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Article

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Motivations, risks, and constraints: An analysis of affective and cognitive images for cannabis tourism in Canada

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ABSTRACT

The aim of this study was to explore Canada's image as a cannabis tourism destination and investigate how tourists' motivations, perceived risks, and travel constraints affect their intentions to visit Canada for leisure cannabis consumption. By examining the image formation process from a pre-travel perspective, this study investigated the impacts of motivation, perceived risks, and travel constraints on the affective and cognitive images that contribute to the formation of a pre-travel image and visiting intention for cannabis tourism.

Empirical results indicated that potential cannabis tourists' visiting intentions were influenced more by their affective image towards Canada than their cognitive image. Furthermore, perceived risk fully mediated the relationship between cognitive image and visiting intention. These findings provide valuable insights for local governments, destination marketing groups, and businesses interested in developing the cannabis tourism market.

1. Introduction

With the passage of the Federal Cannabis Act on October 17, 2018, Canada became the second country globally, following Uruguay, to formally legalise cannabis for recreational adult use. This significant shift has opened new avenues for business ventures in the tourism sector, such as 'bud & breakfasts', cannabis tours, speciality travel agencies, consumption lounges, and cannabis-related events (Dupej & Nepal, 2021). Interestingly, the COVID-19 pandemic has further propelled the growth of cannabis tourism as a 'new travel trend', where it has been utilized as a stress-alleviation mechanism (O'Regan, 2022). However, scant research has been conducted on how cannabis legalization has impacted Canada's destination image and, subsequently, the implications for tourist intentions to visit for leisure cannabis consumption.

Before the enactment of this legislation, perceptions of Canada from traditional markets, including the United Kingdom and Germany, were characterized by descriptors such as "beautiful", "friendly", "confident", and "liberal". Emerging markets such as China and Mexico shared similar views, focusing on Canada's beauty and friendliness (Liang, Shen, Huang, & Choi, 2019). Yet, according to Hudson and Ritchie (2009), these perceptions seemed to represent an outdated and

incomplete image of Canada, predominantly reflective of the country's natural beauty and historical past.

The legalization of cannabis provides a unique opportunity to reshape Canada's destination image, but concerns linger about the potential negative impacts of promoting recreational cannabis consumption (Kang, 2019). The effects of cannabis legalization on Canada's image as a cannabis tourism destination remain largely unknown, given the novelty of this research area (Kang, 2019). Moreover, as noted by O'Regan (2022), the burgeoning trend of cannabis-related tourism entails risks for both tourists and the destination, yet empirical evidence remains scarce regarding how these risks impact tourists' travel decisions and perceptions of Canada's destination image.

In response to the gaps in the literature, this study aims to address two key questions: What are the key factors that contribute to Canada's destination image change following the legalization of cannabis, and how does this image influence tourists' intentions to visit for leisure cannabis consumption? By investigating these relationships, we aim to extend the theoretical understanding of how policy changes can reshape a nation's destination image and influence tourists' decision-making processes. Moreover, the study investigates how motivation, perceived risk, and travel constraint (reflective of the changes brought about by cannabis legalization) impact these constructs.

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The results of this study not only contribute to the growing body of cannabis tourism literature but also provide practical insights for local governments, destination marketing groups, and businesses involved in cannabis tourism. This study, therefore, marks a significant step in understanding and optimizing the potential benefits of legalization, thereby helping stakeholders meet the anticipated demand in this emerging market.

2. Literature review

2.1. Cannabis tourism

Attention to cannabis tourism in the literature has increased as more countries legalise both recreational and medical use (Dupej & Nepal, 2021; Keul & Eisenhauer, 2019). Previous scholarly studies defined cannabis tourism as a form of travel to destinations where tourists can legally purchase and consume cannabis (Cartier, 2017; Travel Industry Dictionary, 2022). However, other scholars (Taylor, 2019; Uriely & Belhassen, 2005) argued that the ability to purchase and consume legal cannabis might not always be the primary purpose of a trip or vacation. This study used Taylor's (2019) broader definition of cannabis tourism as purchasing and consuming cannabis products while travelling away from one's usual place of work or residence.

Earlier studies investigated cannabis tourism under the broader context of drug tourism, which considered the consumption and use of drugs as illegal or illegitimate, and as a socially condemned activity (Goode, 1970; Uriely & Belhassen, 2005). Amsterdam is renowned for its relaxed drug laws around decriminalisation, which have attracted tourists and travelers to its many 'coffee shops' where cannabis can be purchased and consumed. Nevertheless, it is also a destination connected with sexual libertinism and a socially permissive environment that permits behaviours that may not be considered proper in other places (Monshouwer, Van Laar, & Vollebergh, 2011).

Changing legal environments in North America around cannabis created spaces for cannabis tourism to emerge in an increasingly tolerated and mainstream context (Belhassen, Santos, & Uriely, 2007; Keul & Eisenhauer, 2019). Several studies explored the economic and social benefits of cannabis legalization on tourism destinations (Kang, O'Leary, & Miller, 2016; Newman, Mason, & Langenderfer, 2021). Cannabis tourism is examined from the perspective of residents (Kang, 2019), tourism operators (Keul & Eisenhauer, 2019), cannabis festival attendees (Kang, Miller, & Lee, 2019; Skliamis & Korf, 2019) and visitors (Taylor, 2019). The emerging themes of selected studies on cannabis tourism are illustrated in Table 1.

Characteristics of the emerging cannabis tourism market are another area of focus (Kang et al., 2019). The motivations and perspectives of cannabis tourists are central themes in cannabis tourism literature (Belhassen et al., 2007; Kang & Lee, 2021; Taylor, 2019; Wen, Meng, Ying, Qi, & Lockyer, 2018). For instance, a study on the travel intentions of Chinese tourists to Amsterdam investigated the factors that motivate Chinese outbound tourists to engage in cannabis use (Wen et al., 2018). Wen, Meng, Ying, and Belhassen (2020) classified Chinese cannabis tourists into three distinct clusters: enthusiasts, diversionists/recreationists, and the curious. They further investigated each cluster's behavioral intentions and suggest that enthusiasts exhibited more intention to revisit cannabis tourism destinations than other groups.

Research on cannabis tourists' motivations demonstrated that cannabis tourists were a diverse group with varying motivations, suggesting a need for varied offerings in cannabis tourism. Other factors documented as influencing the cannabis consumption behavior of tourists include a risk perception of cannabis smoking and perceived constraints to cannabis use related to socially deviant behavior. Risk perception is an important concern for cannabis smokers as Uriely and Belhassen (2006) found that consumers were concerned about the legal, social, and medical risks of cannabis consumption, but they perceived these risks as less dangerous in the context of tourism. This suggested

Table 1
Overview of current studies on cannabis tourism.

Theme	Author(s) (Year)	Sample/method	Findings
Residents' attitudes toward developing cannabis tourism destination	Kang and Lee (2018)	Questionnaire/Structure Equation Modelling	The more residents perceive marijuana impacts positively, the more likely they will support cannabis tourism. Place attachment moderates this relationship. Highly attached residents held a positive image of their place, which in turn influenced their support of marijuana tourism
		Questionnaire/Structure Equation Modelling	Three Chinese cannabis groups: cannabis enthusiasts, diversionists/recreationists, and the curious. Four groups were identified based on the respondents' festival motivations: motivation, cannabis seekers, multi-purpose seekers, and festival seekers.
	Wen et al. (2020)	Questionnaire/K-means cluster analysis	Three festival attendee groups were identified: active, passive, and moderate participants. Four motivation clusters were identified: experimentation, pleasure orientation, purchasing, the quest for authenticity
	Kang and Lee (2021)	Questionnaire/Latent class analysis	A six-dimensional motivation scale was proposed: spiritual and emotional healing, social prestige, relaxation and escape, cannabis authenticity, commercial cannabis availability, and cannabis experimentation. Four motivations were identified: experimentation, pleasure and diversion-seeking, the quest for authenticity, and accessible purchasing.
Cannabis-oriented tourists' motivations	Taylor (2019)	Questionnaire/Exploratory Factor Analysis	The most favorable leisure interests of cannabis tourists were identified: social activity (time with friends, developing relationships, meeting new people), outdoor activity (fresh air, nature, outdoor environment), musical activity (bands, live
	Wen et al. (2018)	Questionnaire/Exploratory Factor Analysis	
Leisure preferences	Belhassen et al. (2007)	Interview/ Grounded theory	
		Gould, Donnelly, and Innacchione (2018)	Questionnaire. Structure Equation Modelling

(continued on next page)

Table 1 (continued)

Theme	Author(s) (Year)	Sample/method	Findings
Cannabis legalization's impacts on the destinations	Newman et al. (2021)	Commentary	music, singing, music listening), electronic and artistic activities. Benefits include increased tax revenues, enforcement cost savings, therapeutic benefits, positive environmental impacts, and social benefits such as a reduction in racial disparities related to marijuana prosecution. Call for research in five areas: economic and social impact of legalization, demand, supply (products, tour packages, attractions), residents, government.
	Kang et al. (2016)	Article	Both first-time and repeat tourists perceive intrapersonal (physical and mental concerns about consuming cannabis), interpersonal (difficulty finding travel companions), and structural (language barriers and security issues about drug dealers/the black market) perceived constraints. Consumers are concerned with risk's legal, social, and medical aspects; they take behavioral precautions to reduce risk. Therefore, they perceive drug use as less dangerous in the context of tourism than in the routine of everyday life.
Perceived constraints to cannabis consumption	Wen et al. (2022)	Interviews/ Hierarchical constraint model	
Risk perception of cannabis consumers	Uriely and Belhassen (2006)	Qualitative, Observation and interviews	

that the tourism context can mitigate risk perceptions and may be a key factor in promoting cannabis tourism. Similarly, constraints on cannabis use tremendously influence cannabis smokers' behaviours. A study by Wen, Kozak, and Ying (2022) found that both first-time and repeat tourists perceive various constraints to cannabis consumption, including intrapersonal, interpersonal, and structural constraints. This underlines the importance of addressing these constraints to attract and retain cannabis tourists.

Among the extensively investigated motives of cannabis-oriented travelers, few studies (Kang & Lee, 2021; Wen et al., 2020) have examined the influence of motivations on behavioral intentions. Studies in other tourism contexts showed that destination image was a significant predictor of tourists' behavioral intentions (Baloglu & McCleary, 1999; Wang & Liang, 2018). Moreover, research suggested destination image itself could be impacted by the laws and regulations passed by legislative bodies (Olson & Park, 2018). Therefore, it is deemed reasonable to assume a major touristic milestone like the legalization of cannabis could impact the image perception of both visitors and residents. Kang (2019) has investigated this impact on residents' image of the destination where cannabis consumption is free. However, there is no known literature examining cannabis legalization's impact on tourists' image perception of destinations. Therefore, this study aims to explore the influence of motivations on destination image and behavioral intentions of cannabis tourists. In doing so it answers Belhassen et al.'s (2007) call for research to investigate destinations that have become associated with cannabis and the affect this association has on destination image.

2.2. Destination image

Destination image is a critical aspect in shaping tourists' behavior and decision making (Zhang, Fu, Cai, & Lu, 2014) and has been widely studied in the tourism literature (Baloglu & McCleary, 1999; Beerli & Martín, 2004). Scholars generally agreed that the perception of a travel destination undergoes changes after the trip compared to before the trip, as travelers adjust their views based on their actual experiences (Akhoondnejad, 2015; Yilmaz & Yilmaz, 2020). While current research on destination image primarily concentrates on how the image is shaped during the journey, comprehending the process of image formation before travel assists marketers in identifying the factors that influence travelers' perceptions, allowing them to guide these perceptions towards desired behavioral decisions.

Early studies on destination image defined it as the cognitive perceptions of tourists at a destination (Echtner & Ritchie, 1993), while later studies focused on the affective conception of the destination (Kim & Richardson, 2003). Crompton's (1979) definition of destination image as "the sum of beliefs, ideas, and impressions that a person has of a

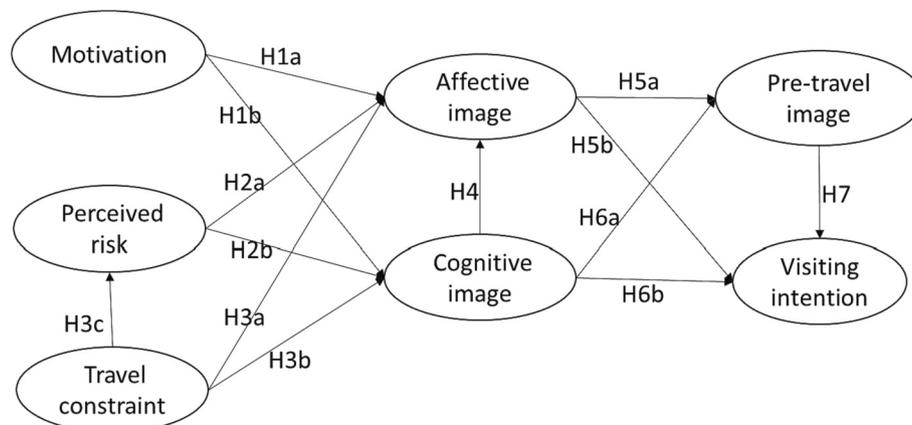


Fig. 1. Proposed model.

destination” (p.18) is widely referenced in the field. Destination image is formed over time from various sources of information (Zhang et al., 2014).

A meta-analysis by Afshardoost and Eshaghi (2020) found that most past studies operationalize destination image as a higher-order construct consisting of several sub-dimensions (e.g., cognitive, affective). Various multi-dimensional models proposed that overall destination image was shaped by cognitive and affective components (Baloglu & McCleary, 1999; Beerli & Martín, 2004). The cognitive component represents visitors’ perceived beliefs about the destination’s attributes, while the affective component reflects their emotions and feelings towards the destination (San Martín & Rodríguez del Bosque, 2008).

The attributes of destination image can range from specific to general (Beerli & Martín, 2004). The selection of attributes used to measure cognitive image largely depends on the destination’s characteristics, positioning, and type of attractions. Factors such as infrastructure, environment, and service quality are also used in measuring cognitive image (San Martín & Rodríguez del Bosque, 2008). Affective image is typically measured by semantic-differential scales that capture visitors’ emotions, such as happiness and excitement resulting from their experience. As Yilmaz and Yilmaz (2020) found that tourists’ pre-travel destination images can be modified based on their actual experience, understanding the pre-travel image formation process is necessary as it helps marketers in identifying factors that influence travelers’ perceptions and guide them towards the desired behavior.

3. Model and hypothesis development

Previous destination image models (Baloglu & McCleary, 1999; Beerli & Martín, 2004) propose that travelers create an image by processing inputs from various stimuli about a destination (Baloglu & McCleary, 1999) and organizing them to form a mental representation (Leisen, 2001). These inputs can be primary, acquired through personal experience, or secondary, perceived before experiencing the destination (Beerli & Martín, 2004). However, the essence of the image may vary among individuals based on personal factors such as sociodemographic characteristics (e.g., gender, age, education) and psychological factors (e.g., motivations, values, personality, lifestyle) (Um & Crompton, 1990).

Of the personal factors, motivation is a key determinant of destination image (San Martín & Rodríguez del Bosque, 2008). Schiffman, O’Cass, Paladino, and Carlson (2013) define motivation as an internal force driven by unfulfilled needs that prompt individuals to engage in a specific behavior. Past studies (e.g., Jiang, Scott, & Ding, 2015; McDonald, Thyne, & McMorland, 2008) have applied the Means-end chain theory (MEC) (Gutman, 1982) to explain the impact of consumer motivations on behavioral intentions. According to MEC, destination attributes serve to achieve specific benefits that align with personal values. Thus, the more a destination aligns with tourists’ desired benefits and values, the more appealing their image of the destination will be (San Martín & Rodríguez del Bosque, 2008). Given this, it is reasonable to assume that the legalization of cannabis can serve as an attribute that influences the motivation of cannabis-oriented tourists and subsequently their perceived destination image. Fig. 1 shows the details about the proposed model.

Research shows that cannabis-oriented travelers are motivated by a combination of factors operating at different levels (Belhassen et al., 2007; Taylor, 2019; Wen et al., 2018). These factors can include a desire for enhanced pleasure while engaging in activities (Borchers-Tempel & Kolte, 2016; Uriely & Belhassen, 2005), the search for deeper, more meaningful and spiritual experiences (Uriely & Belhassen, 2005; Wen et al., 2018), experimentation/curiosity (Grobe & Lüer, 2011; Taylor, 2019; Wen et al., 2020), and the relaxed legal frameworks surrounding the availability and consumption of cannabis at certain destinations (Belhassen et al., 2007). This study proposes that the greater a traveler’s motivation to use cannabis, the better their image of the cannabis

tourism destination. More specifically, this study argues that motivation towards cannabis use can influence cognitive image as this motivation may inform a traveler’s beliefs and knowledge about a destination. If a traveler is highly motivated to engage in cannabis tourism, they may have a more positive understanding or perception of the destination, recognizing it as suitable for satisfying their cannabis-related desires or curiosity.

H1a. *Motivation has a positive relationship with affective image.*

In a similar vein, the motivation to use cannabis can have a positive relationship with the affective image, as this motivation may shape the emotional response or feeling a traveler has towards a destination. If a traveler is strongly motivated by the prospect of enhanced pleasure or deeper, spiritual experiences through cannabis use, it could lead to positive feelings or attachments to the destination that offers such opportunities.

H1b. *Motivation has a positive relationship with cognitive image.*

Risk perception plays a crucial role in shaping the image of a destination (Chew & Jahari, 2014; Lepp, Gibson, & Lane, 2011). According to Reichel, Fuchs, and Uriely (2007), the potential loss resulting from an action that could put the traveler in danger, defines multiple risks including health, finance, performance, and sociopsychology (Khan, Chelliah, & Ahmed, 2017; Yang, Khoo-Lattimore, & Arcodia, 2017). The degree of risk associated with a destination can significantly impact the benefits sought by travelers and alter the image perception of the destination (Lehto, Douglas, & Park, 2008). Sonmez and Graefe (1996) found that perceived risk is especially important for pre-trip image formation, as travelers without personal experience of travelling to risky destinations show a higher aversion tendency.

Cannabis-oriented travelers also perceive multiple types of risks associated with their consumption, including legal, social, and medical (Axelrod, 1973; Uriely & Belhassen, 2006). However, as legal frameworks for cannabis emerge, the incorporation of cannabis into tourism experiences is increasingly tolerated and widespread (Dupej & Nepal, 2021). Changing attitudes towards cannabis in these contexts no longer make it acceptable to profile cannabis tourists as deviant (Kang et al., 2016; Keul & Eisenhauer, 2019). Despite this, given the stigmatized nature of cannabis, this study proposes that the risk perception of cannabis-oriented travelers is negatively associated with the cognitive and affective image of the destination. Specifically, the perceived risk may negatively impact cognitive image because the awareness of potential dangers (like legal, social, or medical risks) associated with cannabis use could influence a traveler’s factual understanding or perception of a destination, making it seem less safe or suitable for fulfilling their cannabis-oriented interests.

H2a. *Perceived risk has a negative relationship with affective image.*

Similarly, perceived risk could negatively influence the affective image because the emotional response to potential threats related to cannabis use could generate negative feelings or emotions towards a destination, reducing the sense of attachment or positive emotional connection a traveler might otherwise have towards that location.

H2b. *Perceived risk has a negative relationship with cognitive image.*

Travel constraints can significantly impact destination image (Khan et al., 2017; Kim, Kim, & Yang, 2021). Travel constraints are an external factor that can affect pre-trip image formation, which is particularly important in pre-travel decisions for less familiar destinations (Gao & Kerstetter, 2016; Li, Zhang, Mao, & Deng, 2011). Travel constraints are factors that limit the formation of leisure preferences and prohibit people’s ability to participate in and enjoy leisure activities (Jackson, 1993). These constraints can reduce demand for tourism services and products, depending on their structure and intensity (Lee, Agarwal, & Kim, 2012).

Crawford, Jackson, and Godbey (1991) categorize travel constraints

into three types: intrapersonal constraints (e.g., stress, lack of interest), interpersonal constraints (e.g., lack of travel companionship or family support), and structural constraints (e.g., lack of information or distance of the destination). Studies have shown mixed effects of such constraints on the behavioral intentions of travelers and non-travelers. For example, while [Hung, Lee, Wang, and Petrick \(2020\)](#) found no difference in constraint patterns between cruising travelers and non-travelers, [Zheng, Zhang, Zhang, and Qian \(2017\)](#) reported stronger interpersonal constraints among those who had not yet visited a death site compared to those who had visited previously. This variation in findings may be why [Jackson \(1993\)](#) suggests that travel constraints should be analyzed contextually. A qualitative study on cannabis-oriented travelers in China showed that Chinese tourists to Amsterdam perceive all three types of travel constraints ([Wen et al., 2022](#)). However, it is not yet understood how these travel constraints impact perceptions of destination image and behavioral intentions. This study argues that travel constraints can negatively influence cognitive image because these limitations may shape a traveler's factual understanding or perception of a destination, making it seem less accessible or less accommodating for their leisure needs.

H3a. *Travel constraint has a negative relationship with affective image.*

Similarly, travel constraints can negatively impact the affective image because these obstacles could produce negative emotions or feelings towards a destination. The frustration or disappointment associated with not being able to easily participate in desired activities could reduce the sense of attachment or positive emotional connection a traveler might have towards the destination.

H3b. *Travel constraint has a negative relationship with cognitive image.*

Additionally, Travel constraints could have a positive relationship with perceived risk as these limitations could increase the perception of potential difficulties or hazards associated with reaching or enjoying a destination. This could make the travel seem riskier and less appealing to prospective tourists.

H3c. *Travel constraint has a positive relationship with perceived risk.*

There is agreement in the literature ([Baloglu & McCleary, 1999](#); [Beerli & Martín, 2004](#); [Zhang et al., 2014](#)) that the consumer's affective response is the result of their cognitive evaluation of the destination attributes. Therefore, this study proposes:

H4. *Cognitive image has a positive relationship with affective image.*

Given that cognitive and affective image together shape the overall pre-travel image of cannabis-oriented travelers:

H5a. *Affective image has a positive relationship with pre-travel image.*

H6a. *Cognitive image has a positive relationship with pre-travel image.*

Measuring the behavioral intentions of travelers is crucial for marketers in evaluating the success of their marketing efforts. Intention to visit, revisit, and recommend are the most widely studied indicators of behavioral intentions ([Afshardoost & Eshaghi, 2020](#)). To understand the impact of non-travelers' image perception on behavioral intentions, this study will focus on using the indicator of intention to visit. The following hypotheses are proposed:

H5b. *Affective image has a positive relationship with visiting intention.*

H6b. *Cognitive image has a positive relationship with visiting intention.*

H7. *Pre-travel image has a positive relationship with visiting intention.*

4. Methodology

4.1. Data collection and sampling

This research aims to investigate the potential effects of motivation,

perceived risk, and travel constraints around cannabis legalization on Canada's destination image among individuals living outside of Canada. Data were collected through an online panel database in the United States and Europe, and only participants who had not previously traveled to Canada were surveyed. The use of an online panel database is preferred over crowdsourced marketplaces (e.g., Amazon's Mechanical-Turk (M-Turk)) as it offers reliable memberships to panel members and encourages serious participation ([Landers & Behrend, 2015](#)). Additionally, online panels offer advantages such as low cost, faster data collection and the ability to obtain large numbers of respondents in subgroups of interest ([Hays, Liu, & Kapteyn, 2015](#)). A convenience-sampling approach was used as probability-sampling may lead to low recruiting rate, higher cost and longer data collection time ([Hays et al., 2015](#)). Respondents were screened to ensure familiarity with cannabis tourism by asking if they knew about the legalization of recreational cannabis in Canada (i.e., "Are you familiar with the legalized recreational use of cannabis in Canada since October 2018?"), and if they had any smoking experience (i.e., "Do you have any smoking experience?"). A total of 600 responses were collected, with 97 respondents excluded due to incompleteness or answering all questions with the same answer, resulting in 503 respondents for the analysis.

4.2. Measurement instrument

The measurement items for this study were developed based on previous literature and measured using a seven-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). The construct of motivation to consume cannabis was measured using 18 items adopted from [Wen et al. \(2018\)](#), which fall into one of five categories: spiritual/emotional healing, social prestige, relaxation and escape, cannabis authenticity, and extraordinary life experience. Perceived risk around consuming cannabis as a tourist was adopted from [Khan et al. \(2017\)](#) and includes three dimensions: social risk, performance risk, and financial risk. Additionally, items were developed to reflect the cannabis tourism context specifically, based on online discussions of risks that might occur for cannabis tourists ([Moya, 2018](#)). Travel constraints around cannabis tourism were also adapted from [Khan et al. \(2017\)](#).

The cognitive image of Canada as a tourism destination was measured using a seven-point Likert-scale (1 = strongly disagree to 7 = strongly agree) and adopted from [Alcañiz, García, and Blas \(2009\)](#), which are based on the most frequently cited image scales by [Echtner and Ritchie \(1993\)](#), consisting of 13 items and 3 dimensions. Affective image was measured using semantic differential scales, based on [Russell \(1980\)](#) and [Baloglu and Brinberg's \(1997\)](#) approach, including: arousing-sleepy, relaxing-distressing, exciting-gloomy, and pleasant-unpleasant. Lastly, pre-travel image was measured with a semantic differential scale adopted from [Prayag, Hosany, Muskat, and Del Chiappa \(2017\)](#): unfavorable-favorable, very negative-very positive.

5. Results

The proposed model was tested through two steps. Firstly, a confirmatory factor analysis (CFA) was conducted to determine the validity and reliability of the measurement model using SPSS 24.0 and R 4.1.3. Then, a structural equation model analysis was applied to examine the structural relations between the variables via R 4.1.3.

5.1. Demographic information

[Table 2](#) presents an overview of the demographic characteristics of the respondents. The distribution of male (48.8%) and female (51.2%) respondents was relatively balanced. However, there was a significant underrepresentation of respondents aged 31–40 years old. The majority of respondents were between 18 and 30 years old (29.1%) and 41–55 years old (28.3%), with slightly fewer being over 55 years old (23.6%). Most respondents were highly educated, with 71.1% having a college or

Table 2
Sociodemographic profiles of the respondents.

Demographic	N (%)	Demographic	N (%)
Gender (n = 406)		Marital status (n = 408)	
Male	198 (48.8)	Single, never married	145 (35.5)
Female	208 (51.2)	Married or have a partner	220 (53.9)
Age (n = 364)		Single, married before	43(10.6)
18–30	106 (29.1)	Personal annual income (n = 408)	
31–40	69(18.9)	Less than \$39,999	206 (50.5)
41–55	103 (28.3)	\$40,000–\$69,999	118 (28.9)
>55	86(23.6)	More than \$70,000	84(20.6)
Education (n = 408)		Ethnicity (n = 408)	
High school or lower	118 (28.9)	White	340 (83.3)
College/University degree	240 (58.8)	Hispanic or Latino	21(5.1)
Postgraduate degree	50(12.3)	American Indian or Alaska Native	8(2.0)
		Asian or other	39(9.6)

university-level degree. Over half of the respondents (53.9%) were married or in a partnership, indicating that this may be a common characteristic among potential cannabis tourists. Financially, over half the respondents had a low income, with a personal annual income less than USD\$39,999 (50.5%). Most respondents identified as white (83.3%), indicating that this group may be a potential market for cannabis tourism from American and European markets. This is in line with the results found in Martins et al. (2021) with data from the National Surveys of Drug Use and Health, indicating that the majority of cannabis users are identified as white (64.6% non-Hispanic white).

5.2. Confirmatory factor analysis

A confirmatory factor analysis was conducted to assess the measurement model and ensure that all items loaded only onto their respective constructs, using R 4.1.3. The results indicate that the model fit the data well ($\chi^2(923) = 1580.59, p = 0.00; CFI = 0.909; TLI = 0.944; RMSEA = 0.057; SRMR = 0.059$) as per Hu and Bentler’s (1999) criteria. The final measurement results for each item are shown in Table 3.

As shown in Table 3, internal consistency was achieved, with composite reliability estimates exceeding 0.7 (Fornell & Larcker, 1981), ranging from 0.715 to 0.921. Anderson and Gerbing’s (1988) methods were used to assess both convergent and discriminant validity. Convergent validity was achieved as all items loaded significantly ($p < 0.001$) onto their respective constructs, ranging from 0.505 to 0.947. Discriminant validity was also achieved as per Fornell and Larcker’s (1981) criterion, as the square root of the average variance extracted per construct was greater than the off-diagonal correlations, as shown in Table 4.

5.3. Structural equation model analysis

Following Anderson and Gerbing’s (1988) two-step approach, a second-order structural equation modelling analysis was conducted after the confirmatory factor analysis using the lavaan package in R 4.1.3. This aims to examine the proposed structural relationships among constructs. As shown in Fig. 2, the results revealed that potential cannabis tourists’ visiting intentions were influenced more by their affective image towards Canada than their cognitive image. Motivation, perceived risk, and travel constraints were found to be significant antecedents that influence tourists’ destination image.

The goodness-of-fit indices for the model indicated an excellent fit, with RMSEA at 0.056, which was below the excellent criteria of 0.06.

Table 3
Confirmatory factor analysis.

Precipitating factor	Items	Standardized factor loading	AVE	Composite Reliability
Motivation	<i>If I am travelling to Canada for/ partially for cannabis experience, I am intent to...</i>		0.684	0.915
	To find something greater than myself	0.560		
	To have more imagination	0.717		
Spiritual/emotional healing	To obtain the power to see inside myself	0.772	0.457	0.715
	To get a wider philosophical and spiritual understanding	0.689		
	To have a different mindset	0.681		
Social prestige	To show my socioeconomic status	0.736		
	To show my experience to others	0.722	0.533	0.819
	To experience what others did not visit	0.713		
Relaxation and escape	I think smoking cannabis is a fashion	0.672		
	Smoking cannabis makes me feel high	0.675		
	To relieve daily boredom and busyness	0.776	0.520	0.812
Cannabis authenticity	To get away from a stressful social environment	0.639		
	To temporarily escape from family	0.528		
	To learn about the local cannabis culture	0.887		
Extraordinary life experience	To learn about the local cannabis industry	0.920	0.809	0.927
	To learn about the local cannabis users	0.891		
	To fulfill the need for an inversion of ordinary life	0.916	0.700	0.822
Perceived risk	To temporarily experience a crazy lifestyle	0.749		
	<i>Travelling to Canada for cannabis...</i>		0.726	0.886
	Might cause trouble when I return to my country	0.786		
Social Risk	Might get me arrested	0.863		
	Might get me fined/paid	0.674	0.659	0.853
	The destination environment might not be safe	0.784		
Performance Risk	Might be boring	0.621		
	Might be disappointing	0.773	0.544	0.780
	Might have a lot of restrictions	0.806		
Financial Risk	Might not receive good value for my money	0.869		
	Might involve unexpected extra expenses (such as changes in exchange	0.764	0.634	0.838

(continued on next page)

Table 3 (continued)

Precipitating factor	Items	Standardized factor loading	AVE	Composite Reliability
Travel Constraint	rates, extra costs in hotels)			
	Might be more expensive than other cannabis destinations	0.751		
	No or limited information about cannabis tourism in Canada was available	0.685		
	I didn't know where to find cannabis related activities or cafe	0.635	0.562	0.808
	There was limited choice for cannabis related activities or cafe	0.807		
	No one may travel with me	0.728		
	My family doesn't support me	0.505		
	Canada has quality of general infrastructure	0.655		
	Canada has beautiful scenery and natural attractions	0.711		
	Canada offers appealing local food	0.750		
Cognitive image	Canada has interesting cultural attractions	0.696		
	Canada offers personal safety	0.754	0.530	0.899
	Canada has interesting historical attractions	0.831		
	Canada has standard hygiene and cleanliness	0.822		
	Canadians are interesting and friendly	0.567		
	Canada has good climate	0.563		
	Canada offers fun activities	0.574		
	Unpleasant-Pleasant	0.737		
	Sleepy-Arousing	0.656	0.602	0.857
	Distressing-Relaxing	0.827		
Pre-travel image	Gloomy-Exciting	0.865		
	Unfavorable-Favorable	0.930	0.853	0.921
Visiting intention	Very negative-Very positive	0.917		
	Likely visit Canada	0.896		
	Plan to visit Canada	0.947	0.785	0.916
	Want to visit Canada	0.809		
	Intent to visit Canada	0.724		

The χ^2/df ratio of 2.269 ($\chi^2 = 1996.799$; $df = 880$) was below 3. GFI was 0.829, CFI was 0.897, NFI was 0.813, and TLI was 0.890, all above the acceptable cut-off point of 0.8. Therefore, the proposed structural model showed good goodness-of-fit indices.

The standardized regression coefficients of each proposed relationships are shown in Fig. 2 and Table 5. All hypothesized relationships between constructs were significantly supported, except H3b (Travel Constraint → Cognitive Image), H6a (Cognitive Image → Pre-travel Image) and H7 (Pre-travel image → Visiting Intention). More specifically, tourists' motivation and perceived risk had significant influences

on cognitive image ($\beta_{mot-ci} = 0.38, p < 0.001$; $\beta_{pr-ci} = -0.33, p = 0.045$) and affective image ($\beta_{mot-ai} = 0.17, p = 0.005$; $\beta_{pr-ai} = -0.29, p = 0.041$). Surprisingly, travel constraint had a significant impact on affective image ($\beta_{tc-ai} = -0.11, p = 0.016$) but not cognitive image ($\beta_{tc-ci} = -0.09, p = 0.416$). Considering this, full mediation might exist for the relationship of travel constraint to cognitive image via perceived risk. A post-hoc mediation analysis was run following Fritz and MacKinnon's (2007) method, detailed in the next section.

As predicted, cognitive image had a significant effect on affective image ($\beta_{ci-ai} = 0.34, p < 0.01$), but did not affect the overall pre-travel image directly ($\beta_{ci-pi} = -0.05, p = 0.228$). This suggests that cognitive image may have an indirect relationship with pre-travel image through affective image in the cannabis tourism context. This was further analyzed using Fritz and MacKinnon's (2007) method, as described in the next section. Visiting intention was significantly influenced by affective image ($\beta_{ai-vi} = 0.47, p < 0.05$) and cognitive image ($\beta_{ci-vi} = 0.37, p < 0.001$), but surprisingly not by pre-travel image ($\beta_{pi-vi} = -0.28, p = 0.366$). Similarly, there may be an indirect effect between affective image and visiting intention through pre-travel image, which was also further explored in the next section.

Overall, the squared multiple correlations (R^2) for visiting intention was 0.26, indicating that 26% of the variance in visiting intention could be explained by pre-travel image. Of the variance for pre-travel image, 88% could be attributed to affective image, which suggests that many cannabis tourists' pre-travel image towards Canada is determined by their affective image of Canada rather than their cognitive image. Similarly, 24% of the variance for affective image could be explained by tourists' motivation, perceived risk, and travel constraints, as well as their cognitive image and motivation.

5.4. Direct and indirect effects

As the previous analysis demonstrates indirect effects might exist, a bias-corrected bootstrapped standard error with 5000 draws was applied to estimate the direct, indirect effects and the standard error of the indirect effects using lavaan in R 4.1.3. This procedure has been found to have more power than the other mediation testing methods (e.g., Baron & Kenny, 1986). Baron and Kenny's (1986) method was criticized for failing to provide: 1) joint test for all steps combined, 2) estimation of the indirect effect, 3) estimation of the standard error, and 4) enough power to detect effect except at large sample sizes (MacKinnon, Lockwood, & Williams, 2004; Fritz & MacKinnon, 2007).

As shown in Table 6, full mediation of perceived risk on travel constraint to cognitive image was supported, as the significant total effect of cognitive image from travel constraint ($\beta = -0.36, t = 1.65, p < 0.05$) can be separated into a significant indirect effect ($\beta = -0.27, t = 1.70, p < 0.05$), and an insignificant direct effect ($\beta = -0.09, t = 0.81, p = 0.416$). Furthermore, the 95% bias-corrected bootstrapped confidence interval did not include a zero value for the indirect effect (95% CI [-0.86, -0.12]). Therefore, perceived risk fully mediated the relationship between cognitive image and visiting intention.

Similarly, it is also supported that affective image fully mediated the effects from cognitive image to pre-travel image, as the significant total effect of pre-travel image from cognitive image ($\beta = 0.27, t = 2.11, p < 0.05$) can be separated into a significant indirect effect ($\beta = 0.32, t = 1.70, p < 0.05$), and an insignificant direct effect ($\beta = -0.05, t = 0.91, p = 0.228$). A zero value was not included for the 95% bias-corrected bootstrapped confidence interval for the indirect effect (95% CI [0.08, 0.97]).

However, no significant mediation of pre-travel image was found on the relationship of cognitive image to visiting intention. This is because although a significant total effect ($\beta = 0.38, t = 9.62, p < 0.001$) and a significant direct effect ($\beta = 0.37, t = 5.70, p < 0.001$) were found, the indirect effect was not significant ($\beta = 0.01, t = 0.66, p = 0.511$). The 95% bias-corrected bootstrapped confidence interval for the indirect effect also included a zero (95% CI [-0.01, 0.18]). This will be further

Table 4
Latent variable construct validity and correlations.

Construct	Average Variance Extracted	Motivation	Perceived Risk	Travel Constraint	Affective Image	Cognitive Image	Pre-Travel Image	Visiting Intention
Motivation	0.684	0.827						
Perceived Risk	0.726	0.222	0.852					
Travel Constraint	0.562	0.316	0.664	0.750				
Affective Image	0.602	0.447	-0.004	-0.122	0.776			
Cognitive Image	0.530	0.706	-0.212	0.269	0.243	0.728		
Pre-Travel Image	0.853	0.303	0.040	0.115	0.686	0.203	0.924	
Visiting Intention	0.785	0.644	0.157	0.199	0.211	0.650	0.102	0.886

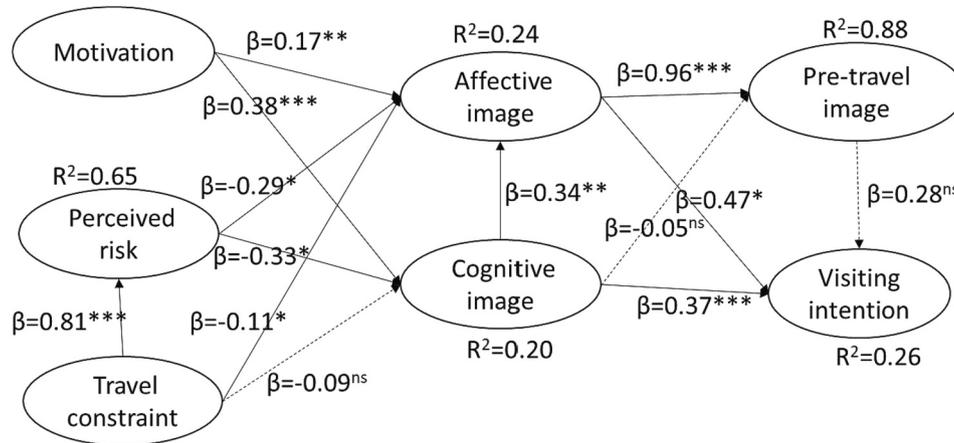


Fig. 2. Structural coefficients.

Note: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; ns: not significant. Chi-square = 1996.799; p-value < 0.001; degree of freedom = 880; Chi-square/degree of freedom = 2.269; CFI = 0.897; TLI = 0.890; RMSEA = 0.056, SRMR = 0.084.

Table 5
Structural model results.

Hypothesized paths	Standardized coefficient	t-value	p	Support
H1a: Motivation → Affective Image	0.167	1.356	0.005	Yes
H1b: Motivation → Cognitive Image	0.378	4.795	0.000	Yes
H2a: Perceived Risk → Affective Image	-0.293	1.175	0.041	Yes
H2b: Perceived Risk → Cognitive Image	-0.332	1.714	0.045	Yes
H3a: Travel Constraint → Affective Image	0.113	1.169	0.016	Yes
H3b: Travel Constraint → Cognitive Image	0.092	0.814	0.416	No
H3c: Travel Constraint → Perceived Risk	0.806	5.430	0.000	Yes
H4: Cognitive Image → Affective Image	0.336	1.195	0.002	Yes
H5a: Affective Image → Pre-Travel Image	0.956	12.766	0.000	Yes
H5b: Affective Image → Visiting Intention	0.465	1.438	0.050	Yes
H6a: Cognitive Image → Pre-Travel Image	-0.046	0.906	0.228	No
H6b: Cognitive Image → Visiting Intention	0.368	5.703	0.000	Yes
H7: Pre-Travel Image → Visiting Intention	-0.275	0.903	0.366	No

Table 6
Results of direct effects and indirect effects.

Parameter	Standardized path coefficients	p	t	Bias-corrected bootstrap 95% CI
Travel constraint → Perceived risk → Cognitive image				
Total effect	-0.36	0.048	1.65	[-0.67, -0.09]
Direct effect	-0.09	0.416	0.81	[-0.29, 0.98]
Indirect effect	-0.27	0.048	1.70	[-0.86, -0.12]
Cognitive image → Affective image → Pre-travel image				
Total effect	0.27	0.026	2.11	[0.12, 0.46]
Direct effect	-0.05	0.228	0.91	[-0.25, 0.04]
Indirect effect	0.32	0.046	1.70	[0.08, 0.97]
Cognitive image → Pre-travel image → Visiting intention				
Total effect	0.38	0.000	9.62	[0.21, 0.68]
Direct effect	0.37	0.000	5.70	[0.44, 0.90]
Indirect effect	0.01	0.511	0.66	[-0.01, 0.18]
Affective image → Pre-travel image → Visiting intention				
Total effect	0.73	0.002	3.06	[0.26, 0.88]
Direct effect	0.47	0.050	1.44	[0.07, 0.54]
Indirect effect	0.26	0.036	1.91	[0.09, 0.31]

discussed in next section.

Lastly, partial mediation of pre-travel image on affective image to visiting intention was supported, as the significant total effect of visiting intention from affective image ($\beta = 0.73, t = 3.06, p < 0.01$) can be separated into a significant indirect effect ($\beta = 0.26, t = 1.91, p < 0.05$), and a significant direct effect ($\beta = 0.47, t = 1.44, p < 0.05$). Furthermore, the 95% bias-corrected bootstrapped confidence interval did not include

a zero value for either the indirect effect (95% CI [0.09, 0.31]), or the direct effect (95% CI [0.07, 0.54]).

6. Discussion

This study adds to a limited and emerging literature by reviewing the current research status of cannabis tourism, and by investigating the effects that the legalization of recreational cannabis has on pre-travel destination image. While other studies have focused on cannabis tourism in the United States and Amsterdam, limited research is available on Canada as a cannabis tourism destination. This research contributes to the existing collection of knowledge on cannabis tourism by providing empirical evidence on the effects of motivation, risk perception and travel constraints on traveler's destination image for Canada as a cannabis tourism destination and their corresponding travel intention.

The results of this study indicated that all proposed relationships between constructs were significantly supported, except H3b, H6a, and H7. Tourists' motivation and perceived risk had a significant impact on their cognitive and affective image, and travel constraints had a significant impact on their affective image only. The analysis also revealed that cognitive image may have an indirect relationship with pre-travel image through affective image in the cannabis tourism context. Additionally, visiting intention was significantly influenced by affective and cognitive images, but not by pre-travel image. Furthermore, the results suggested that perceived risk fully mediated the relationship between travel constraint and cognitive image and that affective image fully mediated the effects from cognitive image to pre-travel image. The findings of this study have important implications for cannabis tourism in Canada, as they can help stakeholders to understand the decision-making process of cannabis tourists and better tailor their marketing strategies accordingly.

Our study observed a non-significant relationship between travel constraint and cognitive image. This may be due to our travel constraint items' narrow focus on cannabis-related judgments, contrasting with the broader scope of cognitive image items. Furthermore, the perceived risk items, also cannabis-centric, appear to mediate the travel constraint-cognitive image relationship, possibly overshadowing more general travel constraints. Unexpectedly, we found no relationship between pre-travel image and visiting intention. This could be due to the high positive levels of the pre-travel image items, indicating a need to reassess the balance and representation in our pre-travel image items. These findings emphasize the need for a balanced approach in future item design, ensuring a mix of specific and generic elements across travel constraint, cognitive image, and perceived risk, and reconsideration of pre-travel image item composition to accurately capture its relationship with visiting intention.

7. Theoretical implications

This study represents an initial effort in Canada to understand the impact of recreational cannabis legalization on a country's destination image from a consumer behavior perspective. The findings indicate that changes in government policy can potentially shape tourists' perceptions, which in turn, influences their decisions to visit a particular destination. This study contributes to the literature by underscoring the role of government policy as a key determinant in the formation of a destination's image. Moreover, the insights gleaned from this study can offer valuable guidance to other countries contemplating similar changes in recreational cannabis regulations.

The implications of this study are significant for policymakers and tourism managers, demonstrating the indirect influence of policy changes, such as recreational cannabis legalization, on tourists' perceptions of a destination. Rather than viewing government policy as a direct information source, our findings suggest it affects other information sources (like news media, tourism marketing information, and word of mouth), which subsequently shape a destination's image (Kang,

2019). This nuanced understanding addresses concerns about potential negative impacts of policy changes on destination image. Consequently, these insights can guide future tourism policies and aid in strategizing how to position cannabis as a potential resource in the tourism industry.

This study highlights the potential impact of government policy, specifically the legalization of recreational cannabis, on the formation of both pre- and post-visit destination images. By examining how policy changes may indirectly affect various information sources (as shown in the construct 'travel constraint'), we gain a more nuanced understanding of the dynamic process of image formation. This research provides empirical evidence on the influence of perceived risk, stereotypes, attitudes, and motivations for cannabis tourism on pre-travel perceptions. It is crucial to clarify that the insights generated from this study may help address, if not entirely allay, concerns about the negative impacts of recreational cannabis legalization on a destination's image. However, as our sample was primarily composed of 'smokers,' this could potentially introduce a bias towards perceiving such legislation favorably. Therefore, we must exercise caution when interpreting these findings, taking into account the potential bias in our sample. This acknowledgment of potential bias underlines the need for a diverse sample in future research to ensure a more balanced understanding of the impacts of policy changes like cannabis legalization on destination image.

Lastly, this study enriches the literature on the relationship between motivation and destination image, by demonstrating the specific impact of motivation on cognitive image. The findings also imply that motivation indirectly affects the destination image through its relationship with pre-destination image. These insights are critical in enhancing our understanding of the cognitive and affective processes involved in destination image formation (Wang & Liang, 2018; Wang, Wang, & Liang, 2019). While our research is limited to post-legalization perceptions, it opens avenues for future longitudinal studies to provide more comprehensive insights into the impact of policy changes on tourists' perceptions and decisions.

8. Practical implications

Travel constraints can have a significant impact on affective image, especially since tourists are unable to experience the place fully before they visit. Consequently, cannabis tourism stakeholders are recommended to prioritize understanding these constraints and collaborate to shape a visitor-friendly environment, thereby enhancing the destination's affective image. This can be achieved by implementing policies supportive of cannabis tourism and hospitality, like facilitating on-site cannabis use in designated areas, as per the Nunavut Cannabis Act (refer [Government of Nunavut, 2023](#)). Establishing cannabis-oriented travel packages and itineraries, capacitating tourism and hospitality personnel with cannabis knowledge, and provisioning relevant information and resources are also key. Such strategic improvements could elevate the destination's affective image, potentially resulting in an increased influx of tourists.

This study has also demonstrated that perceived risk fully mediates the relationship between travel constraint and cognitive image. This suggests that providing accurate and reliable information about cannabis at the destination can help to reduce the negative impact of travel constraints on cognitive image. As [Wen et al. \(2022\)](#) noted, by understanding cannabis tourists' perceived constraints stakeholders at a destination can provide clear instructions and warnings to visitors about cannabis consumption. It is important to note that this information should be provided on a consistent basis, as the perception of risk plays an integral role in the formation of an individual's cognitive image. Furthermore, it is also important to consider how this information will be communicated to tourists.

This research suggests that to improve the cognitive image of a destination among potential visitors, it may be more effective to focus on increasing motivation rather than directly addressing the cognitive image itself. For instance, Destination Marketing Organizations (DMOs)

might consider crafting cannabis-themed experiences, such as guided tours and cannabis farms, cannabis-infused culinary events or workshops. According to our results, this could increase tourists' motivation (cannabis authenticity), which might further lead to higher visiting intention as it motivates potential travelers by providing an authentic and unique experience. Furthermore, this has implications for destination marketing efforts, as it suggests that efforts to increase motivation among target audiences may lead to a more positive perception of the destination (Wang, Liang, & Wang, 2020). For cannabis-friendly accommodation providers, they might focus on highlighting the social prestige to motivate customers. For example, accommodation providers can spotlight the personalized experiences on cannabis consumption, and exclusive amenities and service they would be providing to their guests.

9. Limitations and future studies

This research has highlighted how cannabis tourists perceive Canada and their motivations for travel; however, there are a few limitations that should be noted for prospective studies. Primarily, the focus on tourists coming to Canada implies that these findings may not be generalized to other countries, such as the United States, Netherlands, or Thailand. It is therefore encouraged that future research undertakings consider contrasting various destinations, as well as capturing longitudinal data to compare data at multiple points in time. With that being said, the findings in this study (i.e., cannabis tourism trends emerge in Canada) are indicative of future opportunities for other destinations around the globe. Lessons learned from a Canadian context, especially in terms of the need for tourist information around cannabis, are insightful for other legal destinations who are looking to leverage cannabis as a tourism resource. More broadly, providing comprehensive information about cannabis at a destination challenges stigma and facilitates normalization. The legalized context influences the perception of cannabis as non-threatening (Dickinson & Jacques, 2021), which supports the creation of positive images for cannabis tourism as a distinct category of a global industry.

Secondly, caution may be taken when interpreting the results as about half of the participants have low incomes, which may have impacted the results. As revealed in Zuo and Lai (2020), the level of household income may have an influence on individual's intention to travel. Therefore, future study can examine the potential confounding effect from income.

Thirdly, as the initial purposes of this study was to investigate the pre-travel image of potential cannabis tourists, only participants that have not been to Canada were included. Future studies can explore and compare the difference by including tourists that have been to Canada before. In addition, the construct of perceived risk only considered three dimensions (i.e., social risk, performance risk and financial risk) while might neglect other types of risks such as physical risk and mental well-being. Future studies can explore on these dimensions.

Finally, while our research identifies correlations implying potential influences of recreational cannabis legalization on tourists' perceptions, potentially reshaping Canada's destination image, the study's cross-sectional nature imposes limitations. This design restricts us from definitively attributing causal relationships, observing shifts over time, or confirming specific changes in motivations, perceived risks, stereotypes, and attitudes towards cannabis tourism. To build upon our findings and address this limitation, we recommend that future research explore the impact of external factors, such as COVID-19, on cannabis-related travel behaviours. Additionally, an investigation into perception shifts among repeat visitors to Canada could provide richer insights (Cousijn, Kuhns, Larsen, & Kroon, 2021). Moreover, longitudinal studies tracking the same respondents before and after their visit to Canada could help elucidate changes in perceptions over time.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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