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Impact of the COVID-19 pandemic on tourist plans: a case study from Poland

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ABSTRACT

The COVID-19 pandemic has had a strong impact on the tourism market worldwide. The aim of the paper was to present the tourism plans of Poles during the COVID-19 pandemic. The research conducted showed that the prevailing pandemic had a significant impact on touristic travel plans. However, the vast majority (over 75%) of the respondents plan at least one tourist trip, which will last from 5 to 7 days. During a tourist trip, the respondents plan to use different forms of accommodation. They considered their own cottage /second house and camping site to be the safest facilities, while hotels or resorts were indicated as the least safe facilities. In order to ensure safety during the stay, the respondents expect specific actions to be taken by the operators of the accommodation facilities, i.e.: availability of hand sanitizers, disinfection of rooms and generally available equipment in the facility as well as compliance with restrictions concerning social distance and the wearing of masks. This article contributes to the evolving literature on the impact of the COVID-19 pandemic on development of tourism sector.

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COVID-19; tourism; tourism activity; tourist behaviour; tourist plans; Poland

Introduction

Overall tourism industry (size/scope/impact)

COVID-19 is an infectious disease that spreads very quickly. According to the report of the World Health Organization (WHO), there are nearly 20 million confirmed COVID-19 cases worldwide (11 August 2020), of which more than 3.6 million in Europe (WHO, 2020).

Although the spread of the epidemic has undoubtedly had an impact on many sectors of the economy, the tourism sector has been particularly affected.

However, it was the COVID-19 pandemic that led to the cessation of almost all international and domestic travel in the first half of 2020 (Prideaux et al., 2020). The upheaval caused by the COVID-19 pandemic resulted in an economic shock and the associated decline in global travel, leading to a reduction in the number of foreign tourist arrivals worldwide by 20-30% in the first quarter of 2020. It was projected to fall by 60-80% during the whole year (UNWTO, 2020). Tourism is an industry where revenues from tourism were permanently lost because unsold services, e.g. accommodation, cannot be stored and sold in subsequent years (Gössling et al., 2021).

On average, the tourism sector directly contributes to 4.4% of gross domestic product (GDP), 21.5% of service exports, and 6.9% of employment in OECD countries. The World Travel and

Tourism Council (WTTC) estimates that COVID-19 can result in a loss of at least \$22 billion in the global tourism industry (Zhu & Deng, 2020).

There is an extremely high possibility of drastic job losses in the tourism sector, due to COVID-19, the World Tourism Organization (UNWTO) estimates that over 100 million jobs are at risk (Dupeyras et al., 2020).

The current COVID-19 crisis is more dramatic in its nature and scope than prior shocks affecting the tourism industry (e.g. cyclones, bush fires, earthquakes, terrorist attacks) (Ritchie & Jiang, 2019). However, the global crisis of 2020 is a novel in modern history, as all prior international catastrophes in the last century were caused by environmental hazards and/or financial crises (Fernandes, 2020). In addition, crisis can move from normal to severe, depending on how it evolves. (Santana, 2004). As stated by Santana (2004), there are a few generic factors that may cause or contribute towards the development of crisis in tourism. It is also possible to establish a cause–effect relationship between clusters or individual crisis. For example, a major industrial accident may result in pollution or contamination, or false advertising can compromise destination image. In addition, crisis can move from normal to severe, depending on how it evolves. In real situations, crisis moves around within the framework, resolving itself or generating new ones.

The COVID 19 crisis and shock is different. This crisis is primarily global in nature, has slowed down the economic growth twice as much as those caused by regular shocks and may trigger structural changes in some industrial sectors. Therefore, this distinguishes the previous economic shocks hitting travel destinations from the COVID19 super shock (Dolnicar & Zare, 2020). The tourism industry is extremely sensitive to crisis situations, as even minor negative events can seriously affect tourism (example such as hurricane, terrorist attack) demand and deteriorate tourism firms' financial performance. The outbreak of the pandemic has paused all tourism activities and has caused a major crisis in the global tourism industry (Kukanja et al., 2020; Shao et al., 2021).

Overall pandemic – general stats, impact on tourism industry, governmental restriction

The tourism industry has been deeply affected. Depending on the region, up to 80% of hotel rooms have been left empty, the airlines have reduced employment, which causes huge losses for the tourism industry (Donthu & Gustafsson, 2020). The spread of COVID-19 and the associated travel and transportation bans have permeated almost all aspects of everyday life. These restrictions have temporarily paralyzed the tourism and hotel industry (Wen et al., 2020).

Since the Covid-19 pandemic hit, business travel has ground to a halt. We have moved critical client meetings to virtual zone (Zoom, etc.) and we have learned how to communicate with colleagues around the world without travelling by plane. Unfortunately, working with Zoom contributes to fatigue due to many hours spent in front of the screen (BBC, 2021).

The governments of virtually all countries in the world have imposed restrictions and limitations on accessible travel in a given country and between different countries. The airlines have also limited their air operations mainly due to the lack of passengers who, due to government restrictions, have stayed at home (Foo et al., 2020; Iaquinto, 2020).

Case of Poland – pandemic impact on Poland

The Polish government faces a very serious problem that it has never faced before. Like other countries around the world, it introduced restrictions and limitations on movement, which also affected the tourism sector. Then, as the situation in Poland and the world improved a bit, it began to slowly lift the restrictions. Table 1 shows the timeline of actions taken by the Polish government to counteract the effects of the covid-19 pandemic in tourism during the studied period.

The Polish government has unveiled a stimulus package to provide some respite for the stakeholders who have been severely affected by the outbreak, especially those in the tourism industry. The tax incentives, restructuring of loans and postponement of repayments to banks, etc. can help to

Table 1. The timeline of actions taken by the Polish government to counteract the effects of the covid-19 pandemic from April 4th to May 31st 2020.

3/4	'Patient zero' in Poland
3/16	Introduction of an epidemiological emergency
3/25	A ban on movement was introduced
4/1	Closed hotels and other accommodations
4/20	The first stage of loosening restrictions – opening forests and parks for recreation
5/4	The second stage of loosening restrictions – opening hotels and accommodation places
5/18	The third stage of loosening restrictions – opening of hairdressers and beauticians
5/26	<ul style="list-style-type: none"> • Conference of the Ministry of Economic Development, Labour and Technology presenting the assumptions of the Anti-Crisis Shield for business • Industry shield • 'Polish Tourist Voucher'
5/30	The fourth stage of loosening restrictions – opening of massage parlors, solariums, gyms and fitness clubs

ease the cash flow of Poland's tourism industry players. To curb potential rising unemployment, a wage-subsidy programme has been introduced and suspended of social security contributions, inter alia, for the tourism industry. The downtime benefit is due in the amount of 80% of the minimum remuneration for work and can be granted no more than three times (MEDLT, 2020a; PARP, 2020).

On the other hand, the Polish government in order to support the Polish tourism industry and to boost domestic tourism proposed an action related to the 'Polish Tourist Voucher', which aims to provide financial support to Polish families and Polish tourism. A Polish Tourist Voucher in the amount of PLN 500 (111.61 EUR¹) per each child to spend on summer or winter holidays in Poland is valid until the end of March 2022 (MEDLT, 2020b). Tourist entrepreneurs or organizations of public benefit that provide hotel services or organize tourist events on the territory of Poland may register for this programme. The voucher can be used to pay for hotel services, accommodation or tourist events carried out by registered agritourism farms, tourist enterprises or public benefit organizations.

In turn, the tourism industry has proposed a special certificate for facilities providing services for tourists, 'Rest in Poland – safely'. This certificate emphasizes the epidemiological preparation of the facilities. Moreover, the Ministry of Agriculture and Rural Development launched the information and education campaign 'Rest in the countryside' in 2020 (PFRT, 2020). It started at the beginning of June 2020.

However, it will take some time to restore the pre-pandemic level of development of the sector. There is also a risk that the tourism sector can be one of the last to recover amid ongoing travel restrictions and a global recession. This has implications beyond the tourism economy, and many other sectors that support and are supported by tourism also have a significant impact (Rebuilding tourism for the future, 2020)

According to UNWTO experts, domestic demand should recover faster than international demand, and signs of recovery are expected in the last quarter of 2020, but primarily in 2021. Travel and leisure, especially trips to friends and relatives, are expected to return faster than business trips (UNWTO, 2020).

Additionally, one of the most likely consequences of this crisis can be the strengthening of local tourism, related to travelling close to home (Romagosa, 2020; Sadowski & Wojcieszak, 2019; Wojcieszak-Zbierska et al., 2020).

The aim of the research was to identify the tourism plans of Poles during the COVID-19 pandemic. The research sought answers to a number of questions, including:

- How popular travel for tourist purposes will be in 2020, and what are the possible reasons for resignation from them?

- How has the COVID-19 pandemic changed tourism plans?
- What are the preferences regarding the length of the trip, accommodation facility, manner of satisfying nutritional needs?
- What measures should be taken by the accommodation facilities to minimize the epidemiological risk?

In addition, the level of tourists' concerns regarding the situations and phenomena that may result from the current pandemic was recognized.

Study methods

Data was collected by means of a questionnaire-based survey. A questionnaire approach was used because it allows to reach a large number of people in order to collect the desired information. Due to the fact that the target group reached were active tourists, non-probability sampling was applied. The study included individuals aged 15 and over. The study used Facebook groups in which tourism was the main subject of interest. A link to the survey questionnaire was posted in these groups. Moreover, the respondents acquired via Facebook were asked to pass the link to the survey questionnaire through social media to other people who are active in terms of tourism. We have thus applied the snowball sampling method to the recruitment of the study participants (Li et al., 2020; Naderifar et al., 2017; Reznik et al., 2020; Sadler et al., 2010; Tew & Barbieri, 2012; Voicu, 2011), which has significantly increased the scope of our research.

The study, in which the webankieta.pl service was used, was conducted in the period from 28 May to 22 June 2020. In scientific research, it is important to specify the size of the sample. According to J.T. Roscoe (after: Uglis & Krysińska, 2012), in the majority of studies on tourism, the appropriate sample size should range from over 30 to less than 500. The final research sample included 576 respondents. All questionnaires were correctly completed and all were used.

The obtained data were subjected to statistical analysis. Significant results were classified as those with $p < 0.05$ and all computations were made in STATISTICA 13.3 as well as the R Statistical Package (R Core Team, 2019).

The analysis included Mann-Whitney's U test, the Wald-Wolfowitz runs test, the Kruskal-Wallis test and a CHi-square Automatic Interaction Detection (CHAID) modelling technique, implemented in the CHIAD package (The FoRt Student Project Team, 2015). The CHIAD model assumed the significance level of 0.05 for merging the categories at all tree levels. The p -values for the merged categories were computed using the Bonferroni adjustment for multiple testing. Results.

The research presents data based on a questionnaire survey of 576 Polish residents conducted during the COVID-19 pandemic in 2020. (Table 2). The majority of the respondents were female (67.4%), and almost 33% were men. The age of the respondents varied – the youngest respondent was 16 and the oldest – 82. The average age was 40.9 and the median was 41 years. Aggregating the age groups, the most numerous is the group aged 35–44 (41.1%).

The respondents were characterized by a high level of education – 83.7% were university graduates and 14.6% were secondary school graduates. High level of education translated into a positive assessment of the financial situation by the respondents. Over 15.3% assessed their financial situation as very good and 58.7% as good. Almost a quarter (24.0%) assessed their financial situation as bearable. It is worth noting that only 12 persons described it as bad or very bad.

The vast majority of the respondents (69.8%) were urban residents and over 30% lived in the countryside. More than one-third (35.1%) of the respondents lived in large urban agglomerations of over 200,000 inhabitants and they constituted more than half (50.3%) of the respondents living in cities. In turn, one-fifth (21.5%) were respondents living in cities of up to 50 thousand inhabitants and one in eight of the respondents lived in a city of 50–200 thousand inhabitants.

The presence of children in the household undoubtedly constitutes a factor determining tourism-related activity. In the study group, 53.5% of the respondents had children under the age of 18. It is worth noting that among households with children, 43.6% had children under the age of 6.

One of the objectives of the study was to diagnose the tourist plans of Poles during the COVID-19 pandemic between June and December 2020. During the study, the respondents were asked whether they plan at least one tourist trip in 2020. The study results indicate that the vast majority of the respondents (75.5%) had such plans, and more than a quarter (25.5%) of the respondents do not intend to travel for tourist purposes this year. Our results are consistent with the research (n=1,000) commissioned by the Polish Tourism Organisation (PTO) in June 2020 (PTO, 2020). The PTO's results also indicate that over a quarter of the Poles surveyed (27%) did not plan any tourist trips at that time.

Based on the results obtained, the CHAID modelling technique was used to determine the demographic profile of the respondents planning to travel for tourist purposes. It is worth noting that Li et al. (2020) applied the CHAID modelling technique in order to get a better understanding of the demographic profile of the respondents planning to shorten their next trip after the COVID-19 pandemic.

The dependent variable used in the CHAID model was 'I intend to travel for tourist purposes in 2020'. The CHAID modelling conducted provided information on the relationship between the dependent variable and demographic variables included in this study, such as age, gender, level of education, assessment of the financial situation, children in the household and place of residence.

The CHAID model analyses indicated three groups that differed by the proportion of respondents willing to go for holidays in 2020 (Figure 1). These groups differed with respect to the place of the residence and the educational level. In all the three groups, the majority of the respondents had an

Table 2. Characteristics of the respondents.

Attributes	Number of respondents	Percent of respondents
Sex		
Female	388	67.4%
Male	188	32.6%
Education level		
Vocational or lower	10	1.7%
Secondary	84	14.6%
Higher	482	83.7%
Assessment of the financial situation		
Very good	88	15.3%
Good	338	58.7%
Bearable	138	24.0%
Bad and very bad	12	2.0%
Place of residence		
Village	174	30.2%
Town of up to 20,000 inhabitants	65	11.3%
Town of 20,000-50,000 inhabitants	59	10.2%
Town of 50,000-100,000 inhabitants	41	7.1%
Town of 100,000-200,000 inhabitants	35	6.1%
City of more than 200,000 inhabitants	202	35.1%
Presence of children (under 18 years of age) in the household		
Household without children	268	46.5%
Household with children	308	53.5%
Age		
Less than 25	47	8.2%
25-34	101	17.5%
35-44	237	41.1%
45-54	124	21.5%
55 and above	67	11.6%
Mean (in years)	40.9	
Median (in years)	41	

Source: own study.

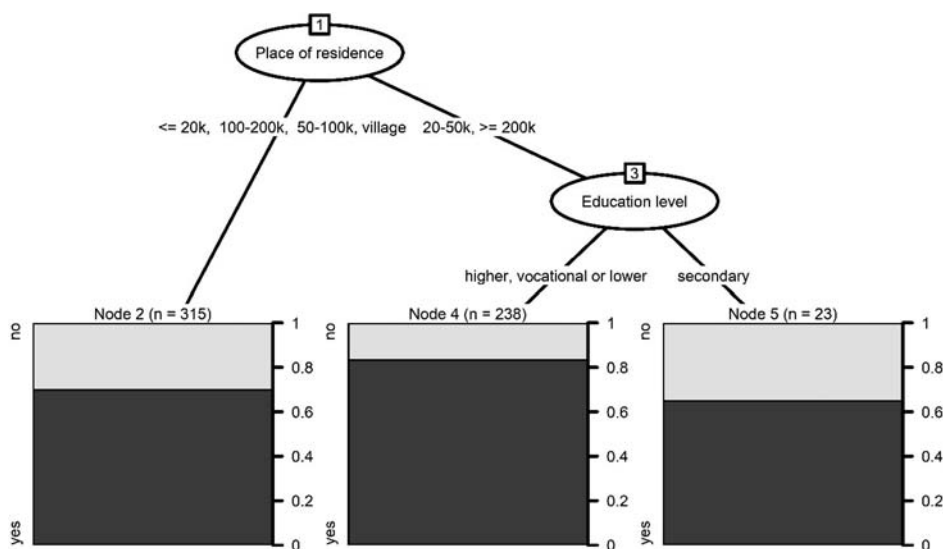


Figure 1. Decision tree based on CHAID model analysis of respondents' intention to go for holidays in 2020 ($n = 576$). Source: own study.

intention to go for holidays. About 70% of the respondents living in cities with the number of residents less than 20k, towns with the number residents between 50 and 100k and in villages were willing to go for holiday. The proportion of inhabitants that live in towns with between 20 and 50k and with 200k or more residents depended on the education level. About 65% of the respondents with secondary education level in this group were willing to go for holiday. The remaining respondents were more eager to go for holidays, as the about 84% of them declared the willingness of realizing their holiday plans. The accuracy of the CHAID analysis reached 76%. The adjusted p -value for the split for groups based on the place of residence was $p = 0.031$, and based on the education level was $p = 0.028$.

Our research showed that almost a quarter (24.5%) of the respondents stated that they were not willing to undertake a tourist trip in 2020. During the study, these persons were asked to indicate the reasons for their lack of interest in tourist trips (Table 3). The most frequently indicated reason was the ongoing COVID-19 pandemic and the fear of contracting the coronavirus during such a trip.

Moreover, a frequently indicated reason was the lack of sufficient financial resources to organize a tourist trip (2.4). Unemployment rate in Poland at the time increased from 5.4% (March 2020) to 6.1%

Table 3. Reasons for the lack of willingness to undertake a tourist trip in 2020.

Reasons ($n = 141$)	Completely irrelevant	Not very relevant	Moderately important	Very important	Mean*
A The prevailing pandemic, fear of coronavirus infection	8.5%	4.3%	12.8%	74.5%	3.5
B Lack of money	27.0%	27.0%	24.8%	21.3%	2.4
C No need or desire to leave	47.5%	21.3%	17.7%	13.5%	2.0
D Official duties	34.8%	29.1%	22.7%	13.5%	2.1
E Lack of time	33.3%	25.5%	27.7%	13.5%	2.2
F Problem with the organization of the trip	48.9%	28.4%	12.1%	10.6%	1.8
G Household duties	40.4%	28.4%	20.6%	10.6%	2.0
H Not possible due to age or health condition	56.0%	23.4%	12.1%	8.5%	1.7
I There is no possibility of accommodation at the preferred facility at the specified time	53.2%	27.0%	13.5%	6.4%	1.7

*measured on a 4-point scale ranging from 'Completely irrelevant' (1) to 'Very important' (4)

Source: own study.

(May 2020). In many cases, this can be due to the pandemic and its impact on the collapse of many areas of the economy, which translates into the concern about further employment. The respondents also pointed to the lack of time (2.2) as well as business and professional duties (2.1) as an important factor in the lack of travel plans.

Non-parametric tests were carried out to check the impact of demographic characteristics on the reasons for not wanting to travel, the significance level was set at 0.05. The analysis started with the Wald-Wolfowitz runs test, followed by the Mann-Whitney U-test. The results of the Wald-Wolfowitz test showed a significant influence of sex on reason G – Household duties ($p = 0.024$), while Mann-Whitney U-test on reason B – Lack of money ($p = 0.041$). On the other hand, when analysing the effect of the presence of children under the age of 18 in the household, both tests indicated a statistically significant influence on reason C – No need or desire to leave ($p = 0.028$; $p = 0.038$). These results confirm that the presence of children in the family is conducive to greater tourist activity because tourism allows parents to organize their children's free time during the summer holidays. Subsequently, analyses were carried out using the Kruskal-Wallis test. The first analysis concerned the impact of age on the reasons for refraining from a tourist trip. The results were statistically significant for as many as four reasons for refraining from such a trip: reason B – Lack of money ($p = 0.015$); reason D – Official duties ($p = 0.015$); reason E – Lack of time ($p = 0.003$) and reason H – Household duties ($p = 0.023$). The next analysis concerned the impact of the assessment of the financial situation and here a statistically significant impact was found for three reasons as well: reason B – Lack of money ($p = 0.000$); reason C – No need or desire to leave ($p = 0.001$) and reason F – Problems with the organization of the trip ($p = 0.023$). The tests carried out also showed an impact on the reasons for refraining from a tourist trip in the case of the respondents' place of residence. A statistically significant impact of this factor was noted for reason G – Household duties ($p = 0.049$). Taking into account the level of education of the respondents, no statistically significant impact on the reasons examined was shown.

Plans and expectations concerning a tourist trip

According to the results of studies, 75.5% of the respondents expressed their willingness to travel for tourist purposes in 2020. However, it should be noted that the ongoing COVID-19 pandemic had a significant impact on the tourism plans of the respondents (Figure 2).

More than one-third of the respondents resigned from abroad destination in favour of domestic places due to the greater safety of such a trip. On the other hand, as many as a quarter of the respondents did not intend to change their holiday plans due to the pandemic. However, another increase in the number of cases and the return to restrictions, e.g. on tourist traffic, including mandatory quarantine after returning from a foreign trip, will probably force a change in their attitude.

Assuming that the pandemic does not develop further, the majority of the respondents (54.5%) planned at least one tourist trip in 2020. The remaining 45.5% were planning two or more trips. The month most frequently chosen for the trip was August (66.0%), July (56.6%) and September (37.2%). With regard to the length of the trip (Figure 3), it was found that 5–7 d trips were the most popular response options. It is worth noting that in the PTO's research (PTO, 2020), trips from 4 to 7 nights were also indicated most often (49.7%). The respondents also willingly planned short trips of 3–4 days (36.8%) and weekend trips (26.6%). Moreover, less than 1/5 of the respondents planned to leave for more than 10 days.

From the point of view of the development of the tourism sector, it was important to determine the destination of the planned tourist trips. Coastal areas (57.5%), mountains (45.1%) and lakeside areas were the most preferred tourist destinations (Figure 4). In turn, more than a quarter of the respondents were planning to go to rural areas. Our results indicate that the least preferred destinations were cities. This suggests that for the vast majority of the respondents urban areas were the place of their everyday life.

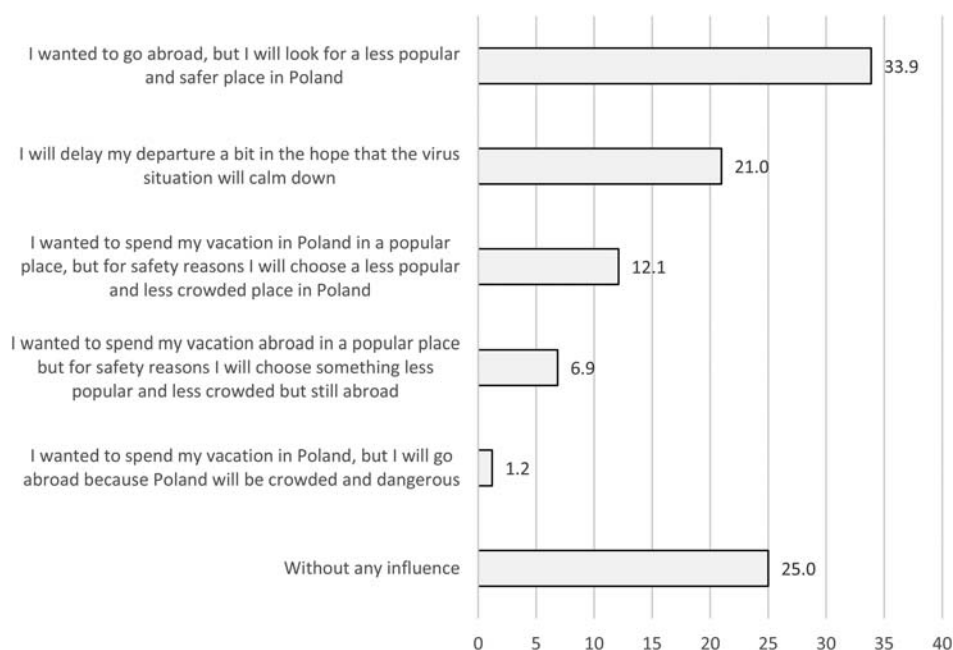


Figure 2. Influence of the COVID-19 pandemic on the change of tourist plans of the respondents [in %, $n = 435$]. Source: own study.

In addition, it is worth pointing out that the respondents indicated quiet and peaceful places far away from civilization, crowds and beaten tourist trails as 'other', which indicates a desire to isolate themselves. One of the more important reasons for this was certainly the fear of the coronavirus.

Taking into account that the accommodation sector was stopped and slowly released after 3 months, it was important to know the preferences concerning accommodation facilities during the planned tourist trips. The most popular were hotels and resorts (Figure 5). However, it should be noted that there is a great interest in exclusively rented apartments, cottage as well as camping sites and in the wild. This undoubtedly indicates a desire to isolate oneself due to the risk of contracting the coronavirus. Moreover, one in six of the respondents plans to use the agritourism offer or to stay overnight with family or friends.

As mentioned earlier, a popular choice were also agritourist farms (17.9%), which, due to the small scale of activity and a small number of tourists staying there at the same time, can also be seen as

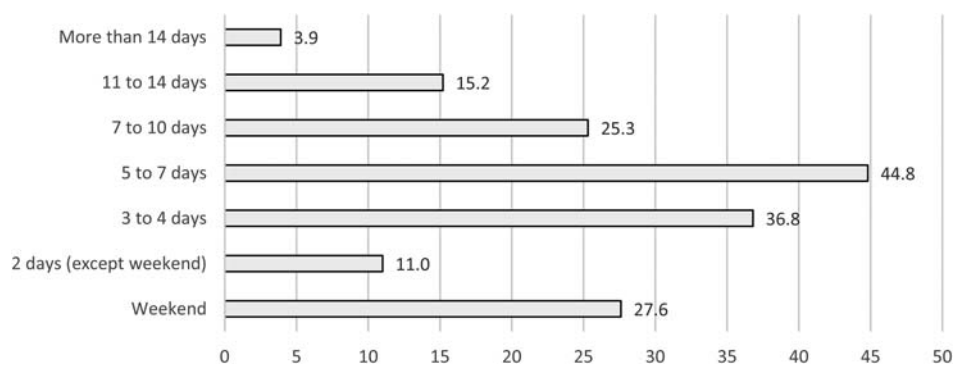


Figure 3. The length of tourist trips planned by the respondents in 2020. [in %, $n = 435$]. *the respondents could indicate a maximum of 3 destinations. Source: own study.

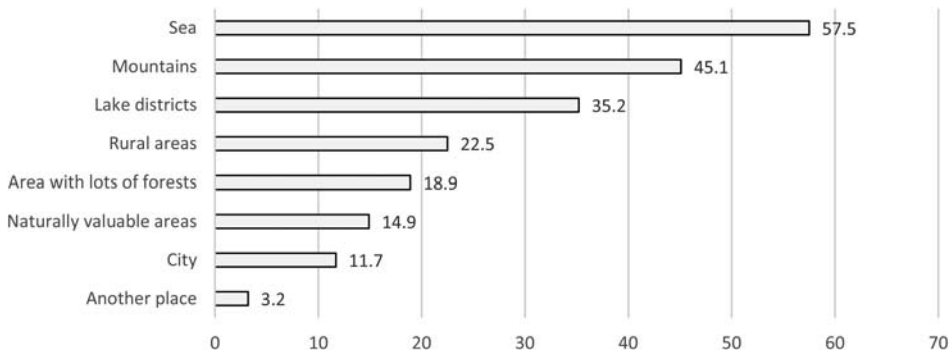


Figure 4. Tourist destinations preferred by the respondents in 2020 [in %, $n = 435$]. *the respondents could indicate a maximum of 3 destinations. Source: own study.

safe places by the potential tourists. Details on this subject are presented in Table 4. Our results indicate that the safest accommodation facility preventing from coronavirus infection is an own cottage house/second home. The respondents also considered accommodation on a campsite (4.1), with family or friends (4.0) and in a tent or trailer (4.0) to be safe. Accommodation in a hotel or holiday resort (3.1), in a guesthouse and in a rented room were assessed as the least safe. It is worth noting that the respondents considered it safer to rent an apartment (3.9) rather than the collective tourism accommodation establishments mentioned earlier. This is due to the fact that staying in an apartment or in an own summer house offers the opportunity to remain isolated from other tourists vacationing in a given destination. In the case of a hotel, guesthouse or rented room it is more difficult to keep a social distance because of the much larger number of tourists staying in the facility at a given time.

In order to detect the impact of demographic features on the ratings given to individual accommodation facilities examined, non-parametric tests were conducted. The analysis started with the

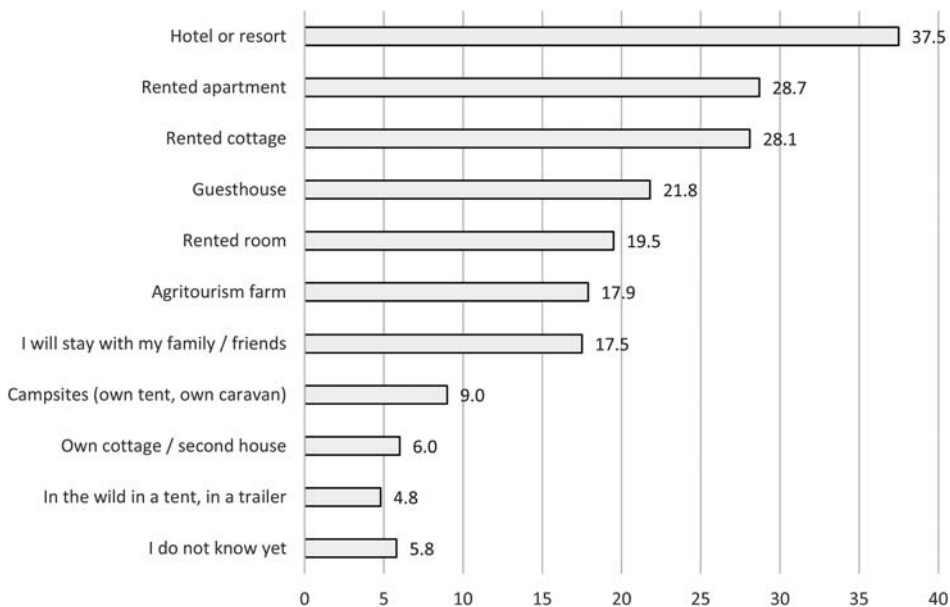


Figure 5. Types of accommodation facilities preferred by the respondents in 2020 [in %, $n = 435$]. *the respondents could indicate a maximum of 3 facilities. Source: own study.

Table 4. Assessment of the safety of holidays in individual accommodation facilities in the opinion of the respondents.

	Facilities (n=435)	I don't have an opinion	Mean*	Mode*
A	Own cottage / second home	10.3%	4.5	5
B	Stay with family / friends	9.9%	4.0	4
C	Campsites (own tent, own caravan)	12.2%	4.1	4
D	Rented cottage	9.7%	3.9	4
E	In the wild in a tent, in a trailer	15.6%	4.0	5
F	Rented apartment	10.8%	3.8	4
G	Agritourism farm	12.0%	3.6	4
H	Rented room	11.7%	3.3	3
I	Guesthouse	12.2%	3.3	3
J	Hotel or resort	11.7%	3.1	3

*measured on a 5-point scale ranging from '1' to '5'.

Source: own study.

Wald-Wolfowitz runs test, followed by the Mann–Whitney U-test. The results of the Wald-Wolfowitz test showed a significant influence of sex on the assessment of safety of a rented summer house ($p = 0.021$) and hotel or holiday resort ($p = 0.019$). The Mann–Whitney U-test, on the other hand, showed that the medians of the scores given to campsites ($p = 0.018$) and agritourism farms ($p = 0.032$) differ significantly. The conducted analyses showed a statistically significant influence of children in the household only in relation to an own summer house/second home – Wald-Wolfowitz runs test ($p = 0.049$). The use of the Kruskal–Wallis test showed a statistically significant variation in the scores given in relation to: age – stay with family/friends ($p = 0.007$), level of education – rented room ($p = 0.050$), assessment of the financial situation – stay in a tent/caravan ($p = 0.005$) as well as rented apartment ($p = 0.011$) and place of residence – stay in a tent/caravan ($p = 0.024$).

In the further part of the study, the respondents were also asked about the persons with whom they were planning a tourist trip. The most frequent answer was life partner or husband/wife (76.7%) and own children (50.6%). Over 30% of the respondents planned to go with friends, 6.3% with siblings and 10.1% with parents and grandparents. The percentage of the respondents who planned to go for a tourist trip alone was 7.3%.

The studies conducted indicate that the fear of contracting the coronavirus seems to be visible also in the planned ways of satisfying nutritional needs during tourist trips. The respondents most often indicated that they would prepare meals on their own, or eat some of the meals offered in the accommodation facility (Figure 6).

Due to the exceptional circumstances of the implementation of tourist trips in 2020, the respondents were asked to express their opinion on the concerns caused by various situations and phenomena (Figure 7). In line with the current situation, a significant proportion of those surveyed



Figure 6. Preferences of the respondents with regard to satisfying their nutritional needs during tourist trips in 2020 [in %, $n = 435$]. Source: own study.

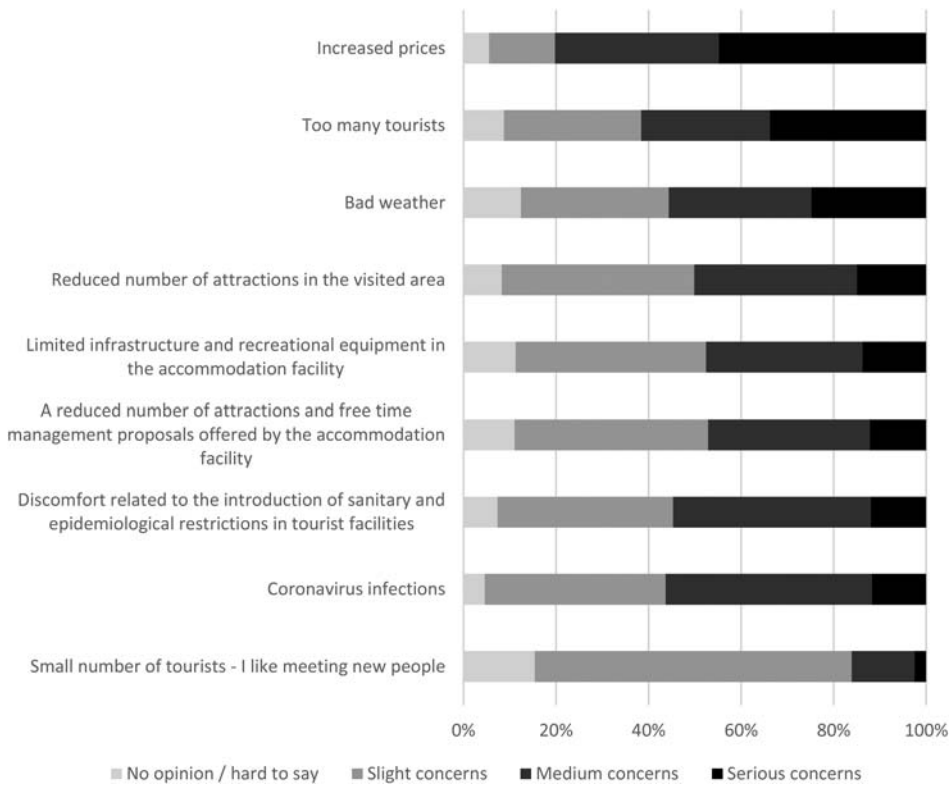


Figure 7. Concerns of respondents in the context of tourist trips in 2020 caused by various situations and phenomena [in %, $n = 435$]. Source: own study.

were concerned about coronavirus infection, but it was assessed as a medium level of concern. The respondents indicated the consequences and phenomena resulting from the pandemic as a major concern, which included price increases, reduced number of attractions (in towns and accommodation facilities) or infrastructural and other constraints resulting from the restrictions caused by the pandemic.

It is also worth mentioning here that a significant proportion of the respondents were afraid of too many tourists resting in a given place. They are potential carriers of the virus and a large accumulation of them may cause great discomfort due to the risk of infection.

Statistical tests were carried out to check the impact of demographic characteristics on the respondents' concerns. The results indicate that there is a statistically significant influence of sex, presence of children, level of education and assessment of the financial situation. The impact of sex was observed when assessing concerns about limited infrastructure and recreational equipment in an accommodation facility ($p = 0.044$) as well as price increases ($p = 0.001$). Moreover, the presence of children in the respondents' household showed a significant impact on the fear of a reduction in the number of attractions and leisure activities offered by the accommodation facility ($p = 0.034$). The use of the Kruskal–Wallis test showed a statistically highly significant effect of the level of education in as many as six of the analysed issues: coronavirus infection ($p = 0.003$), discomfort associated with the introduction of sanitary and epidemiological restrictions in tourist facilities ($p = 0.002$), reduced number of attractions in the place visited ($p = 0.019$), limited infrastructure and recreational equipment in the accommodation facility ($p = 0.003$), reduced number of attractions and leisure activities ($p = 0.005$) and too many tourists ($p = 0.002$). Taking into account the assessment of the respondents' financial situation, a significant correlation was found only in relation to the fear of price increases ($p = 0.048$).

Table 5. Recommendations and observations of respondents concerning actions to be taken by accommodations to minimize the risk of coronavirus infection [$n = 205$].

Action	Number of respondents	Percent of respondents
Recommendations on the availability of hand disinfectants	110	53.7%
Recommendations on disinfecting rooms and equipment etc.	85	41.5%
Observance of restrictions on social distancing and wearing masks	54	26.3%
Recommendation on hygiene in general	31	15.1%
Obligation to follow generally accepted procedures in connection with the pandemic	30	14.6%
Restrictions on serving of meals and restaurant facilities	25	12.2%
Remarks on the limited number of guests at the accommodation facility	21	10.2%
Belief that there is no need to impose any restrictions in terms of sanitary and epidemiological safety	12	5.8%
Belief that there is no need to impose any additional restrictions in terms of sanitary and epidemiological safety	12	5.8%
Coronavirus tests before accommodation, obligatory checks, e.g. temperature	10	4.9%
Drawing the attention of the guests to the problem and recommending caution by the staff	8	3.9%
Recommendations on the common sense of both guests and service providers	7	3.4%
Recommendations on ventilation of public spaces	6	2.9%

Source: own study.

The last issue raised in the study was to determine what actions should be taken by the accommodation facility to minimize the risk of coronavirus infection. The question was open and voluntary. A significant part (47.1%) of respondents who declared their willingness to travel for tourist purposes in 2020 shared their observations and remarks. The answers are grouped and shown in [Table 5](#).

The vast majority of respondents indicated the availability of hand disinfectants (53.7%). Disinfectants should be available to the public in the form of liquids or contactless devices located at the main entrance to the facility, at the elevators and the entrance to the restaurant. Respondents also pointed out the disinfection of rooms and equipment available to the public in the facility (46.1%). More than 25% of the respondents expressed the opinion that it is necessary to observe restrictions on social distancing and wearing masks.

Interestingly, almost 6% of the respondents expressed the belief that there was no need to introduce any restrictions on sanitary and epidemiological safety. Some of them believe that the existence of any epidemic or pandemic is a fiction.

Discussion

Scientific studies indicate that the outbreak and spread of COVID-19 has a huge and negative impact on the tourism industry as tourists around the world cancel bookings and delay their travel plans due to concerns about the virus (Foo et al., 2020; Mathew & J, 2020; Rutynskyi & Kushniruk, 2020). Our research serves as a confirmation.

Our results are consistent with the research of the Polish Tourist Organisation (PTO), which showed that two-thirds of Poles (64%) admitted that the COVID-19 pandemic and the introduced restrictions affected their plans related to tourism travel in 2020 (PTO, 2020). Similar data is indicated by studies from other regions of the world. For instance, approximately 50% of American consumers and 38% of British consumers declared that they voluntarily cancelled, delayed or were forced to cancel their holiday plans due to the pandemic and the crisis stemming from it (WARC, 2020). Other studies indicate that half of the citizens of Finland have no plans to travel in the summer period due to the COVID-19 pandemic. Moreover, one-third of the respondents estimated that they would limit their trips in the summer of 2020 (Statista, 2020).

In light of our results, the vast majority of respondents (75.5%) are planning at least one trip for tourist purposes, which proves that tourism activity is an important need for them. These results are

consistent with the findings of Destination Analysts among American consumers, almost 70% of whom plan to make at least one tourist trip this year. Most Americans who will travel in 2020 say they will avoid crowded destinations and visit places they know (DA, 2020). Polish tourists will do the same, as our research results show. It is worth emphasizing that school children play an important role in planning a tourist trip. The role of the child in purchase decisions is becoming increasingly important to vacation marketers and working parents (Nickerson & Jurowski, 2001). At the time of writing a vaccine has not been created or approved for children yet, which could also impact on travel plans. As Lapointe (2020) points out, in view of the current mobility restrictions due to sanitary requirements, enterprises in the tourism sector will turn their attention to local businesses and their needs.

Research by Li et al. (2020) indicate significant changes in the behaviour related to the planned trip after the pandemic. Moreover, our results indicate that the COVID-19 pandemic had a significant impact on tourism plans already during the pandemic. Unfortunately, tourist traffic is one of the factors responsible for the spread of the virus around the world. Tourists contributed to the intense development of the pandemic in tourist destinations in Italy, Spain or Japan (laquinto, 2020).

The release of tourist traffic and the reduction of sanitary conditions have caused many Europeans to go on holiday abroad. Regrettably, this has resulted in an increase in the number of new patients infected with COVID-19. This is why in some countries governments have introduced a 14-day quarantine or obligatory coronavirus test for tourists returning from holidays abroad, e.g. tourists from the UK returning from holidays in Spain. Another way to counteract the spread of the virus is a 14-day self-isolation obligatory for people coming from a given country, e.g. from Poland to Norway, Ukraine or the Baltic States (WPROST, 2020).

Conclusions

COVID-19 attacked the whole world and strongly influenced the global economy. One of the industries that has suffered the most is tourism in its broadest sense. Tourists, on one hand, have reduced their current travel plans, and as well, have reduced or stopped their future planned tourist trips. It was not expected that tourism would find itself in such a difficult situation with the tourist traffic drastically weakened.

The objective of this study was to identify what are the long- and short-term plans of tourists and study their behaviour during the nearest tourist trips. From a practical standpoint, this study provides valuable data and consumer insights for destinations and tourism organizations, and tour operators as well as the government in order to the development of the tourism industry post-COVID-19.

The results of this research indicate that a vast majority (over 75%) of respondents plan at least one tourist trip in 2020. The factor that influenced the decision not to travel for tourist purposes was the ongoing COVID-19 pandemic and the fear of contracting a coronavirus during such a trip. It should be noted, however, that the ongoing COVID-19 pandemic has also significantly affected the plans of respondents planning touristic travel in 2020.

During their travels, they will mainly use hotel or resort accommodation. Rental apartments, flats and houses, as well as camping sites and 'wild' camping were indicated with great interest. Respondents indicated that in order to minimize the risk of coronavirus infection in the accommodation facilities, there should be a wide availability of hand disinfectants, which should be provided to the general public preferably in the form of non-contact devices and located at the main entrance to the facilities, at the elevators and the entrance to the restaurant. They also pointed out the need to disinfect rooms and equipment open to the public in the facility and to observe restrictions on social distancing and wearing masks.

It is a clear signal for the managers of relatively large accommodation facilities to intensify activities to improve the sanitary conditions of such facilities in terms of security. Appropriate certificates may be recommended. It can also be essential after the pandemic because it will remain in the public consciousness for a long time.

Moreover, due to the ongoing COVID-19 pandemic, they were also afraid of reduced availability of attractions in localities and accommodation facilities as well as restrictions on infrastructure and other limitations resulting from the pandemic. This poses a significant challenge for the tourism industry in terms of preparing proposals for spending free time in line with legal (including sanitary) restrictions and satisfactory from the point of view of visitors. Research results indicate that it is crucial for families with children. However, this task may be difficult due to the diversified preferences of tourists. Providing security guarantees can be a priority for tourists when choosing a destination.

Surely, an important factor in tourist behaviour will be the epidemiological situation in a given tourist destination and the approach to safety not only of tourist enterprises but also of local and governmental authorities.

In conclusion, there are several limitations of this study to take into account. First, the limitation stems from the fact that we conducted the research via the Internet, including Facebook travel groups. Not everyone uses Facebook, and some may not even have access to the Internet. The next problem may be closed questions (some answer options are missing) and the respondents' bias. Findings of this study are limited by its focus on prospective tourists from Poland.

Based on the outcomes of this study, future research should focus on the actual travel behaviour of tourists after the pandemic to find whether the forecasted travel indications have materialized. It would also be advisable to repeat research after the start of vaccination Covid-19 to determine whether this has an impact on travel plans. In addition, it is worth increasing the sample size and the geographic scope of further research, as this may be a source of valuable comments. It will be interesting and useful for tour operators, accommodation providers, and other entrepreneurs in the tourism industry.

Note

1. PLN 4.48 - average EUR exchange rate according to the National Bank of Poland as of 26th May 2020.

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References

- BBC Worklife (BBC). (2021). <https://www.bbc.com/worklife/article/20200731-how-coronavirus-will-change-business-travel>
- Destination Analysts (DA). (2020, August 25). Update on American Travel in the period of Coronavirus – week of June 15th. https://www.destinationanalysts.com/blog-update-on-american-travel-in-the-period-of-coronavirus-week-of-june-15th/?utm_source=Email&utm_medium=Email&utm_campaign=Email%20Marketing
- Dolnicar, S., & Zare, S. (2020). COVID19 and airbnb – disrupting the disruptor. *Annals of Tourism Research*, 83(102961). <https://doi.org/10.1016/j.annals.2020.102961>
- Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of Business Research*, 117, 284–289. <https://doi.org/10.1016/j.jbusres.2020.06.008>
- Dupeyras, A., Haxton, P., & Stacey, J. (2020). Policy brief the Covid-19 crisis and tourism: Response and recovery measures to support the tourism sector in Oecd countries. Task Force 11. Covid-19: Multidisciplinary Approaches To Complex Problems. https://www.g20-insights.org/wp-content/uploads/2020/11/T20_TF11_PB18.pdf

- Fernandes, N. (2020). Economic effects of coronavirus outbreak (COVID-19) on the world economy (SSRN Scholarly Paper ID 3557504). Social Science Research Network. <https://doi.org/10.2139/ssrn.3557504>
- Foo, L. P., Chin, M. Y., Tan, K. L., & Phuah, K. T. (2020). The impact of COVID-19 on tourism industry in Malaysia. *Current Issues in Tourism*, 23. <https://doi.org/10.1080/13683500.2020.1777951>
- The FoRt Student Project Team. (2015). CHAID: CHI-squared automated interaction detection R package version 0.1-2.
- Gössling, S., Scott, D., & Hall, C. M. (2021). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(5), 1–20. <https://doi.org/10.1080/09669582.2020.1758708>
- Iaquinto, B. L. (2020). Tourist as vector: Viral mobilities of COVID-19. *Dialogues in Human Geography*, 10(2), 174–177. <https://doi.org/10.1177/2043820620934250>
- Kukanja, M., Planinc, T., & Sikošek, M. (2020). Crisis management practices in tourism SMEs during the covid-19 pandemic. *Organizacija*, 53(4), 346–361. <https://doi.org/10.2478/orga-2020-0023>
- Lapointe, D. (2020). Reconnecting tourism after COVID-19: The paradox of alterity in tourism areas. *Tourism Geographies*, 22(3), 633–638. <https://doi.org/10.1080/14616688.2020.1762115>
- Li, J., Nguyen, T. H. H., & Coca-Stefaniak, J. A. (2020). Coronavirus impacts on post-pandemic travel behaviours. *Annals of Tourism Research*, 86(102964). <https://doi.org/10.1016/j.annals.2020.102964>
- Mathew, J., & Malbarosa, M. A. J. (2020). Impact of covid-19 pandemic on the tourism sector. *UGC Care Journal*, 31(17), 663–668.
- Ministry of Economic Development, Labour and Technology (MEDLT). (2020a). <https://www.gov.pl/web/rozwoj-praca-technologie/tarcza-dla-turystyki>
- Ministry of Economic Development, Labour and Technology (MEDLT). (2020b). <https://www.gov.pl/web/development-labour-technology/tourist-voucher-pln-500-per-each-child-as-well-as-additional-pln-500-for-each-child-with-disability—assistance-for-families-with-children-as-well-as-for-the-tourist-industry>
- Naderifar, M., Goli, H., & Ghaljaie, F. (2017). Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education*, 14(3), e67670. <https://doi.org/10.5812/sdme.67670>
- Nickerson, N. P., & Jurowski, C. (2001). The influence of children on vacation travel patterns. *Journal of Vacation Marketing*, 7(1), 19–30. <https://doi.org/10.1177/135676670100700102>
- PARP. (2020). <https://www.parp.gov.pl/component/content/article/61442:na-jakie-wsparcie-moze-liczyc-branza-turystyczna-2>
- Polish Federation of Rural Tourism “Gospodarstwa Gościnne” (PFRT). (2020). <https://odpoczywajnawsi.pl/>
- Polish Tourism Organisation (PTO). (2020, August 20). Plany wakacyjne Polaków 2020, lipiec 2020 [Poles' holiday plans for 2020, July 2020]. <https://www.pot.gov.pl/attachments/article/1804/Plany%20wakacyjne%20Polak%C3%B3w%202020%20ost.pdf>
- Prideaux, B., Thompson, M., & Pabel, A. (2020). Lessons from COVID-19 can prepare global tourism for the economic transformation needed to combat climate change. *Tourism Geographies*, 22(3), 667–678. <https://doi.org/10.1080/14616688.2020.1762117>
- R Core Team. (2019). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. <https://www.R-project.org/>
- Rebuilding tourism for the future: COVID-19 policy responses and recovery. (2020). https://read.oecd-ilibrary.org/view/?ref=137_137392-qsvjt75vnh&title=Rebuilding-tourism-for-the-future-COVID-19-policy-response-and-recovery
- Reznik, A., Gritsenko, V., Konstantinov, V., Khamenka, N., & Isralowitz, R. (2020). COVID-19 Fear in Eastern Europe: Validation of the fear of COVID-19 scale. *International Journal of Mental Health and Addiction*. doi:10.1007/s11469-020-00283-3
- Ritchie, B. W., & Jiang, Y. (2019). A review of research on tourism risk, crisis and disaster management: Launching the annals of tourism research curated collection on tourism risk, crisis and disaster management. *Annals of Tourism Research*, 79, 102812. <https://doi.org/10.1016/j.annals.2019.102812>
- Romagosa, F. (2020). The covid-19 crisis: Opportunities for sustainable and proximity tourism. *Tourism Geographies*, 22(3), 690–694. <https://doi.org/10.1080/14616688.2020.1763447>
- Rutyskiy, M., & Kushniruk, H. (2020). The impact of quarantine due to COVID-19 pandemic on the tourism industry in Lviv (Ukraine). *Problems and Perspectives in Management*, 18(2), 194–205. [https://doi.org/10.21511/ppm.18\(2\).2020.17](https://doi.org/10.21511/ppm.18(2).2020.17)
- Sadler, G. R., Lee, H. C., Lim, R. S., & Fullerton, J. (2010). Recruitment of hard-to-reach population subgroups via adaptations of the snowball sampling strategy. *Nursing & Health Sciences*, 12(3), 369–374. <https://doi.org/10.1111/j.1442-2018.2010.00541.x>
- Sadowski, A., & Wojcieszak, M. (2019). Geographic differentiation of agritourism activities in Poland vs. Cultural and natural attractiveness of destinations at district level. *PLoS ONE*, 14(9), e0222576. <https://doi.org/10.1371/journal.pone.0222576>
- Santana, G. (2004). Crisis Management and tourism. *Journal of Travel & Tourism Marketing*, 15(4), 299–321. https://doi.org/10.1300/J073v15n04_05
- Shao, Y., Hu, Z., Luo, M., Huo, T., & Zhao, Q. (2021). What is the policy focus for tourism recovery after the outbreak of COVID-19? A co-word analysis *Current Issues in Tourism*, 24(7), 899–904. <https://doi.org/10.1080/13683500.2020.1806798>

- Statista. (2020, August 25). How has the coronavirus (COVID-19) pandemic impacted your summer travel plans? <https://www.statista.com/statistics/1120377/coronavirus-impact-on-summer-travel-plans-in-finland/>
- Tew, C., & Barbieri, C. (2012). The perceived benefits of agritourism: The provider's perspective. *Tourism Management*, 33(1), 215–224. <https://doi.org/10.1016/j.tourman.2011.02.005>
- Uglis, J., & Krysińska, B. (2012). Próba zdefiniowania profilu agroturysty. [The attempt to define a profile of agritourist]. *Zeszyty Naukowe Uniwersytetu Szczecińskiego nr 699, Ekonomiczne Problemy Usług*, 84, 155–166.
- United Nations World Tourism Organization (UNWTO). (2020, June 30). <https://www.unwto.org/impact-assessment-of-the-covid-19-outbreak-on-international-tourism>
- Voicu, M. C. (2011). Using the snowball method in marketing research on hidden populations. *Challenges of the Knowledge Society*, 1, 1341–1351.
- WARC. (2020). GlobalWebIndex coronavirus research March 2020, Series Two: Travel & Commuting. WARC COVID-19 Series, March 2020.
- Wen, J., Wang, W., Kozak, M., Liu, X., & Hou, H. (2020). Many brains are better than one: The importance of interdisciplinary studies on COVID-19 in and beyond tourism. *Tourism Recreation Research*, 46(2). <https://doi.org/10.1080/02508281.2020.1761120>
- Wojcieszak-Zbierska, M. M., Jęczmyk, A., Zawadka, J., & Uglis, J. (2020). Agritourism in the Era of the coronavirus (COVID-19): a rapid assessment from Poland. *Agriculture*, 10(9), 397. <https://doi.org/10.3390/agriculture10090397>
- World Health Organization (WHO). (2020). Coronavirus disease (COVID-19). Situation Report – 204, 11 August 2020.
- WPROST. (2020). Kwarantanna dla osób z Polski. Kolejne kraje wprowadzają ograniczenia [Quarantine for people from Poland. More countries are introducing restrictions]. <https://biznes.wprost.pl/gospodarka/transport/10351373/kwarantanna-dla-osob-z-polski-kolejne-kraje-wprowadzaja-ograniczenia.html>
- Zhu, H., & Deng, F. (2020). How to influence rural tourism intention by risk knowledge during COVID-19 containment in China: Mediating role of risk perception and attitude. *International Journal of Environmental Research and Public Health*, 17(10), 514.