academic success (Meda et al., 2017). The research goes on to state that cannabis is not the sole factor that determines success of a student, and that socioeconomic status, mental health, and IQ are also substantial variables when identifying success of an individual.

Initiatives on Campuses

Alcohol

When considering young peoples' use of cannabis and efforts to reduce the potential harm of cannabis use, it may be beneficial to examine areas where colleges and universities have already attempted to impact students' participation in certain activities or consumption of drugs. Alcohol is the most accessible and widely used drug amongst post-secondary students (D'Lima, Pearson, & Kelley, 2012; Shupp, Brooks, & Schooley, 2015). The first years of college often coincide with the first few years of reaching the legal age requirements for indulging in alcohol. In Canada young people are able to purchase alcohol starting at 19 in most provinces, and 18 in Alberta, Manitoba, and Quebec (provinces comprising about 38% of the total population of Canada). Inexperience with drinking, stress and self-medication are a few contributing factors for alcohol misuse amongst post-secondary students. Inaccurate conclusions made about peers was a discordant factor identified in previous research (Moreira, Oskrochi, & Foxcroft, 2012).

Poor academic performance and sexual assault were two alcohol-related concerns for which a post-secondary institution may intervene. The Alcohol and Other Drug Assistant Programs for Students (ADAPS) by Rutgers University and the escalation point system, Connection Alcohol and Other Drug Program by Shippensburg University are two examples of mandated alcohol-related interventions led by universities. Drug and alcohol interventions vary depending on the institutions' needs, concerns about a students' well-being or academic performance (Graham, Tatterson, Roberts, & Johnston, 2004). University alcohol-related interventions shape how

alcohol-related risks for students are managed. Preventative behavioral strategies are employed to reduce these risks specific to individual needs. More importantly, the success of these interventions protect more than just the individual student as alcohol use creates extensive second-hand harms to community members (Nayak et al. 2019). Property damage, assault and sleep disturbances are ramifications of alcohol misuse that affect students' peers and school property (Wilkinson & Ivsins, 2017), and preventive behavioral strategies may mitigate alcohol-related risks and misuse (Pearson, 2013).

Cannabis

Many cannabis-related preventative behavioral strategies derive from the success of strategies implemented on alcohol-related incidents of misuse. Surprisingly, universities themselves provide a unique risk factor for substance use as prescription, alcohol, and cannabis use were associated with academic stress and drug-exposure opportunity (Arria et al., 2008). For this reason, an institution's role in addressing cannabis-related misuse is paramount. According to Bravo et al. (2017), cannabis-related preventative behavioral strategies "[were] shown to be a robust predictor of lower cannabis use frequency and experiencing fewer consequences" (2017, p. 17)

The perception of how many other students are using drugs may also effect how young people engage with cannabis. The National College Health Assessment examined students' perceptions on alcohol and cannabis use amongst their peers and compared it to the actual use of students at the college where this current research project took place. The results for both substances were similar in that the perceived use was much higher than the actual. Almost 80% of students believed that their peers had used cannabis within the last month, when only 19.8% had actually used cannabis.

Tobacco

Online tobacco interventions for college students have been studied for their accessible format and break from traditional anti-smoking campaigns (Gulliver et al., 2015). Tobacco use for college students not only includes smoking. In ACHA-National College Health Assessment, 92 per cent of self-determined non-smoker students admitted to engaging in hookah or water pipes

where tobacco was present (Caffrey et al., 2018). Therefore, traditional anti-tobacco campaigns that emphasize mitigating cigarettes may fail to appeal to college students that engage in e-cigarette and hookah use.

Smoke-free campus initiatives are an example of institutional prohibition. Compliance with the policies regulates appropriate environments for student smoking. However, students reluctance to comply with the policies remains an issue slowing the widespread roll-out of smoke-free and tobacco-free post-secondary programs (Mamudu et al. 2016; Rooke et al., 2010).

Students respond to advertising, and previous research has identified that some strategies are more effective than others. While students were less persuaded by the idea that they might be romantically rejected due to their use of tobacco, they did identify that advertising highlighting things like the smell and health impacts of second hand smoke could shape how and where they consumed tobacco (Goldman & Glantz, 1998). Educators should be careful how they tread as fear based approaches to tobacco control may inadvertently harm consumers by causing anxiety in the targeted using population (Hastings, Stead, & Webb, 2004).

Sexual Health

Many sex-related harm reduction initiatives on campuses focus on potential victims and how their actions assist with mitigating risk. There is evidence that affirms that female college students that engage in preventive behavioral strategies experienced fewer negative alcohol-sexually related consequences including lower incidences of STIs and sexual assault compared to their peers (Goldstein, Barnett, Pedlow, & Murphy, 2007). Goldstein et al. examined new partner-related sexual encounters where alcohol was present. New sexual partnerships and alcohol require risk-mitigating strategies that protect both the individual student and their sexual partner(s). Traditional sexual health initiatives at colleges target young heterosexual females, which limit the student audience they serve (Greene, 2017; Moylett & Hughes, 2017). Newer approaches my reach wider audiences. Bystander intervention initiatives alleviates the burden placed on victims to minimize sexual risks by encouraging bystanders to intervene when witnessing sexual harm done (Orchowski, Berkowitz, Boggis, & Oesterle, 2015).

While most universities provide a wide range of sexual health services to their students, smaller schools and two-year institutions may not have the same level of support available to ensure the full range of preventative and reactive support mechanisms are in place for students (Habel et al., 2018). In addition, the engagement with peer educators and others involved in supporting students requires a thorough and wide-ranging plan that includes sufficient training, or it risks not addressing the needs of groups like international students and LGTBQ populations (Dunn, 2018).

Methods

We conducted eight focus groups involving 39 participants between March and April 2019. The participants were all students at a college in Toronto, Canada. Inclusion criteria required participants be between 19-30 years of age, had used cannabis in the last year, had obtained their own cannabis in the past year, and were currently a student in the college where the research took place. The focus groups took place on campus, led by student Research Assistants to avoid participants' curtailing of answers due to the presence of a faculty member. Participants completed a short survey about their cannabis use upon entering the focus group, and were provided food and $40CAD remuneration for their 1.5 hours of time spent in the focus group.

The focus group method allows researchers to examine how peer groups discuss individual decision-making practices around topics in a supportive environment that allows them to place their own experience in context of their peers (Chatrakul Na Ayudhya, Smithson, & Lewis, 2014). While individual interviews may appear to garner a broader array of information, the focus group has proven to be a better option to encourage research participants to discuss sensitive topics and personal practices (Guest et al, 2017). The rich data obtained in the focus group setting allows us to understand participant's experiences with cannabis with a deeper level of understanding than available via a quantitative survey (Agar & MacDonald, 1995; Stewart & Shamdasani, 2014)

The research employed a purposive sampling technique to ensure we spoke with students who have made a decision about how to obtain cannabis, not simply a student who may have

consumed cannabis provided to them in a group or social setting. We endeavoured to engage with students who specifically sought out to obtain cannabis as one of the key reasons for legalization of cannabis is to eliminate the black market. Unfortunately, the delay in allowing physical retail outlets in Ontario (until April 1, 2019), potentially uncompetitive prices, and the lack of product information on the austere packaging may dissuade people from switching to these new stores. This may be particularly true for heavier uses of cannabis as they are more sensitive to price and selection issues (Deloitte, 2016).

The validity of qualitative work is, in part, reliant upon the project achieving data saturation. Previous research, (Guest et al., 2017) has identified that saturation in focus groups can occur in a relatively short time-frame, with 90% of eventual themes identified in between three to six focus group sessions. Given that the focus group facilitators will be student research assistants, two additional sessions beyond the suggested six were conducted to take account of learning curve faced by first time focus group facilitators.

The project's sample (n=39) was comprised of 56% males, 41% females, and 2.6% who chose not to identify their gender. 87% of participants were between 19-24 years of age, whereas only 56% of the school's population falls within that range. 43% of the sample was non-white, with Black and South Asian students comprising the largest non-white ethnic groups. On average, participants consumed cannabis on 15 of the last 30 days. When broken down further we identified that 10.3% of participants reported that they had not consumed cannabis in the past 30 days, while 30.8% reported using between 15 and 29 days in the last 30, and 20.5% reported daily use. The participants paid on average $9.04 per gram of cannabis in the last 30 days, and had obtained cannabis four times during that period. Statistics Canada reported that on average, illicit cannabis costs $6.51 per gram, and legal cannabis costs $9.70 per gram (Statistics Canada, 2019b). Participants reported consuming their cannabis via a joint 40% of the time, while water pipes (bongs) were used 23% of the time, and vaporizers were used just 11% of the time. This is a far lower percentage of young people consuming with vaporizers that has previously been identified in the research, and warrants further examination in future research as widespread use of vaporizers instead of other forms of smoking may represent a public health benefit.

Analysis:

Thematic analysis was conducted using Nvivo 12, without a pre-defined coding structure. Four key themes emerged in our preliminary analysis, and they will be explored herein. When examining how students made decisions about their cannabis use the primary concern was their desire to meet individual needs related to the outcome of their experience. This largely broke down between medical and recreational goals, though there was significant overlap where things like relaxation were seen as both a medical and recreational goal. Students focused on achieving this outcome by picking the right environment to suit their needs, or manipulating their environment to ensure it was safe, comfortable, and able to facilitate the outcome they desired. They resided in these spaces keenly aware of the image they were creating both for themselves and for cannabis users in general, and took efforts to promote a positive image of their actions to those that might encounter them in the act of consuming cannabis or shortly thereafter while the participants were still high. All of these decisions were made after engaging with a wide variety of sources of knowledge. Formal drugs education material was often held in equal weight to advice from friends and budtenders, with sources sharply examined for their transparency and history of misinformation. Finally, the transition to a legalized cannabis paradigm was not occurring uniformly across all aspects of the cannabis using experience. While purchase at legal outlets and less fear about possession might be fairly advanced, the actual use of cannabis still evoked a fear or being found out or exposed to law enforcement for many participants.

Individual Needs

While medical access to cannabis has existed in Canada since 2001, by October 2018 when recreational cannabis was legalized only 343,000 registered patients were part of the Access to Cannabis for Medical Purposes Regulations (ACMPR). None of our participants identified as registered medical users, but many indicated that their decision to use cannabis at all was defined by their desire to achieve relief of mental and physical issues. Mental wellbeing as opposed to mental illness was the driving medical factor for participants. These were not usually physician diagnosed conditions, but rather feelings of anxiety or stress that were medicalized into self-diagnosed conditions, or at least ailments, that could be responded to with cannabis. Physical pains cited included muscle, menstrual, and other types of pain. These were, like the mental wellbeing issues, not chronic ailments diagnosed by a physician, but often temporary conditions

for which cannabis could be employed. Mataro, a young woman who smoked daily, preferred to use a bong, and still obtained her cannabis from an illicit dealer, explained her use as such, "I also work pretty physical job; an arborist part time, so a lot of physical involvement with that. And like [when you're] sore, you're tired, [and] I have a lot of like anxiety. Things like that too. So it just helps me calm down."

Recreational goals were not that divergent from the often-cited medical goals. Many were related to relaxation in response to the stress of work and school. Interpersonal connections with friends were cited as a reason to use cannabis, with the enjoyment of the experience being directly related to the openness created by the use of cannabis.

> … I'd like to get into a conversation with somebody and in that conversation you just get to know them more and they, they don't really filter out a lot of their thoughts… you get to know them more and you get to understand the person more… So like deep conversations are usually fun whenever you get high with people around you. (Green, 22, Male)

At the same time, cannabis could make being alone more enjoyable. Tiffany, 22, an infrequent joint smoker, found that she preferred to use cannabis almost as a treat at the end of a long day when she was alone and in her personal space. "…So I do it alone at the end of the night kind of thing. Like, when I'm done work[ing], done my assignments ,whatever, like once I know I'm going to go to bed in like an hour or two."

Participants were aware of potential acute risks of using cannabis, but did not see themselves at risk due to their previous experience with the drug and an idea that problems arose from bad consumption practices. Even if they were at risk they identified that risk as minimal and not life threatening. With the current overdose crisis in North America, the non-fatal outcomes of overconsumption of cannabis were hard to be worked up about when even seasoned opiate users were dying regularly from adulterated drugs.

> [Cannabis] can definitely cause anxiety and paranoia… and I have experienced that, but I think it comes from, well … a lot of people, like no one has ever died of cannabis overdose. People often think that maybe they're going to, but it's, any kind of issues that come from people using cannabis generally are due to user error or whatever, like incompetence or not knowing how to use it properly (Stella)

The adaptability of cannabis to meet a variety of needs showed that the drug itself was, in many cases, a pathway to a pre-identified end. Users had clear expectations of the effect of the drug they desired, and found they could meet that need by either finding the environment to facilitate that experience, or by manipulating their environment to be more hospitable

Environment and Experience

While our participants often cited parties in their teen years as the place they first tried cannabis, this social environment was not often where they now choose to use cannabis. Environments that are more peaceful provided opportunities to use cannabis to relax, whereas large social situations required one to be socially engaged, and this was seen as more of a role that alcohol could facilitate. For many, the outdoors were the ideal place to consume cannabis. Tony, an infrequent smoker of pipes and joints noted a clear preference for either using in outdoor situations or consuming in environments that let him feel like he was. "Sometimes like I just feel like I want to be at a lake by myself, and just when I get high and zoned out and just relax."

This desire to consume in peaceful home environments was challenged by access to such situations as many participants lived at home. When family who did not approve of cannabis were present it made accessing the 'proper' environment more difficult, and participants reported having to amend their use patterns and methods to align with these restrictions. Of course, not all families were opposed to participants' use, and several had engaged family members about their use in an attempt to reduce stigma. "…My brother got married in the fall and my entire extended family was all together and I was like smoking weed regularly, and I had [a conversation], you know. My grandmother is now looking into using it for arthritis. My aunt is looking into doing that [too]." (Stella)

Image and Identity

The respondents in this survey had been consuming cannabis in a legalized environment for six months at the time of data collection, but were very aware of the image they presented as individual cannabis users and as part of a sub-group in society. This actively shaped their decisions about when and where and how to consume cannabis. Their concerns were largely split

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between maintaining privacy about what they were doing, and ensuring that their actions, when seen or known about, protected their image and reputation, and that of cannabis users in general. Many were cognizant that their actions took place in a social context where their actions were legal, but still not widely condoned. There was often a sense of being 'outed' if they partook in ways that were noticed by non-users.

> But socially sometimes I feel bad. Like one time I was like smoking a J[oint] like off campus with a friend. And I got on the subway and I obviously smelt like it. Some people were like "oh shit someone's dank". I felt bad as I was like, 'ah someone, you know, someone is offended and you know what I mean? And it's like that kind of thing makes me feel bad and makes me a little paranoid, but it's not like I really feel like I'm going to get arrested or anything like that cause you're not. It's more like, 'Oh I feel bad kind of feeling like I'm inconveniencing others in public.' I'm kind of worried about that kind of about people thinking oh I'm a stoner like. (Mataro)

This concern ties back into the efforts to use cannabis in environments where there was less threat of proximity to non-users, or a desire to use in a way that was less noticeable. Even when not trying to hide their use, participants identified that flaunting their cannabis use, especially in front of children, might bring negative repercussions either directly to them, or more likely to the idea of what it means to be a cannabis consumer.

> I personally treat smoking marijuana in a public place, like I said, you were talking [about] cigarettes. I wouldn't want to smoke near someone's kids or at a park or something like that. Yes, I feel like that would be just asking for trouble. Like why would you want to put yourself in a position like that if you can totally avoid it? Do it somewhere [else]. (Ms. Purple, 21, Female)

Education and Sources of Knowledge

All of these decisions and motivations emanated from a sample that professed to have extensively engaged in knowledge acquisition efforts related to cannabis. This held true from those who consumed daily, to those that were infrequent users. The sources of this knowledge were primarily from school, government published education material, and independent research conducted online.

High School provided much of the basic information related to drug use, but that information was often seen as suspect at this point in time, even if they had not been at the time it was delivered. Information provided by the college was also seen as biased, and not particularly engaging. Students felt disconnected from larger discussions about how the school handled cannabis on campus, and as such the information about cannabis health risks was seen to be directed at students, not for students. The lack of transparency about where the school's information emanated from gave students the sense that such education material was still based on old stigmas against cannabis.

Government provided information was largely distrusted. The history of cannabis prohibition, combined with a sense of the government's unease with cannabis led students to discount health warnings emanating from government sources. In addition, issues of transparency related to the motivation of those creating the content engendered further distrust amongst the sample.

Independent research, especially amongst those with medical motivations to use cannabis, and amongst those heavier consumers, was the primary source of knowledge. When seeking information students went to a variety of sources. These included advocacy based websites and more formal pieces of research from academic sources. Knowledge from individuals with lived experience of cannabis, or directly involved in the production of cannabis, held more sway than those who were seen as outside the cannabis community. The history of previous efforts to stigmatize cannabis users left them seeking those that they felt were part of their community and had their best interests at heart.

Discussion

In examining this preliminary data it is important to note three key intersections between the major themes identified. They are the influence that lack of trust has on all aspects of the cannabis using experience, the sense of community at the heart of the cannabis using experience, and the role of key messengers in promoting knowledge dissemination to younger users.

Trust is a concern raised by participants in each of the main themes identified. From a lack of trust in government undermining the effectiveness of school and government public education materials, to the concern that non-users will stigmatize their behaviour if viewed consuming cannabis in a dubious manner, young people in our research felt there were few individuals outside of the cannabis advocacy and using community that they could trust. This lack of trust influenced what environments they choose to consume cannabis in, how they choose to consume, and whom they could talk about their decisions with. It also greatly influenced the efficacy of public health campaigns. As government and schools spend heavily to try to influence young people to avoid problematic consumption patterns with cannabis, old practices may not work on these consumers. They are all too aware of the costs of prohibition and the misinformation used to sustain the practice, and are therefore skeptical of messaging that comes from the government or schools that seems to suggest cannabis may be harmful.

In shaping their identity and that of the cannabis using community, our participants were taking active measures to ensure the representation of cannabis users was not aligned with previous stereotypes about the group. Their efforts to construct this identity shaped their decisions regarding when and where to consume, how they spoke to non-users, and even the efforts to seek out additional knowledge to be well versed in the drug they were consuming. While these efforts appeared more pronounced in more frequent users, it was clear throughout the data that cannabis use was not a decision made without the user engaging with how they fit into the social context of the recently legalized drug.

Users who were previously part of a stigmatized and criminal activity had suddenly found themselves operating in a legal context. The intimacy that they once shared as common outlaws was now absent from their ritualized activities, and they could freely walk the streets, fly in airplanes, and even enter police stations with up to 30 grams of what was an illicit drug only a few months previous. This seemed to bring them closer to other users whom they trusted, and even influenced their decisions about whom to trust when it came to learning more about cannabis. In short, while they were no longer criminalized, they did not necessarily feel accepted, and so it might be argued that legalization may engender a stronger sense of community amongst

long-time users. To paraphrase a meme about hipsters, cannabis users were 'into cannabis before it was cool'.

This shared sense of community made these younger users keen to hear from trusted sources in the community about issues related to how best to consume cannabis, the benefits and downsides to various strains, and other relevant consumer information. The lack of trust of big business and government puts a very limited group of individuals in a positon to influence use amongst young people. At the moment, there does not appear to be one figurehead that they turn to, but there are certainly plenty of sources they turn away from. This puts academic institutions in a difficult positon of feeling a duty to put forward drugs education materials while the consumers of that material may not be open to them as the messenger. Even older organizations like the National Organization for the Reform of Marijuana Laws (NORML), Drugs Policy Alliance (DPA), and other organizations did not enter the discussion. While groups like Students for Sensible Drugs Policy (SSDP) and their Canadian sister organization (CSSDP) did not enter the discussion, they seem to fit the description of organizations the students might be willing to engage with. This puts such organizations, student led and student focused, in a powerful position to lead public health and drugs education efforts with students.

Conclusion

This research engaged young people 19-30 years of age who had consumed and obtained cannabis in the last year in order to understand how they made decisions related to their cannabis use in a legalized environment. Our findings show that these young people are operating in a legalized environment where they still feel their drug use is stigmatized both by the general public and in the post-secondary environment. They had clear expectations about the experience they sought to obtain by using cannabis, and actively worked to find environments to support their experience. When such environments were not readily available they did not cease cannabis use, but rather worked to manipulate their available environments to suit their needs.

Initial examination of the data indicates that the young people in our focus groups were keen to engage with material that would help them make informed decisions about their cannabis use.

Their current practices reflected consideration and thoughtfulness in their decision making, but still showed significant gaps in knowledge and some misinformation regarding health impacts, legal requirements, and other important information. As such, a space exists for the right organizations to present information to students that may influence their decision making about cannabis, both to support their individual wellbeing and to promote wider public health benefits.

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