



Journal of Geography, Politics and Society

2021, 11(3), 1–13

<https://doi.org/10.26881/jpgs.2021.3.01>



TOURISM OF POLISH CANNABIS CONSUMERS

Andrzej Matczak (1), Przemysław A. Pawlicki (2)

(1) Institute of Urban Geography, Tourism Studies and Geoinformation, Faculty of Geographical Sciences, University of Lodz, Kopcińskiego 31, 90–142 Łódź, Poland, ORCID: 0000-0002-9509-5879

e-mail: andrzej.matczak@geo.uni.lodz.pl (corresponding author)

(2) Institute of Urban Geography, Tourism Studies and Geoinformation, Faculty of Geographical Sciences, University of Lodz, Kopcińskiego 31, 90–142 Łódź, Poland

e-mail: przemyslaw.adam.pawlicki@gmail.com

Citation

Matczak A., Pawlicki P.A., 2021, Tourism of Polish cannabis consumers, *Journal of Geography, Politics and Society*, 11(3), 1–13.

Abstract

The aim of this study is to characterize the tourism activity of Polish cannabis consumers in terms of (i) the level of their participation in tourism, (ii) parameters describing this participation, (iii) the effect of legal access to cannabis on choosing tourism destinations. The study is based on an anonymous online survey in which 886 voluntary respondents answered a series of questions about their tourist travels, their attitude to cannabis consumption, and their demographic, socio-economic and geographic metrics. Results of the survey were analyzed using several statistical indicators of variability, structure, correlation, and structure similarity. For the respondents declaring cannabis consumption, the level of their participation in tourism is close to the national level. Other parameters describing the domestic and foreign tourism of these respondents differ quite significantly from those reported for the general public of Poland. This indicates that the possibility of cannabis consumption significantly affects the nature and directions of travels undertaken by tourists interested in cannabis. Furthermore, there is a strong connection between the respondents' personal preferences and the nature of their tourism, especially the destinations of their foreign trips. The conclusions from this study mostly apply to current and recent cannabis consumers because the vast majority of respondents (90%) rank among such kinds of cannabis users.

Key words

tourism, cannabis, cannabis consumers, Poland.

Received: 20 August 2021

Accepted: 08 November 2021

Published: 29 November 2021

1. Introduction

Until recently, the production, distribution and use of cannabis¹ was criminalized and threatened with

imprisonment in almost all countries of the world. However, under growing pressure from their societies, many countries have commuted penalties for the possession and use of cannabis. Some of the countries have even allowed for the commercial sale and consumption of cannabis under controlled conditions. For example, cannabis can be legally consumed for therapeutic, but also recreational

¹ Throughout the whole study, the term 'cannabis' is used to describe all psychoactive products based on the Cannabis plant, e.g., marijuana and hashish.

purposes in Dutch 'coffee shops', in several states of the USA,² Canada and Uruguay. The legal status of cannabis production, distribution and use varies from country to country, which results in an increasing number of travels oriented towards cannabis consumption. The growing cannabis tourism tends to make a multi-sided impact on society, economy, politics, etc. in many countries and their regions. From a geographical perspective, cannabis tourism and the associated cultural transformations have only recently become the focus of in-depth research (Kang et al., 2016).

It is evident today that a number of tourist travels are associated with an opportunity for cannabis consumption. Such travels can be either domestic or outbound to a neighboring country (e.g., German tourists in the Netherlands, Polish tourists in the Czech Republic, US tourists in Mexico) or to a more distant country (e.g., UK tourist in the Spanish island of Ibiza) (Valdez, Sifaneck, 1997; Bellis et al., 2000; Briggs, Turner, 2012; EMCDDA, 2012; Cherpitel et al., 2015). The trip duration ranges from a weekend break to backpacking trips lasting up to several months.

In Poland, a relatively large group of citizens admits to consuming cannabis.³ According to a report prepared by the Public Opinion Research Center Foundation commissioned by the Polish Ministry of Health (Sierosławski et al., 2015), it can be estimated at around 1.5 million. Many of the users make tourist trips. Thus, the aim of the present study is to characterize the tourist activity of Polish cannabis consumers, and its determinants. First, the level of their participation in tourism is estimated. Next, this participation is quantified using several parameters (such as the trip date, the length of stay, traveling companions, etc.) Finally, the effect of demographic, socio-economic and geographic features of voivodships⁴ on the participation of Polish cannabis consumers in tourism is explored.

2. Literature review

The phenomenon of drug consumption during tourist travels first attracted interest of researchers in the

1970s. This phenomenon was initially ascribed to a specific type of tourists who were termed 'drifters' (Cohen, 1973). Such a viewpoint was supported by subsequent studies on the drifter subculture on the beaches of Goa (India) and Koh Pha Ngan (Thailand) (Westerhausen, 2002). Drug tourism was defined as "the phenomenon by which persons become attracted to a particular location because of the accessibility of licit or illicit drugs and related services" (Valdez, Sifaneck, 1997, p. 880). This definition resulted from the study of drug tourism on the USA-Mexico border. Later, the important role of cross-border mobility in drug consumption among the Mexican-American residents living on the USA-Mexico border was suggested (Cherpitel et al., 2015). Drug tourism was also formulated as "the phenomenon by which the tourist experience involves all of the awareness, consumption, and usage of drugs that are considered to be illegal in either the visited destination or the tourist's country of origin" (Uriely, Belhassen, 2005, p. 239). Motivations for the drug tourism of American and European tourists in the Amazonia region were thoroughly analyzed in a series of studies (DeRios, 1994; Winkelman, 2005; Tupper, 2008; Holman, 2011; Prayag et al., 2015; Kavenská & Simonová, 2015). One of the reasons for those travels was an opportunity to consume the ayahuasca brew, which is made of plants containing psychoactive substances. The ayahuasca brew was consumed by the tourists seeking profound experiences while they were participating in all-night religious ceremonies conducted by local shamans. In contrast to the ayahuasca tourists, some other types of drug tourists, exemplified by British tourists in Ibiza (Bellis et al., 2000; Briggs, Turner, 2012; van Havere et al., 2011) and American students on their spring break (Josiam et al., 1998), were mainly motivated by the need for entertainment and leisure. Nevertheless, the trips of drug tourists to the Netherlands were taken due to the liberalism of the Dutch towards drugs, the commercial availability of high-quality and relatively cheap drugs in the Netherlands, as well as access to local health care services in case of drug indisposition or drug addiction (van den Brink, 1996; Korf, 2002; Monshouwer et al., 2011; EMCDDA, 2012).

The aforementioned studies of drug tourism are limited to only several tourist destinations where (i) some drugs are legally and commercially available and (ii) some niche forms of tourism, such as backpacking, drifting, tramping, participation in music festivals, etc. are supported. The conclusions drawn from these studies apply, in principle, to specific groups of tourists. The research approach to drug tourism in these studies is mostly constructed around the concept of trips associated with addiction (the

² Despite the federal ban, several states (e.g., Colorado in 2012) legalized cannabis consumption for recreational purposes.

³ The purchase of cannabis for medical purposes was legalized in 2017. The first deliveries to pharmacies were made in 2019.

⁴ Voivodship is an administrative region of Poland that corresponds to a province in many other countries. There are 16 voivodships in Poland (Fig. 1).

so-called deviant entertainment), which is due to the negative social connotations of drug use. Thus, the phenomenon of drug tourism still seems to be rather far away from being fully characterized (Hoffmann, 2014; Pinheiro Dias Pereira, de Paula, 2016; Kang et al., 2016).

In the field of drug tourism, cannabis attracts increasing attention due to its prevalence over other drugs consumed worldwide (UNODC, 2019). The extant literature on cannabis tourism usually stresses its negative perception as a marginal subculture (Uriely, Belhassen, 2005). Such a perception seems not to provide an unbiased and in-depth picture of this kind of drug tourism. A recent study indicated that, in the light of cannabis legalization in several states of the USA, cannabis use can be perceived as a recreational activity for modern Western societies (Kang et al., 2016). Moreover, cannabis consumption is largely used as a pastime and to cope with the challenges and demands of living in modern Western societies (Liebregts et al., 2015; Osborne, Fogel, 2008). Therefore, the unilateral view on cannabis consumption as a deviant tourist behavior cannot be held any longer. Nowadays, people are beginning to accept cannabis as a tourist attraction that they can experience during their holidays. They do not construe cannabis as a marginalized tourist interest or a mere extension of their daily habit (Kang et al., 2016). Cannabis tourism is inevitably associated with the process of cultural changes in the modern world, especially in the West. This process affects people's attitude towards cannabis. Thus, the sociological aspect of cannabis is also present in the studies of cannabis tourism (Belhassen et al., 2007; Kang et al., 2016; Keul, Eisenhauer, 2019; Wen et al., 2018).

The legalization of recreational cannabis creates opportunities for the development of tourism and hospitality. A better understanding of this development requires in-depth studies on cannabis tourism, the supply and demand for it, its economic and social impact, the relation between cannabis tourists and the locals, and policies and regulations governing the cannabis tourism market. The last few years have indeed seen a number of studies in these fields. First, there were attempts to formulate the very definition of cannabis tourism (Motyka, 2016; Taylor, 2019). Next, the motivations for this kind of tourism (Osborne, Fogel, 2008; Wen et al., 2018) and the segmentation of cannabis tourists were identified and analyzed (Wen et al., 2020). Issues connected with governing the liberalization of cannabis for recreational purposes in Colorado were specified in a series of studies (Kang et al., 2016; Kang, Lee, 2018; Keul, Eisenhauer, 2019). The effect of cannabis tourism on the overall tourism income was estimated for

the Amsterdam metropolitan area⁵ and the US state of Colorado (Kang et al., 2016; van Loon, Rouwendal, 2017). The positive economic effect of cannabis tourism in Colorado resulted in the growing support of the locals for this kind of tourism (Kang, Lee, 2018; Kang, 2019). Finally, such cannabis-related events as cannabis festivals and their attendees were characterized from a tourism perspective (Skliamis, Korf, 2019; Kang et al., 2019).

It was reported in previous studies that the category of drug tourists mostly includes people at the age between 15 and 34 who study and/or work (Uriely, Belhassen, 2005; Grobe, Lüer, 2011; EMCD-DA, 2012; Motyka, 2016; Matczak, Pawlicki, 2016). Males are twice as likely as females to become drug tourists. In principle, drug tourists are usually well-educated and they can afford to travel. They are not addicted to drugs, but they have previous experiences with their consumption. They are usually well integrated into the society, fulfilling basic social roles and life tasks. For them, drug consumption during tourist trips is usually part of their tourist experience (Grobe, Lüer, 2011; Motyka, 2016). It was also shown that the youth who visited clubs, music festivals and dance events were more experienced in drug use than other young people (Measham et al., 2001; van Haverre et al., 2011). For example, Ibiza, which is famous for its nightlife and electronic music events, is recognized as a place where drug use is accompanied by extensive clubbing and partying (van Haverre et al., 2011; Briggs, Turner, 2012).

3. Data and methods

Data were obtained from an anonymous online survey conducted in March 2016. Answers to 14 questions were collected for 886 respondents who declared cannabis consumption (aged 15–64) and lived in Poland at that time. The respondents answered nine questions about their attitude to cannabis consumption and the characteristics of their tourist trips. There were also five questions to provide the demographic, socio-economic and geographic metrics of the respondents (gender, age, education, source of income, place of residence).

There are two methodological issues associated with the survey. The first is the date of the survey. Year 2016 was one of the last years of intense discussions in the mass media, developing social

⁵ The expenses of tourists visiting Amsterdam mostly for cannabis consumption were higher than those of all other tourists. This suggests an unexpectedly large contribution of cannabis to the municipal economy.

movements to legalize cannabis consumption, and the liberalization of cannabis use despite the stringent law on drugs in Poland. Therefore, there was much interest in the survey among cannabis users at that time. Thus, the date of the survey could be regarded as an advantage. The second issue arises from the fact that the online survey form was spontaneously filled in by a large group of voluntary respondents who came across a hyperlink to the survey while browsing the Internet (the hyperlinks were placed in social networks, websites and discussion groups). The subject of the survey was interesting to the respondents who were convinced that the survey concerned them directly, and it could have an influence on public opinion. Because of the voluntary participation in the survey, its results should be treated with some caution.

Results of the survey are analyzed by means of such essential statistical indicators as the coefficient of variation (V), Spearman's rank correlation coefficient (r_s) and the concordance coefficient (r_k) (Runge, 2006, p. 503). The V coefficient is expressed in percentage points using the following formula:

$$V = \frac{S}{\bar{X}} \times 100$$

where S is the standard deviation and \bar{X} is the arithmetic mean. The value of V indicates that the variability of a parameter is small ($V < 20\%$), average ($20\% < V < 40\%$), high ($40\% < V < 100\%$) or very high ($V > 100\%$). The r_s and r_k coefficients are calculated according to the formulas:

$$r_s = 1 - \frac{6 \sum_{i=1}^n d_i^2}{n^3 - n}$$

$$r_k = \frac{12 \sum_{j=1}^N R_j^2 - 3m^2 \times n(n+1)^2}{m^2 \times n(n^2 - 1)}$$

where d_i denotes the rank difference, n is the number of elements in a series, R is the sum of ranks, and m is the number of features. The statistical significance of r_k is verified by the χ^2 test ($\chi^2 = m(n-1)r_k$). The r_k coefficient is a normalized correlation measure ($0 \leq r_k \leq 1$). The closer the r_k coefficient is to unity, the more consistent ordering a series of features shows.

The similarity of voivodeships with respect to the tourist motives and travel destinations of respondents is analyzed by means of the structural difference index (W_s) (Rogacki, 2009, p. 214):

$$W_s = \frac{1}{200} \sum_{i=1}^n |a_i - b_i|$$

where a_i and b_i denote the shares of voivodeships a and b , respectively, in a given group of motives and travel destinations. The values of W_s fall in the range from 0 to 1, and the former signals an identical structure. The higher the W_s value is, the greater the difference is between two voivodeships in their structure. The model of arithmetic means (M_{sr}) is also used to distinguish the main elements determining individual structural groups (Runge, 2006, p. 232).

$$M_{sr} = \frac{\bar{X}_{gj}}{\bar{X}_{oj}}$$

where \bar{X}_{gj} stands for the arithmetic mean of the j -th feature in a group, \bar{X}_{oj} is the arithmetic mean of the j -th feature in the entire matrix, $j = 1, \dots, m$.

4. Results

The demographic, socio-economic and geographic characteristics of respondents participating in the survey were presented in our previous paper (Matczak, Pawlicki, 2019). Below, the main findings of that paper are summarized to provide the background to the present study.

The vast majority of respondents belong to the Y generation, aged 15–34 at the time of the survey. Respondents born in the 1970s (the so-called X generation) constitute merely a share of 4.4%. Within the Y generation, the respondents at the age of 15–29 dominate, amounting to 88.5% of all respondents. The group of male respondents is much more numerous (72.6%) than that of women. The age structure of respondents shows some differences between both genders. The shares of younger age, 20–24 in particular, mainly contribute to the group of all female respondents. There is a significant decrease in the shares of older women. For the male respondents, the share of age under 25 is clearly smaller than the corresponding share of women. For this reason, the shares of older male respondents decrease much slowly. Respondents are essentially characterized by a high level of education. The highest share is represented by those having secondary or higher education. For the male respondents, the share of secondary education is greater than that of higher education. In contrast, there are more female respondents having higher education than those with secondary education. Due to their young age, many respondents may continue education and increase the level of their education in the near future. The young age of many respondents also indicates a significant level of family participation in their livelihood. Nearly half of male respondents declare their own source of income, while only one third

of women do so. Over one third of all respondents admit that they depend exclusive on family for their livelihood. On the other hand, similar shares of male and female respondents declare a combination of family support and their own source of income. Such respondents most often work and/or study.

More than half of the respondents (62.7%) are classified as the current cannabis consumers, that is, they consumed cannabis during the 30 days preceding the survey (EMCDDA, 2008). 28.6% of respondents declare regular consumption (practically every day) and 34.1% claim frequent use. 27.2% of respondents are identified as recent cannabis consumers, that is, they used cannabis during the 12 months preceding the survey (EMCDDA, 2008). Occasional experimenting with cannabis in a lifetime is indicated by 10.1% of respondents (the so-called ever users). One third of the ever users gave up cannabis consumption.

The share of male respondents is triple as many as the share of female respondents. This applies to both current and recent cannabis consumers. By contrast, there are almost identical shares of male and female ever users. The respondents' age is another factor differentiating the frequency of cannabis consumption. The share of current consumption decreases with the respondents' age. A similar trend can be found for recent users. Interestingly, the share of cannabis experimenters increases with their age. An increase in the level of education is associated with the diminishing share of current consumption and with the growing shares of recent use and experimentation. Current users more often declare their own source of income than their partial or total dependence on family support. By contrast, recent consumers and experimenters often depend on family for their livelihood.

In the survey there are respondents from each voivodeship of Poland. On average, 53.1 respondents can be assigned to each voivodeship, with a standard deviation of 38.2 and a high value of the variation coefficient (71.9%). Small numbers of respondents come from three less populated voivodeships (Świętokrzyskie, Opolskie, Lubuskie). Two thirds of respondents live in the voivodeships with over 0.5 million inhabitants and large cities (Dolnośląskie, Łódzkie, Małopolskie, Mazowieckie, Wielkopolskie) or being highly urbanized (Śląskie, Pomorskie). Large cities (Warsaw, Kraków, Łódź, Wrocław and Poznań) are the place of residence for 36.5% of respondents. Each of these cities has over 0.5 million inhabitants and well-developed services offering the best prospects for work and education, and they provide various kinds of entertainment, including nightlife and

stimulants. Very few respondents live in small towns or rural areas (3.3%).

4.1. Participation in tourism

The results of the survey show that the level of respondents' participation in tourism is slightly higher than that of the Polish society (56.4 vs. 54.0%) (GUS, 2016). The former is clearly differentiated between the voivodeships of Poland ($V = 75.2\%$). The respondents living in the eastern voivodeships, which are less economically developed, declare a higher level of participation in tourism. It appears that the lower level of social acceptance of cannabis consumption in these regions results in the necessity for tourist travels to consume cannabis. Foreign travels are more popular than domestic trips; the latter are taken by less than one third of the respondents. This is much different from the trips of the Polish in general; ca. 80% of the Polish spend holidays in Poland (GUS, 2016). One third of the respondents declaring domestic trips simultaneously participate in foreign travels. The average frequency of traveling is high (3.6 trips per respondent) and it varies among voivodeships ($V = 76.7\%$). For the respondents residing in the southern and northern voivodeships, the frequency of their traveling is above the average.

4.2. Characteristics of tourism

Table 1 presents the complete characteristics of respondents' tourism. From this table it can be deduced that the respondents' domestic trips are essentially short-term. For 56.2% of the respondents, their domestic trips take no longer than four days. Foreign travels are longer and 60.4% of respondents spend at least five days on such travels. Respondents most often travel with friends, especially when going abroad (61.2%). Respondents on domestic trips are accompanied by family members (14.9%) or a partner (13.4%). The share of foreign travels with family is only of 4.4% and that with a partner amounts to 26.4%. 7.5% of the respondents participate in domestic and foreign group travels. 3% and 13.2% of the respondents travel on their own within the country and abroad, respectively. Cars (55.4%) and railway (35.4%) are two most popular means of transport for domestic trips. Respondents travel abroad by car (39.1%), plane (28.9%) or bus (25%). Rail transport and unconventional forms of transport, such as hitchhiking or by bicycle, are marginal. Respondents on their tourist trips stay at relatively cheap accommodation facilities. Respondents on domestic trips use private accommodation (22.9%), tents and camping houses (31.5%), summer houses (29.9%) and hotels (15.7%). Respondents on foreign trips mainly use hotels (38.5%) or other hotel

Tab. 1. The characteristics of tourist trips made by the survey respondents. For comparison, tourist trips made by the Polish society in 2015 are also characterized. All values are expressed in percentage points except for the values of expenses in PLN

Trip characteristics	Trips of respondents ¹		Trips of the Polish ²	
	Domestic	Foreign	Domestic	Foreign
Date of trip				
1 st quarter of year	3.0	13.1	20.4	18.0
2 nd quarter of year	9.0	13.1	20.3	23.2
3 rd quarter of year	71.6	53.1	40.1	38.3
4 th quarter of year	16.4	20.7	19.0	20.5
Length of stay				
2–4 days	51.4	34.2	60.8	19.2
5 days and more	48.6	65.8	39.2	80.8
Traveling companion				
Friends	61.2	48.3	ND ³	ND
Family	14.9	4.4	ND	ND
Partner	13.4	26.4	ND	ND
Group	7.5	7.7	ND	ND
None	3.0	13.2	ND	ND
Means of transport				
Car	55.4	39.1	74.0*	32.6*
Coach/bus	9.2	25.0	14.5*	17.4*
Train	35.4	3.1	11.0*	0.7*
Plane	-	28.9	.*	48.3*
Other	-	3.9	0.5*	1.0*
Type of accommodation facility				
all hotel facilities	15.7	45.7	22.2	50.1
only hotels	5.7	38.5	-	-
private accommodation/guest room	22.9	7.2	9.2	7.7
hostel	-	6.5	2.4	1.8
campsite, camping site, bungalow	31.5	18.8	3.6	2.5
summer house, etc.	29.9	21.8	62.6	37.9
Average expenses per person				
domestic short-term trip	388.8	-	264.0	-
domestic long-term trip	1017.0	-	823.0	-
foreign one-day trip	-	257.5	-	344.0
foreign short-term trip	-	897.9	-	1151.0
foreign long-term trip	-	3281.1	-	2347.0
Destination				
in Poland				
within the voivodeship of residence	36.4	-	ND	-
neighboring voivodeships	30.0	-	ND	-
more distant voivodeships	33.6	-	ND	-
abroad				
Czech Republic	-	24.2	-	5.4
Netherlands	-	46.5	-	1.6
other European countries	-	24.8	-	78.5
non-European countries	-	4.5	-	14.5

¹ Based on own survey data.

² According to (GUS, 2014; GUS, 2016).

³ The abbreviation 'ND' stands for no data.

* Means of transport used in 2013 for domestic trips taking at least five days or foreign trips with at least one night's accommodation.

Source: own survey data.

facilities (13.7%), tents and camping houses (18.8%) and accommodation with family and friends (21.8%). Respondents spend relatively little money on tourist travels. Nearly half of the respondents spend up to €100 on domestic trips. The rest of the respondents spend more than €100 but less than €750. Greater expenses are spent on foreign trips. Almost 75% of respondents spend up to €750 on such trips.

4.3. Cannabis consumption as a travel motive

The respondents' tourist trips are partially conditioned by the willingness to consume cannabis. Nearly one third of respondents indicate that cannabis consumption is a primary motive for traveling. However, 55.1% of the respondents claim that cannabis consumption on a trip is an additional factor widening their tourism experience. Cannabis consumption is a minor motive for traveling for 12.8% of the respondents.

The importance of cannabis consumption as a motive for traveling varies among the voivodeships of Poland. The W_s index allows dividing the voivodeships into five structural groups according to the importance of cannabis consumption as a travel motive (groups I–V in Table 2 and Figure 1). The travel motives determining these groups are identified by means of the arithmetic means model. Cannabis consumption is the primary travel motive for the respondents residing in the following voivodeships: Podkarpackie, Warmińsko-Mazurskie and Świętokrzyskie. Respondents coming from the Śląskie, Opolskie and Pomorskie voivodeships reveal two mutually exclusive motives; many respondents make trips mainly to consume cannabis and many

others consider cannabis consumption as a minor motive for traveling. Cannabis consumption is an additional motive (that is, equally important as other motives) for the respondents living in the Lubelskie, Lubuskie, Podlaskie, and Wielkopolskie voivodeships. The respondents of the Kujawsko-Pomorskie, Zachodniopomorskie, Dolnośląskie, Łódzkie voivodeships indicate cannabis consumption as a minor motive for their domestic tourist trips.

There is a strong similarity between the voivodeships of the respondents' residence if the frequency of cannabis consumption is compared with the motives for traveling, especially for foreign trips. The voivodeships of the current cannabis users' residence (that is, those consuming cannabis during the 30 days preceding the survey (EMCDDA, 2008)) closely correspond to the voivodeships in which cannabis is regarded as the additional ($r_s = 0.96$) or primary ($r_s = 0.94$) motive for a tourist trip. Similarly, the voivodeships of the residence of recent cannabis users (that is, those consuming cannabis during the 12 months preceding the survey (EMCDDA, 2008)) correlate with the voivodeships in which the respondents consider cannabis as the additional motive for a tourist trip ($r_s = 0.94$). Respondents experimenting with cannabis usually share the same voivodeships with the respondents declaring cannabis as the additional motive for a tourist trip ($r_s = 0.875$).

Tab. 2. The structure of the importance of cannabis consumption as a travel motive.

Group	Voivodeships	M_{sr} ¹
I	Kujawsko-Pomorskie, Zachodniopomorskie, Dolnośląskie, Łódzkie	1.59 – minor 0.999 – additional 0.76 – primary
II	Podkarpackie, Warmińsko-Mazurskie, Świętokrzyskie	1.69 – primary 0.72 – additional 0.54 – minor
III	Mazowieckie, Małopolskie	1.16 – primary 1.019 – additional 0.516 – minor
IV	Śląskie, Opolskie, Pomorskie	1.175 – primary 1.039 – minor 0.889 – additional
V	Lubelskie, Lubuskie, Podlaskie, Wielkopolskie	1.303 – additional 0.741 – primary 0.346 – minor

¹ The scale of motive importance ranges from 'primary' to 'additional' and to 'minor'.

Source: own survey data.



Fig 1. Five groups of voivodeships distinguished using the W_s index for the structure of the importance of cannabis consumption as a travel motive

Source: data taken from Table 2.

4.4. Tourist destinations

4.4.1. Domestic tourist trips

Results of the survey essentially show similar shares of respondents traveling within the voivodeship of residence, to the neighboring voivodeships and to more distant voivodeships. Frequent short-term trips to destinations with good environmental conditions for recreation (lakes, beaches, etc.) and in the vicinity of the place of residence are favored. Trips to more distant voivodeships are less frequent, but the stays take longer and then recreation is combined with sightseeing and various forms of entertainment.

As shown in Table 3, the respondents living in the Lubuskie, Zachodniopomorskie, Podlaskie and

Kujawsko-Pomorskie voivodeships mainly travel within the voivodeship of their residence (termed by 'intra' in Table 3). Respondents from the Opolskie, Podkarpackie and Warmińsko-Mazurskie voivodeships mostly travel to the neighboring voivodeships, while those from the Łódzkie and Dolnośląskie voivodeships mainly go on trips to more distant voivodeships. Respondents from the remaining seven voivodeships (group II in Table 3) willingly travel both within the voivodeship of their residence and to more distant voivodeships.

The voivodeships exhibiting high tourist attractiveness tend to hold their residents for recreation, with the exception of respondents living in the Dolnośląskie voivodeship. On the other hand,

Tab. 3. The structure of domestic tourist destinations

Group	Voivodeships	M_{sr}^1
I	Łódzkie, Dolnośląskie	1.802 – distant 0.673 – neighboring 0.540 – intra
II	Mazowieckie, Lubelskie, Wielkopolskie, Śląskie, Małopolskie, Świętokrzyskie, Pomorskie	1.061 – intra 1.048 – distant 0.870 – neighboring
III	Lubuskie, Kujawsko-Pomorskie, Podlaskie, Zachodniopomorskie	2.534 – intra 0.210 – neighboring 0.000 – distant
IV	Opolskie, Podkarpackie, Warmińsko-Mazurskie	1.875 – neighboring 0.843 – intra 0.393 – distant

¹ Domestic tourist destinations are termed as 'intra', 'neighboring' and 'distant', depending on the distance between the voivodeship of domicile and the voivodeship of a tourist destination. 'Intra' means tourist trips within the voivodeship of residence.

Source: own survey data.

the respondents coming from highly urbanized voivodeships and inhabiting large cities, prefer traveling to neighboring and more distant voivodeships. The respondents who spend holidays in Poland take cannabis from their place of residence and consume it on a trip, regarding it as a form of leisure activities and integration with friends.

4.4.2. Foreign tourist trips

The choice of individual foreign tourist destinations by the respondents is related to the possibility of cannabis consumption in the destinations. The Netherlands is the most often visited country (46.5% of the respondents traveling abroad), and the Czech Republic is the second most popular destination (24.2%). Other European destinations account for 24.8% of foreign tourist trips. These destinations include, among others, Spain, Germany and Great Britain (ca. 4% each). Few trips are reported to non-European destinations (e.g., Egypt, India, the USA, Mexico, Thailand, Vietnam, Uruguay). Cannabis is easily accessible in these countries.

The respondents living in individual voivodeships show quite different preferences for the destination of their foreign tourist trip. Five structural groups (I–V in Table 4) are distinguished by means of the W_s index. Within each group, the dominant tourist destinations are identified using the model of arithmetic means (M_{sr} in Table 4). The respondents of nearly two thirds of voivodeships favor traveling to the Netherlands. The Czech Republic is a popular destination for the respondents residing in the border voivodeships. Only the respondents of the Lubuskie and Łódzkie voivodeships visit the Czech Republic more often than the Netherlands. Respondents

living in the northern voivodeships of Poland prefer other European destinations to the Netherlands and the Czech Republic. The residents of only a few most urbanized voivodeships (Łódzkie, Małopolskie, Mazowieckie, Śląskie and Wielkopolskie) declare trips outside Europe.

The main reason for visiting the aforementioned destinations is the possibility of legally purchasing cannabis (advertised as feeling the taste of freedom) and trying many varieties of cannabis on a tourist or business trip. Amsterdam and Prague are sometimes visited in transit, e.g., while traveling to the Alps.

4.5. Effect of regional differentiation of demographic, socio-economic and geographic parameters on tourist trips

The effect of demographic, socio-economic and geographic parameters on tourist trips is estimated by comparing the spatial distribution of the voivodeship of respondents' residence with such parameters as the distribution of city inhabitants aged 16–44, the number of inhabitants of large cities (population larger than 100,000), the level of education (only secondary and higher), and the size of the gross domestic product. The r_s coefficient calculated for all tourist trips, domestic trips and foreign trips is in the ranges of 0.88–0.94, 0.73–0.93 and 0.82–0.91, respectively. The r_k coefficient adopts high values: 0.95 for all tourist trips ($\chi^2 = 85.29$), 0.93 for domestic trips ($\chi^2 = 83.79$) and 0.94 for foreign trips ($\chi^2 = 84.15$). All the three calculated χ^2 values are greater than the expected value of $\chi^2 = 24.996$, and therefore, they suggest a significant interrelation ($\alpha = 0.05$ is taken for the χ^2 test). The spatial distribution of the voivodeship of the respondents' residence is

Tab. 4. The structure of foreign tourist destinations

Group	Voivodeships	M_{sr}^1
I	Dolnośląskie, Opolskie, Podlaskie	1.892 – The Czech Republic 1.162 – The Netherlands 0.168 – other European countries 0.000 – non-European countries
II	Łódzkie, Lubuskie	1.959 – The Czech Republic 1.058 – non-European countries 0.728 – The Netherlands 0.628 – other European countries
III	Lubelskie, Małopolskie, Śląskie	1.103 – The Netherlands 1.000 – The Czech Republic 0.953 – non-European countries 0.842 – other European countries
IV	Kujawsko-Pomorskie, Pomorskie, Warmińsko-Mazurskie, Mazowieckie, Świętokrzyskie	1.780 – other European countries 0.767 – The Czech Republic 0.727 – The Netherlands 0.326 – non-European countries
V	Wielkopolskie, Podkarpackie, Zachodniopomorskie	1.532 – The Netherlands 1.000 – other European countries 0.077 – The Czech Republic 0.077 – non-European countries

¹ Foreign tourist destinations are termed according to the country of a tourist destination.

Source: own survey data.

strongly conditioned by the spatial distribution of young, well-educated people living in large cities and in rich, well-developed regions.

The effect of parameters varies among the destinations of foreign tourist trips. In the case of the Netherlands, the r_s coefficient falls in a range of 0.8–0.9 and the r_k coefficient is of 0.929 ($\chi^2 = 83.61$). A similar range of r_s is obtained for the remaining destinations and the r_k coefficient amounts to 0.945 ($\chi^2 = 85.05$). For tourist trips to the Czech Republic, the spatial distributions of parameters are characterized by a much lower degree of similarity. Then, the r_s coefficients are at an average level of 0.5–0.53 and $r_k = 0.823$ ($\chi^2 = 74.07$). This indicates that the demographic, socio-economic and geographic structure of respondents traveling to the Czech Republic is somewhat different from that of respondents visiting the Netherlands. Respondents residing in the voivodeships bordering the Czech Republic and declaring cannabis consumption on a tourist trip more often choose the Czech Republic to be the destination of their trip. The r_s coefficient between the distances of the voivodeship of respondents' residence from the border crossing in Cieszyn adopts a negative value of -0.6.

The place of the respondents' residence poorly corresponds to the place of residence of the Polish declaring drug consumption in general (Czapiński, Panek, 2015). The r_s coefficient between the two

spatial distributions is equal to 0.238, 0.178 and 0.397 for all tourist trips, domestic trips and foreign trips, respectively. This suggests that cannabis consumers and users of other drugs are different in their demographic, socio-economic and geographic nature.

The respondents declaring cannabis consumption on a domestic tourist trip usually prefer the region in which they currently live. It seems that the distance to a vacation spot and the length of stay are the most important, hence the low value $r_s = 0.282$ between the place of respondents' residence and the tourist attractiveness of this place. On the other hand, relatively high r_s values can be observed between the destination region and its tourist attractiveness (0.679) and the volume of tourist traffic (0.703). This indicates that the respondents take the tourist attractiveness of a destination into account while planning a tourist trip.

5. Discussion and conclusions

The present study proves that online surveys, despite their inherent limitations, are able to provide the demographic (gender, age), socio-economic (level of education, source of livelihood), geographic (place of residence) and cannabis consumption characteristics of respondents making tourist trips.

On the one hand, the analysis of motives for the respondents' participation in tourism indicates that cannabis consumption is an additional tourist attraction for the majority of the respondents. On the other hand, one third of the respondents consider cannabis consumption as the primary motive for their tourist trips. This shows that, to a large extent, the respondents equate their travels with the consumption of cannabis, which is in line with results of other studies (Motyka, 2016; EMCDDA, 2012; Grobe, Lúer, 2011). The respondents' tourist activity and travel motives are conditioned by the fact that many respondents are current and recent cannabis consumers. The frequency of cannabis consumption declared by our respondents differs from the findings reported in the literature, according to which 16.3% of the Polish aged 15–64 admit to using cannabis at least once in a lifetime, 4.6% in the last year and 2.1% in the last month (Sierosławski et al., 2015, p. 219). The present survey shows significant shares of respondents consuming cannabis during the last month (62.7%) and year (27.2%) preceding the survey. It means that mostly current and recent cannabis consumers were interested in participating in the survey. Thus, the results of the survey mainly concern such groups of cannabis users.

The tourism activity of respondents declaring current and recent cannabis consumption has a different nature from the tourism activity of the Polish society in general. While the level of participation in tourism does not differentiate our respondents from the Polish society in general, other parameters characterizing their tourist activity show evident differences. For foreign tourist trips, the respondents prefer those countries where cannabis is easily accessible and its consumption is legal or at least tolerated. This shows a strong influence of the respondents' personal preferences on the nature of their travels.

The statistical analysis of the survey data (r_s and r_k) confirms the previous finding that cannabis tourists come from a group of young people with secondary and higher education, living in large cities and rich regions (Motyka, 2016; EMCDDA, 2012; Grobe, Lúer, 2011). Therefore, a cannabis tourist is a person with a low/medium level of addiction and simultaneously rich enough to afford a tourist trip.

Participation in cannabis tourism, previously treated as a deviant or marginal behavior, results from in-depth cultural changes in the modern world (Wen et al., 2018; Ying et al., 2019). Western societies rapidly change and they start taking positive attitude towards wide cannabis consumption for relaxation (Wen et al., 2018). This also applies to the Polish society. The consent to cannabis consumption is

largely conditioned by a regional cultural context. This is illustrated by the geographic differentiation of the socio-economic environment in which Polish cannabis consumers undertaking tourist trips exist.

The present study seems to be another proof that cannabis tourism becomes a field of growing interest among tourism researchers. The worldwide trend to legalize the production, distribution and consumption of cannabis for recreational purposes results in changes in the tourism and hospitality of many regions. Geography can contribute important knowledge to monitoring these changes.

References

- Belhassen Y., Santos C.A., Uriely N., 2007, Cannabis usage in tourism: a sociological perspective, *Leisure Studies*, 26(3), 303–319. doi: 10.1080/02614360600834958
- Bellis M.A., Hale G., Bennett A., Chaudry M., Kilfoyle M., 2000, Ibiza uncovered: changes in substance use and sexual behaviour amongst young people visiting an international night-life resort, *International Journal of Drug Policy*, 11(3), 235–244. doi: 10.1016/S0955-3959(00)00053-0
- Briggs D., Turner T., 2012, Understanding British youth behaviors on holiday in Ibiza, *International Journal of Culture, Tourism and Hospitality Research*, 6(1), 81–90. doi: 10.1108/17506181211206270
- Cherpitel C.J., Ye Y., Zemore S.E., Bond J., Borges G., 2015, The effect of cross-border mobility on alcohol and drug use among Mexican-American residents living at the U.S.–Mexico border, *Addictive Behaviors*, 50, 28–33. doi: 10.1016/j.addbeh.2015.06.008
- Cohen E., 1973, Nomads from affluence: notes on the phenomenon of drifter-tourism, *International Journal of Comparative Sociology*, 14(1–2), 89–103. doi: 10.1177/002071527301400107
- Czapiński J., Panek T., 2015, Diagnoza społeczna 2015. Warunki i jakość życia Polaków (Eng. Social diagnosis 2015. The objective and subjective quality of life in Poland), *Contemporary Economics*, 9(4), 1–545.
- DeRios M.D., 1994, Drug tourism in the Amazon, *Anthropology of Consciousness*, 5(1), 16–19. doi: 10.1525/ac.1994.5.1.16
- EMCDDA, 2008, *A cannabis reader: global issues and local experiences*, European Monitoring Centre for Drugs and Drug Addiction, Lisbon. doi: 10.2810/13807
- EMCDDA, 2012, *Travel and drug use in Europe: a short review*, European Monitoring Centre for Drugs and Drug Addiction, Lisbon.
- Grobe A., Lúer J., 2011, Drug tourism, [in:] A. Papathanassis (ed.), *The long tail of tourism: holiday niches and their impact on mainstream tourism*, Gabler Verlag, Wiesbaden, 137–147.
- GUS, 2014. *Turystyka i wypoczynek w gospodarstwach domowych w 2013 roku* (Eng. Tourism and leisure in households in 2013), Central Statistical Office, Statistical Office in Rzeszów, Rzeszów.

- GUS, 2016, *Turystyka w 2015 r.* (Eng. Tourism in 2015), Central Statistical Office, Statistical Office in Rzeszów, Rzeszów.
- Hoffmann B., 2014, Drug consumption tourism as a social phenomenon, *Trakia Journal of Sciences*, 12(4), 455–460. doi: 10.15547/tjs.2014.04.017
- Holman C., 2011, Surfing for a shaman: analyzing an Ayahuasca Website, *Annals of Tourism Research*, 38(1), 90–109. doi: 10.1016/j.annals.2010.05.005
- Josiam B.M., Hobson J.C.P., Dietrich U.C., Smeaton G., 1998, An analysis of the sexual, alcohol and drug related behavioural patterns of students on spring break, *Tourism Management*, 19(6), 501–513. doi: 10.1016/S0261-5177(98)00052-1
- Kang S., Miller J., Lee J., 2019, The cannabis festival: quality, satisfaction, and intention to return, *International Journal of Event and Festival Management*, 10(3), 267–283. doi: 10.1108/IJEFM-04-2019-0029
- Kang S.K., 2019, Place attachment, image, and support for marijuana tourism in Colorado, *SAGE Open*, 9(2), article number 2158244019852482. doi: 10.1177/2158244019852482
- Kang S.K., Lee J., 2018, Support of marijuana tourism in Colorado: a residents' perspective using social exchange theory, *Journal of Destination Marketing & Management*, 9, 310–319. doi: 10.1016/j.jdmm.2018.03.003
- Kang S.K., O'Leary J., Miller J., 2016, From forbidden fruit to the goose that lays golden eggs: marijuana tourism in Colorado, *SAGE Open*, 6(4), article number 2158244016679213. doi: 10.1177/2158244016679213
- Kavenská V., Simonová H., 2015, Ayahuasca tourism: participants in shamanic rituals and their personality styles, motivation, benefits and risks, *Journal of Psychoactive Drugs*, 47(5), 351–359. doi: 10.1080/02791072.2015.1094590
- Keul A., Eisenhauer B., 2019, Making the high country: cannabis tourism in Colorado USA, *Annals of Leisure Research*, 22(2), 140–160. doi: 10.1080/11745398.2018.1435291
- Korf D.J., 2002, Dutch coffee shops and trends in cannabis use, *Addictive Behaviors*, 27(6), 851–866. doi: 10.1016/S0306-4603(02)00291-5
- Liebrechts N., van der Pol P., van Laar M., de Graaf R., van den Brink W., Korf D.J., 2015, The role of leisure and delinquency in frequent cannabis use and dependence trajectories among young adults, *International Journal of Drug Policy*, 26(2), 143–152. doi: 10.1016/j.drugpo.2014.07.014
- Matczak A., Pawlicki P.A., 2016, Cannabis indica as a motivation for foreign travel by Polish citizens, *Tourism*, 26(2), 49–56. doi: 10.1515/tour-2016-0013
- Matczak A., Pawlicki P.A., 2019, Cannabis consumers in Poland, *Journal of Geography, Politics and Society*, 9(2), 32–43. doi: 10.26881/jpgs.2019.2.04
- Measham F., Aldridge J., Parker H., 2001, *Dancing on drugs: risk, health, and hedonism in the British club scene*, Free Association Books, London.
- Monshouwer K., van Laar M., Vollebergh W.A., 2011, Buying cannabis in 'coffee shops', *Drug and Alcohol Review*, 30(2), 148–156. doi: 10.1111/j.1465-3362.2010.00268.x
- Motyka M., 2016, Turystyka narkotykowa (Eng. Drug tourism), *Hygeia Public Health*, 51(1), 31–38.
- Osborne G.B., Fogel C., 2008, Understanding the motivations for recreational marijuana use among adult Canadians, *Substance Use and Misuse*, 43(3–4), 539–572. doi: 10.1080/10826080701884911
- Pinheiro Dias Pereira T.F., de Paula L.B., 2016, Drug tourism: general overview, case studies and new perspectives in the contemporary world, *European Journal of Tourism, Hospitality and Recreation*, 7(3), 188–202. doi: 10.1515/ejthr-2016-0021
- Prayag G., Mura P., Hall M., Fontaine J., 2015, Drug or spirituality seekers? Consuming ayahuasca, *Annals of Tourism Research*, 52, 175–177. doi: 10.1016/j.annals.2015.03.008
- Rogacki H., 2009, Dynamika i przekształcenia strukturalne turystycznej bazy noclegowej w Polsce w ujęciu przestrzennym (Eng. Dynamics and structural transformation of the tourist accommodation base in Poland: a regional approach), *Folia Turistica*, 21, 203–220.
- Runge J., 2006, *Metody badań w geografii społeczno-ekonomicznej – elementy metodologii, wybrane narzędzia badawcze* (Eng. Research methods in socio-economic geography – elements of methodology, selected research tools), Wydawnictwo Uniwersytetu Śląskiego, Katowice.
- Sierosławski J., Malczewski A., Misiurek A., Strzelecka A., Jędruszek Ł., Leszczyńska M., 2015, Substancje psychoaktywne – postawy i zachowania. Raport z ogólnopolskich badań zrealizowanych w 2014 r. (Eng. Psychoactive substances - attitudes and behavior. Report on national surveys carried out in 2014), [in:] *Estimating the prevalence of selected addictions and the behavioral analysis of the correlation between the occurrence of behavioral addictions and the use of psychoactive substances*, CSO Foundation, Warszawa, 195–273.
- Skliamis K., Korf D.J., 2019, Cannabis festivals and their attendees in four European cities with different national cannabis policies, *International Journal of Event and Festival Management*, 10(2), 138–154. doi: 10.1108/IJEFM-08-2018-0049
- Taylor L.L., 2019, Defining marijuana tourism, *Journal of Hospitality & Tourism Research*, 43(3), 438–446. doi: 10.1177/1096348018804610
- Tupper K.W., 2008, The globalization of ayahuasca: harm reduction or benefit maximization? *International Journal of Drug Policy*, 19(4), 297–303. doi: 10.1016/j.drugpo.2006.11.001
- UNODC, 2019, *World Drug Report 2019*, United Nations Office on Drugs and Crime, Vienna.
- Urieli N., Belhassen Y., 2005, Drugs and tourists' experiences. *Journal of Travel Research*, 43(3), 238–246. doi: 10.1177/0047287504272024
- Valdez A., Sifanek S.J., 1997, Drug tourists and drug policy on the U.S.-Mexican border: an ethnographic investigation of the acquisition of prescription drugs, *Journal of Drug Issues*, 27(4), 879–898. doi: 10.1177/002204269702700413
- van den Brink W., 1996, Heroin in Amsterdam, *Jellinek Quarterly*, 3(4), 6–7.
- van Havere T., Vanderplasschen W., Lammertyn J., Broekaert E., Bellis M., 2011, Drug use and nightlife: more than just dance music, *Substance Abuse Treatment, Prevention, and Policy*, 6, article number 18. doi: 10.1186/1747-597X-6-18
- van Loon R., Rouwendal J., 2017, Travel purpose and expenditure patterns in city tourism: evidence from the Amster-

- dam Metropolitan Area, *Journal of Cultural Economics*, 41(2), 109-127. doi: 10.1007/s10824-017-9293-1
- Wen J., Meng F., Ying T., Belhassen Y., 2020, A study of segmentation of cannabis-oriented tourists from China based on motivation, *Current Issues in Tourism*, 23(1), 36–51. doi: 10.1080/13683500.2019.1584608
- Wen J., Meng F., Ying T., Qi H., Lockyer T., 2018, Drug tourism motivation of Chinese outbound tourists: Scale development and validation, *Tourism Management*, 64, 233–244. doi: 10.1016/j.tourman.2017.08.001
- Westerhausen K., 2002, *Beyond the beach: an ethnography of modern travellers in Asia*, White Lotus Co. Ltd., Bangkok.
- Winkelman M., 2005, Drug tourism or spiritual healing? Ayahuasca seekers in Amazonia, *Journal of Psychoactive Drugs*, 37(2), 209–218. doi: 10.1080/02791072.2005.10399803
- Ying T., Wen J., Shan S., 2019, Is cannabis tourism deviant? A theoretical perspective, *Tourism Review International*, 23, 71–77. doi: 10.3727/154427219x15561098338303