

# Regionalization and analysis of rally event visitors: A case study of Czech Rally Championship events

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## ABSTRACT

This paper focuses on small-scale events of sport tourism, which potentially play an important role in the tourism industry of host regions by attracting a significant number of visitors. It examines seven rallying events in Czechia, seeking to determine whether these events share common characteristics or possess unique features that distinguish one from another. Utilizing online surveys, the results indicate similar patterns of different events in terms of accommodation and dining options, with only minor differences influenced by specific factors, such as event duration or importance. Notable distinctions among different events include differences in their geographical background and the average spending of visitors, with the Barum Czech Rally Zlín standing out from the other events.

## KEYWORDS

small-scale events; rallying; Czechia; regionalization; sport tourism; motosport tourism

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## 1. Introduction

Tourism as a field provides a wide range of attractivities for visitors, and both regional and national level tourism agencies regularly publish reports with the numbers of visitors to the most visited places within a given spatial unit. Czechia is no exception – CzechTourism (2022) annually publishes a list of top 50 attractions. The number of visitors to these sites ranges from 1.7 million to 180,000 visitors a year. Furthermore, this list of attractions is divided according to various characteristics, such as region and attraction type. However, one kind of tourism attractivities is completely missing – sport tourism events. These tourism attractors could also attract large numbers of visitors, the biggest of which could have potential to be placed among the top 50 attractions. This type of tourism event attracts numbers of visitors and includes examples such as editions of the biathlon world cup in Nové Město na Moravě, where each edition is estimated to have more than 100,000 visitors in attendance (iDnes 2016; HN 2013) or Czech Grand Prix in MotoGP It used to take place at Masaryk circuit in Brno and attracted approximately 200,000–250,000 visitors (iSport 2019; BIKERACING 2008). A similar number of visitors gathers annually in Zlín region for the Barum Czech Rally Zlín (hereinafter abbreviated as BCRZ), which is nowadays presumably today's biggest small-scale event in Czechia's event tourism as the event is visited by around 250,000 visitors (Motor Max 2022). This number of attendees has been surpassed by only a few events in recent years, for instance, IIHF World Championships in 2015 and in 2004 which, respectively, attracted more than 700,000 and 500,000 visitors (IIHFWORLDS2015 2015; MSHOKEJ2004 2004). These, however, are classified as mega-events by Higham (1999).

We can conclude that sporting events have the potential to be among Czechia's top tourism attractivities and thus play an important role in the country's tourism sector. Furthermore, if we cross out mega-events, we could conclude that motoring events are among the most visited sport tourism events in Czechia. Therefore, it is quite surprising that sport events are a scarcely researched topic and only a handful of studies can be found – the majority are scholarly and focus either on motorsport or biathlon. For example, Hrušák (2013) and Píža (2013) studied BCRZ, and Kyselý (2016) compared selected sporting events, such as the Brno GP and biathlon world cup in Nové Město na Moravě. Biathlon itself was a focus of Kalousková (2016), Kutal (2014) and Klapač (2014). Most of these works, with exception of Kyselý (2016), focus on a single event and analyze it without comparison to others.

The paper therefore aims to focus on seven selected rally events held annually in Czechia with the goal of finding mutual differences and common aspects and, therefore, discovering whether rally events have

unique characteristics distinguishing one event from the other or not.

## 2. Literature review

Visiting sporting events can be classified as participating in tourism because everyone except the locals travels to participate in sport tourism. And is doing so in accordance with UN Tourism (1995) definition of tourism: "Tourism comprises the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes." For other authors, sport tourism is defined as a specific kind of tourism on the crossroads of sport and tourism (Galvasová 2008; Palatková and Zichová 2011; Pigeassou 2004). Deery, Jago, and Fredline (2004) add that there is constant debate as to what kind of sport can still be counted as sport tourism, whether all sport should be included or just participation in competitive sports (Neirotti, 2003). In this paper, sport tourism is defined as travel for the purpose of attending or participating in competitive sporting events.

Similarly, there are according to Hinch and Higham (2011) differences in participation – whether its active or passive. Although these categories overlap as many fall into both, Ratkowski and Ratkowska (2018) nonetheless define these two groups as "athletes" and "spectators," The majority of whom are the latter (Gibson 1998).

After defining sport tourism and its participants, another debate arises as scholars argue about the roots of sport tourism. Hinch and Higham (2011) posit that people have traveled for centuries for sport, and this habit can be dated back to Ancient Greece and its Olympic Games. The long history of sport tourism is also mentioned by Ritchie and Adair (2004), Weed and Bull (2009), and Huggins (2013). Another approach views sport tourism as a modern phenomenon, emerging with the advent of greater free time and disposable income for travel. However, scholars generally agree that sport tourism is a relatively new research field that has gained prominence in recent decades (Gibson 2017). Since then, sport has begun to be treated as a central research focus and not just a byproduct of other tourism research (Mollah, Cuskelly and Hill 2021; Ritchie and Adair 2002; Hinch and Higham 2001). The research here is focused on modern era (Huggins 2013), and since the 1980s, the majority has dealt with mega-events such as the Olympic Games of World Cups (Weed 2009).

Sport tourism, as a part of event tourism, has similar traits to other types, such as event or festival tourism, because it could work as a tool for promoting region or creating a destination image (Harcup 2000; Dychkovskyy and Ivanov 2020; Pioš, Skoczylas and Brzezińska-Wójcik 2014). Like other forms of event tourism, sport tourism is frequently analyzed in terms

of its economic impact, particularly the financial benefits it brings to the host region. This includes economic contributions from both the event and public sector support (Brown et al. 2015; Dwyer, Jago and Forsyth 2016; Chung, Hou and Kuo 2011). Contrariwise, there are also aspects that differentiate sport tourism from other forms. The main difference is target audience and hence target visitors, as each kind of event has a (slightly) different target audience. This results in differences in length of stay, loyalty to the event, or participant preferences when choosing accommodation or dining (Pioš, Skoczylas and Brzezińska-Wójcik 2014; Ferrucci et al. 2021; Gomez-Casero et al. 2020; Cudny, Jolliffe and Guz 2022).

Focusing on motorsport, most scholars study the biggest events, such as Formula 1 or World Rally Championship (WRC). Nonetheless, these events are still small-scale events according to Higham (1999) as they do not fulfill the characteristics of mega-events. Although the initial expenditures required for a new destination to host such an event are quite high, as it usually requires building new facilities to required standards of the series, after this initial expenditure, the benefits of small-scale events start to apply. The venues are constructed for long-term use, unlike certain one-time mega-events like the Olympic Games. Circuit racing (such as Formula 1) has high expenditures for maintaining venues and facilities, but as was previously mentioned, these facilities are intended for use across multiple editions of the event. In recent years, the initial expenditures have also often been funded by the public sector with the aim of promoting the country or region and increasing tourism (Ramasamy and Yeung 2020; Henderson et al. 2010; Ramasamy, Wu and Yeung 2020; Galliera 2006; Larasati, Mahadewi and Surata 2023; Nugroho and Pradini 2022). Circuit racing is hence the most popular in academia research.

In rallying, a similar trend found in circuits starts to emerge as most scholars focus on the biggest events

from the WRC (Hassan and McCulloch 2007, 2008; Hassan and O'Connor 2009; Naess 2014). These scholars usually study the geographical background of the events and the visitors' sociology, such as what motivates fans to visit the event. The economic aspects of organizing these events are also popular, with attention paid to estimating visitor spending at the events or the benefits supporting these events brings to the public sector. Finally, scholars deal with the role rally events play in regional tourism.

Only a handful scholars focus on smaller events. Hassan and O'Connor (2007), for example, conducted research on the French national event Rally Le Torquet in addition to the WRC events. Barajas, Coates, and Sanchez-Fernandez (2016) and their study of the Spanish championship event Rally Ourense is another example. In Czechia, there is research of the BCRZ (Hrušák 2013; Píža 2013; Kura 2017), which is part of the European Rally Championship and therefore an event with importance between the WRC and national events. Aside from the two mentioned exceptions, research omits national-level events despite the economic impact and important role they play in regional tourism, according to Wilson (2006).

### 2.1 Importance of event size

When dividing (sporting) events by size, the starting point is the classification of Gratton, Dobson, and Shibli (2000), who categorized six major British sporting events based on economic indicators and participant numbers, establishing four event types, labeled A through D Wilson (2006) introduced a fifth category, Type E, representing minor national-level events characterized by limited economic impact and minimal media attention. This typology was fine-tuned by Duglio and Beltramo (2017) and is presented in Fig. 1.

The literature review makes clear that there is a limited body of research regarding sport tourism

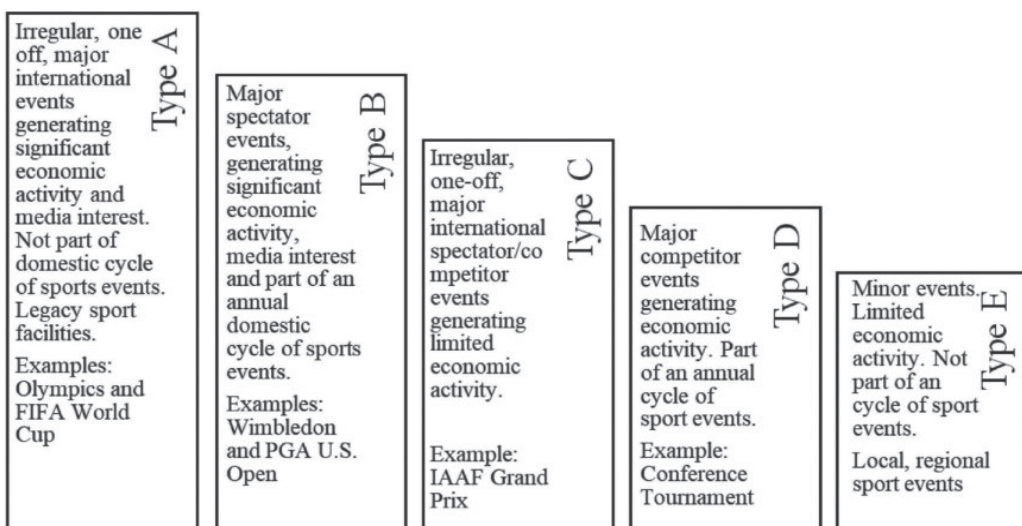


Fig. 1 Typology of events. Source: Rowley and Smith (2022)

and motoring events in general. Focusing on rallying, the literature is even more scarce. Only a handful of texts are aimed at smaller rally events like national championships. These events however could play a substantial role for the hosting region and be beneficial for it, as is shown in Fig. 1.

Therefore, this research is seeking a novel approach, the aim of which is to deepen understanding of rally events in Czechia. The primary research question aims to assess whether there are any significant differences among rallying events annually held in Czechia – a topic that has not been previously explored in academic literature. Previously, research has predominantly focused on individual events. This research contributes a novel perspective by examining multiple rallying events simultaneously. It addresses a gap in the literature by comparing the characteristics and differences of these events within the specific context of Czechia, which has not been explored previously.

To date, as previous paragraphs showed, scholarly attention has largely been directed towards comparing events mainly within WRC. However, smaller events on a regional scale have been overlooked in research endeavors. Therefore, this study fills a significant gap in the literature by conducting research at a broader level and within the specific context of Czechia, thus representing a notable advancement in the field.

### 3. Methodology

#### 3.1 Events in the case study

The paper focuses on selected annual rally events with the aim of identifying their geographical background and discovering whether there are significant differences in the habits and customs of each event's visitors. As the research employs a comparative analysis, seven rally events were selected (Tab. 2 provides an overview) – some of these events were at the

time also part of foreign national and international championships.

Barum Czech Rally Zlín (BCRZ) stands out as the largest event, spanning three days and annually drawing over 100 participating crews – in 2019, there were 127 crews, with 34% coming from foreign countries. In contrast, the other events listed in the MČR championship typically attract fewer than 100 participants, with Rally Bohemia having the lowest number of 68 participants. Moreover, these events tend to have a smaller proportion of foreign competitors compared to BCRZ. Rally Pačejov lasted only one day, yet it attracted the highest number of participants among all studied events, with 146 crews participating.

Regarding visitor numbers, data is often unavailable as event organizers rarely publish such figures. However, it is known that BCRZ typically draws over 200,000 visitors, with approximately one-tenth of them coming from abroad (Rally Zlín 2016). Information about visitor numbers for other events is usually found only in press releases or news articles. Generally, these events have a smaller audience compared to BCRZ. For instance, in previous years, Rally Bohemia attracted around 100,000 visitors (iDnes.cz 2013), while Rallye Český Krumlov typically sees attendance from several tens of thousands of visitors (Kudyznudy.cz 2024).

#### 3.2 Material and Methods

Research was conducted via an online questionnaire survey utilizing a combination of closed and open-ended questions. Distribution of the questionnaire to respondents was online via the websites and social media pages of each event and via webpages focusing on rallying. Online research was selected due to the expansive nature of the research area, with events occurring throughout various times and regions of Czechia. As noted by Eysenbach and Wyatt (2002), this approach to research proves advantageous when dealing with widely dispersed research groups. Furthermore, the efficacy of online research in

Tab. 1 Brief introduction of studied events.

Event name	Center	Event period	Championship <sup>1</sup>
Valašská rally	Valašské Meziříčí	29. 3. – 31. 3. 2019	MČR, CRT, SK
Rally Šumava	Klatovy	26. 4. – 27. 4. 2019	MČR
Rallye Český Krumlov	Český Krumlov	17. 5. – 18. 5. 2019	MČR, CRT
Rally Hustopeče	Hustopeče	14. 6. – 15. 6. 2019	MČR, CEZ, SK
Rally Bohemia	Mladá Boleslav	12. 7. – 14. 7. 2019	MČR
Rally Pačejov	Horažďovice	26. 7. – 27. 7. 2019	RSS
BCRZ	Zlín	16. 8. – 18. 8. 2019	MČR, ERC

1 Each rally is listed in various championships with different importance. Rally Pačejov was part of the second-tier Czech championship, called RSS. Some events were part of the third-level European rally championships, the CRT or the CEZ. Rally Hustopeče and Valašská were part of the Slovak Rally Championship, and BCRZ was part of the European Rally Championship.

such scenarios has been underscored by the findings of Hickman et al. (2019) and Milković et al. (2023).

Scholars also mention that using online surveying is beneficial for targeting desired research group and controlling the sample while including fewer mistakes, blank items, and item refusals (Nayak and Narayan 2019). On the flip side, it's crucial to acknowledge the limitations inherent in this type of research, particularly the limited ability for researchers to influence the research audience. Menon et al. (2020) highlighted that online surveying relying on voluntary participation faces limitations due to unknown target populations and potentially biased samples. This sentiment was echoed by Azzam and Jacobson (2013) and Akbulut (2015), who emphasized the importance for researchers to exercise caution when interpreting data collected through online questionnaires, as response biases may skew the results.

To ensure the quality of the data collected through online surveying and to address the potential limitations mentioned earlier, questionnaires from BCRZ were compared with the results of the authors' previous research conducted at Barum Czech Rally Zlín (Kura 2017), where data were gathered both online and in-person. In that study, the data from offline surveying did not show any significant difference from those gathered online. Therefore, in line with Yu et al. (2022) or Gosling et al. (2004), it can be argued that the benefits of online surveying outweigh possible limitations. Moreover, in the context of rally research, such limitations did not seem to influence the results.

The questioning was conducted mainly in the week following each given event; thus, respondents

had all the information needed to complete the questionnaire in their recent memory, ensuring minimal risk of a memory fade bias. To ensure that the data gathered would have enough representativeness, a demographic distribution of respondents was compared to other rally events in Czechia (Píža 2013; Hrušák 2013; Kura 2017) and internationally (Hassan and O'Connor 2009; Hassan and McCulloch 2007, 2008; Barajas, Coates and Sanchez-Fernandes 2016) without any significant difference. To ensure the representativeness of the sample at least two hundred questionnaires were gathered from each rally event, approximately 1% of the unique visitors from each rallying event.

In Tab. 2 are provided short demographic characteristics of the respondents. Several patterns emerge in the structure of the respondents: the data shows that rallying is still a male-dominant sport and, for all the events, the majority of visitors are male, which is in accordance with other rally events studied (Píža 2013; Hassan and McCulloch 2007; Hassan and O'Connor 2009). Visitors to rally events studied show no difference to previous scholars in age structure either, with the dominant group being of productive age between 20 and 35 years. The research mentioned above did not deal with the education of the respondents; therefore, only Czech events were compared. The data showed that an ISCED 2011 level 3 of education (upper secondary education) prevails, a similar structure of education to the Czech population – the most recent census showed that 63% of Czech inhabitants had finished ISCED 2011 Level 3 of education (CSU 2023).

**Tab. 2** Structure of respondents.

Category	Valašská rally	Rally Šumava	Rallye Český Krumlov	Rally Hustopeče	Rally Bohemia	Rally Pačejov	BCRZ
<b>Gender</b>							
Male	91.1%	87.8%	82.2%	88.7%	86.7%	89.9%	88.2%
Female	8.9%	12.2%	17.8%	11.3%	13.3%	10.1%	11.8%
<b>Age</b>							
Younger than 16	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%
16–25	23.8%	20.3%	18.4%	19.1%	19.3%	14.7%	27.7%
26–35	36.3%	32.9%	38.5%	37.4%	30.9%	35.6%	28.8%
36–45	23.3%	23.8%	22.6%	16.6%	23.2%	18.7%	23.2%
46–55	10.7%	11.5%	12.3%	16.5%	12.7%	15.5%	12.8%
56 and older	5.9%	11.5%	8.2%	10.4%	13.9%	15.5%	5.0%
<b>Education (ISCED 2011)</b>							
Level 2/ lower secondary education	4.1%	6.1%	4.1%	4.3%	7.4%	8.6%	7.1%
Level 3/ upper secondary education	77.4%	75.6%	80.2%	73.1%	79.3%	71.9%	69.4%
Higher	18.5%	18.3%	15.7%	22.6%	13.3%	19.5%	23.5%

Source: our questionnaire survey

The questionnaire itself was constituted of five parts, with each focusing on a distinctive topic area. The initial part of the questionnaire focused on transportation methods and the place of origin of the visitors. The subsequent part sought to comprehend the habits and customs of the spectators during their time in the event's hosting region, with particular emphasis on their choice of accommodation, food consumption, and other activities tied to the rally combined with an estimation of their spending for these services. It also asked whether the rally was the sole reason for their visit to the hosting region.

The two following parts of the questionnaire were focused on aspects not connected with this paper, such as reasons to visit the region besides the rally. The concluding section of the survey collected demographic details, such as respondent age, gender, and educational background. In total, 2,300 questionnaires were gathered for the research, with 887 respondents gathered from events other than the BCRZ, the latter was at the center of other research being conducted by the author, and therefore subject to more profound questioning with a bigger research sample.

Various statistical analyses were utilized to analyze the data according to the nature of each question on the questionnaire. For the numerical variables, such as distance traveled to the event center or length of stay at the event, the data were first checked by Shapiro-Wilk test as to whether they were distributed normally. As the data for numerical variables in all questions showed abnormal distribution, a Kruskal-Wallis test was used to determine whether there were statistically significant differences between the events. To learn the differences between the exact events, a Mann-Whitney U test (with Bonferroni correction) was additionally applied. Additionally, a Chi-square test was used to find out the independence of the data where it was suitable.

## 4. Results

As respondents specified their place of residence, it was possible to measure the distance traveled to the event center. These distances are averaged as a person traveling, for example, to Mladá Boleslav from the south of Prague would cover a few kilometers more than a person traveling from the north of Prague. The general summary about travel to the events is showed in the table 3 below.

The distances traveled to each event were first examined using a basic statistical analysis to determine the median and average values. As is shown in the Fig. 2 map, distance decay plays a role as most visitors arrive at the events from neighboring municipalities. Three groups of events could be differentiated according to average travel distance. The highest average distance was BCRZ, which is the most international event and has a significant share of visitors from abroad. The second group of events consists of the Valašská rally, Rally Hustopeče, and Rallye Český Krumlov, with an average traveled distance hovering around 100 km. The last three events have the smallest reach as these are not part of any international championship. Using the Kruskal-Wallis test indicated statistically significant differences among the events ( $H(6, n = 1109) = 17.457, p = 0.00774$ ). These differences were observed only among some of the events according to post-hoc pair-wise Mann-Whitney U test (with Bonferroni correction for multiple testing). Differences were found between Rally Hustopeče and following events: Rallye Šumava ( $p = 0.012$ ), Rally Bohemia ( $p = 0.0045$ ) and Rally Pačejov ( $p = 0.012$ ). In conclusion, while differences were observed in the average distance traveled to each event, only Rally Hustopeče displayed statistically significant differences when compared to the other events.

As more than half of the visitors were not local (locals were defined as respondents living in the LAU1 where the city with the rally center is located) respondents were asked what their primary reason was for arriving at the event region. A Chi-Square test ( $\chi^2(6, N = 802) = 14.77, p = .022$ ) revealed a statistically significant association between visitors' arrival in the region and their participation in the rally. This suggests that the rally events are a key driver of local tourism, attracting visitors who would not have otherwise traveled to the region. In other words, the rally events were an important player in local tourism as they attracted a number of visitors who otherwise would not have come without the rally. To further explore the significant differences in motivations for attending motorsport events, a post-hoc analysis using adjusted residuals was performed. Two events emerged with notable deviations from expected frequencies. The Valašská Rally showed a significantly higher number of respondents indicating the rally as their sole reason for visiting the region (Adjusted Residual = +1.59), while fewer respondents than expected cited additional reasons for their attendance (Adjusted Residual = -1.87). On the other hand, Rallye

**Tab. 3** Distance traveled to the center (see Tab. 1) of each event.

	Valašská rally	Rally Šumava	Rallye Český Krumlov	Rally Hustopeče	Rally Bohemia	Rally Pačejov	BCRZ
Median	60	48.5	50	97	50	52	153
Average	95.80	85.68	102.35	127.59	80.15	81.57	207.57

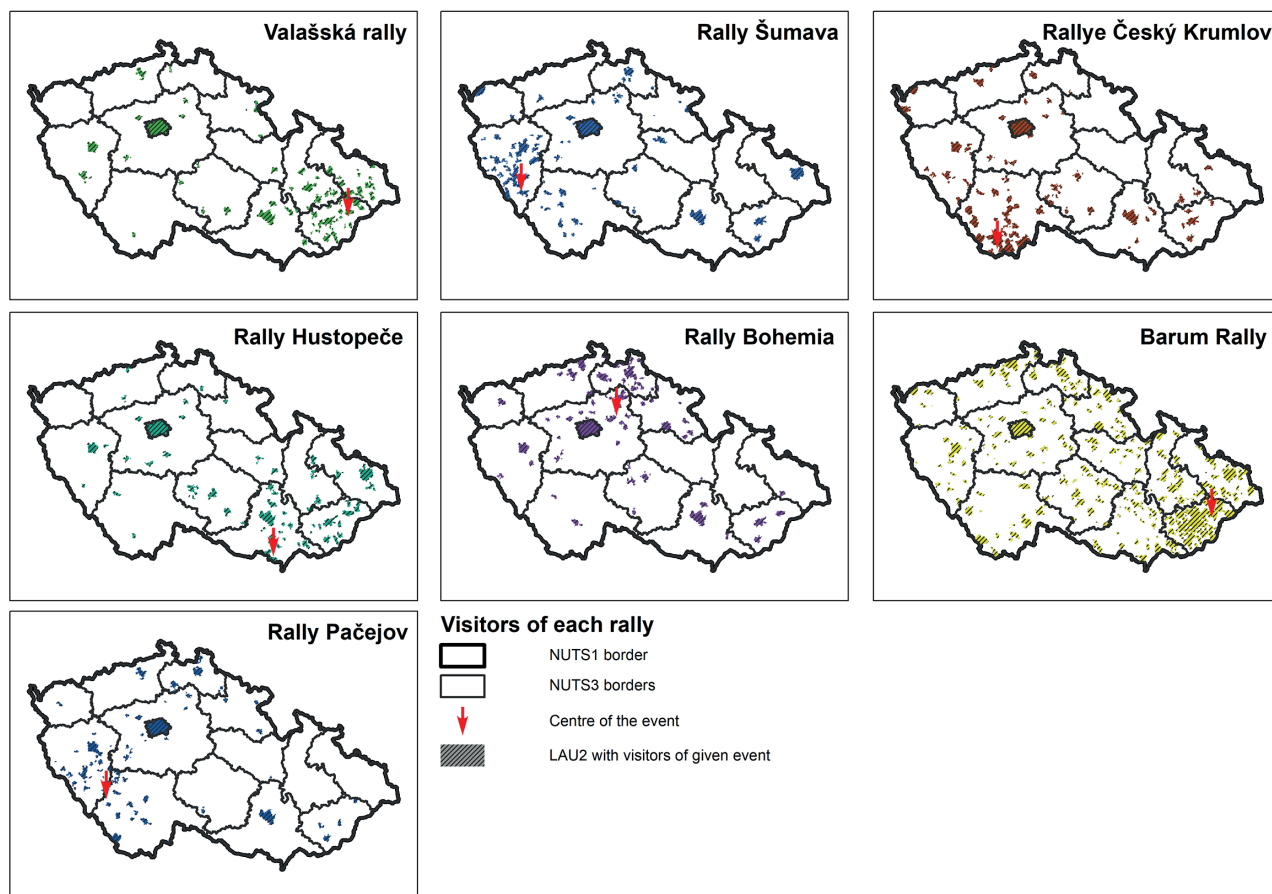


Fig. 2 Geographical distribution of event visitors.

Šumava had fewer respondents than expected attending solely for the rally (Adjusted Residual = -1.21) and more attendees for other reasons (Adjusted Residual = +1.43).

Fig. 3 provides insight into the length of stay. The key factor influencing the length of stay was the duration of the event itself (shown in Tab. 1). The majority of events span two days, with only BCRZ lasting three days, while Rally Pačejov is a single-day event. To analyze potential differences among the events,

focus was put on whether there are variations in the duration of attendees' stay beyond the event's scheduled duration. The results of the chi-square test of independence for the categorized stay data indicated a significant association between event type and the decision to extend the stay ( $\chi^2(6, N = 802) = 193.43, p < .00001$ ).

At Rally Hustopeče, nearly 90% of attendees extended their stay beyond the event's scheduled duration, making it the event with the highest

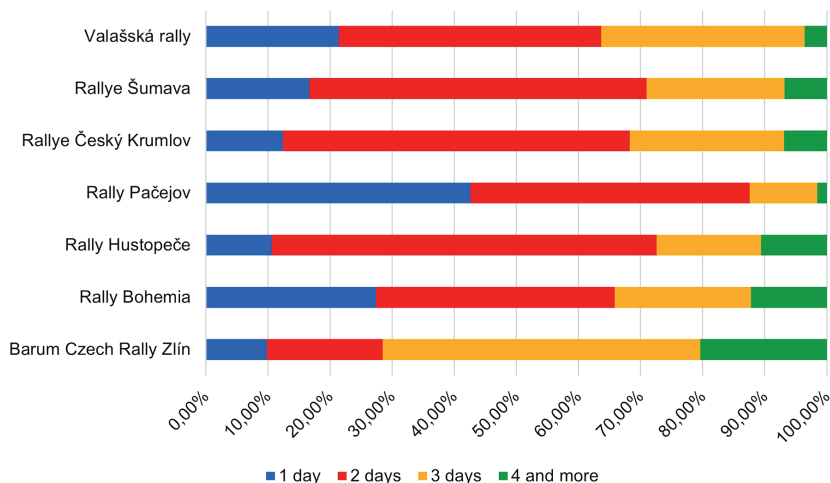


Fig. 3 Length of stay among visitors per event.

likelihood of prolonged visits among all those studied. In contrast, at Rally Pačejov, only 12% of respondents extended their stay beyond the event day. For the remaining events, approximately one-third of attendees prolonged their stay.

Regarding the shortening of stay, this trend is most notable at Rally Bohemia and BCRZ, where around one-quarter of visitors opted for a shorter duration than the event's scheduled length.

#### 4.1 Habits and customs during the rally visit

Two basic categories of habits and customs, obtaining (a) accommodation and (b) dining, during the events were observed. Focusing on accommodation options, the first notable finding was that the most frequent option is returning home. Accommodation was also affected by the duration of the event. Two-thirds of the visitors to Rally Pačejov spent the night at home as the event was only a single day. For the rest of the events, at least 40% of the visitors returned home every night. From a geographical perspective, there is clearly a visible difference in distance between the event center and the place of residence. Visitors spending only a day at the event venue are willing to travel approximately 55 km, whereas those spending two or more days at the event and still returning home travel nightly on average only 35 km.

A chi-square test of independence was conducted to evaluate the relationship between event types and attendees' accommodation preferences. The test revealed statistically significant differences among the events ( $\chi^2$  (48, N = 802) = 343.65,  $p < .00001$ ) and post-Hoc Analysis with Adjusted Residuals showed which events. Invelt Rally Pačejov showed a significant tendency for attendees to participate only during the day and not stay overnight (Adjusted Residual = 5.06). Several events showed unique patterns in accommodation types that significantly differed from expected values under the hypothesis of independence ( $\chi^2$  (48, N = 802) = 343.65,  $p < .00001$ ). The

type of accommodation which significantly differed was sleeping in cars or in tents for the BCRZ (Adjusted Residual = 2.39). At Rally Hustopeče more attendees than expected stayed in hotels (Adjusted Residual = 2.45).

As regards obtaining food and drinks, the questionnaire respondents were able to combine given options and, therefore, in order to summarize, each occurrence of each individual option was counted to get a distribution of popularity for each option.

An overview of the usage of each dining option is provided in Fig. 4. In general, the most popular option was using the food stalls at the event location. A Chi-Square test was used to learn whether there is a significant association between the event and the dining options preferred by the respondents. The results indicated no statistically significant association between the type of event and the chosen dining options ( $\chi^2$  (18, N = 802) = 20.14,  $p = .325$ ) and suggested that the share of each dining option is consistent across events. It could be therefore assumed that the visitors to all the studied events have similar habits and the differences among them are statistically insignificant.

#### 4.2 Economic aspects of rally events

Small-scale events can have a smaller but stable economic impact on the hosting region and scholars utilized the economic impact of events as a differing factor for dividing events into types. Due to the lack of the data about exact number of visitors, this research was only able to estimate the average spending per person per day.

In the questionnaires, the respondents wrote down their average daily spending on (1) accommodation, (2) food and drinks, and (3) other expenses such as fuel, entry fees, car rental, and various other possible expenses related to their stay at the event. For each of these three categories, the respondents were given spending intervals, and they filled in the expenditures

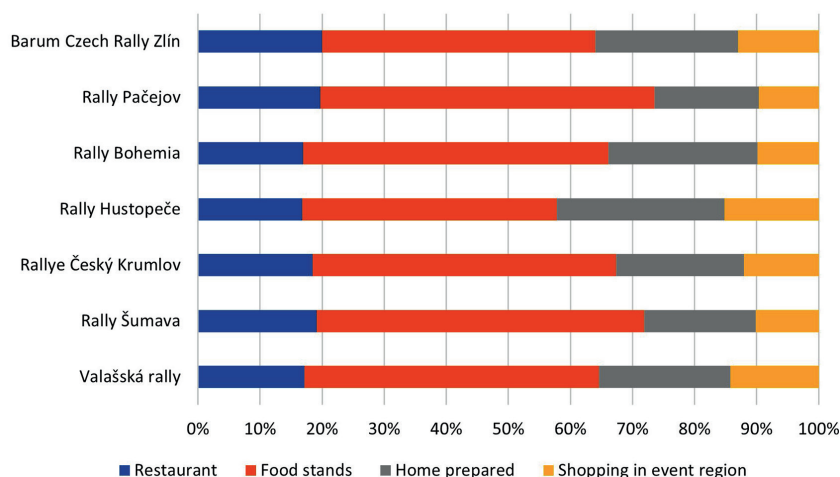


Fig. 4 Share of food and drink obtaining options among visitors at each event.



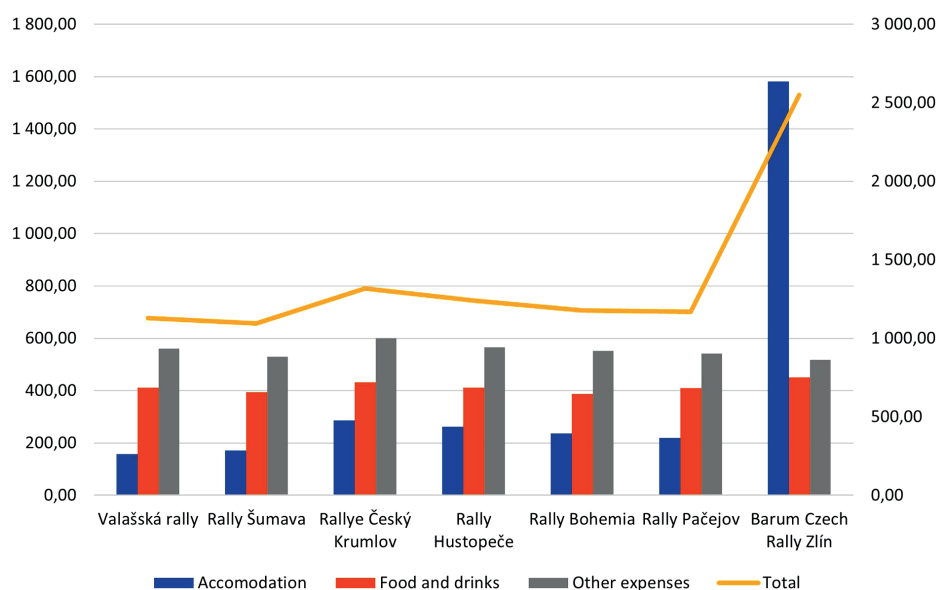


Fig. 5 Structure of spending in CZK among visitors of each event.

incurred most often for each kind. As Fig. 5 shows, overall, one event differs from the rest: BCRZ.

Switching our focus to the other events, the average daily spending per person is 1,200 CZK and all events differ from this mean value by a maximum of 120 CZK. The highest spending among the remaining events was by visitors of Rallye Český Krumlov, which, as was shown in Table 2, has the largest average geographical background among the remaining events.

For all the studied events, there is a high portion of those who return home for the night (40% or more depending on the event, as was discussed in the previous section); therefore, those who spent nothing on accommodation and other goods were excluded. Despite this, the same pattern emerges: BCRZ is by far the event with the highest spending and Rally Hustopeče follows. The difference between the events when BCRZ is not included is nearly the same, with differences of approximately 10%.

## 5. Discussion

The paper focuses on selected events from the Czech Rally Championship with the aim of finding out the geographical and tourism habits of their visitors. Each event was studied via a questionnaire that was conducted online during and after each event. This type of research was chosen with consideration for both the benefits and limitations of online questioning. Given the wide range of potential respondents, online surveying offered a cost-effective means of reaching this audience, as demonstrated by studies such as those by Hickman et al. (2019) and Milković et al. (2023). However, potential biases resulting from the semi-unknown audience and the method of questionnaire distribution, as highlighted by Azzam and Jacobson (2013) and Akbulut (2015), were carefully

considered. A sample of results was compared to previous research conducted by the author (Kura 2017), where part of the questionnaires was collected in-person. Since no significant differences were found between the samples, it can be inferred that these limitations of the research were effectively mitigated.

The first analysis of geographical background and travel distance suggests that the events can be categorized into three distinct groups based on their reach and visitor distribution (Fig. 2). In this stage of the research, BCRZ stood out. However, further statistical analysis using the Mann-Whitney U test (with Bonferroni correction) indicated that Rally Hustopeče was the only event that significantly differed from the others. This is probably caused by the location of the event and its listing in both the Czech and Slovak rally championships, which resulted in different arrival patterns among its visitors and thus larger distances traveled. Another reason could also be the fact, that the results suggested that Rally Hustopeče has the highest portion of visitors who exhibited likelihood to prolong their stay in the region beside the rally.

Focusing back on the purely geographical background of the events, besides BCRZ, the remaining events show a relatively uniform pattern, with the majority of visitors coming to these rally events from the hosting region or those that border it. For all the studied events, there was no difference from other scholars dealing with rallying (Hassan and McCulloch 2007; Hassan and O'Connor 2009) in the fact that the event itself is the main reason the visitors come to the hosting region. This result was also found out by scholars focusing on Barum Czech Rally Zlín (Píža 2013; Hrušák 2013) when focusing on the structure of visitors of the BCRZ. These findings underscore the significant role that rallying events play in driving tourism in the host regions, particularly by attracting visitors who might not otherwise travel to these

areas (Egresi and Kara 2014; Nicholson and Pearce 2001). Thus, it could be concluded that rally events bring a significant number of visitors to the hosting region who would otherwise not come. This observation is further strengthened by the statistically significant association found between visitors' arrival to the region and their attendance at the rally. The results suggest that a significant portion of visitors would not have come to the region in the absence of the rally, highlighting the direct contribution of these events to local tourism. This underscores the direct impact of the rallying events on tourism in the region, supporting the importance and relevance of the study's focus on these events.

The focus of the research on the length of stay at the event centered on whether respondents chose to extend or shorten their stay in the region beyond the duration of the event. The chi-square test of independence for the categorized stay data revealed a significant association between event type and the decision to extend the stay.

Rally Hustopeče again demonstrated the highest likelihood of attendees extending their stay, possibly due to factors such as its cross-border appeal and dual inclusion in both the Czech and Slovak rally championships. Conversely, Rally Pačejov exhibited a lower likelihood of stay extension. This could possibly be attributed to the fact that in the year of the research, the event lasted only one day. Therefore, respondents may have attended solely for that day and did not seek accommodation, returning home after the event concluded.

As regards accommodation and dining options, there are mostly similarities among the events, with just a few differences. As a relatively high proportion of the visitors to all the studied events are based in the hosting region, the most frequent option for spending the night is to return home. However, there are differences between those who spend one day at the event and those who spend more days as the latter on average travel half the distance to the event center in comparison to those who come for just one day. Besides this accommodation option, the most popular choice is to spend the night in hotels, with only a few differences among the events emerging. For BCRZ and Rally Pačejov, there is a statistically significant number of those who visit the event for only one day, whereas Rallye Český Krumlov and Rally Hustopeče have a significantly different option of tenting near the special stages. All the events share the same patterns of visitor habits with respect to dining options, with the majority preferring food stands at the event venue followed by the consummation of food prepared at home and then restaurants.

Last but not least, the paper estimated visitors spending during the events and found that the highest average spending is made by visitors to BCRZ as it is the event with the greatest share of hotel usage, which is clearly visible in the average daily spending

on accommodation. It is this specific spending category that explains why the BCRZ is so different from other events as the remaining expenditures are quite similar to the rest of the studied events. Like previous research focusing on this event (Hrušák 2013; Píža 2013; Kura 2017) has shown, this event has also a broader geographical background of visitors and a higher share of the foreign visitors who tend to spend more. There were no statistically significant differences in spending among the remaining events, with Rallye Český Krumlov having highest spending if the rest as it an event with broader geographical background.

## 6. Conclusion

This paper contributes to the existing body of knowledge and supports the further understanding of the role of small-scale events. By focusing on seven rally events held annually in Czechia, the paper aims to broaden the understanding of these kinds of events as most scholars in tourism research focus on mega-events and study them as individual and unique events without comparisons (Ramasamy and Yeung 2020; Henderson et al. 2010; Larasati, Mahadewi and Surata 2023; Nugroho and Pradini, 2022).

There are, of course, several studies comparing rallying events, but these focus on comparing events of world importance (Hassan and McCulloch 2007, 008; Hassan and O'Connor, 200) and just a handful of research is focused on national-level events (Barajas, Coates and Sanchez-Fernandez 2016). These should be perceived as typical small-scale events, somewhere between Gratton, Dobson, and Shibli's (2000) Type D classification and the Type E events added by Wilson (2006).

The results showed that among the studied events, there are no great differences between them, and the significant differences were solely in small aspects of the visitors' behavior.

The results of the study are constrained by the focus on the visitors of these events, and thus the findings apply to these attendees. Moreover, there could be limits caused by the questionnaire, which focused on the measurable aspects of the visitors' behavior. It did not focus on deeper motivations and explanations for visitor behavior during the event visits. This could be understood as a limitation of online research, which was focused on getting a broad sample of respondents so as to identify the general characteristics of the event visitors.

Future research should focus on possible changes in the visitors to the events according to changes in the championship status of the event or on the long-term analysis of visitors who attend these events to provide more durable and more profound insights into the evolving pattern of visitor behavior and their spending patterns.

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