Exploration of the Perceptions Held by Older Adults Surrounding Cannabis

by

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Abstract

The history of cannabis prohibition in Canada is rooted in racism and it was not until 2018 that recreational cannabis was legalized in an attempt to curtail drug crime and to protect the health and safety of Canadians. Due to its long-standing criminal status, the limited existing research on cannabis has predominately explored addiction and the efficacy of cannabis as a treatment for various medical conditions, with a focus on young people. Nevertheless, statistics reveal an increase in cannabis use among older adults; therefore, it is important to explore what beliefs older adults possess that persuade or dissuade engagement with cannabis and to understand how they navigate their cannabis consumption. For the current study, data were collected from in-depth semi-structured qualitative interviews conducted with six older adults. General thematic analysis was used for coding and theme development. The findings demonstrate that 1) participants relied upon disclosing their membership to particular social groups as a means of communicating their worldviews and engagement with cannabis; 2) participants perceived the risks of cannabis to be equivalent to, or less than that of alcohol, other illicit substances, and prescription medications; 3) they credited the government control as a result of legalization as a factor in reducing some of the risks related to cannabis; and 4) during the years of prohibition, the risk of informal sanctions played a more pivotal role than formal sanctions in affecting their consumption and the behaviours they exhibited. The whiteness of the participants leads to the question of how instrumental one's race is in affecting the apprehension of formal sanctions surrounding cannabis for older adults. Thus, future research is needed to explore perceptions and behaviours of older adults surrounding cannabis, from an intersectional lens.

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Exploration of the Perceptions Held by Older Adults Surrounding Cannabis

Cannabis has been used for multiple purposes around the world since its discovery in ancient times (Szaflarski & Sirven, 2017), and it was not until 1923 that the possession of cannabis was established to be a criminal act in Canada (Fischer et al., 2003). Prior to the inclusion of cannabis in the Opium and Drug Act of 1923, no problems related to cannabis had been documented which would justify the inclusion of cannabis as a substance to be prohibited in Canada (Fischer et al., 2003). However, the history of legislation prohibiting the sale and possession of cannabis in North America is rooted in racism and in the fear that non-British immigrants were perceived to pose to the privileged white settlers of both Canada and the United States of America in the early twentieth century (Ghelani, 2020; Gordon, 2006).

The passing of the Opium Act in 1908, marked the first time that any psychoactive drug was criminalized in Canada (Hathaway & Erikson, 2003). In the years leading up to 1908, many powerful white Canadians viewed opium as "emblematic of the Chinese problem", and while it was not perceived as "a habit harmful in itself", it was viewed as an action that exemplified the inferiority and "inassimilable nature of the Chinese" (Gordon, 2006, p. 64). Moreover, Gordon (2006) explained that the fear that "morally weak women" would begin smoking opium and introduce it into the lives of white working-class men, was of significant concern to those in positions of authority at that time (p. 64). The author communicated that the "trope of the overly sexualized, racialized Other, ready to prey on and contaminate the purity of white women and, by extension, the white race", was prominent in the late nineteenth century and early twentieth century (p. 64). Thus, the enactment of the Opium Act in 1908 which

prohibited opium in Canada, came a year after the anti-Asiatic riots that occurred in Vancouver (Hathaway & Erikson, 2003), in an effort by the Canadian Government to control immigration of Asian peoples as well as to contain the "moral upheaval" that opium was perceived as having the potential to create (Fischer et al., 2003, p. 267).

In 1908, when the Opium Act was passed, cannabis was not included in the drug prohibition. However, in the 1920s Mexican immigrants were commonly being blamed for various crimes committed in the Southern American states, including "property crimes, sexual misconduct, and murderous rampages" (Bonnie & Whitebread, 1999; Warf, 2014, as cited in Ghelani, 2020, p. 7). As cannabis had started to appear in urban areas of The United States of America, as well as in "Hispanic labour" in the country, an association between cannabis and the Mexican population developed (Fischer et al., 2003, p. 268). People from Mexico were perceived by American politicians as criminals who were "violent" and it was argued that it was cannabis that made them "crazy" (Ghelani, 2020, p. 7). It was not until cannabis became associated with Mexican immigration and the xenophobia surrounding Mexican immigrants that cannabis was considered problematic (Ghelani, 2020). Officials of the time deliberately referred to cannabis as marijuana or marihuana to give it a name that signified a foreign identity and tied this drug to "dark-skinned men", which became the catalyst for criminalizing the substance (Ghelani, 2020, p. 8).

In the 1920s, cannabis also began to arrive in coastal cities throughout The United States of America (Warf, 2014). Shortly thereafter, those in power observed a significant increase in cannabis being consumed by particular groups of people such as musicians and members of some African American communities (Ghelani, 2020; Warf, 2014). In

response, “tough on crime narratives and legislation were promoted to broadcast concerns about intoxicated Black and Mexican men committing crimes and corrupting White youth” in America (Ghelani, 2020, p. 8). However, in Canada, cannabis had not been highlighted in the media as problematic, nor had the political leaders in Canada advocated for its inclusion in the Opium and Drug Act (Fischer et al., 2003).

Nevertheless, the year before cannabis was added to the Opium and Drug Act, Emily Murphy (1922, as cited in Hathaway & Erikson, 2003), Canada’s first female judge, and moral reformer who was a strong advocate for drug prohibition, expressed a similar rhetoric to that which was communicated by politicians in the United States. In her book *The Black Candle*, Murphy (1922, as cited in Hathaway & Erikson, 2003) asserted that those addicted to, and under the influence of cannabis, would “become raving maniacs and are liable to kill or indulge in any form of violence to other persons” (p. 467). The release of Emily Murphy’s book, *The Black Candle*, a year prior to cannabis being added to the list of prohibited drugs in Canada, is considered to have been a catalyst for the change that was seen in Canadian law (Fischer et al., 2003). It seems her US propaganda-based assertions on the detrimental effects of cannabis significantly influenced political actors, thereby, leading to the prohibition of cannabis in Canada (Fischer et al., 2003).

For the first few decades after cannabis was criminalized in Canada, little enforcement occurred in the country (Fischer et al., 2003). Nevertheless, this level of enforcement changed dramatically in the 1960s (Fischer et al., 2003). The perceived dangers associated with cannabis use were exacerbated by the media, religious groups, and law enforcement during this decade (Dingelstad et al., 1996; Fischer et al., 2003).

Moreover, the increase in "addiction science" allowed the powerful actors to rely upon discourses of science to legitimize their actions for the criminalization and aggressive prosecution for cannabis possession (Fischer et al., 2003). As a result, the number of individuals in Canada that were criminally charged for possession of cannabis increased significantly. Estimates state that close to 700,000 Canadians had criminal records as a result of their cannabis possession by the year 2000 (Fischer et al., 2003).

Despite the demands at the end of the twentieth century from the public, drug researchers, key stakeholders, and from a Commission established by a previous Liberal Government calling for reforms to the criminalization of cannabis, policymakers neglected to legalize or decriminalize cannabis at that time (Fischer et al., 2003). It was not until 2018, that Canada legalized possession of up to 30 grams of cannabis for those aged 18, 19, or 21 depending on the province or territory for which the individual is in (Department of Justice, 2019). Nevertheless, despite the change in cannabis' legal classification, many individuals perceive the stigma associated with cannabis to have been maintained (Bobitt et al., 2019). Consequently, many of the impression management techniques that individuals employed to mitigate the impact of their cannabis consumption during the years of prohibition, have persisted (Bobitt et al., 2019; Lau et al., 2015a; Lau et al., 2015b).

Overview of the Following Chapters

In the next chapter, the theoretical lenses that were employed during the current study will be detailed. This will begin with the theoretical lens of social constructionism which was used to explore how society determines what constitutes old age, as well as how substances and behaviours come to be categorized as criminal and deviant.

Additionally, symbolic interactionism will be discussed with a particular focus on how an individual's interpretations of things, such as cannabis, ultimately influence their behaviours and perspectives. This chapter will be followed by a review of the extant literature surrounding cannabis. The literature highlighting the increased consumption of cannabis among older adults, the perception of cannabis posing limited risks compared to other substances, and the perceived stigma that cannabis continues to have despite legalization, will be discussed. The positive and negative consequences that have occurred as a result of cannabis prohibition coming to an end in Canada and many states in America, will follow this discussion. Moreover, the evidence communicated in the literature on the effectiveness of cannabis in treating various ailments as well as the plethora of risks associated with cannabis consumption will be presented.

In the next chapter, I review the methodology of the present study. Specifically, I discuss the process that was relied upon for the recruitment of the participants as well as how the semi-structured qualitative interviews were conducted. This is followed by a description of how Braun and Clarke's (2018) six-phase approach to Thematic Analysis was used for the coding and theme development of the present study. The findings from this study are then presented and discussed. Two main themes that were developed after analyzing the data collected from the semi-structured interviews; informal control measures employed by the participants, and the worldviews held by the participants surrounding cannabis consumption and the legalization of cannabis, are discussed in detail. The final chapter provides a summary of the how the identity of the participants is explained by their membership to particular social groups and how this membership is used by participants to explain their worldviews surrounding cannabis. Additionally the

discussion surrounding the participants' views of cannabis safety and addiction, and how legalization has affected these perceptions, is presented. Lastly, I provide an analysis on the informal sanctions that were communicated to have had a greater influence than formal sanctions on the behaviours of participants. I then query the extent to which the whiteness of the participants influenced this minimal fear of formal sanctions that was articulated.

Theoretical Framework

Social Constructionism

Social constructionism is a theory that argues knowledge is constructed by individuals in a given society by their interactions with others. It is through these interactions, and the culturally and historically specific times, that we create concepts and categories that allow us to understand our world (Burr, 2003). In contrast to positivism, which posits that scientific methods can be employed to reveal the truth about society by focussing solely on observable data, the social constructionist perspective concentrates on human thought and how sociocultural forces establish our knowledge of the world (Burr, 2015). Thus, knowledge, from a social constructionist perspective is produced by subjective human interests and is susceptible to continuous change as moral entrepreneurs and other members of society reinterpret such knowledge (Szaflarski & Sirven, 2017). In order to understand cannabis use among older adults, it is necessary to examine the social and cultural elements that exist. Through examining the social and cultural elements that exist, it becomes evident that variables surrounding cannabis consumption such as criminalization and what constitutes "older adults", are socially constructed.

Definition of Older Adults

Increasing criticisms have been made in the social science fields on the dependence of chronological age as the sole measurement for age. It is argued that chronological age is an "empty variable" that inadequately illustrates an individual's unique capacities (Moreira, 2016). For instance, individuals of the same chronological age can differ in physical health, cognitive abilities, employment status, and income

(Kuppelwieser, 2016). Nevertheless, the continuous reliance on numerical age has penetrated all facets of modern society. Age is used in the creation of policies, it is used to determine the rights bestowed upon an individual, and has provided a standardization that reaches all cultures, times, and geographies (Moreira, 2016). Despite chronological age being a vital factor in how we understand the specific stages of the lifecourse, the specific ages that encompass individuals categorized as older adults, seniors, or "emerging elders" is inconsistent both within and across populations as well as in the extant literature (Fields et al., 2018; Kowal & Dowd, 2001).

Age categorizations that are used in Western societies have been, and continue to be, extremely fluid. Phillipson and Walker (1986, as cited in Phillipson, 2008), argued that ageing "may be seen as primarily the product of a particular social division of labour rather than a natural concomitant of the ageing process […] what we regard as old age is manufactured socially" (p. 166). This is supported by Kowal and Dowd's (2001) explanation, that what is determined as old age frequently corresponds with the retirement age in a particular society within the developed countries. Nevertheless, our perspective on when retirement should occur continuously changes based on human interests, the economic stability of a particular society, and other sociocultural forces. For instance, as the economic position in any given society significantly fluctuates, so too does the designation of when an individual is perceived as having the expectation to participate in the workforce (Taylor & Earl, 2016). Taylor and Earl (2016) detailed that public opinion and social norms during times of job scarcity result in increased social pressure, and amendments to public policy, to encourage older workers to leave the workforce to allow younger workers to acquire the available positions. However, as the

economic position improves, the social perspective on the responsibilities and expectations of members of this cohort begins to change. As the proportion of individuals that are categorized as retirement age continues to increase, concerns regarding the sustainability of having such a large proportion of the population retired begin to rise. As a result, a push to have these individuals remain productive members of society through employment is reintroduced through rapid public policy changes and public opinion (Taylor & Earl, 2016).

Individuals that do not contribute to the economic growth of society are negatively stereotyped as burdens on our health and social welfare systems by those that hold a neoliberal perspective (Kesby, 2017). Therefore, individuals in particular social classes are subjected to societal pressures to continue actively participating in the economy despite their chronological age. This has resulted in the common conceptualization of old age being questioned, as the milestone of retirement is perceived differently than it was in the past. The designation is further disrupted by the birth of the new term "the third age" as it disrupted the notion that the lifecourse's final stage was retirement (Gleason, 2017). The term created a distinction between the "young-old" and "old-old" (Kesby, 2017); therefore, further hindering the retirement age as being a reliable figure to determine old age. These changes illustrate the importance of time and context into how society designates individuals into categories and determines what economic roles they are expected to play.

Ageist stereotypes are born from how age is socially constructed in any given society and exceed those surrounding the expectations for employment. These stereotypes penetrate the minds of both the population labelled as older and those of

younger chronological ages (Bai, 2014; Jones, 1999). The media perpetuates these negative stereotypes of older adults through their underrepresentation of older adults and through the portrayals of older characters appearing forgetful and expressionless (Bai, 2014). The various narratives and portrayals surrounding how age is understood and how one should behave based upon their chronological age relates to the social and political pressures of the time (Moreira, 2016). The continuous changes to these narratives highlight how human interests play a pivotal role in how older adults is socially constructed and are period specific (Gleason, 2017).

Criminalization of Cannabis

Social constructionists look at how certain behaviours become defined as criminal or deviant in any given society. Przemieniecki (2017) detailed that this theoretical perspective emphasizes that criminal behaviour only becomes codified as such, because individuals, often those with power and authority in a given society, have defined it to be. The opinions that these powerful individuals hold, "are supported by the relevant knowledge produced in specific historical periods" and are reflected in the official documents of the time (Szaflarski & Sirven, 2017, p. 281). Thus, behaviours and substances are not inherently wrong, deviant, or illegal; however, they become this way when society deems them to be. Przemieniecki (2017) further highlighted that the act of criminalizing a behaviour or a substance is subject to the "time, place, culture and individual perspective" (p. 806). This notion is illustrated by how the criminalization that previously accompanied cannabis possession is created, maintained, negotiated, and reinterpreted as society changes.

Creation of Cannabis Criminalization. As aforementioned, it has been argued

that the release of Emily Murphy's book, *The Black Candle*, in 1922 in which Murphy "reduced all mind-altering substance use to moral failure and enmeshed race, immigration, violence, and drug use in the Canadian imagination" (Carstairs, 1999, as cited in Ghelani, 2020, p. 9), influenced officials in Canada to make cannabis prohibited by law (Fischer et al., 2003). Consequently, cannabis was added to the Opium and Drug Act in 1923, where it was categorized as a prohibited substance. It would remain a prohibited substance to consume medically until 2001 and recreationally until 2018.

Maintaining the Criminalization of Cannabis. During the years that cannabis was prohibited in Canada and in The United States of America, data on drug prevalence illustrates that white people in America and Canada consumed cannabis at equal rates, or higher rates than Black people (McElrath et al., 2016). Moreover, in Canada, the data have shown that rates of cannabis consumption among Indigenous Peoples is similar to the rates that are evident in other racial groups (Ghelani, 2020; Valleriani et al., 2018). However, in both countries, the policing practices that target Black people (Ghelani, 2020; Gordon, 2006; McElrath et al., 2016; Valleriani et al., 2018), Indigenous Peoples in Canada (Ghelani, 2020; Valleriani et al., 2018), and predominantly Black communities in both countries, has resulted in a disproportionate number of Black people and Indigenous Peoples being criminally charged for cannabis offences compared to white people (Ghelani, 2020; Gordon, 2006; McElrath et al., 2016; Valleriani et al., 2018). For instance, in America, Black adults are 3 times more likely than white adults to be arrested for drug possession (McElrath et al., 2016). Similarly, one study conducted in Regina, Saskatchewan from 2015 to 2017, found that Indigenous Peoples in the city were "9 times more likely to be arrested for cannabis possession" compared to white people in the

same city (Valleriani et al., 2018). Furthermore, the discriminatory practices in sentencing also detrimentally affected marginalized groups as they were given harsher sentences than white people arrested for the same charges (McElrath et al., 2016). The formal sanctions disproportionately affecting marginalized groups was clearly demonstrated when Rivers detailed that in 2018, despite 60% of the population of America being white, "People of Colour made up 84% of all federally sentenced cannabis convictions" (Rivers, 2019, as cited in Ghelani, 2020, p. 10).

Ghelani (2020) asserted that "a cannabis user's skin has been demonstrated to impact the manner in which they are depicted and treated in the public sphere" (p. 15). The policing patterns of the decades that cannabis was prohibited by law in Canada, support the assertion made. The racial disparities in cannabis possession arrests and convictions are a reflection of the policing strategies that disproportionately focussed on People of Colour, particularly those that lived in low-income communities (McElrath et al., 2016). These strategies which were employed by the police in Canada prior to legalization of cannabis, including the targeting of minor Black dealers and stopping People of Colour on the street "who had done nothing identifiably illegal", were ineffective in ending the consumption of illegal drugs (Gordon, 2006, pp. 69-70). However, as Gordon (2006) argued , it was the "pursuit of order in the immigrant communities [that] underlies the war on drugs" as the state was aware that targeting these individuals would not cease the illicit drug market (p. 74).

Revision to Criminalization. The legalization of recreational cannabis in Canada in 2018 was not a reflection of the demands from the general population. Rather, the new interpretation of cannabis' criminal definition was based upon political actors deciding

"that legalizing cannabis would be the best way to deal with such issues as restricting youth access to cannabis, minimizing drug crime, and avoiding the costs of controlling cannabis" (Müller, 2019, p. 150) The Government of Canada, Department of Justice website (2019), detailed that the *Cannabis Act* has three main objectives. These objectives are to keep cannabis away from youth, to prevent criminals from profiting from cannabis, and to protect the health and safety of the public. Moreover, the rhetoric that Prime Minister Justin Trudeau used to justify the legalization of cannabis frequently revolved around the protection of youth ("Debate over recreational", 2018).

When examining the minimum age that was determined by the Government of Canada as the legal age to purchase cannabis, it becomes evident that the decisions were made for political rather than neuroscientific reasons. The minimum age of 18 was determined by the Government of Canada as the legal age to purchase cannabis; however, the provinces and territories were authorized to determine higher ages for legal purchasing in their jurisdictions (Nguyen et al., 2020). The age of 18 was determined by the Federal Government Task Force on Cannabis Legalization as appropriate to disrupt the illegal market (Nguyen et al., 2020). Nevertheless, this age was criticized for being too young as it contradicted the neuroscientific evidence that suggests the brain is still developing until the age of 25, and that drug use is dangerous for the developing brain (Nguyen et al., 2020). Establishing what an optimal minimum age for the legalization of cannabis use is difficult to determine, as policymakers must balance the neuroscientific evidence with the attempt to curtail the illegal market (Nguyen et al., 2020). However, based on the determined minimum age set by the Federal Government it can be argued that the decision made surrounding the age of legalized use of cannabis was determined

with a greater focus on reducing the criminal activity of the illegal market than it was of the neuroscientific evidence. This illustrates how the changes in the criminalization of cannabis were reinterpreted based on the political and social pressures of the time.

Symbolic Interactionism

Symbolic interactionism is a sociological perspective that views social order as an ongoing process where individuals create and manipulate symbols (Dillon, 2014). Symbolic interactionists assert that individuals create meaning of the world by interpreting and responding to the cues in one's environment (Dillon, 2014). This theoretical perspective focusses on micro-level processes such as an individual's and a group's interactions with other people, objects, and ideas and what changes and consequences these interactions give rise to (Carter & Fuller, 2015; Dillon, 2014). George Herbert Mead founded this theoretical perspective; however, other scholars who are noteworthy contributors to this perspective include Charles Horton Cooley and Georg Simmel (Wagner, 2007). Nonetheless, it was Mead's student, Herbert Blumer, who coined the term symbolic interactionism after Mead's death (Snow, 2001). Mead contended that individuals learn a system of symbols that allows them to communicate with others, share meanings with each other, and to create order (Aksan et al., 2009).

Symbolic interactionism rests on three basic premises that were detailed by Blumer. Aksan and colleagues (2009) listed each of these tenets and explained that the first is that individuals develop their attitude towards things based on the meanings they have given them. The second tenet is that it is through our social interactions with others that we give meaning to things. Lastly, the third tenet states that the meanings that we give to things are not static, they are modified as we interact with objects in our

environment, including other individuals, physical objects, and institutions. This theoretical perspective explains how aspects of society, including one's sense of self, can change as symbols are created and recreated based upon these interactions. Symbolic interactionists assert that the way one interprets the symbols that they encounter ultimately affects their interactions with others as well as their perceptions of themselves and society.

Impression Management

In the 1960s, Erving Goffman presented the process of impression management. He argued that impression management described social life as people performing numerous social roles that are in accordance with the cultural and contextual expectations in a given society (Lester, 2011). Goffman used the metaphor of a theatre to further illustrate the theory that he proposed (Semaan et al., 2017). According to his theory, "interaction is viewed as performance" where individuals play a variety of roles (Semaan et al., 2017, p. 712).

In continuation of the metaphorical theatre, Goffman distinguished between two regions that he coined as front-stage and back-stage to clarify the influence that an audience has upon the role that one enacts (Lester, 2011). He emphasized that the "role performance is contingent on the presence of an actor's primary audience" (Dillon, 2014, p. 288). The front-stage represents the arena of interaction in which one puts on a façade to adhere to the socially expected behaviours by using dramatic devices (Lester, 2011). It is in this region that individuals manage their behaviours and impressions; thereby, portraying themselves in a favourable way (Lester, 2011). This is in vast contrast to Goffman's notion of the back-stage. For it is in the back-stage where the audience is

absent; therefore, alleviating the individual of the burden of acting out a socially prescribed role (Semaan et al., 2017, p. 713). It is also in this arena that individuals are able to conduct the necessary work to prepare themselves for the front-stage. Lester (2011) explained that individuals prepare themselves for the front-stage by interpreting the roles that are expected of them, as well as "constructing the performances, and reflecting on previous performances" (p. 157).

Stigma

Individuals engage in impression management as a means to control the information that others are able to acquire (Vickers, 2017). The incentive to put on a performance when on Goffman's metaphorical front-stage, is to avoid the negative feelings that arise when a secret is unable to remain concealed. When one's secret is known, an individual is susceptible to being subjected to shame, guilt, fear, and often stigma (Vickers, 2017). Stigma was defined by Goffman in his 1963 germinal work, entitled: *Stigma: Notes on the management of spoiled identity,* as an "attribute that is deeply discrediting that reduces the bearer from a whole and usual person to a tainted, discounted one" (as cited in Lester, 2011, p. 157). Research on the topic of stigma has been extensive since Goffman's influential work was published, as researchers have elaborated on his definition, refined how he conceptualized the term, and have demonstrated the impact that stigma has on various populations. While some have challenged the individualistic focus that stigma has (Link & Phelan, 2001), for the purposes of this paper, Goffman's conceptualization of stigma will be utilized.

In *Stigma: Notes on the management of spoiled identity*, Goffman (1986) differentiated between three different types of stigmatizing conditions, with the first

being “abominations of the body” (p. 4). This source was used to categorize the physical disabilities and deformities that an individual may live with (Dillon, 2014). A second source of stigma that Goffman identified, was “tribal identities” which includes stigma associated with identification of one’s race, nationality, or religion (Goffman, 1986, p. 4). The final source identified by Goffman, was “blemishes of individual character” (Goffman, 1986, p. 4). This source includes traits that are “perceived as weak will” and “domineering or unnatural passions” (Goffman, 1986, p. 4). He further explained that those that possess one or more of the conditions that are stigmatized, are viewed by others as “not quite human” (p. 5). As a result, individuals in society that do not possess stigmatizing characteristics, what he called “normals”, construct an ideology that justifies placing themselves in a superior position to the stigmatized persons.

Goffman (as cited in Bottorff et al., 2013), argued that stigma is an interactional process where the construction of an individual with stigma being inferior is enacted upon by members of society in a variety of exercises. Those that do not adhere to the expected behavioural norms, as well as those who have a different type of stigma attached to them, are subjected to exclusion, condemnation, and discrimination. Bottorff and colleagues (2013) explained that these social interactions can result in both enacted and perceived stigma. They detailed that enacted stigma becomes evident when an individual or a group engage in the exclusion or discrimination of one whom deviates from the social norms. Consequently, the stigmatized individual’s life chances are effectively reduced (Goffman, 1986). Conversely, perceived stigma is when an “individuals’ assumptions or fears of discrimination lead to self-perceptions of shame and guilt” (Bottorff et al., 2013, p. 2). The stigmatized individual will feel, even if

temporarily, inadequate in their ability to successfully reach the standards expected of them, as dictated by society (Goffman, 1986). Based on Mead's argument that one's identity is formed based on the interactions with others, the stigmatized individual inevitably internalizes the perception others have of them (Dillon, 2014).

The manner is which an individual responds to the stigma they experience and internalize, can vary significantly. Some individuals will make direct efforts to correct the stigma, others will work diligently to master activities that are typically viewed as unachievable for someone with their stigma; thereby compensating for their stigma, others may blame their stigma for lack of success despite it not being related to the stigma, whilst others may isolate themselves (Goffman, 1986). Nevertheless, some individuals may seek solace with others who share their stigma or with what Goffman named, "wise" others (Goffman, 1986). "Wise" others are sympathetic to the stigmatized individuals, thus allowing the stigmatized individual to "feel no shame nor exert self-control, knowing that in spite of his failing he will be seen as an ordinary other" (Tsai et al., 2013, p. 3).

Literature Review

A systematic literature review was conducted using five databases. The most extensive review was completed using ProQuest (All databases). Findings with the keywords cannabis, cannabinoids, marijuana, or marihuana, in conjunction with older adults, elderly, seniors, aged, or geriatric, in the abstract, were reviewed. Due to the large volume of articles this search resulted in, the search was narrowed down to include only peer reviewed articles that were published in English within the past five years. This resulted in a total of 223 articles. After reviewing the abstract of each article, 62 articles were immediately excluded. Of those excluded, six articles were duplicates, twenty-eight had a primary focus on a topic other than cannabis, five were outlines, protocols, or suggestions for conducting research, ten only provided an overview of other studies, six were intended for a specific audience (neuroscientific, dentistry, or chemistry); therefore, too technical for the scope of this study, and three looked at specific populations that are not relevant to this study. The final four articles were excluded for having a primary focus on financial services, screening instruments, critique of state policies in the United States of America surrounding retail sales of cannabis or provided conference notes. All of which were determined not to be relevant to this study.

Additional searches were conducted using the International Bibliography of the Social Sciences (IBSS) database, Taylor and Francis database, Wiley database, and Sage database. Findings with the keywords cannabis and older adults in the IBSS database resulted in the inclusion of five additional articles based on the same criteria as aforementioned. The searches using Taylor and Francis, Wiley, and Sage were all conducted using the keywords cannabis and older adults, cannabis and older, marijuana

and older, marijuana and older adults, cannabis and seniors, and marijuana and seniors. The search in the Taylor and Francis database resulted in the inclusion of fourteen additional articles. Furthermore, nine additional articles were included as a result of the search conducted using the Wiley database and five additional articles from the Sage database. Lastly, two additional articles that were relevant to this study were added as a result of reviewing the citations and references in the aforementioned list of articles. As a result, 196 articles were included in this review. Thirty-four of these articles focussed exclusively on adults over the age of 50 and an additional 43 articles included some participants over the age of 50 in their study. The remaining articles either explored associations with cannabis in children or adolescents (n=69), young adults (n=29), explored both youth and young adults (n=2), or did not discuss age in the article (n=19).

The articles that met the inclusion criteria as previously discussed, were synthesized into five themes: (a) patterns and prevalence of cannabis consumption among older adults, (b) risks associated with cannabis consumption, (c) medical cannabis, (d) perceptions of cannabis among older adults, and (e) the impact from changes to cannabis legislation.

Patterns and Prevalence of Cannabis Consumption

Trend analyses for cannabis consumption among older adults in Canada are scarce. This paucity of information in the literature was explained by Rotermann and MacDonald (2018) when they stated that the data surrounding older Canadian adults' cannabis consumption is commonly too unreliable to publish. Nevertheless, an article composed by Baumbusch and Yip (2020), in conjunction with an additional publication by Bertram and colleagues (2020), provided some information pertaining to older

Canadians' use of cannabis. Throughout the articles, the authors illustrated both the current situation and the changes that have been observed over the last few decades.

Canadian Patterns of Cannabis Consumption

By using the data obtained from the annual cross-sectional Canadian Tobacco Use Monitoring Survey (CTUMS), the Canadian Tobacco, Alcohol and Drugs Survey (CTADS), and the new survey, the National Cannabis Survey (NCS), Rotermann (2019) concluded that the prevalence of cannabis consumption between 2004 and 2017 in Canada has varied according to the different age groups. The author explained that while the prevalence of cannabis consumption by those aged 15 to 17 decreased, the prevalence remained stable for those between the ages of 18 and 24 and increased among those aged 25 to 64 during the years examined. Although Rotermann determined that it was not possible to identify a trend analysis for those aged 65 and over during this time period, Bertram and colleagues (2020) argued that over the last decade, the rate of cannabis consumption by older adults has been rising. The authors relied upon information from Statistics Canada and findings from one study that explored the consumption of cannabis by older adults in the province of Ontario to defend their statement. The study the authors highlighted showed that the percentage of older adults in Ontario that consumed cannabis doubled between 2005 and 2015 and had "increased five-fold since 1977" (p. 135).

Baumbusch and Yip (2020) echoed Bertram and colleagues (2020) position by expanding their statistics to explore older Canadians adults throughout the entire country. They detailed that in 2012, approximately 40,000 older adults reported consuming cannabis; however, this number rose to approximately 400,000, by 2019. This is an increase from one percent to seven percent within those eight years (Baumbusch & Yip,

2020). Consequently, the increasing number of older adults that are consuming cannabis in this cohort has resulted in older adults being declared the "fastest growing group of cannabis users" (Baumbusch & Yip, 2020, p. 1). Furthermore, of notable importance, a growing number of older adults are reporting themselves as new users (Baumbusch & Yip, 2020). For instance, Baumbusch and Yip detailed that in the third quarter of 2019, over a quarter of older adults who consumed cannabis during those three months, reported the consumption as being their first. These new users categorized as older adults are exceeding the number of new users in other age groups (Baumbusch & Yip, 2020). Baumbusch and Yip (2020) explained that cannabis is more likely to be reported exclusively for medicinal purposes among those in this cohort, and compared to younger users, older adults are more likely to obtain their cannabis from legal sources. Lastly, consistent with the majority of findings in other countries, consumption of cannabis in older Canadian adults, is more common among males compared to females (Rotermann, 2019). Unfortunately, information surrounding demographic correlates, other than gender, were not reported in the literature.

International Patterns of Cannabis Consumption

In stark contrast to the limited information available on cannabis consumption among older Canadian adults, this literature review yielded a plethora of studies that detailed the patterns and prevalence of cannabis consumption among older adults in other nations. It was communicated that cannabis consumption in the United States and Australia correlates with demographics such as being male (Han et al., 2017; Kostadinov & Roche, 2017; Lloyd & Striley, 2018; Lum et al., 2019), unmarried (Han et al., 2017; Kostadinov & Roche, 2017; Lloyd & Striley, 2018; Reynolds et al., 2018), and being a

younger member of the older adults cohort, frequently known as “young-old” (Han et al., 2017; Kostadinov & Roche, 2017; Lloyd & Striley, 2018; Lum et al., 2019). Furthermore, higher educational attainment was reported to be positively correlated with cannabis consumption by Lum and colleagues (2019) and Reynolds and colleagues (2018). However, Lloyd and Striley (2018) detailed that higher educational attainment was only positively correlated with cannabis consumption among those between the ages of 50 and 64, and negatively correlated with those aged 65 and higher. Findings also indicated that polydrug, tobacco, and alcohol users, as well as those suffering from multiple chronic diseases are more likely to consume cannabis (Kostadinov & Roche, 2017; Lloyd & Striley, 2018).

Identity and Cannabis Consumption

Reports on correlations between one’s race and ethnicity and cannabis consumption are inconsistent or absent in the literature. Lloyd and Striley (2018) reported that in the United States of America, cannabis consumers between the ages of 50 and 64 were more likely to be non-Hispanic White; however, those over the age of 65 that consumed cannabis, were more likely to be African American. Moreover, Han and colleagues (2017) communicated that the prevalence of past-year cannabis consumption increased significantly for non-Hispanic Whites while remaining stable for other racial and ethnic peoples. Nevertheless, one American study that was conducted between 2016 and 2017 in Colorado, United States of America by Reynolds and colleagues (2018), found that most current users were older white women. The authors acknowledged that these findings were “contrary to other previously published studies in which individual marijuana users tended to be male, black…” (p. 2169). As a result of the inconsistent

findings surrounding race and ethnicity, it would be erroneous to conclude that the literature has identified how race and ethnicity correlates with cannabis consumption in older adults. Nevertheless, the consistent positive correlations with cannabis consumption and other demographic characteristics provides confidence in identifying some of the patterns and prevalence of cannabis consumption among this cohort.

Risks Associated with Cannabis Consumption

The debate surrounding the risks and benefits of cannabis consumption remains contentious. While research surrounding the potential benefits to cannabis remains limited, and often contradictory, research focussing on the risks that are associated with its use, are plentiful. Therefore, it is unsurprising that the results from the extensive databases search provided many articles with a primary focus on the risks associated with cannabis consumption. A number of different potential risks were outlined in the literature, some of which are documented with consideration of all age groups' cannabis consumption. Nevertheless, other risks have been explored without taking into account the particular population of older adults. Rather, the findings are considered transferrable to all individuals, regardless of one's age, or neglect to discuss the relevance it may have on older individuals altogether.

As notable increases in cannabis consumption among older adults have become evident in Canada and abroad (Bertram et al., 2020; Choi et al., 2018b; Minerbi et al., 2019), an increase in concern has accompanied this trend (Satre, 2015). Researchers have communicated that both medicinal and recreational cannabis consumption is associated with risks that are specifically significant for older adults such as dizziness (Minerbi et al., 2019), changes in depth perception risking falls (Bertram et al., 2020; Minerbi et al.,

2019), tinnitus (Qian & Alyono, 2020), and the potential for drug-drug interactions (Minerbi et al., 2019). Furthermore cognitive risks, including, but not limited to, impairment of an individual's short-term memory and their emotional processing, are communicated (Bertram et al., 2020; Choi et al., 2018b; Minerbi et al., 2019; Qian & Alyono, 2020; Satre, 2015). Lastly, a variety of psychomotor (Bertram et al., 2020; Choi et al., 2018b; Minerbi et al., 2019), cardiovascular (Bertram et al., 2020; Minerbi et al., 2019), mental health (Bertram et al., 2020; Choi et al, 2018b; Minerbi et al., 2019), and behavioural risks (Choi et al., 2018b) for all individuals who consume cannabis were detailed.

Psychomotor Skills

A commonly discussed psychomotor skill that is adversely affected by cannabis consumption is one's ability to operate a motor vehicle. Bertram and colleagues (2020) communicated that the evidence supporting how cannabis impairs an individual's driving ability is primarily associated with one's consumption of tetrahydrocannabinol (THC), as the effects of cannabidiol (CBD) is not as well established. Nevertheless, the recommendation presented by the authors was for individuals born between 1946-1964, to refrain from any "safety sensitive work", including the operation of a motor vehicle, for 24 hours after consuming cannabis, regardless of the concentration of THC and/or CBD (p. 139). The authors presented findings to illustrate that individuals who have consumed cannabis have an increased risk of being in a motor vehicle accident, with an odds ratio of between 2.49-2.84 (p. 139). They further highlighted the risks involved in the consumption of cannabis and alcohol together, asserting that the combination of the two substances "will have a synergistic effect on impairment" (p. 139).

Injuries

The dangers associated with the operation of a motor vehicle after the consumption of cannabis were echoed by Choi and colleagues (2018b), Cordovilla-Guardia and colleagues (2018), and Minerbi and colleagues (2019). Cordovilla-Guardia and colleagues explored the association between different substances and one's admittance to hospital for trauma and trauma recidivism (TR). The authors defined TR as "a chronic situation where different traumatic events appear on multiple occasions" (p. 2). The authors findings support Bertram and colleagues' (2020) proclamation of the risks cannabis consumption has, as their findings showed that cannabis consumption was most commonly associated with hospitalizations for trauma related to motor vehicle collisions. The authors also found an increased risk of TR among those who consumed cannabis. Additionally, Choi and colleagues (2018b) communicated that after removing all confounding factors, including alcohol, cannabis consumption was related to an increased likelihood of being involved in a motor vehicle collision that required the individual to be hospitalized. Minerbi and colleagues stated that the risk of having a motor vehicle collision was five times higher for those who had consumed cannabis and a two times greater risk of an accident with a fatal or serious outcome.

Mental Health

An additional risk that is extensively documented in the literature, is that of mental health problems. Older adults' cannabis consumption is identified in the literature to have an association with mental health problems such as anxiety, depression, panic, and psychosis (Bertram et al., 2020). Furthermore, Minerbi and colleagues (2019) explained that despite limited studies, findings suggest that cannabis consumption is

associated with increased suicide ideation, increased suicide attempts, as well as increased deaths by suicide. Lastly, the danger of developing cannabis use disorder (CUD) is a frequently discussed mental health risk associated with cannabis consumption. Choi and colleagues (2018b) stated that approximately one in six individuals over the age of fifty who consumed cannabis, had past-year CUD. Satre (2015) detailed that the proportion of individuals categorized as older adults that are entering treatment for the first time, is increasing when compared to those of other cohorts. The author further stated that projections indicate that the number of older individuals requiring treatment for alcohol or drugs "will double in the near future" (p. 238). Despite findings and projections such as these, a full consensus that addiction in this cohort is likely to be an important issue is not evident among all professionals (Minerbi et al., 2019). The articulated need for additional research to be conducted with a specific focus on individuals in this cohort (Bertram et al., 2020; Minerbi et al., 2019; Qian & Alyono, 2020; Satre, 2015), is illustrated by this lack of full consensus on what issues require attention when exploring older adults' cannabis consumption.

Summary of Risk

The risks associated with cannabis consumption which are detailed by the authors, are immense. Nevertheless, the majority of the articles that had a focus on the risks associated with cannabis explored these risks in isolation; they neglected to consider the benefits the individual receives from recreational or medicinal consumption, whether that benefit is perceived or is evident through clinical studies. In essence, this unfortunately reinforces one position or argument surrounding cannabis consumption. To accurately weigh the risks and benefits that cannabis poses to individuals of a particular age, it is

imperative that future researchers explore why individuals in this cohort are consuming cannabis. Some degree of onus must be placed upon clinicians to discuss cannabis consumption with their patients (Bertram et al., 2020) and further research with a particular focus on the risks and benefits on older individuals is especially noted throughout the literature (Bertram et al., 2020; Minerbi et al., 2019; Qian & Alyono, 2020; Satre, 2015).

Medical Cannabis

Restricted medical use of cannabis became legal in much of Canada and the United States before legalization of recreational use commenced in Canada on October 17, 2018. In 1996, California became the first state to legalize restricted use of medical cannabis, with more than 30 states since following their lead. In 2001, the implementation of the Marihuana Medical Access Regulations (MMAR) allowed individuals who had been determined to have a medical need, to legally consume dried medical cannabis in Canada (Health Canada, 2016). As a result of this longer standing legality of medical cannabis, a significant amount of research has been conducted exploring the benefits cannabis can offer in treating various ailments and diseases.

Medical Uses of Cannabis

As aforementioned, the existing research surrounding the potential benefits to cannabis remains limited, and often contradictory. However, there is substantial evidence supporting its effectiveness in treating patients with chronic pain, especially pain that is neuropathic in origin (Bertram et al., 2020; Briscoe & Casarett, 2018; Lloyd & Striley, 2018; Minerbi et al., 2019; Rotermann & Pagé, 2018). Additionally, there is growing evidence suggesting cannabis is beneficial in treating cancer-related pain (Bertram et al.,

2020; Minerbi et al., 2019), spasticity for multiple sclerosis (Bertram et al., 2020; Lloyd & Striley, 2018; Minerbi et al., 2019), as well as nausea and vomiting associated with chemotherapy (Bertram et al., 2020; Briscoe & Casarett, 2018). Nevertheless, Briscoe and Casarett (2018) argued that cannabis used to treat chemotherapy-induced nausea and vomiting (CINV) may only be effective for particular types of chemotherapy. They further argued that the method of consumption is an important variable in the effectiveness of cannabis as a treatment for CINV, as there is no existing evidence surrounding the effectiveness of oral cannabinoids for CINV.

Medical Indications for Older Adults

Some clinical research, in conjunction with qualitative and anecdotal reports, further indicate the positive impact of cannabis and cannabidiol on other ailments that may be relevant to individuals of an older age. The limited evidence from these reports suggest that cannabis may be useful for arthritis pain relief (Lum et al., 2019), reducing symptoms in adults with anxiety (Briscoe & Casarett, 2018; Lum et al., 2019; Minerbi et al., 2019; Rotermann & Pagé, 2018), depression (Lum et al., 2019; Rotermann & Pagé, 2018), post-traumatic stress disorder (Briscoe & Casarett, 2018; Minerbi et al., 2019), insomnia (Briscoe & Casarett, 2018; Minerbi et al., 2019; Rotermann & Pagé, 2018), and as a treatment for glaucoma (Baumbusch & Yip, 2020). Additionally, there are mixed results evaluating the effectiveness of cannabis in treating agitation in individuals with dementia and for relief of symptoms associated with Parkinson's disease (Minerbi et al., 2019). Lastly, the research exploring whether medical cannabis may reduce opioid use amongst older adults is of significant importance. The limited research indicates that many individuals report consuming cannabis to treat symptoms related to their medical

condition and have subsequently decreased their consumption of opioids (Baumbusch & Yip, 2020; Briscoe & Casarett, 2018; Lum et al., 2019).

Potential Benefits for Older Adults

Contrary to articles highlighting the risks of cannabis while ignoring its potential benefits, articles discussing the potential medical benefits to cannabis clearly outlined the risks that are also associated with its use (cf. Briscoe & Casarett, 2018; Minerbi et al., 2019). The authors articulated, that despite the evidence of cannabis' potential to aid an individual in dealing with their symptoms, decisions to consume cannabis should always include careful consideration of the risks that are also associated with it. While much of the evidence indicating the potential use of cannabis is promising, it undoubtedly remains limited. Furthermore, studies are often disputed for their methodology; therefore, furthering hindering the confidence in the validity of the findings that are published. It is therefore unsurprising that a core theme that was expressed throughout the literature was the need to have further research carefully explore the benefits cannabis may offer, with particular attention to the population of older adults.

Perceptions of Cannabis Among Older Adults

Historically, cannabis was "referred to as a 'gateway drug'" (Lau et al., 2015a, p. 654) and was viewed by older adults as a risk to one's health (Lloyd & Striley, 2018). Furthermore, as a result of the previous illegality of the substance, the opportunity for older adults to obtain cannabis was limited (Salas-Wright et al., 2017, as cited in Lloyd & Striley, 2018). Nevertheless, as members of the Baby-Boomer generation grew older and entered the classification of older adults, a shift occurred in the perception that this cohort had traditionally held surrounding the acceptability of cannabis consumption (Lloyd &

Striley, 2018). Many individuals in this cohort have experience with recreational cannabis consumption "since the hippie movement of the 1970s" (Minerbi et al., 2019, p. 40) and subsequently, the older adults cohort had a higher lifetime consumption of cannabis than previous generations (Briscoe & Casarett, 2018; Lloyd & Striley, 2018). This familiarity, in conjunction with the growing scientific evidence detailing the potential benefits cannabis offers (Briscoe & Casarett, 2018; Minerbi et al., 2019), the changes that have been made in legislation surrounding the legality of cannabis (Bobitt et al., 2019), as well as the changes in how cannabis is portrayed in popular culture (Cheeta et al., 2018), have affected how cannabis is perceived by older adults.

Perception as Related to Experience with Cannabis

The literature suggests one's perception of risk regarding cannabis consumption is related to one's own cannabis consumption (or lack thereof). For instance, those who had consumed cannabis in the past-year perceived cannabis as lower risk than those who had not recently consumed cannabis (Choi et al., 2018a). Choi and colleagues (2018a) explained that only 3.9% of older adults that consumed cannabis in the past year held the perception that regular consumption, defined as once or twice a week, was of great risk. Han and colleagues (2017) further illustrated how the majority of older adults who consumed cannabis in the previous year perceived cannabis to have a minimal risk, by detailing that 85.3% of adults, aged 50 or over, who consumed cannabis in the past year, reported that monthly cannabis consumption was associated with either no risk or a slight risk. Moreover, the authors communicated that 79% reported they also perceived either no risk or a slight risk to be associated with consuming cannabis once or twice a week.

Conversely, relying on the results from the National Survey on Drug use and

Health, conducted in the United States of America, Choi and colleagues (2018a) explored how the risk surrounding cannabis was perceived by all adult respondents, the vast majority of whom had not consumed cannabis in the past month. The authors detailed that the proportion of all adult respondents who perceived regular cannabis consumption "as having great risk of harm", was 33.3% in 2014. Although the level of risk perceived to be associated with cannabis consumption had decreased from 50.4% in 2002, it remains substantially higher than the risk perception held by those who had consumed cannabis in the past year (Choi et al., 2018a).

Comparison to Alcohol and Narcotics

Throughout the literature, older adults frequently compare cannabis to alcohol, illicit drugs, and pharmaceuticals (cf. Baumbusch & Yip, 2020; Bobitt et al., 2019; Cheeta et al., 2018; Lau et al., 2015a; Lau et al., 2015b; Lloyd & Striley, 2018). Moreover, cannabis consumption is commonly detailed by respondents as a safer alternative to these substances. Lau and colleagues (2015a) explained that the participants in their qualitative study expressed that cannabis was a safer alternative "because it had more manageable or less adverse side effects" compared to other substances (p. 655). Their participants also explained that when compared to alcohol and cocaine, they perceived cannabis to have less addiction potential and that it was easier to control and regulate their high. Lastly, some participants in their study voiced confidence, that unlike other substances, cannabis was not seen to result in crime and violence. This belief that cannabis is attributed to far less societal problems than alcohol, was echoed by participants from a study conducted by Bobitt and colleagues (2019). This was clearly illustrated when one participant expressed that alcohol "does far more damage than

anything I've ever seen marijuana do" (Bobitt et al., 2019, p. 662). Nevertheless, the perception that cannabis is less harmful than substances such as alcohol, cocaine, heroine, and crack cocaine is not unique to older adults. A survey conducted by Cheeta and colleagues (2018) found that young adults, aged 18 to 24, also perceived alcohol to be more harmful than cannabis.

Comparisons to Pharmaceuticals

With regard to pharmaceuticals, it was frequently communicated throughout the literature that older adults perceived cannabis to be more effective in relieving the symptoms they were experiencing when compared to the prescription medications they had been advised to consume (Bobitt et al., 2019; Lau et al., 2015a). This belief was also shared by older adults who had not consumed cannabis but relied upon anecdotal evidence of family or friends to support their position (Bobitt et al., 2019). Unfortunately, in contrast to the reasonable amount of data surrounding how older adults perceive cannabis' effectiveness, there is a paucity of information provided within the literature explaining why older adults perceive cannabis to be a safer alternative to prescription medications. Nevertheless, Lau and colleagues (2015a) did provide a small amount of insight when they communicated that some individuals maintain cannabis to be a safer alternative to pharmaceuticals due to cannabis being a natural herbal remedy.

Stigma Associated with Cannabis

Despite cannabis consumption being perceived as a safer alternative to other substances, beneficial for symptom management, and having been legalized for medical and/or recreational purposes in Canada and in many states of America, many older adults indicated that they still perceived cannabis to have a stigma associated with it (Bobitt et

al., 2019; Lau et al., 2015a; Lau et al., 2015b). On account of the stigma associated with recreational consumption being perceived as higher than the stigma associated with medical consumption, many individuals felt the necessity to delineate between the two when describing their consumption (Bobitt et al, 2019). Nevertheless, many older adults who consumed cannabis for medical purposes still neglected to disclose their consumption to their healthcare professional due to perceived personal, privacy, and professional risks (Bobitt et al., 2019; Lau et al., 2015a; Lau et al., 2015b). It was argued that the stigma associated with cannabis has resulted in a lack of openness from healthcare professionals to discuss cannabis with older adults (Bobitt et al., 2019). Older adults further explained that the stigma resulted in them being fearful of "their name going onto a list", that they may be judged or interrogated by healthcare professionals, or that it could result in termination from their job (Lau et al., 2015b, p. 718). It is evident from the literature that despite the declaration from many older adults that cannabis consumption has become more accepted (Baumbusch & Yip, 2020; Lau et al., 2015b), the stigma that is perceived to be associated with it, remains.

Impact from Changes to Cannabis Legislation

A respectable amount of research has been conducted to investigate the impact that changes to cannabis legislation have had on individuals of various ages. However, the studies were limited to individuals in the United States of America and did not explore the Canadian context. Furthermore, a prominent focus in the literature was on the changes that were measurable specifically after medical cannabis laws were implemented in various states (cf. Adams et al., 2017; Kim et al., 2016; Mauro et al., 2019; Nicholas & Maclean, 2019; Santaella-Tenorio et al., 2017). Nevertheless, one study conducted by

Blevins et al. (2018) that focussed on adolescents, and an additional study by Melchior et al. (2019), that focussed on adolescents and adults, did explore changes that have occurred as a result of recreational cannabis legalization. These studies, in conjunction with an article by Nathan and colleagues (2017) that provided a physician's perspective to cannabis legalization, illustrate how both medical and recreational cannabis legislation changes have impacted the American population. Those that opposed cannabis legalization had fears about the repercussions that would arise as a result of adults having legal access to cannabis (Nathan et al., 2017). Nevertheless, the research suggests that "the worst fears of opponents have not materialized" (Nathan et al., 2017, p. 1746).

Operation of a Motor Vehicle

Findings suggest that the implementation of medical cannabis laws, and the legalization of recreational cannabis where applicable, have impacted only some aspects of society. Furthermore, the measurable changes that have been evaluated are not always negative, as some have been positive, while others show no statistically significant change. This is particularly evident when exploring the relationship between changes in cannabis legislation and motor vehicle fatalities. While fear continued to grow that medical cannabis laws being implemented would result in an increase of motor vehicle injuries in the United States of America (Santaella-Tenorio et al., 2017), Nathan and colleagues (2017) detailed that in states where cannabis prohibition had ended, both motor vehicle accidents and fatalities had surprisingly decreased. These findings were echoed in a study conducted by Santaella-Tenorio and colleagues (2017) when they determined that immediate reductions in traffic fatalities, in those aged 15 to 44 years, and gradual reductions in traffic fatalities, in those aged 25 to 44 years, were evident in

states that had legislation allowing medical cannabis consumption. Moreover, the authors communicated that states which had enacted medical cannabis legislation had lower motor vehicle fatality rates compared to states that had not enacted medical cannabis legislation. The authors explained that much of these reductions in fatalities were a result of lower alcohol-related motor vehicle fatalities. They suggested that the changes to medical cannabis legislation may have contributed to individuals substituting their alcohol consumption with medical cannabis.

Conversely, another study that explored the relationship between changes to medical cannabis legislation and the operation of a motor vehicle did not have as positive of results. Adams and colleagues (2017) did not examine motor vehicle fatalities but sought to determine if enacting medical cannabis legislation resulted in behavioural changes of drivers. They concluded that in states with high numbers of individuals authorized to consume medical cannabis, a reduction in seatbelt use was evident among males between the ages of 25 and 69 years. The authors suggested that individuals adhere to seatbelt laws as a means to reduce the likelihood of interaction with law enforcement; however, as the laws regarding possession of cannabis were amended, the behaviour of individuals of this particular demographic also changed. These findings suggest that the changes to cannabis legislation have subsequently affected drivers in both positive and negative ways.

Legislation and Changes in Consumption

The findings from research exploring the impact that changes in cannabis legislation have had on the prevalence and patterns of cannabis consumption, are inconsistent (Blevins et al., 2018; Mauro et al., 2019; Melchior et al., 2019). For instance,

the enactment of medical cannabis legislation has been found to have no affect on adolescents' use of cannabis (Mauro et al., 2019), nor on adolescents' patterns of use (Melchior et al., 2019). Nevertheless, the effect that recreational cannabis legalization had on the patterns and prevalence of cannabis consumption for adolescents has not been as clearly identified. Melchior and colleagues (2019) identified six studies that suggested recreational legalization may be associated with in an increase of consumption for adolescents; however, Blevins and colleagues (2018) detailed that they found no evidence that the frequency of cannabis consumption changed after legalization. Lastly, for adults aged 26 and older, Mauro and colleagues (2019) explained that the enactment of medical cannabis legislation resulted in an increase of cannabis consumption. Unfortunately, studies exploring adult populations are scarce and often include a broad age group similar to the range detailed in Mauro and colleagues' study. Moreover, findings from this age group frequently have inconsistent findings surrounding patterns and prevalence of consumption (Mauro et al., 2019); therefore, the data needs to be used with caution.

Legislation and Health

Nicholas and Maclean (2019) recognized the scarcity of reliable information surrounding how changes to cannabis legislation have impacted older adults and chose to examine this cohort. The authors explored the effect medical cannabis laws have had on the health and labor of individuals aged 51 and older. The authors detailed that older adults living in states that allowed legal access to medical cannabis, reported better health and reduced pain levels post-legalization. The authors quantified their findings and communicated that "the probability of reporting one's health as very good or excellent increased by 3.4 percent" after medical cannabis legislation was implemented (p. 475).

While the benefits to older adults' self-reported health did not result in an increase of individuals in this cohort returning to work, the evidence did suggest that the implementation of medical cannabis legislation did allow older adults, who were currently working, to increase their working hours.

Summary of Impact of Legislation

The vast array of literature on the impact from changes to cannabis legislation highlights the numerous areas that have been affected by cannabis legalization. While some facets of life have benefitted from medical or recreational cannabis legislation, it is evident that some outcomes have been negative. Nevertheless, as Nathan and colleagues (2017) eloquently described, although cannabis "regulation in legalized states has not been perfect, it is far better than the prohibition it replaced" (p. 1746). The prohibition on cannabis disproportionately affected People of Colour, for despite similar rates of consumption, People of Colour were four times more likely than white individuals to be arrested for cannabis possession. (Nathan et al., 2017). Therefore, both the benefits and the adverse consequences that have come from changes to cannabis legalization must be considered from a perspective that far exceeds what was discussed within this literature.

Summary of Literature Review

The systematic literature review that was conducted, provided a substantial number of articles that explored cannabis; however, the majority of these articles neglected to provide information specifically focussed on older adults. Nevertheless, the articles that did meet the inclusion criteria for this study were synthesized into five themes. The first theme that was discussed was the patterns and prevalence of cannabis consumption among older adults. While the information surrounding cannabis

consumption among older adults in Canada is scarce, the limited data does suggest that the consumption is rising in both the "young-old" (Rotermann, 2019), and the "old-old" (Baumbusch & Yip, 2020; Bertram et al., 2020), age groups in Canada. This increase is also present in the United States of America and abroad. Data from these countries also suggest that demographic characteristics such as being male, unmarried, and being "young-old" are correlated with cannabis consumption (Han et al., 2017; Kostadinov & Roche, 2017; Lloyd & Striley, 2018; Lum et al., 2019; Reynolds et al., 2018). However, there are inconsistent findings surrounding the correlation with one's race and ethnicity and cannabis consumption among individuals in this cohort.

The second theme that was detailed was the risks associated with cannabis consumption. A plethora of studies have been conducted that explored this topic and findings indicated that a variety of risks exist with cannabis consumption. Risks such as dizziness, the potential for drug-drug interactions (Minerbi et al., 2019), changes in depth perception risking falls, cardiovascular risks (Bertram et al., 2020; Minerbi et al., 2019), tinnitus (Qian & Alyono, 2020), cognitive risks (Bertram et al., 2020; Choi et al., 2018b; Minerbi et al., 2019; Qian & Alyono, 2020; Satre, 2015), psychomotor risks, mental health risks (Bertram et al., 2020; Choi et al., 2018b; Minerbi et al., 2019), and behavioural risks (Choi et al., 2018b) were all highlighted in the literature.

Medical cannabis was the next theme that was explored. It was explained that cannabis is effective in treating individuals with chronic pain (Bertram et al., 2020; Briscoe & Casarett, 2018; Lloyd & Striley, 2018; Minerbi et al., 2019; Rotermann & Pagé, 2018), and that there is moderate evidence suggesting cannabis is beneficial in treating cancer-related pain (Bertram et al., 2020; Minerbi et al., 2019), spasticity for

multiple sclerosis (Bertram et al., 2020; Lloyd & Striley, 2018; Minerbi et al., 2019), as well as CINV (Bertram et al., 2020; Briscoe & Casarett, 2018). Moreover, there is limited evidence suggesting that cannabis may be useful for arthritis pain relief (Lum et al., 2019), reducing symptoms in adults with anxiety (Briscoe & Casarett, 2018; Lum et al., 2019; Minerbi et al., 2019; Rotermann & Pagé, 2018), as a treatment for depression (Lum et al., 2019; Rotermann & Pagé, 2018), as a treatment for post-traumatic stress disorders (Briscoe & Casarett, 2018; Minerbi et al., 2019), as a treatment for insomnia (Briscoe & Casarett, 2018; Minerbi et al., 2019; Rotermann & Pagé, 2018), as a treatment for glaucoma (Baumbusch & Yip, 2020), and that it may be useful for decreasing the consumption of opioids (Baumbusch & Yip, 2020; Briscoe & Casarett, 2018; Lum et al., 2019).

The fourth theme discussed was the perceptions that older adults hold surrounding cannabis. Due to many older adults having experience with recreational cannabis consumption (Briscoe & Casarett, 2018; Lloyd & Striley, 2018; Minerbi et al., 2019), the scientific evidence suggesting the potential benefits cannabis can offer (Briscoe & Casarett, 2018; Minerbi et al., 2019), the changes in cannabis legislation (Bobitt et al., 2019), as well as the changes in the portrayal of cannabis in popular culture (Cheeta et al., 2018), the perception held by older adults of regular cannabis consumption “as having great risk of harm”, has substantially decreased (Choi et al., 2018a). Furthermore, individuals in this cohort perceive cannabis to be safer than other substances and more effective in symptom relief than prescription medication (Bobitt et al., 2019; Lau et al., 2015a). Nevertheless, the literature indicated that older adults believed that the stigma attached to cannabis consumption has remained (Bobitt et al., 2019; Lau et al., 2015a;

Lau et al., 2015b).

The final theme that was explored was the impact that changes to medical and recreational cannabis legislation have had in America. The literature showed that the legalization of medical and/or recreational cannabis was correlated with decreases in motor vehicle accidents and fatalities (Nathan et al., 2017; Santaella-Tenorio et al., 2017), decreases in seatbelt use among men aged 25 to 69 (Adams et al., 2017), self-reported improvements in health among older adults residing in jurisdictions that ended prohibition on cannabis, and increased working hours by these individuals (Nicholas & Maclean, 2019). Additionally, the introduction of medical and/or recreational cannabis legalization has not conclusively shown to result in an increase in cannabis consumption among adolescents (Blevins et al., 2018; Mauro et al., 2019).

Methodology

The present study originated from the need to gain a deeper understanding of the perceptions that older adults hold surrounding cannabis and its recent legalization as well as the motivations and deterrents that this cohort deem important surrounding engagement in cannabis consumption. In the present study, a qualitative research approach was chosen as it allows for the opportunity to gain a high level of detail from the observation and interpretation of participants' expressed experiences, feelings, and social processes (Mohajan, 2018). The qualitative research methods used for this study included purposive sampling, semi-structured interviews, and general thematic analysis of the data collected. The Mount Allison University Research Ethics Board (REB) approved the procedures of this study prior to recruitment of participants. Moreover, when face-to-face interviews were suspended due safety concerns regarding the coronavirus pandemic, a request to modify the existing research protocol to allow the remaining interviews to be conducted virtually, was approved by the REB.

Recruitment

New Brunswick residents aged 60 or above, or those who fulfilled the role of primary caregiver to a New Brunswick resident aged 60 or above, were eligible to participate in the current study. Due to the objective of this study being to explore the perceptions and experiences of cannabis consumption, it was necessary that the participants selected for this study were willing to discuss these topics. Perceptions and experiences with cannabis consumption included those surrounding recreational and medicinal use both prior to legalization and post-legalization. Participants selected for this study were not required to currently consume cannabis, nor were they required to

have any history of cannabis consumption.

The primary method for recruitment of participants was through the use of posters which advertised the research project, stated the requirements for participation as aforementioned, and detailed the contact information of the primary researcher for interested participants to call or email (see Appendix A). Posters were displayed in a number of locations in the Town of Sackville, New Brunswick and in the City of Moncton, New Brunswick. Posters were approved by the Mount Allison Research Ethics Board prior to being displayed. The posters were placed on bulletin boards in local grocery stores, laundromats, and coffee shops. Additionally, Cannabis New Brunswick was enlisted to assist with recruitment and served the project by displaying the recruitment posters in four of their locations in the communities previously stated. Lastly, an email was distributed from Mount Allison University to all retired faculty with the study's information and contact information of the primary researcher for those interested in participating.

Participants

A total of eight participants that contacted the researchers were selected to be interviewed for the present study, four of whom were interviewed face-to-face before the restrictions were put in place for the coronavirus pandemic. These interviews were conducted at a time and location of the participants choosing. Two of the remaining participants agreed to the modified method of interviewing; therefore, the interviews with these participants were completed virtually through the videotelephony software program, Zoom. The final two participants decided not to complete the interview once the restrictions for face-to-face interviews were implemented. With participant approval,

the four face-to-face interviews were audio recorded and the two virtual interviews were audio and video recorded.

The participants ranged in age from 58 to 72. One participant was very keen to participate in the study despite not meeting the age criteria, and so was included. Three participants identified as male and three identified as female. Four participants self-declared their sexual orientation as straight, one as gay, and one preferred not to say. All of the participants were either retired or self-employed. Furthermore, each of the participants had at a minimum completed high school, with one participant also completing college, and four participants having obtained either a bachelor's degree or a master's degree. Five of the participants described themselves as current cannabis users, and one as a former occasional user. Lastly, the racial and ethnic identity of the participants was self-reported as white by five of the participants, and one participant self-reported being multiethnic.

Data Collection

Semi- structured qualitative interviews were used in this study. A qualitative research method was purposefully selected as it places more emphasis on explaining why individuals think and behave the way they do as opposed to producing statistics on how many people in a given group behave in a certain way (Mohajan, 2018). Furthermore, as it is through open-ended questions that participants may reveal information or phenomenon that was not previously considered by the researcher (Mohajan, 2018), this method suited the objective of this exploratory study to gain insight into older adults' perceptions and behaviours. Lastly, as semi-structured qualitative interviews afford the researcher an insider's perspective of the research topic, it allows "the researcher to find

issues that are often missed by the scientific, more positivistic enquiries" (Mohajan, 2018, p. 39). Therefore, this method was determined to be ideal for the research objective.

Prior to beginning the interview, all participants who completed the interview face-to-face, read and signed an informed consent form (see Appendix B). For those who completed their interview virtually, the informed consent was sent via email and verbal consent was given and recorded immediately before the interview began. Additionally, participants were reminded that they could withdraw from the study at any point in the process prior to publishing and that any information that they shared would be redacted or amended as per their request. Participants also chose a pseudonym to be used in all written work to safeguard the identity of each participant. As the primary investigator on this research project is a mandated reporter, participants were also informed, both in writing and verbally, that any communication of abuse would need to be reported to the appropriate authorities. Nevertheless, all participants were told that current or historical consumption of legal or illegal substances was not a concern that needed to be reported.

In preparation for the interviews, two interview protocols were developed to structure each of the interviews depending on whether or not the participant currently engaged in cannabis consumption. The queries that were made with participants that currently engaged in cannabis varied from the queries made with those that did not; however, there was some overlap in the questions such as any history of cannabis consumption or a history with other substances. Nevertheless, a semi-structured interview approach was used regardless of the participants' current engagement with cannabis. Each semi-structured interview was conducted by both the primary researcher and a

second researcher. Having two researchers provided the opportunity for more than one perspective, afforded greater follow-up questions than is likely to occur with a single researcher, and allowed for collaboration between researchers to occur during the analysis stage.

Semi-structured interviews were used to encourage participants to freely reveal information surrounding the research topic. The questions were intentionally worded to allow participants to control what information they felt was important to share and what they were comfortable in sharing. Ensuring that participants had control of their knowledge, experiences, and disclosures, was of the utmost importance. Both clarification and probing questions were used when necessary to encourage participants to elaborate on a response to a previous question. Each interview lasted between 45 and 65 minutes.

Data Analysis

Upon completion of the interviews, the audio recordings were transcribed verbatim by one of the researchers and checked by the primary researcher for accuracy. Transcriptions were then sent to each participant for member checking. The approved transcriptions were then copied into Quirkos, a qualitative data analysis software. Quirkos was used to aid in the process of analysing and coding the collected data by providing a platform that visually organizes the codes and themes constructed. The approach used for coding and theme development was Thematic Analysis (TA), specifically, the six-phase approach to TA detailed by Braun and Clarke (2018). Braun and Clarke's approach to TA is a flexible method that can be conducted in a number of ways, including for both inductive and deductive data coding and analysis (Braun &

Clarke, 2012). Inductive coding allows the codes to be derived from the data that were collected; meanwhile, a deductive approach to coding begins with ideas of concepts and these are used to code the data (Braun & Clarke, 2012). As Braun and Clarke (2012) explained, while one method may be predominate in the coding and analysis stage of a study, a combination of both approaches is common. An inductive approach to coding was initially used for the present study; however, as the final two interviews were conducted six months after the four face-to-face interviews, due to restrictions put forward in response to the coronavirus pandemic, the first two rounds of coding had already been completed on the face-to-face interviews. Consequently, a deductive approach was relied upon to a greater degree at the end of the data analysis for these final two interviews. Therefore, Braun and Clarke's six-phase approach to TA was an ideal method for this study.

After becoming familiar with the data that were collected, as per Braun and Clarke's (2018) first step in their six-phase approach to TA, the process of generating the initial codes commenced. Each transcription was coded in its entirety before moving on to the next interview. The initial coding process resulted in primarily a semantic level of meaning, as 49 of the 53 codes that were developed during this pass were descriptive codes. Nevertheless, two additional passes were made in an effort to generate a greater mix of descriptive and interpretive codes. By the third pass through of each interview's transcription, a greater mix of descriptive and interpretive codes had been generated and approximately 70% of all verbal communication within the transcriptions were coded.

Continuing with Braun and Clarke's (2018) six-phase approach to TA, the next two steps in the process of data analysis, to search for themes and to review the potential

themes, were completed. Braun and Clarke (2012) explained that "searching for themes is an active process meaning we generate or construct themes rather than discover them" (p. 63). Therefore, each code was reviewed by both researchers to identify any overlap that existed between the codes that had been constructed at the end of the third pass through each transcription. Those that shared similarities were clustered together which resulted in seven themes and nineteen subthemes being constructed.

The first theme that was developed was *worldviews and ways of knowing*. This theme had nine subthemes assigned to it which were titled safety of cannabis, identity, legalization, decriminalization, other substances, knowledge of cannabis, politics, epistemological views, and natural. The next theme was titled *informal control* and contained four subthemes. The subthemes for informal control were stigma, impression management, engagement versus disengagement, and risk management. *Medicinal use of cannabis* was the next theme, and this contained only one subtheme which the researchers labelled physicians and medical team. The descriptive theme titled *reasons for consumption* also contained only one subtheme, titled benefits of consuming. Two additional themes, titled *negative experiences* and *normalization* were developed; however, neither of these contained any subthemes. The final theme that was developed was titled *personal consumption*. The four subthemes that this theme had were frequency of use, early use, type of cannabis consumed, and acquiring cannabis.

Braun and Clarke's (2018) phase four requires a review to be conducted to ensure that the themes capture the relevant data. This was accomplished by printing a report generated by Quirkos that displayed all extracted data sorted by the specific theme. This led to "Phase 5: Defining and Naming Themes" (Braun & Clarke, 2012, p. 66). Phase 5

of Braun and Clarke's (2018) approach to TA was completed in this study through collaboration between the researchers to verify that the themes were unique and specific. Furthermore, the themes were reviewed to ensure that they were "related but did not overlap, so they are not repetitive" and that they addressed the research question (Braun & Clarke, 2012, p. 66). The themes were named to capture the essence of what the data were expressing. Lastly, the final phase of Braun and Clarke's (2018) approach, "producing the report" was also completed collaboratively among the two researchers. It was through dialogue between the researchers that the order in which the constructed themes were to appear was discussed and determined. Additionally, by using a quote table that was created, the researchers for this study were able to ensure that the extracts that were selected were from across the data items "to show the coverage of the theme, rather than drawing on only one data item" (Braun & Clarke, 2012, p. 67).

Establishing Trustworthiness

Qualitative research has been criticized due to the fact that it does not rely upon the objective methods that are evident in quantitative research (Cope, 2014). However, qualitative researchers take care to conduct and report their research in a manner that develops trustworthiness in the study's findings (Cope, 2014). The criteria detailed by Lincoln and Guba (1985, as cited in Cope, 2014) are the most commonly used in evaluating qualitative research. As these criteria are applicable to research conducted using thematic analysis (Nowell et al., 2017), the research team employed the four strategies of credibility, transferability, dependability, and confirmability presented by Lincoln and Guba (1985, as cited in Cope, 2014) to strengthen the trustworthiness of the findings from this study.

Credibility

Credibility refers to the truth of what is being presented in the study (Cope, 2014). Cope (2014) explained that it refers to the truth of the participants' views and how these views are represented by the researcher. The author further explained that credibility is determined when an individual who has shared similar experiences to those being described in a study, is able to easily recognize those experiences. The purpose of a researcher adopting this strategy, is to "establish confidence that the results (from the perspective of the participants) are true, credible and believable" (Forero et al., 2018, p. 3). A researcher can employ a number of different techniques to address credibility in a study (Nowell et al., 2017); however, for the current study, member checking and negative case analysis were the techniques used.

Prior to beginning the coding process, the entire data set was transcribed and then read by each of the researchers as per the recommendations made by Braun and Clarke (2006, as cited in Nowell et al., 2017). The transcriptions were then sent to each participant for member checking. Member checking provides participants with the opportunity to confirm, retract, or modify any statements that were made during the initial interview (Candela, 2019). Furthermore, the participants are able to confirm or deny whether the interpretations made during the analysis phase by the researchers, are accurate and fair as they are provided an opportunity to review the final draft of the report (Candela, 2019). During this stage, it is important that any issues with representation that are brought to the attention of the researcher are discussed and settled (Candela, 2019). While complete agreement between the researcher and participant is not necessary, the opportunity for the participant to challenge the interpretation, provide additional

evidence, and discuss alternative interpretations is important in demonstrating the credibility of this study (Candela, 2019).

The technique of negative case analysis was completed prior to the participants completing their final member checking. Elements of the data that appeared to be in contradiction to any of the patterns that were being explored during the analysis stage, were sought by, and discussed between the two researchers extensively. This allowed the researchers to propose any alternative explanations or to refine any early themes being developed (Rose & Johnson, 2020). While completing the final phase of Braun and Clarke's (2018) approach to TA, producing the report, the inclusion of any data or evidence that did not fully support, or that contradicted, the final themes developed were purposefully included. Rose and Johnson (2020) explained that "the social and political world is a complex landscape, and acknowledging these variations likely presents a more realistic (and believable) account of the phenomenon of interest" (p. 443). As a result, it was imperative that any statements that were made in the final report had been revised to ensure that all data, including those that contradicted the main patterns were able to be explained and were included in the findings.

Transferability

Transferability refers to the researcher providing their findings in as great of detail as possible to allow the readers to determine if the findings are transferable to other contexts (Cope, 2014; Forero et al., 2018; Nowell et al., 2017). To successfully achieve this, it was necessary to ensure that all information required by a reader to understand the findings, were communicated in the final report. By providing specific information about the methods used to recruit and interview participants, as well as specific information

about the participants themselves, it allows the reader to make an informed decision on whether the context of the current study is transferable to their own (Cope, 2014). Demographic information was collected from the six individuals that participated in this study and communicated above to provide a thick description for others to judge transferability. Nevertheless, certain information was withheld if deemed necessary by the researchers to safeguard the identity of participants.

Dependability

To achieve dependability, a researcher must ensure that the findings of their study are consistent and that they could be repeated in similar contexts (Forero et al., 2018; Rose & Johnson, 2020). Cope (2014) explained that the dependability criterion would be met if an outside researcher "concurs with the decision trails at each stage of the research process" (p. 89). One strategy for a researcher to rely upon to achieve this, is to create an audit trail. An audit trail is a collection of documents that were used throughout each stage of the research process that could be made available to others (Cope, 2014). These documents include records of the raw data that were collected, copies of verbatim transcriptions (Nowell et al., 2017), and data analysis notes (Cope, 2014).

For the present study, records pertaining to the recruitment of participants, as well as any communications that either researcher had with a participant, were kept in an Excel spreadsheet that was saved to the primary researchers' secure OneDrive. The audio or audio-visual recordings of all interviews were also uploaded and saved to this location to ensure they too were accessible in the future if necessary. Additionally, steps were taken by the researchers to ensure that a record of each level of coding was preserved in Quirkos. As the researchers progressed to the second and third rounds of coding, a new

project was created in Quirkos. By engaging in this step, it allows any researcher to easily identify any revisions that were made to the coding of the data set. Any revisions that were made to the coding system were discussed between the two researchers "to ensure correct and consistent interpretation throughout the analysis" and were verified through this dialogue before moving forward (Forero et al., 2016, p. 6). Lastly, a final copy of the data analysis was created in Quirkos to leave a clear trail of how the themes were created based on the codes that had been generated by the researchers.

Confirmability

Confirmability refers to a researcher demonstrating that the interpretations and findings that are communicated in a study, are derived from the data and not from the biases that the researchers possess (Cope, 2014; Nowell et al., 2017). Nowell and colleagues (2017) explained that when the three strategies of credibility, transferability, and dependability are achieved, "confirmability is established" (p. 3). For it is through the clear detailing of the processes involved in establishing the conclusions of a study, that a reader is able to identify "how and why decisions were made" (Nowell et al., 2017, p. 3). Furthermore, by relying upon the inclusion of direct quotes from the participants as evidence to support the conclusions that are made, a researcher is able to address confirmability in their study (Cope, 2014).

In the present study, the arguments that were presented were developed as a result of the raw data that was collected. To demonstrate that they were derived from the data, rich quotations from the participants were regularly included as supporting evidence. An additional measure that was taken to achieve confirmability was the practice of reflexivity by the research team. Reflexivity is the active examination of a researchers

own beliefs, judgements, and backgrounds, with the understanding that these factors can influence each stage of the research process (Cope, 2014). By engaging in discussions on a bi-weekly basis with the other member of the research team, the researchers were able to review the work completed at each phase of the study, were able to engage in critical self-awareness, and were able to actively explore alternative explanations for any conclusions that were being made throughout the research process. Through practicing reflexivity, the researchers were able to provide a more impartial analysis despite the beliefs, judgements, and backgrounds of the individual researchers.

Findings

This study endeavoured to explore the thoughts held by older adults surrounding cannabis as well as why an individual in this cohort may engage, or may refrain from engaging, in cannabis consumption. Thus, some of the questions in the semi-structured interviews queried participants about the frequency of their cannabis consumption as well as their motivations for cannabis use. After analyzing the interview data that were collected from the six interviews that were conducted, seven themes were developed. Three themes were analytical, and four were descriptive. The analytical themes developed were informal control measures employed, worldviews and ways of knowing, and normalization of cannabis. The four descriptive themes were medicinal use, negative experiences, reasons for cannabis consumption, and personal consumption. Detailing all seven themes and their subthemes is beyond the scope of this paper; therefore only two themes that were developed will be covered in great detail. These themes are informal control measures employed by the participants and the worldviews held by the participants surrounding cannabis consumption and the legalization of cannabis. The subthemes of epistemological views, identity, perceptions of safety surrounding cannabis, and the participants personal views on legalization which were constructed under the theme of worldviews held by the participant will be discussed in this section. Lastly, the subthemes of stigma, impression management, and engagement versus disengagement of cannabis consumption which were constructed under the theme of informal control will be discussed.

Worldviews and Ways of Knowing

The term worldviews was described by Hart (2010, as cited in Coq-Huelva et al.,

2018, p. 168) as "mental lenses that are entrenched ways of perceiving". The term comes from the German word Weltanschauung, "meaning a view or perspective on the world or the universe 'used to describe one's total outlook on life, society and its institutions'" (Wolman 1973, as cited in Koltko-Rivera, 2004, pp. 3-4). In short, an individual's personal worldview represents the most fundamental beliefs that the individual possesses. The personal worldviews held by an individual shape and inform their beliefs about what is appropriate and inappropriate, the opinions that they hold, as well as their behaviours. Koltko-Rivera (2004) also explained that one's worldview defines what can be known in this world and how that knowledge can arise. Lastly, the construction of one's worldview can be influenced by multiple factors and can vary both between and within cultures.

Epistemological Views

The worldviews held by the participants played a central role in defining the perceptions that they held surrounding cannabis. This was highly evident with three of this study's participants who perceived cannabis' natural existence and its rich history of medicinal use as the primary factors that in their opinions should be considered when determining how society should regard cannabis. For these three participants, their beliefs surrounding cannabis' acceptability is constructed from Indigenous knowledge, Chinese medicinal knowledge, knowledge from other cultures, or the belief in creationism. Consequently, they all perceived cannabis to be natural and to have a history of proven effectiveness; therefore, they deemed cannabis as acceptable, safe, and preposterous to have it criminalized. This position was well illustrated by Gerald, a 58-year-old cannabis consumer who was using cannabis for medical purposes and was also a caregiver for his spouse who had previously been using cannabis for medical purposes. He communicated,

> It's like any plant it's part of creation as we are. And for me I think it's effects on our endocannabinoid receptors we have endocannabinoid receptors don't we? To me is just a big bonus because if I didn't have that little effect I don't know if I'd be a sleeping. I don't know if I'd be sleeping. I don't know if I'd be in very good shape at all if I didn't have that right now. So I'm counting on it. As something that has been used as medicine for at least 5000 years or more if not time in memorial people have been chewing on weed, or smoking weed, or making cookies out of weed or whatever for a long time and I think it's important that we explore that aspect clinically through randomized trials and control groups etc. So we tease out what is fun and what is medically useful.

Gerald, like the other two participants who shared a similar worldview, believed that further research should be conducted to better understand the benefits that cannabis' properties can offer. Each participant communicated the need to decentre the dominant Eurocentric beliefs by incorporating the knowledge from other cultures. They held tremendous respect for this knowledge and the influence it had on their beliefs.

Many of the participants simultaneously adopted the epistemological perspective of positivism when explaining their position on cannabis. Each participant spoke about favourable experiences that they and the members of their social groups have had with cannabis; however, they each mentioned the value that can come from accepting that our knowledge of cannabis is limited, and that further scientific research would be beneficial. In the interim, the participants explained that they would rely upon knowledge from other cultures, personal experiences with cannabis, as well as government and medical institutions' websites to inform their position on cannabis' acceptability, as well as the

risks and benefits associated with its use.

Identity

An individual's personal identity is constructed over time as the individual engages in activities, goals, and projects "that are not thought of as those of a community, but as the property of the person" (Hitlin, 2003, p. 118). This sense of self that an individual develops encompasses many different attributes that becomes a core part of the individual. In social identity theory, the process involved in how an individual defines themselves in relation to other classifications, is known as self-categorization (Stets & Burke, 2000). Social identity theory posits that it is through this process of classifying and naming itself in relation to others that an identity is formed (Stets & Burke, 2000). Furthermore, this theory argues that an individual will also develop a social identity through this process of self comparison (Stets & Burke, 2000). The theory asserts that an individual will have an understanding that they belong to a social group, which is a group of individuals that share "common social identifications", and they will come to view themselves as members of this social category (Stets & Burke, 2000, p. 225). Lastly, Stets and Burke (2000) explained that individuals will emphasize the perceived similarities that they have with other members of each of their social group including the beliefs and behavioural norms.

For the individuals that participated in this study, how they identified themselves was frequently detailed as relevant to the perceptions of cannabis that they possessed and communicated as being relevant to their personal history of cannabis consumption. Participants mentioned social groups that are known for their liberal standpoint on cannabis, or social groups that engage in cannabis consumption, and communicated their

personal belonging to these groups when explaining their worldviews and engagement in cannabis. For instance, during their interviews, two of the participants identified themselves as either a former hippie or as a current hippie. This self-identification of being a hippie was disclosed when explaining their history of cannabis consumption or their worldview on how knowledge surrounding cannabis can be acquired. One participant, Aimee, a 70-year-old cannabis consumer, communicated the following when explaining her history of cannabis consumption,

> So when I was 19, 20 I was a hippie so there was lots of use then and then there were years and years when I didn't use it at all and or very very occasionally you know? And then there's been other times when I've used it a lot and probably abused it. You know?

Accentuating the similarities between herself and other members of this particular social group surrounding cannabis consumption was used to explain the behaviours that this participant had performed. Thus, the identity of a hippie was communicated as sufficient information to explain the engagement in cannabis consumption in the past. Moreover, this identity of a hippie was similarly used by a different participant in this study to explain his worldviews on how knowledge surrounding cannabis can arise. Private Eye, a 70-year-old cannabis consumer stated,

> And I, what I've always observed in my life is that North American institutions are very hesitant to adopt other institutions from the Chinese medicine, or from you know from other cultures. So I'm sure that there's a lot more knowledge in other cultures about cannabis that could be utilized these days and…Yeah. I guess my hippiness would say, Well, you know what are clinical studies if you compare

> that to the way medicine has evolved in other cultures over time, um, clinical studies is kind of a modern term that. Right?

The identity of a hippie was used by both individuals in different contexts to explain either their engagement with cannabis or their worldviews on cannabis. Moreover, their membership to this particular social category was included by participants without prompting.

Despite each of the individuals in this study belonging to numerous social categories, when the participants explained their own history of consumption or they explained their worldviews on cannabis, four of the participants highlighted their membership to one specific social category. These social categories focussed on by the participants each have members who share similar beliefs and behaviours to themselves regarding cannabis. In addition to the identity of a hippie being used to explain one's engagement in cannabis consumption and the rationalization behind their worldviews of cannabis, the identity of a musician and a botanist were also communicated by other participants for this purpose.

Perceptions on the Safety of Cannabis

The perceived safety of cannabis consumption compared to other substances such as alcohol, illicit drugs, or prescription medication, was a topic that was raised by most of the participants in this study. In regard to alcohol, each participant that discussed this topic viewed the safety of cannabis to be equivalent to alcohol or viewed it as a safer alternative to alcohol. Three participants argued that cannabis is less harmful than alcohol and stated that alcohol has caused more problems for them personally, or for the members in their social groups compared to cannabis. Another participant categorized

cannabis as a soft drug that was as normal as alcohol, while a final participant argued that cannabis was equivalent to alcohol and maintained that the risks associated with its consumption are also equivalent to the risks associated with alcohol. The final participant did not compare the safety of cannabis to alcohol.

The perceptions that the participants held surrounding the safety of cannabis in relation to illicit drugs and prescription medication was also quite positive. While fewer participants compared cannabis to illicit drugs and prescription medications than the number that compared it to alcohol, those that did, asserted that cannabis was far less problematic than these other substances. In the analyses made by the participants, the risk of addiction to cannabis was not dismissed, nor was the understanding that cannabis consumers still required self-control and caution. Nevertheless, the participants maintained that cannabis was a safer alternative despite these factors. Gerald expressed this position when he communicated the following,

> So given that marijuana is nowadays can be super high [concentration] so to speak I think there's more caution required but those other drugs are definitely drugs that are more damaging in my view. And cannabis, whether I eat it in a cookie or take it as oil at night or actually smoke something, it's to me it's just not that damaging. Or it doesn't lead to so many problem areas in life developing as if you're a crystal meth head or you know if you're on ecstasy for 12 months or whatever, and you've lost 50 pounds. I've done that and those drugs are much more damaging and much more physically compelling or addictive

This comment made by Gerald in his interview illustrated the standpoint that was communicated by many of the participants in this study. Each of the participants that

made the comparison between cannabis and other substances communicated that cannabis is not neutral when it comes to safety; however, they each reported stories from their personal lives, their knowledge of how other substances are created, or recounted stories from the news media to justify their position on why they perceived the risk of cannabis to be equivalent to the risk of consuming alcohol or why they perceived cannabis to be a safer alternative to illicit drugs, prescription medication or alcohol.

Safety of Government Controlled Cannabis. Prior to legalization of cannabis in Canada, those that consumed cannabis recreationally were obligated to acquire their cannabis through the grey market or to cultivate it themselves. While many of the participants in this study declared that they had trusted sources for obtaining their cannabis throughout the years, or that they grew it themselves, others were apprehensive about what other materials the cannabis they purchased from a non-governmental source may contain. As a result, two participants in this study adamantly perceived legalization as beneficial in ensuring the safety of consuming cannabis. This position was well demonstrated by the comment made by Joni, a 67-year-old former occasional cannabis consumer, when she stated the following during her interview,

> Which makes me feel even more, more strong, stronger about the fact that if now that it's legal and now that I feel that whatever comes out of that store has some controls built into it. If I were, and if for any reason wanting to go back into um using cannabis again I'm very grateful that that store is there. Because I feel like there's some controls. I feel like I would know what I'm getting in to. I mean God you know, it's like anything on the street. I mean you don't know what you've got right.

Joni's view on the safety of cannabis now that it has been legalized, and thus the contents of it being controlled by the state when purchased from regulated sources, was not unanimous among the participants in this group. Nevertheless, half of the participants in this study did acquire their cannabis solely from regulated distributors or stated that if they choose to consume cannabis in the future they would depend exclusively on the legal source.

Personal Views on Legalization

In addition to the abovementioned perceptions that two of the participants held surrounding the increased safety of cannabis as a result of legalization, each participant in this study also discussed the views that they held surrounding the legalization of cannabis and other substances in general. Every participant in this study, regardless of whether they personally engaged in recreational cannabis consumption, medical cannabis consumption, or have abstained from cannabis since their youth, believed that the Canadian Government's decision to end prohibition on recreational cannabis was correct. Moreover, the participants in this study communicated that the political and media rhetoric that was popular during their adolescence was problematic and ineffective. The participants argued that the criminalization of cannabis consumption was unnecessary and that it resulted in numerous people's lives being detrimentally affected through receiving criminal records, being incarcerated, and having a negative impact on their employment opportunities. Consequently, they supported the move to legalize cannabis with many of them suggesting that attention towards cannabis should only be paid towards those suffering from the separate issue of addiction. One participant articulated his position clearly when he stated the following,

> Well, you know for me because I had associations with plants and how people use plants when they, when governments and police forces started to criminalize these, these simple things that were used for centuries by all kinds of people, I just thought it was nuts. You know? I can see problems related to addiction. But that was always a separate issue […] The potential to become addicted. You know has to be dealt with. But recreational use and occasional use and pain control, these are things you do normally, you need, you need things to help you with those issues. (Jack)

The preceding comment made by Jack, a 65-year-old cannabis consumer, effectively summarizes not only his position, but the position that was communicated by each of this study's participants. The common opinion that the participants articulated was that legalization or decriminalization was the appropriate measures for the Government of Canada to make and that the risks and consequences associated with it should be handled the same way as alcohol is within our society.

Although all participants applauded the government's decision to legalize recreational cannabis, two participants advocated for additional steps to be made in ending criminal sanctions associated with recreational cannabis. These two participants both argued that cannabis, as well as other illicit drugs, should be decriminalized. Svrakic and colleagues (2012) explained the difference between decriminalization and legalization when they detailed that legalization is the removal of legal prohibitions of the substance, frequently with possession limits, while decriminalization is the removal of criminal sanctions surrounding the substance. With decriminalization, the substance remains illegal; however, the criminal justice system would not get involved in

prosecuting individuals for possession of an amount that the state had deemed minimal. Nevertheless, under decriminalization, those that are found in possession of the substance, can be subjected to penalties that can "range from no penalties at all, civil fines, drug education, or drug treatment" (Svrakic et al., 2012, p. 90).

The argument put forward by these two participants was that decriminalization of not only cannabis, but all substances would be ideal for our society. Private Eye explained this position when he stated,

> I mean it, the criminalization of all substances is ridiculous and, I think the sooner the government realizes that and decriminalize everything, and, and allow people to get medical assistance who are, who are substance abusers. And I mean it's a mess eh.

While Private Eye and another participant in this study fully supported decriminalization, this position of decriminalizing cannabis and other illicit drugs was not shared among all participants. For those that opposed decriminalization as an alternative to legalization, the safety component of regulated distribution through state-run businesses was the main factor in their opinion. Nevertheless, regardless of whether the participant perceived legalization or decriminalization as the ideal decision for the government to make, all of the participants agreed that criminalization of cannabis was unfavourable.

Informal Control

Informal control differs from formal control, in that formal control encompasses the rules that are enforced by the state and its agencies, compared with informal control which are the "informal rules and other guides to behavior that are created in micro-environments by groups which have no clearcut code or mechanisms for enforcement"

(Maloff et al., 1979, p. 163). These groups may include one's immediate family, close friends, extended family, colleagues, or neighbours. Despite these informal rules and guides to behaviour having no precise process of enforcement, they are powerful means in influencing the behaviour of an individual. Individuals learn what their social groups' rules are and internalize these norms and values. These informal social controls govern what steps individuals take if one chooses to engage in acts socially constructed as deviant by the state (Brochu et al., 2018). Moreover, informal sanctions such as ostracization and ridicule which may be imposed upon any individual who fails to abide by the social groups' informal rules and the formal rules set out by the state, can be additional means of generating compliance. For the purpose of this study, actions that participants engaged in according to the informal rules and guidelines created by social groups were coded as informal control.

In this study, many participants detailed how they relied upon the internalization of norms, values, and moral responsibilities created in society both pre-legalization and post-legalization to control their cannabis consumption. It was further communicated by some participants that informal control sanctions impacted their behaviour to a greater extent than the external sanctions that were enforced by the state. This was illustrated by participants such as Private Eye who divulged that he had consumed cannabis for many decades despite the rules dictated by the state,

> I've smoked all my life pretty much. Um, not that you know I would get high and go and teach a class. You know I, once you kind of get responsible with stuff…Ah let's say I was, I was um practical and smart about it. I mean why bring on um, you know if you're careless at some point someone's gonna notice

> and you know make trouble for you. Right. So I would be surprised if people did not know oh yeah '[Private Eye]' smokes weed.

The formal control sanctions that existed in New Brunswick pre-legalization did not prevent Private Eye from engaging in cannabis consumption. Nevertheless, the informal social controls that existed were evidently influential in the behaviour that this participant exhibited. This participant declared that while he presumed that most people knew about his cannabis consumption, he nonetheless understood, and respected, the expectation that particular settings required him from abstaining from consuming cannabis. The social norms dictated that those entrusted with the role of teaching others should do so without being high. Thus, Private Eye, an educator, was not concerned with others having knowledge of his engagement in cannabis consumption; however, he would refrain from consuming cannabis prior to participating in particular roles that he perceived the informal rules dictated were necessary to be done without being high.

In addition to the informal rules surrounding when cannabis could be consumed prior to legalization, other participants in the study discussed how informal rules also existed within social groups surrounding where cannabis should be consumed. These informal rules were created to control the choices of the group to ensure that their actions were less likely to result in negative sanctions by those outside of their social group. Thus, participants discussed how they would consume cannabis with their social group; however, they would only do so in designated spaces. Aimee articulated,

> Oh yes, well I have a room in the basement that is ventilated [for professional reasons]. So we only smoked in that room and it was vented outdoors, and no one ever saw. You know? Kind of added to the fun. When we weren't at home it

> was you know finding a very secluded place on the bike trail you know where no one was; sharing a joint.

Although participants neglected to adhere to the formal rules that existed in society prohibiting all recreational cannabis consumption, the informal rules created by social groups were followed by members of the group. Aimee and her social group understood the normative behaviours that are prescribed by society; therefore, they took appropriate actions to ensure they appeared to be in compliance. Aimee, as well as many other participants were aware of the informal sanctions such as stigma, disapproval, and social exclusion that could arise from their engagement in what society has determined to be deviant behaviour; therefore, they controlled their behaviour to reduce the likelihood that they would be subjected to such sanctions.

Stigma of Cannabis as an Informal Sanction

Stigma is conceptualized for the purposes of this paper according to Goffman's interpretation of the term. Goffman (1986) asserted that individuals may be stigmatized for engagement in activities that are perceived by other members of a society as unnatural passions. He further explained that when stigma is directed towards an individual, it reduces that person to a tainted or discounted person (as cited in Lester, 2011). Lastly, Goffman's understanding of stigma is that it is an interactional process where members of society respond to individuals who are stigmatized. For those that engage in unnatural passions in today's society, the stigma that is associated with this engagement is directed towards individuals in various ways.

While none of the individuals that participated in this study personally attached any stigma to cannabis, it was common for the participants to communicate that prior to

cannabis legalization, stigma directed towards those who consume cannabis existed in their communities. Moreover, some participants explained that after recreational cannabis was legalized, the stigma associated with cannabis remained. Consequently, for some participants, the apprehension surrounding the possible responses by others towards those who engage in cannabis consumption, which is perceived by some as an unnatural passion, was communicated to be sufficient for them to implement informal control measures to reduce the likelihood that they would be subjected to such stigma and its repercussions.

Stigma of Engagement in a Criminal Activity. Participants practiced various informal controls measures to reduce the likelihood of being stigmatized, including ceasing their consumption completely. For instance, Jodi, a 72-year-old cannabis consumer, disclosed that she refrained from consuming cannabis for approximately 10 years during the time that recreational cannabis consumption was prohibited by law in Canada. Jodi explained,

> I definitely uh I just because it was illegal I just went out wi- [sic] a lot of years and I was involved in like in the school system. And um I just didn't want anybody to know that I did like. Lots of people use things against you if, yeah.

Jodi was not the only participant in this study to declare that she was worried about how others would respond to the knowledge that she consumed cannabis recreationally prior to legalization. However, after further exploration of Jodi's concerns, it was revealed that the stigma that she was concerned would be directed towards her, was not stigma that is associated with cannabis use of itself; rather, it was the stigma that is associated with engaging in a criminal act.

This sentiment was shared by another participant in the study, Joni, who explained that the stigma attached to the criminality of cannabis was also a factor in her abstaining from cannabis consumption. Joni compared the stigma associated with the criminal aspect of cannabis to the stigma that exists today associated with charges for alcohol-impaired driving. She acknowledged that during her youth, she would drink and drive; however, she perceived that the repercussions for those actions at the time were limited to a small fine and that "your parents would slap you on the shoulder and say, 'don't you do that again, that's stupid'". Nevertheless, she stated that the present-day stigma associated with drinking and driving is much more severe and therefore a deterrent from driving after consuming alcohol. Joni equated the present-day degree of stigma that is associated with a criminal charge for alcohol-impaired driving with the stigma associated with being charged with cannabis prior to cannabis legalization. As a result, she declared that it was a deterrent for her to engage in such activities. She explained,

> You know. So yeah no, the, the legal, the legalities of um cannabis I would, would just be enough to….Yeah. Especially in a small town. You know if I was living in New York and I was just one face among millions, I don't know if it would matter that much but, you know you grew up in a small community, everybody knows who you are. You have a certain you enjoy having a certain sort of credibility. You know people look up to you.

While no universal response for how one will interact with a stigmatized individual exists, Joni and Jodi, as well as the majority of the other participants, detailed that the possibility for negative responses was enough for them to implement informal control

measures in their lives. The comments articulated by participants demonstrated that they feared that the stigma surrounding cannabis consumption could compromise their employment, result in loss of respect and credibility, as well as label them as an addict and that they would be treated with disdain. While there appears to be an element of formal control influencing decisions about cannabis use in these examples, a close reading of participants' words suggests that informal control related to stigma avoidance was also operating here. The participants were not remiss of the formal sanctions that existed such as legal penalties; however, it was communicated that the aforementioned consequences that could arise as a result of the stigma that is produced when awareness of one's engagement in a criminal activity occurs, simultaneously to the formal sanctions, were what was paramount in the participants employing informal control measures.

Stigma from Members of One's Social Group. As aforementioned, the majority of the participants acknowledged that they had friends, family, or colleagues who held negative opinions about cannabis prior to its legalization, and therefore, the participants possessed some level of concern about the stigma that may be directed towards them for their personal cannabis use. Moreover, the stigma associated with cannabis consumption did not completely dissipate among some participants' social groups after recreational cannabis was legalized in Canada. This was evident in the disclosure that Jodi provided of a conversation that she had with her partner after she had been joking about cannabis among her friends post-legalization. Jodi stated,

> And I know this one when I was alone with [Arthur]… I said, "do you think I shouldn't have said that?" And he said, "yeah I don't think you should". And I said "why?" And he said, "well you know not everybody is accepting of it". I said, "but

> it's legal". He said, "well that doesn't mean that some people don't like it". I thought okay.

Nevertheless, it would be remiss to state that the stigma surrounding cannabis was unanimous among every participants' social groups. For instance, Jack did explain that minimal stigma directed towards cannabis was evident in his social group. Jack articulated,

> Well when I grew up I knew because all my old aunties and all of old people around my village used plants. And my auntie grew opium poppies. She was the nurse who had the bottle of laudanum but she knew, you know. She grew them because they were beautiful. She didn't make her own opium but it was all these they, they had plants they used as purgatives. Like um buckthorn. It grew, it's a purgative. They squeezed it and make a tincture so you can, you know exactly, what you do now to do a colonoscopy. So they, these people knew how to use plants and they knew what uses they had. There wasn't a lot of stigma.

For Jack's social group, there was limited, if any, stigma associated with cannabis consumption. Furthermore, as he explained during his interview, it had been this way since his childhood, as the residents of his village perceived cannabis the same way as other plants. Therefore, while some participants noted that the stigma associated with cannabis was evident in their social groups prior to legalization, and some perceived its existence to persist even after legalization, this perception was not shared by all individuals.

Impression Management

As previously detailed, some participants communicated that they made

fundamental changes to their lifestyle, through means of abstaining from cannabis, to avoid stigmatization during the years recreational cannabis was prohibited by law in Canada. Nevertheless, others opted for controlling their behaviour according to their specific audience in order to minimize the risks associated with their continued consumption. These behavioural changes included engaging in the process of impression management. Impression management is the process where individuals may purposefully omit or include particular information in order to influence the perceptions that others will have of themselves, other individuals, an object, or a situation. These efforts are made by individuals in an attempt to convey oneself, or a situation, in the most positive frame possible (Vickers, 2017). Individuals may employ a number of different techniques to influence the impression that others will have of themselves; however, the most common technique that was discussed by the participants in this study was to limit the information they provided to members of their social group during social interactions. The motive for invoking such behaviours was to present an identity that the individual believed would be acceptable to the other individuals present.

A common strategy that the participants in this study relied upon to shape the opinions that others developed of them, was to refrain from discussing their cannabis consumption with others. Participants communicated that with the exception of the small group of individuals that they personally consumed cannabis with, they would consciously avoid discussing cannabis with their remaining friends, family, and other community members prior to cannabis legalization. One participant, Aimee, described how she navigated keeping her cannabis consumption private during the years that recreational cannabis was prohibited by law by explaining,

> Um, I think very carefully over the years as to who would know. I know I have friends who are adamantly against it or their life partners are adamantly against it. So you know I wouldn't talk about it with them and then I would have other friends I know who smoke frequently. So it was necessary to be very discreet about who knew. My husband was actually in enforcement so that required even more discreteness because he would have lost his job immediately if it was known. 'Cause it was illegal at the time you know? So he was also very, very discreet.

The participants communicated that they would discuss and indulge in alcohol when in social settings regardless of who was present; however, they would be extremely discreet about cannabis.

For some of the participants, the impression management techniques that they relied upon during the years that recreational cannabis was prohibited have remained despite legalization. One participant explained that even today he had only disclosed to five or six individuals in his social group that he consumes cannabis. An additional participant communicated that although one of her children was aware of her cannabis consumption, she has never discussed it with her other child who works in the medical field. Moreover, some of the participants had neglected to discuss their recreational cannabis consumption with their own personal healthcare providers. Upon inquiry as to why even after legalization individuals had refrained from disclosing their cannabis consumption to remaining family, friends, or to their healthcare providers, the responses included that the topic had simply not arose or that they were still fearful of the potential responses.

Nonetheless, although many of the participants have continued to engage in the impression management techniques that they relied upon during the years that recreational cannabis was prohibited to some degree, other participants described how that they feel more comfortable in abandoning their efforts in impression management since legalization. For instance, Jodi explained how she feels less restrained discussing cannabis with others since legislation has been passed allowing individuals to engage in recreational cannabis.

> But like for instance I'd say, I'd say oh I should go have a puff or something like this. And then oh what do you mean by that? Oh have to go have a puff of marijuana. Huh do you do that? And I said well not very often but would you like to come with me? You know something like this so, ordinarily I would never ever had said anything like that to anybody.

Jodi's comment illustrates the impression management technique she relied upon prior to legalization and how this has since changed.

Engagement Versus Disengagement

The motivations for cannabis consumption varied extensively among the participants in this study. Participants detailed how they would engage in cannabis consumption if they were suffering from some aching pain, or if they wanted to get creative, or the most common reason being when they were socializing with their friends. However, in addition to the various motivations that participants had for engaging in cannabis consumption, each participant also detailed situations where they made the decision to refrain from consuming cannabis. These situations where the participants decided to avoid using cannabis were in addition to those made as a means to reduce

stigma, or as an action of impression management as previously detailed. Rather, they were situations where the participants decided that disengagement in cannabis was the appropriate decision based on their own unique personal situations. For instance, each participant detailed certain circumstances where they had decided that engaging in cannabis was not ideal for them such as the years when they were raising their children, if they planned on consuming alcohol that evening, or if they simply required a certain level of concentration for a specific activity they were performing.

Making the decision to occasionally disengage from cannabis consumption to achieve personal objectives was an action discussed by each participant; however, it was especially true for Gerald, one of this study's participants. Gerald explained the necessity in controlling when he would engage and disengage in cannabis consumption to ensure that the desired effect he sought from cannabis would not be compromised from overusing. Gerald explained,

> For me if I consume too much cannabis during the day, that leads to just wanting to be stoned all the time. So I gotta temper that with my current use of it which is a sleep aid and maintain the integrity of that dosage at night working. I don't wanna compromise that. So I'm aware that if I consume too much cannabis I'll just become a regular old pothead who more or less sleeps and more or less functions and more or less manages in life. And I don't wanna go there I don't wanna lose that control of I sleep at night and that's great and during the daytime I'm more productive and helpful. And yep I am distinguishing for myself I'm trying to put up a barrier for myself in my mind not to go overboard with cannabis.

Gerald, similar to many other participants self-managed his cannabis consumption based

upon his specific intention for consuming. He, like the other participants in this study, was aware of what personal motivations existed for him to consume cannabis; thus, he controlled when disengagement from cannabis was necessary.

It was evident in the interviews that the effects and the risks associated with cannabis consumption were consciously weighed by the participants when making these decisions. The potential synergistic effects of cannabis and alcohol as well as the risk of addiction were evident in the comments made by the different participants in this study. Moreover, the impairment to one's cognitive skills that can occur from the consumption of cannabis was frequently discussed as a factor in the participants' decision-making for when to engage and when to disengage in cannabis. Lastly, the type of environment that one would be spending the duration of their day in was factor in the decision-making process for half of the participants in this study. These participants openly shared how they would decide whether to consume cannabis depending on the activities that were planned for their day, the amount of people they would be around, and the responsibilities that they had to fulfil. Aimee summarized how she personally deduced when engaging in cannabis would be appropriate and when it was best for her to personally refrain from using by stating,

> Sure going to social situations, not smoke beforehand. You know? Because of the amount of stimulation that there would be in a social setting you know? Like some kind of gathering maybe where there'd be 50 people or what have you. Then I just found that cannabis would make me feel uncomfortable you know? That there was too much stimulation, or you know more you know do it at home when there's no tasks at hand. So in a social setting you know let's say it's like some

> kind of big potluck or big party you know? There's actually a stress element to that you know? So I just found that whenever there is a stress element then you don't want it I don't wanna add in cannabis.

The calculated decision-making process as illustrated by Aimee's comment was shared among half of the participants; however, the remaining participants initially communicated that no clear logic existed in their decision-making process. Nevertheless, upon further querying each individual did provide some examples of when they were more likely to engage in cannabis and provided examples of scenarios where it would be likely they would choose to disengage.

Discussion

The perceptions that the participants in this study possessed surrounding cannabis consumption, as well as the opinions they held surrounding the criminalization of recreational cannabis use, corresponded with the social groups to which they personally identified themselves with. The participants described themselves according to social groups such as musicians and hippies, which are groups that are more likely to have liberal standpoints on cannabis, and/or groups that view cannabis as natural, and/or are social groups which are associated with cannabis consumption (Pedersen, 2009). The participants used their membership in these social groups as a rationale for the perceptions that they held. This was particularly relevant for the two participants in the present study who described themselves as a hippie. Lloyd and Striley (2018) explained that individuals of the Baby Boomer generation had "higher rates of lifetime drug use than previous generations" (p. 1), and this is especially true for members of this cohort who categorized themselves as a hippie. Consequently, Lloyd and Striley asserted that compared to previous generations, which viewed cannabis as a risk to their health, cannabis seems normalized among the older adults of today.

Nevertheless, Duff and colleagues (2012) explained that despite recreational cannabis consumption becoming more normalized across various social groups in Canadian society, cannabis use has not lost "the cultural identifications common to earlier generations and earlier representations of the 'typical pot smoker' in Canada" (pp. 276-277). As cannabis use has historically been described as part of the hippie culture and associated with the youth of the 1960s "whose behavior, attitudes or values, and self-image, were indicative of opposition to the traditional order" (Suchman, 1968, as cited in

Pederson, 2009), and who "emphasized qualities such as "nature," love, peace, freedom, mysticism and psychedelic drugs" (Hellum, 2010, p. 173), participants were able to sufficiently communicate their worldviews on cannabis by simply referencing themselves as belonging to this particular social group.

Worldviews and Safety of Cannabis

The disclosures shared in the six interviews, illustrated that the worldviews held by the participants, and how the participants constructed their worldviews, influenced their perceptions on the safety of cannabis consumption. For instance, the participants disclosed that they viewed cannabis as safer than, or equal to, alcohol, prescription medication, and other illicit substances. The worldview of cannabis as a "natural" herb or plant, and the participants' understanding of cannabis' long history of successful use for medicinal purposes in cultures outside of the Eurocentric North American culture, were communicated to be factors in how the participants constructed their perceptions of cannabis as safer than or equal to these other substances.

Minerbi and colleagues (2019) explained that the belief that cannabis is less harmful than prescription medications due to it being a plant product, is common in society. For instance, Lau and colleagues (2015a) detailed that among some of their participants, cannabis was considered "safer than prescription medications because it was a 'natural' herbal remedy" (p. 657). Thus, the views expressed by the participants in the current study of cannabis as "natural", and therefore safer than prescription medications and other substances, echoed what has been reported in previous studies exploring older adults and cannabis consumption.

Moreover, the minimal risk that the participants perceived cannabis consumption

to have, is consistent with the findings reported by Han and colleagues (2017), who communicated that more than three-quarters of their participants viewed weekly cannabis consumption to have no risk or that it posed only a slight risk. Additionally, the perceptions communicated by the participants of the current study of cannabis having "less adverse side effects" compared to drugs like cocaine, ecstasy, LSD, as well as alcohol, mirrors the findings from Lau and colleagues (2015a, p. 655). The expressed reasoning behind these perceptions of safety by the participants also frequently aligned with what is described in the literature. This is illustrated by the participants of the current study arguing that alcohol and other substances have caused more societal problems than cannabis; thereby, echoing the findings that were communicated by both Bobitt and colleagues (2019) and Lau and colleagues (2015a). However, on occasion the reasons presented in the literature for why cannabis was viewed as safer than other substances, were not agreed upon by the participants in the current study. This was evident with the discussion surrounding addiction.

Throughout the literature, older participants in studies frequently perceived cannabis as safer than other substances due to the high risk associated with addiction to other substances and the perceived low risk for addiction with cannabis (cf. Bobitt et al., 2019; Lau et al., 2015a). However, the participants in this study frequently communicated that addiction to cannabis was a concern. The risk of a physical and/or psychological addiction to cannabis was discussed in more than half of the interviews conducted. Moreover, three participants disclosed personal experiences of either themselves or someone close to them having had an addiction to cannabis as personal evidence for why they viewed the substance to have this risk. Hasin (2018) detailed that despite the general

perception being that cannabis use disorder (CUD) is rare, according to US national data, "19.5% of lifetime users" met the criteria for cannabis use disorder (p. 198). Therefore, it would be valuable for future researchers to explore whether the perceptions surrounding the risk of addiction held by older adults has changed since recreational consumption has been legalized to match the findings of this study and the occurrence of CUD in society, or if the perception that cannabis poses minimal risk for addiction has remained as per previous studies.

Opinions on Legalization

An additional factor surrounding the discussion of cannabis safety that was distinctive in this study, was that half of the participants in this study evaluated cannabis as being safer than other drugs due to the control measures that were in place as a result of legalization. Some of the participants discussed their apprehension of purchasing cannabis from illicit markets due to the risk that it could be laced with other substances; therefore, a significant part of their views on cannabis safety compared to other drugs were the control measures that the government had in place. The desire expressed by the participants in the present study to obtain cannabis from a legal retailer aligns with the finding that "older adults are more likely than other age cohorts to obtain cannabis from a legal source" (Statistics Canada, 2019, as cited in Baumbusch & Yip, 2020, p. 25). However, the literature does not fully explore whether the reasoning behind this cohort utilizing legal retailers more than other cohorts is due to the safety aspect such as what was discussed by the participants of this current study or if there is a different reason, such as not having a trusted person in the community to whom they can purchase it from.

The safety aspect of cannabis as a result of government controls and regulations,

the worldview of cannabis as a natural substance, as well as the delineation the participants made between recreational consumption and addiction, were reasons expressed by some of the participants for why they applauded the Canadian Government's decision to legalize recreational cannabis. The participants explained how they viewed addiction as a separate issue and that while this issue undoubtedly should be addressed, the risk of addiction should not be a factor in prohibiting the consumption of cannabis. Rather, they suggested that it be treated in a similar manner to how addiction to alcohol is managed in society. They expressed hope that by legalizing recreational cannabis, it would allow those struggling with addiction to get medical assistance and be treated in the same way that those with alcohol addiction are treated. Furthermore, the participants communicated that with the introduction of legal retailers selling cannabis, the dangers associated with cannabis, including the risk of it being laced with more dangerous chemicals, was significantly reduced. Thus, the participants, especially the three who communicated they would primarily use legal retailers to acquire their cannabis, viewed legalization as an important step in removing some of the risks associated with recreational cannabis consumption. Limited research has been conducted on the perceptions of safety surrounding cannabis since recreational cannabis has been legalized in Canada, and even less so with a focus on this cohort; therefore, it would be beneficial to explore the extent to which the perceptions of safety surrounding cannabis have increased as a result of legalization of recreational cannabis.

Informal Control

Each of the participants communicated that despite the formal control sanctions that existed during Canada's prohibition on recreational cannabis, they continued to

participate in cannabis consumption for at least some of the time that it was illegal. However, the participants described the various measures they employed to mitigate the effects of their behaviour, including managing whom they disclosed their cannabis consumption to, controlling the settings they would consume cannabis in, and ensuring that they refrained from consuming cannabis if they were expected to engage in certain activities or fulfil certain obligations. Thus, the participants responded to the informal controls, which are the rules that are created by social groups without any explicit means of enforcement (Maloff et al., 1979), during the time cannabis was prohibited by law in Canada. Moreover, the participants in this study communicated that since recreational cannabis has become legalized, they have continued to rely upon many of the measures that they used prior to legalization. They detailed their awareness of the expectations and norms that existed in their communities and social groups regardless of the criminal status of cannabis; thus, they engaged in certain measures to appear in compliance and to reduce being subjected to the stigma that they perceived was associated with cannabis consumption.

While the stigma associated with cannabis consumption prior to legalization was communicated as being related to the engagement in a criminal activity as opposed to the consumption of cannabis itself, the informal sanctions that were associated with this were of significance for some of the participants in their decision on whether to engage or disengage in cannabis consumption. The participants in this study openly discussed how they were cognizant of the negative repercussions that could arise if other people became aware of their cannabis consumption. Therefore, it was common for these individuals to be careful in allowing only select people to become aware of their recreational cannabis

consumption—the common response from participants was that only their closest friends and family members were aware that they used cannabis. This allowed for them to continue consuming cannabis recreationally while minimizing their risks of damaging their reputation or jeopardizing their employment status.

Duff and colleagues (2012) reported similar disclosures from their Canadian participants, who were between the ages of 20 and 50, when they stated that "most emphasized discretion in relation to the times, places and company in which cannabis was consumed, and moderation in the frequency and volume of this consumption" (p. 278). However, the motivations for employing informal control measures communicated by Duff and colleagues' participants were different than those expressed by the participants of the current study. Duff and colleagues communicated that the informal control measures employed by their participants were not taken to conceal their use and that only on the rare, isolated situation were these measures employed to avoid stigma; rather, they were done to show respect and courtesy for those who did not participate in cannabis consumption.

The individuals in Duff and colleagues' (2012) study revealed that they used cannabis prior to legalization "in a wide array of public settings where the fact of their cannabis use was clearly discernible to any passer-by who might happen to investigate" (pp. 278-279). This is vastly different than the influence that stigma had on the behaviours of many of the older adults in the present study, and for the older participants in Bobitt and colleagues' (2019) study in Colorado, which explored the perceptions of cannabis use from individuals who were all over the age of 60. Bobitt and colleagues (2019) explained that as older adults have been exposed to extensive anti-cannabis

propaganda and “public information campaigns implemented as a part of President Nixon’s war on drugs”, many members of this cohort may continue to view cannabis as deviant regardless of its legal status (p. 662). Therefore, the variance in the influence that stigma has on the behaviours and informal control measures between the studies may be a reflection of how cannabis has been constructed throughout their life course (Bobitt et al., 2019).

Race as an Unspoken Factor in Informal Control Measures Employed

The participants in this study all engaged in various levels of informal control to mitigate the likelihood that they would be subjected to formal and informal sanctions as a result of their engagement in cannabis consumption during the years that it was prohibited by law. While each of the participants were aware of the formal sanctions associated with cannabis consumption prior to the legalization of recreational cannabis consumption in Canada, it was the consequences that could potentially arise from the stigma and other informal sanctions associated with engaging in a criminal behaviour, and not the potential legal ramifications, that were paramount in their decisions to employ informal control measures. This was consistent with the findings that were reported by Lau and colleagues (2015b) and Duff and colleagues (2012). Lau et al. (2015b) communicated that “it is important to distinguish legal risks from stigmatization when considering cannabis-related harms” due to “the prospects of disclosure, status loss, or social stigma” being considered a greater threat to the individual than the formal sanctions (p. 4).

Some of the participants in the present study communicated that they presumed most people in their communities were aware of their cannabis consumption, and in some

cases even the cultivation of their own cannabis prior to legalization; however, they had remained confident that as long as they adhered to the informal rules such as refraining from being high in certain situations, that they would be able to avoid any trouble. Given the whiteness of the participants in this study, this lack of fear about being affected by formal sanctions leads one to question how instrumental the race of the participants was. Yet, race, or whiteness, was only mentioned on one occasion by a participant in the current study, and in the context of an idiom that reinforced white privilege/supremacy. Therefore, although the race of the participants may be relevant to the behaviours they exhibited, the choices they made, and the level of apprehension they felt surrounding the likelihood and degree of criminal sanctions they may be subjected to during cannabis prohibition, it primarily remained as an unspoken factor in their disclosures.

In the aforementioned studies which highlighted stigma as a motivating factor for participants to employ informal control measures, a large proportion of the participants identified as white. For instance, in Lau and colleagues (2015b), 73% of the participants were white, in Duff and colleagues (2012), 87% of the participants were white, and in Bobitt and colleagues (2019), 94% of the participants were white. Furthermore, five of the participants in the current study identified as white, and the remaining participant identified as multiethnic. Therefore, the vast majority of the individuals involved in these studies were not members of a population group that was specifically targeted by police during the years of drug enforcement. As the policing strategies that were employed focused on surveilling Black people (Ghelani, 2020; Gordon, 2006; McElrath et al., 2016; Valleriani et al., 2018), Indigenous Peoples (Ghelani, 2020; Valleriani et al., 2018), and People of Colour, especially those that lived in low-income neighbourhoods (Ghelani,

2020; Gordon, 2006; McElrath et al., 2016; Valleriani et al., 2018), the participants from the current study, as well as those in the abovementioned studies, did not fit the physical appearance of the police's target. Consequently, the reasoning that they provided for why they felt it was necessary to engage in informal control measures and impression management techniques being to avoid social stigma and not out of fear from formal sanctions was likely related to their race.

Summary of Discussion

The findings from this study demonstrated that older adults viewed cannabis as safer than, or equal to, alcohol, prescription medications, and illicit drugs due to the perception that cannabis is natural, has less adverse effects in comparison to other substances, has caused less societal harms, and is controlled at government-run retail establishments. However, many of the participants in this study rejected the notion that cannabis is safer than other substances due to the low risk of addiction, as they perceived CUD as an important risk that should be recognized and addressed. As a rationale for the construction of these worldviews and perspectives surrounding cannabis, many of the participants in this study communicated their belonging to particular social groups which are known for their tolerant attitudes towards cannabis. This included being a hippie, a musician, or a botanist.

Each of the participants disclosed that they consumed cannabis during the time that recreational cannabis was prohibited by law in Canada. Nevertheless, they all engaged in various impression management techniques and informal control measures to reduce the risk that they would be subjected to informal sanctions during this time. Moreover, the informal sanctions were communicated to have a greater influence on their

behaviour than the formal sanctions. However, since most of the participants in this study were white, and therefore not from a population group that were highly surveilled during the decades that cannabis was prohibited in Canada, further exploration on whether the race of the participants was a relevant factor to this lack of fear surrounding formal sanctions, is needed.

Conclusion

This study was conducted to explore the perceptions held by older adults surrounding cannabis consumption and its recent legalization in Canada, as well as any factors older adults may communicate to be relevant as to why they may engage or refrain from engaging in cannabis consumption. The findings from this study add to the limited literature available on older adults' perceptions of cannabis as well as highlight the need for further exploration into the perceptions and behaviours of older adults surrounding cannabis. As this was an exploratory study, the objective was not to derive any conclusive results in a statistical sense nor was it to provide generalizability. Rather, the objective was to gain a better understanding of the perceptions and behaviours of older adults surrounding cannabis. However, despite this exploratory study having many strengths in meeting its stated objective, it does have several limitations.

Limitations

The first limitation to this study was that the participants who volunteered for the current study were all middle class, they each had a history of cannabis consumption, and they were predominantly white. Thus, the homogeneity of the data further hinders any generalizability that can come from the findings. Second, the non-specific recruitment efforts that were engaged in by the research team limited the potential participants that may volunteer for the study. Recruitment posters were placed in local grocery stores, laundromats, coffee shops, and Cannabis NB locations in Sackville, New Brunswick, and in Moncton, New Brunswick whilst an email was also sent to retired faculty members from Mount Allison University. However, as only 3.8% of Sackville New Brunswick's population self-reported being a member of a visible minority according to census data

from 2016 (Statistics Canada, 2017b), and only 6.1% of Moncton, New Brunswick's 2016 population self-reported being a member of a visible minority population (Statistics Canada, 2017a), there were no targeted efforts to recruit those from marginalized (including racialized) populations. Moreover, as the interviews were only offered in English, this may have further limited the participants that volunteered for the study.

Additionally, as the data collected surrounding the participants' history of cannabis consumption, informal control measures they employed, and the perspectives they held surrounding cannabis were all self-reported, the potential for social desirability bias may have influenced the disclosures made (Choi et al., 2018b). Thus, the validity of the data may have been affected by this bias (Choi et al., 2018b). Lastly, the coronavirus pandemic which began midway through this research project, resulted in further limitations to this study. For instance, to ensure compliance to the health and safety measures implemented by the Federal and Provincial Governments, the final interviews that were scheduled for this study were forced to be conducted through an online platform. Consequently, two of the remaining four participants withdrew from the study. The final two participants did complete their interviews virtually; however, as there is disagreement in the literature surrounding whether utilizing videoconferencing software for qualitative research studies hinders the ability to establish rapport with research participants (Archibald et al., 2019), this change in facilitation methods may have affected the quality of data obtained in the final two interviews.

Summary of Key Findings

The data collected from the six semi-structured interviews provided valuable insight into the perceptions and behaviours of older adults in southeast New Brunswick

surrounding cannabis consumption, the safety of cannabis, the legal status of cannabis, and the perceived risks of formal and informal sanctions as a result of their personal cannabis use and cannabis cultivation. After analyzing the responses from the six semi-structured qualitative interviews that were conducted with older adults residing in southeast New Brunswick, we constructed seven themes to organize this data. These themes were: informal control measures employed, worldviews and ways of knowing, normalization of cannabis, medicinal use, negative experiences, reasons for cannabis consumption, and personal consumption. However, discussing each of these themes is beyond the scope of this paper; therefore, only the themes of informal control measures employed, and the theme titled worldviews and ways of knowing were presented in great detail.

Worldviews and Ways of Knowing

The disclosures from the participants highlighted how the membership to particular social groups is used to communicate the worldviews the participants possess, the perceptions they hold surrounding the safety of cannabis, their own personal history of cannabis consumption, as well as their own personal views on the legalization of recreational cannabis in Canada. This was especially true for the two participants in the current study who described themselves as a hippie, as this is a social group that is frequently associated with cannabis consumption and is known for its tolerant worldview of cannabis (Pederson, 2009). Thus, by communicating their belonging to this specific social group, they were easily able to communicate their worldviews surrounding cannabis and how these views were constructed.

The views held by the participants in the current study surrounding the safety of

cannabis as equal to, or safer than, alcohol, prescription medications, and other drugs, frequently aligned with the extant literature. Moreover, the views expressed by the participants of cannabis posing minimal risks due to it being "natural" and that it causes less societal problems compared to alternative substances, echoed what has been communicated by other researchers. However, the perceived safety as a result of legalization which was communicated to be an important factor by the participants in the present study, is a factor that is often absent in other studies. This is likely due to the limited studies that have been conducted since legalization.

Lastly, the risk of addiction as perceived by the participants in this study was more pronounced than what has been communicated in previous studies. A common explanation that is posed by participants in studies for why cannabis is safer than, or equal to, alcohol, prescription medications, or illicit substances, is the minimal risk associated with addiction to cannabis compared to the high risk with other substances (cf. Bobitt et al., 2019; Lau et al., 2015a). However, many of the participants in the current study highlighted CUD as a problem and declared that it should be addressed in society with the same understanding and care as that of alcoholism. As half of the participants in the current study had personally experienced CUD, or had someone close to them struggle with CUD, it is possible that this is why the risk for addiction to cannabis expressed by the participants aligned more with the statistics on the prevalence of CUD in society (cf. Hasin, 2018), than with the perceptions held by many participants in previous studies.

Informal Control

The participants in the current study detailed that despite the formal control

sanctions that were in place in Canada prior to October 2018, when recreational cannabis consumption and cultivation of recreational cannabis were prohibited by law, that they all engaged in the consumption and/or cultivation of cannabis to some degree during this time. However, they each described the measures they took during this time to mitigate the informal sanctions that they would be subjected to without such measures. These measures employed by the participants included impression management techniques such as limiting the number of people that they disclosed their cannabis consumption to and consuming cannabis only in isolated locations. Furthermore, the participants articulated that they would refrain from engaging in cannabis consumption if they were required to fulfil any responsibilities such as educating others, looking after their own children, completing tasks that required their full concentration, or if they were planning on consuming alcohol that day. While the participants were aware of the formal sanctions that existed, it was frequently communicated that it was the informal sanctions, specifically the stigma associated with engaging in a criminal activity and those associated with failing to complete certain obligations without being high, that were instrumental in their decision to control their behaviour regarding their cannabis consumption.

Lastly, the findings from this study which demonstrated a lack of fear surrounding the formal sanctions that existed during the decades that cannabis consumption and cultivation were prohibited by law in Canada, leads to the question whether the race of the participants was a significant factor in this lack of fear. The current study aligns with the findings from similar studies that have explored the influence that formal and informal sanctions had on the behaviours of older adults who consumed cannabis, which

highlighted that the informal sanctions were deemed more influential. However, as the participants in the current study, as well as those in the literature, have been predominantly white, they are not individuals from members of population groups that were primarily the target of police forces during the years of drug enforcement (cf. Ghelani, 2020; Gordon, 2006; McElrath et al., 2016; Valleriani et al., 2018). Therefore, the whiteness of the participants likely played a role in their perceptions and the lack of apprehension of formal sanctions; however, the extent to which the race of the participants affected their lack of fear of formal sanction during the time that cannabis consumption was prohibited by law in Canada requires further exploration.

Recommendations for Future Research

Cannabis consumption among older adults in Canada has increased over the past few decades; however, limited research has been conducted to explore the perceptions and behaviours of this specific cohort. As recreational cannabis consumption was only legalized in Canada within the past three years, the implications of legislative changes on the perceptions and behaviours of older adults requires further exploration. For instance, it would be beneficial for future researchers to explore whether the perceived safety of cannabis compared to other substances is related to the control measures in place as a result of legalization which allowed government retailers to sell cannabis to the general public. This argument was strongly articulated by the participants in this study surrounding cannabis safety; however, due to the limited research conducted since legalization, it is unknown how common this perception is among older adults.

For future research, it is also important to explore not only how age affects the perceptions held by individuals surrounding cannabis, but how their identity markers,

such as race and class, may intersect with age to determine the perceptions held, and the behaviours exhibited, by these individuals. The disclosures by the participants in the present study which echoed those from previous studies, indicating that informal sanctions influenced the behaviours of older adults to a greater extent than formal sanctions, led to the question on how instrumental one's race is to these perceptions. Thus, the findings from this study illustrated the need to explore the perceptions, experiences, and behaviours of older adults from an intersectional lens.

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Appendix A

Recruitment Poster

Appendix B

Consent Form

CONSENT FORM

Cannabis Use Among Older Adults in New Brunswick

Dr. Christiana MacDougall, RSW
Assistant Professor, Department of Sociology
Mount Allison University

I am an assistant professor at Mount Allison University conducting a research project about cannabis (marijuana, weed) use among older adults. I (or a member of my research team) would like to conduct an interview with you to discuss your thoughts about cannabis, and why you might or might not use cannabis.

We are interviewing 5-10 individuals aged 60 and up who live in New Brunswick. We may also be conducting a survey on the views on cannabis held by healthcare professionals in the region.

The interview will have roughly 20 questions and is expected to take 60 minutes. We will meet online using Microsoft Teams or Zoom. All interviews will be recorded so that the information can be reviewed and written down soon after. All recordings and typed transcriptions will be stored on Mount Allison's OneDrive server behind the MTA firewall. Only I and the student research assistants working on this project will have access to your interview and transcript.

Here are the links to the platforms' privacy statements:
Zoom: https://zoom.us/privacy
Teams: https://docs.microsoft.com/en-us/microsoftteams/teams-security-guide

All video interviews will be encrypted according to the platform. This means that no one other than you and the research team will have access to the interviews or recordings.

There are some potential risks to you. The questions that you will be asked will relate to your personal feelings and experiences of cannabis. Although it is now legal to use cannabis in Canada we will ask questions about your use before legalization. Additionally, you may be asked about your experience with other drugs. We will safeguard this risk by not using your real name in any written work or findings. You will pick a fake name for all written work. However, there is a chance that participants might be correctly identified by others. We will change or remove any identifiable data to reduce this risk.

It is possible that during your involvement with this study, you might share information that causes members of the research team to worry about your safety or another person's safety. You should be aware that I (Dr. MacDougall) am a social worker and a "mandated reporter". This means that situations like the abuse of a child or abuse of an older adult need to be

reported to the appropriate authorities. You should keep this in mind as you decide what to share. For example, drug use, of any kind, is not a concern that needs to be reported. However, if someone is stealing your medications and threatening you with physical harm, we might need to report that. In almost every instance we would discuss this concern with you prior to any reporting. Please make sure you ask any questions you might have about this.

We hope that your contributions and those of others will help create policy and practice for older adults.

You are under no obligation to participate, and you may end the interview at any time. If you choose to end the interview early, you may tell us not to use any of the information you have provided. Also, if you change your mind at any time after the interview has been completed, you can also tell me that we cannot use the information you have provided.

I will be using the results from this study to create story examples based on many interviews to share with healthcare professionals and others interested in this topic. The information gathered will be useful for clinical discussions, professional development, training, and targeting information about safer cannabis use to older adults living in New Brunswick. We will also be presenting findings at academic conferences and in academic publications. At no time will you be identified in any of these presentations or publications.

Only members of the research team will know who participated in the study and have access to the transcriptions of the interviews.

As a thank-you for your participation and as compensation for your time, we are providing you with a $25 gift card.

Permission to Quote:
I may wish to quote your words directly in presentations, reports, and publications resulting from this study. With regards to being quoted:

☐ Yes ☐ No I agree to be quoted directly if my name is not used.

Request for Copy of Findings:
Findings gathered from this study will be used in a variety of places. As a participant if you would like to have a copy of these publications shared with you, or be notified of any public presentations please indicate below:

☐ Yes ☐ No I would like to have a copy of the publications sent to me.
☐ Yes ☐ No I would like to be made aware of any public presentations

If you indicated that you would like a copy of the publications sent to you, please provide a mailing address for it to be sent to. If you wish to change your decision after the interview has been completed and would like a copy sent to you, please contact me and I will arrange for publications to be sent to you.

Mailing address:
Or
Email:

By providing verbal consent, you are indicating that you fully understand the above information and agree to participate in this study.

Participant's consent accepted verbally:

_____
Date:

_____
__
Researcher's signature: _____
Date:

_____
__

If you have any questions about this study, please contact me at cmacdougall@mta.ca or 506-364-2662. This research has been reviewed and approved by the Mount Allison University Research Ethics Board. If you have any questions or concerns about this study, you may contact Dr. Lisa Dawn Hamilton, Chair of the Mount Allison University Research Ethics Board, by phone (506-364-2618) or by e-mail at reb@mta.ca.