



MICE Tourism in the Pre-COVID-19 Era: Key Determinants of Academic Conference Attendees' Satisfaction

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Abstract: *One of the new trends in the world tourism economy is the large and rapid growth of congress tourism. Congress tourism includes various types of meetings - congresses, conferences, incentive trips, events and manifestations. The congress-tourist offer consists of two components - congress and tourist, so in that sense, it is divided into a working part and part for rest and leisure. This study aims to examine the key determinants of academic conference attendees' satisfaction. Primary data were collected by the survey method. Descriptive statistics, correlation, simple and multiple regression were used in the study for data analysis. The results of the research highlight a key determinant that has a statistically significant impact on satisfaction: the experience of participants. Identification of key determinants of academic conference attendees' satisfaction is essential for organizers of academic conferences and tourism organizations in the destination of the conference because in this way they gain opportunities to improve future business relationships with clients and business performance.*

1. INTRODUCTION

The development and modernization of technology, along with natural and economic resources and an extensive network of academic and educational institutions have conditioned the need to organize the scientific, professional and economic exchange of achievements and education in these areas. Modern scientific and technological development has also influenced the need for closer cooperation between businessmen and scientists in national and international frameworks. To achieve cooperation, and exchange experiences and opinions, various types of gatherings are organized. Their program depends on the professional structure of the participants. The number of these gatherings also contributed to the creation of a new tourist branch, the so-called - congress tourism (Bjeljac, 2006).

At the congress of the International Organization of Scientific Experts in Tourism (AIEST), congress tourism was defined as follows: "Congress tourism is a set of phenomena and relations, which arise from the travel and stay of persons who meet for the exchange of mostly scientific and professional information, and for whom the meeting place is not a permanent place of residence or work." In the true sense of the word, we can talk about international congress tourism only from the period when the modern congress-tourist offer was created, when there was a popularization of tourist movements and when international meetings attendees besides going to meetings for professional, business, or professional reasons, are largely motivated by tourist reasons (Štetić, 2007).

In this part of tourist movements, whether national or international, influential people from various fields of human activity gather - businessmen, scientists, artists, politicians, and representatives of various organizations. Participants usually represent highly educated, qualified and

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renowned people whose grades are very important, so they also represent individual media propaganda. Their impressions can be of crucial value in decision-making and are therefore the subject of special concern of congress cities, as well as congress and tourist offers as a whole (Štetić, 2006).

To identify the key determinants of academic conference attendees' satisfaction an empirical study was conducted on a sample of 102 respondents. Primary data were collected through a survey method in the Balkans, while descriptive statistics, correlation, and simple and multiple regression analysis were used in the data analysis. The importance of the implemented research is reflected in the identification of key determinants of satisfaction of attendees at academic conferences. These are dimensions that relate to the overall experience of attendees at academic conferences, which include all components in the value chain of the conference as a service. Although a large number of studies have been focused on the decision-making process of participation in the conference; factors influencing the choice of the conference; motives for participating in conferences; very few authors are interested in research aimed at the satisfaction of academic conferences attendees, so studies in this field are present to a lesser extent, but are slowly becoming the subject of interest and study.

2. LITERATURE REVIEW

2.1. Congress tourism

Business tourism includes various meetings, seminars, congresses, conferences, conventions, symposiums, exhibitions, and events that contribute to connecting people and exchanging knowledge and information. Due to the inclusion of all economic and non-economic activities in the realization of these trends, this form of tourism is one of the most profitable forms of tourism (Štetić, 2007). Within business tourism, it stands out as a special market niche, the so-called congress tourism, that can be viewed as a subset of a broader area of tourism - business tourism (Ficarelli, Sendra, Parra, & Lloret, 2013). However, despite the everyday use of this term, the ICCA (International Congress and Convention Association) has not proposed a single definition of congress tourism (Šušić & Mojić, 2014).

The development of congress tourism requires the existence of a quality congress-tourist offer, which will satisfy the needs of both participants and organizers of gatherings. The tourist offer, in a broader sense, consists of attractive (natural beauties, cultural heritage), receptive (accommodation capacities) and communicative factors (traffic infrastructure), which are necessary for the development of tourism in a destination. Tourist destinations that have elements of attractiveness are also desirable places for various gatherings because thanks to the tourist attractiveness of the destination, the attractiveness of the gathering is greater, participants come to the gathering accompanied by spouses, children, or friends, and usually stay longer to get to know the given destination. The congress offer of the destination includes all types of facilities and various service activities that enable uninterrupted meetings (Dragičević, Plavša, Štetić, & Stankov, 2009). For the gatherings, primarily congress centers are used, then hotels, university rooms, but also some "exotic" spaces (museums, theaters, theme parks, castles, and even vehicles, usually a ship and train), which will make the gathering more attractive, unique and memorable (Lawson, 2000).

Actors in congress tourism are organizers, i.e. conference holders (corporations, associations and various institutions), direct service providers (congress centers, hotels with conference space, etc.),

intermediaries (travel agencies, destination management agencies, professional congress organizers), as well as attendees (Rabotić, 2013). Organizers are looking for attractive destinations and spaces that will suit the size of their event (Whitfield, 2009), so the destination must provide the organizers with a large selection of congress facilities. Attendees represent the category of tourists with the highest consumption (Holloway, Humphreys, & Davidson, 2009), who spend two to four times more than ordinary tourists (Swarbrooke & Horner, 2001), and are therefore a very desirable category of tourists in destinations (Bučić, Dragičević, & Cimbaljević, 2015).

The International Congress and Convention Association (ICCA), based in Amsterdam, annually publishes data on the number of international congresses, conferences and similar gatherings, based on which the participation or position of certain countries or cities in the congress market is determined.

The ICCA ranking is formed based on the number of meetings held in a country or city (the meeting has a minimum of 50 attendees, is held regularly and the host of the meeting alternates between at least four countries) (ICCA, 2019). Table 1 shows the 10 leading countries and cities by the number of meetings held in 2019. It can be noticed that the USA and European countries occupy leading positions, but also that the participation of Asian countries (Japan and China) is significant. According to ICCA statistics, the France capital Paris is the most popular congress city in the world, with 237 gatherings held in 2019. Certainly, European cities are the most popular cities for congress tourism, according to the given data. For individual countries and cities to maintain or improve their positions in the congress tourism market in the future, it is necessary to adopt national strategies on congress tourism. Also, it is necessary to conduct regular research on the volume, the value of the business travel market, and trends that prevail or are predicted on it, in order to provide reliable statistics to study primarily the impact of congress tourism on national economies (Dragičević, 2008).

Table 1. Top 10 Country and City Rankings

Rank	Country	No. of meetings	Rank	City	No. of meetings
1	U.S.A.	934	1	Paris	237
2	Germany	714	2	Lisbon	190
3	France	595	3	Berlin	176
4	Spain	578	4	Barcelona	156
5	United Kingdom	567	5	Madrid	154
6	Italy	550	6	Vienna	149
7	China	539	7	Singapore	148
8	Japan	527	8	London	143
9	Netherlands	356	9	Prague	138
10	Portugal	342	10	Tokyo	131

Source: ICCA, 2019

The congress activity has reached unexpected proportions in recent years. When talking about congress activities, the acronym M.I.C.E. is often used - for meetings, incentives, conferences and exhibitions (Alananzeh, Maaiah, Al-Badarneh, & Al-Shorman, 2018). From year to year, the share of M.I.C.E. industries is growing in all countries. At congresses and conferences, communication is realized between experts, members of the association, and business people.

The importance of congress activities is visible from the viewpoint of:

- technical and technological development and progress of world science;
- economic and business cooperation;

- communication between people of different, perceptions, cultures, and races;
- mobility of a new group of tourists - “congressmen”;
- propaganda of national and tourist values of the host country;
- peace in the world (Štetić, 2006).

By organizing international congresses, conferences, meetings, etc. high economic effects are achieved and influential visitors are attracted. Congresses affect the development of tourism, increase off-season traffic and create a new image of the destination (Šušić & Mojić, 2014). The second benefit is realized over a longer period. Namely, congresses are an opportunity to present domestic expertise and knowledge to foreign colleagues and customers, as well as an option for domestic products to find their way to foreign customers. Also, domestic experts often do not have the opportunity to go to similar events abroad because they have certain resource limitations, and in this way, they can present their works and research to their colleagues and thus be internationally recognized (Mihajlović & Stošić Mihajlović, 2017).

In addition to the positive, congress tourism can have negative social and environmental consequences, e.g. air pollution due to used transport (airplane, car driving), water and soil pollution during a hotel stay, food and solid waste generation, overuse of natural resources (Han et al., 2019). Congress attendees usually move in groups and in a short period, which can lead to traffic congestion, increased congestion in parking lots, restaurants, shops, etc. This is especially pronounced in destinations that have a smaller spatial coverage (mountain, coastal destinations, etc.). when the number of attendees may exceed the carrying capacity of the destination (Whitfield, 2007).

A country that invests in the development of tourism and takes into account the engagement of existing capacities during the year, sees an alternative in the development of congress tourism because it affects the extension of the tourist season. Due to the wide range of needs of congress tourism participants, their entourage as well as the organizers, the M.I.C.E. industry and their participants are increasingly becoming the subject of competition in the market. The propaganda of a tourist destination begins with announcements and comments about where the meeting, congress, or conference is being held. The role of the media can hardly be measured by numbers or financial data, but it undoubtedly contributes to creating an image of a destination and its characteristics (Štetić, 2006). Conferences can be of great benefit to the congress city if they were successful and if the participants left the city satisfied, which means that depending on the success of the conference depends on the image of the tourist destination and its further placement on the tourist market.

Research in the field of congress tourism is mainly focused on: factors influencing the choice of destination (Crouch, Del Chiappa, & Perdue, 2019; Crouch & Louviere, 2004; Lee & Back, 2008); congress destination attractiveness (Marques & Pinho, 2021; Pavluković, Vuković, & Cimbaljević, 2021; Sikošek, 2020); the impact of congress tourism on national economies (Grado, Strauss, & Lord, 1997; Kim, Chon, & Chung, 2003), motives to attend academic conferences (Fowler, Cardon, Marshall, & Elder, 2021; Mair, Lockstone-Binney, & Whitelaw, 2018; Rittichainuwat, Beck, & Lalopa, 2001; Severt, Wang, Chen, & Breiter, 2007), factors influencing conference and congress participation decision-making process (Baloglu & Love, 2005; Oppermann & Chon, 1997; Pavluković & Cimbaljević, 2020; Yoo & Chon, 2008), quality dimensions of conferences, congresses, and conventions (Kim, Lee, & Kim, 2012), attractiveness factors of academic conferences (Cieślowski & Brusokas, 2020), needs of conference attendees (Aktas & Demirel, 2019).

2.2. Satisfaction of academic conference attendees

Academic conferences are events where the work and research of academics - professors, researchers, experts and students are presented; they are an ideal place for gathering experts from a certain field that is the subject of the conference, exchanging experiences, knowledge and establishing cooperation between researchers and institutions they represent (Campos, Leon, & McQuillin, 2018; Lewis & Kerr, 2012). Academic conferences can, therefore, provide an abundance of scientific and societal impacts (Hauss, 2021). Academic conferences are also useful for informal review, something that can improve the quality of research and facilitate publication and citation (Chalvatzis & Ormosi, 2021; de Leon & McQuillin, 2020; Gorodnichenko, Pham, & Talavera, 2021).

Conferences enable the exchange of ideas, they are focused on career advancement (Bjeljac, 2006), and provide attendees with the opportunity to achieve professional and personal goals; obtain feedback relevant to their work; the opportunity to get acquainted with the professional work and achievements of colleagues and experts in the field (McCarthy, McDonald, Soroczak, Nguyen, & Rashid, 2004) as well as a forum for discussion, presentation and debate on new concepts, research and attitudes (Edelheim, Thomas, Åberg, & Phi, 2018; Hobson, 1993). Also, conferences create space for attendees to escape from routine and meet the need for change.

Different types of organizations and academic institutions organize thousands of conferences a year around the world. Conferences can be of national, regional and international character. Conferences of international character are certainly of the greatest importance because they gather a large number of academics and experts from various parts of the world and enable the scientific community to present their work and achievements in the field that is the subject and topic of the conference. Large international conferences gather a large number of attendees, so in that sense, they can be seen as big events, although they occupy relatively low media attention.

Since there are a large number of conferences at their disposal, academics select some of them that they are interested in because it is impossible to participate in each of the conferences that are organized. Numerous factors influence the decision-making process on the selection of conferences in which to participate such as time required for research preparation, travel and accommodation costs, and conference fees (Kadaifci, Asan, & Topcu, 2020).

In 2011, Kozak and Yunci conducted a study on the factors influencing the choice of the conference, which identified 40 factors such as registration fees, accommodation costs, conference time and the possibility of contributing to professional career development. The results of the research showed that the most important factors influencing the decision to participate in the conference are: the possibility of recreation, the destination or location of the conference and the total costs (Gür, Hamurcu, & Tamer, 2016).

In a study conducted by Gur, Hamurcu, & Tamer (2016), 4 factors and 21 subfactors were identified during the conference selection. Factors are divided into costs (subfactors are: registration fee, accommodation and transport costs) time of the conference (subfactors are: travel time, conference length, time of registration and conference intensity), city or country where the conference is held (subfactors are: city/country brand, national cuisine, security, visa required, types of accommodation) as well as the characteristics of the conference (subfactors are: conference

topic, prestige, the official language of the conference, location, keynote speakers, academic contribution of the conference, social activities, accessibility of the conference venue and relevance of the conference). The conclusions of the study imply that when choosing a conference, the primary factor is the topic of the conference itself, and then other factors, such as costs, are taken into consideration.

When talking about factors affecting conference attendance decision-making, Lee & Back (2005) argue that the location of the conference is very important; Oppermann & Chon (1997) emphasize the destination brand as a significant factor while Rittichainuwat, Beck, & Lalopa, (2001) suggest that tourist attractions are important in the conference venue.

As they are service-oriented, academic conferences can be seen as a subset of the service economy. In this regard, organizers of academic conferences must be focused on delivering high-quality services to remain competitive (Weber & Ladkin, 2003).

Satisfaction is the consumer's emotional response to the experience he has in connection with the purchase of a certain product or service (Marinković, 2012). When it comes to academic conferences, it is expected that satisfied attendees will participate in the conference again. Severt, Wang, Chen, & Breiter, (2007) believe that there is a link between satisfaction and conference loyalty. When an attendee in a particular conference is satisfied, he can rank it higher compared to other alternatives in the future (Oppermann & Chon, 1997). However, satisfaction with a particular conference is an insufficient guarantee that attendees will return (Severt, Wang, Chen, & Breiter, 2007) as the impact of other factors such as cost, destination, research and professional development may be more important. Regardless of the influence of other factors, if conference attendees are not satisfied, they are less likely to participate in the future.

Pizam, Neumann, & Reichel (1978) point out that tourism is an intangible composition of interconnected components, where satisfaction or dissatisfaction with one component leads to satisfaction or dissatisfaction with the whole experience. In this sense, conferences can be seen as a set of services of different providers (Otto & Ritchie, 1996) including transport, accommodation, hospitality and conference organizers. Thus, the assessment of conference experience must include all components in the value chain of the conference as a service. The entire experience consists of three phases: before the conference (refers to the application process, communication with the organizers, the review process, travel, accommodation and transfer to the conference venue), during the conference (conference venue and environment, quality of presentations, social activities and networking, tourist tours) and after the conference (return and travel from the conference to the place of residence). Overall satisfaction is achieved if expectations are met for each of the services involved in the overall experience (Lovelock & Wirtz, 2007).

3. RESEARCH METHODOLOGY

To examine the key determinants of the academic conference attendees' satisfaction, empirical research was conducted using the survey. The questionnaire was conceived in the online form and distributed to respondents via e-mail. The total number of e-mail addresses to which the questionnaire was distributed was 300. The number of fully responded questionnaires received in the period from January 24 to February 4, 2019, was 102, which represents a response rate of 34%. The basic sampling criterion is that the respondents attended an academic conference in the previous period (in the past 3, 6, 12 months or more).

The questionnaire consists of two parts. The first part consists of 7 groups of questions (variables), with a total of 18 questions, which respondents rated on a five-point scale, from 1 to 5, with the answer 1 indicating absolute dissatisfaction, while the answer marked 5 indicating absolute satisfaction. In other words, the satisfaction of academic conference attendees was measured through 6 variables, while the last variable represents the overall satisfaction. The questions were taken and adjusted based on questionnaires developed by (Lewis & Kerr, 2012), to measure the full experience or satisfaction of conference attendees, given that the questionnaires distributed by conference organizers after the closing of the conference measure only some aspects of satisfaction. The questionnaire is designed to monitor the entire attendees' experience, from the assessment of transport to the destination where the conference is held, all the way to the assessment of transport upon returning to the place of residence. This formed the basis for measuring the overall satisfaction of academic conference attendees. Table 2 shows the determinants of satisfaction, which include a total of 18 questions.

Table 2. Key determinants of academic conference attendees' satisfaction

Variables	Questions
Transport	Transport (by flight, bus, or car) to conference city was?
	Transfer to conference venue was?
	Transport (by flight, bus or car) from the conference?
Accommodation & Food	The accommodation was?
	The breaks between presentations were?
	The food at the conference venue was?
Communication & Organization	The peer-review process was?
	The registration process was?
	Admin./technical support at the conference was?
Social Activities	The social program at the conference was?
	The networking opportunity at the conference was?
Evaluation of Experiences	My experience as a presenter was?
	My experience as a member of the audience in sessions was?
	The plenary sessions were?
Destination Experience	The destination experience was?
	The tour(s) organized by the conference was?
Satisfaction	To what extent are you satisfied with your participation in the conference?
	To what extent are your expectations met?

Source: Authors, based on Lewis & Kerr (2012)

In the analysis of the collected data, descriptive analysis, correlation, and simple and multiple regression were used. First, a descriptive statistical analysis was conducted on the entire sample of respondents. From the measures of descriptive statistics for each question, the arithmetic mean and standard deviation were calculated. In the second step, correlation analysis was implemented to identify the degree of interdependence of all variables, followed by simple and multiple regression analysis. The problem of multicollinearity was examined through the values of the variance growth factor (VIF). Data analysis was implemented in the statistical package SPSS 19 (Statistical Package for the Social Sciences).

In addition to the above questions, the questionnaire includes questions related to respondents (gender, age, academic position, and nationality) and questions related to conferences (type of the conference, number of attendees at the conference, when the conference was held, topic of the conference, venue of the conference).

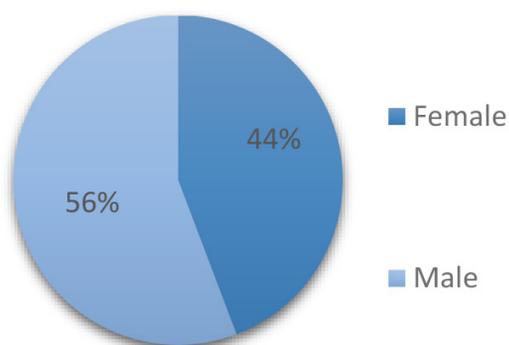


Chart 1. Gender

Source: Authors' research

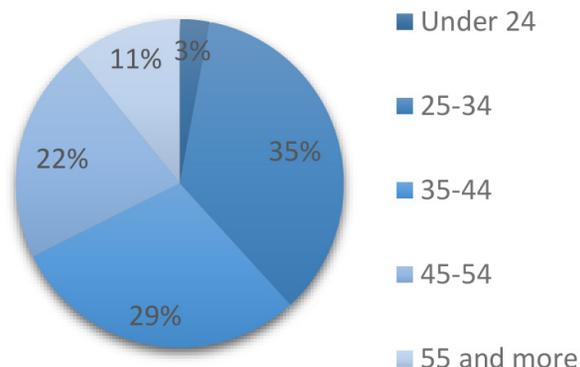


Chart 2. Age structure

Source: Authors' research

Observing the structure of the sample in Chart 1, it can be stated that more male respondents (56%) than women (44%) were included in the sample. When it comes to age (Chart 2) 3% of respondents are under 24, 35% of respondents are between 25 and 34 years old, 29% of respondents belong to the age group between 35 and 44, 22% are respondents from 45 to 54, 11% are respondents over 55 years. It can be concluded that all age groups are present. The sample consists mainly of respondents of two age groups: between 25 and 34 years, 35 and 44 years, in almost equal numbers, and the least present are persons under 24.

If we look at the academic position of respondents (Chart 3), the largest number of respondents (27%) have the title of senior assistant or assistant professor, and approximately the same percentage of respondents have the title of associate professor (21%), while 22% of respondents are graduate students. The smallest group of respondents are full professors (9%), 11% are lecturers, while 10% are mostly doctors of philosophy who participate in conferences and are not engaged in any of the educational institutions.

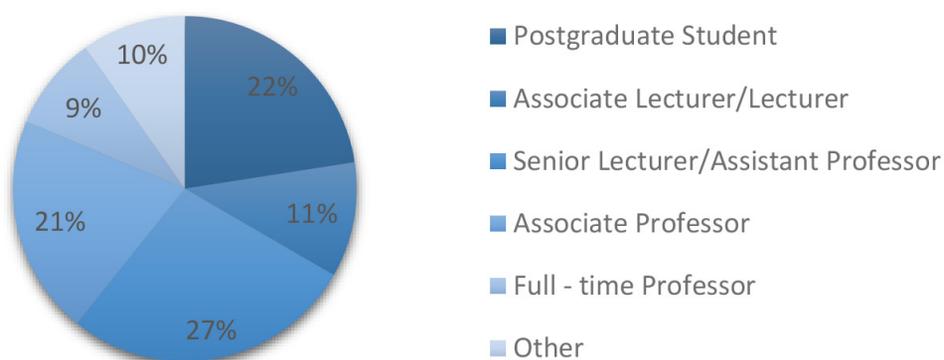


Chart 3. Academic position of respondents

Source: Authors' research

In Chart 4 we have an insight into the nationality of the respondents. The largest group of respondents are from Serbia (50%), while the smallest percentage of respondents are from Montenegro (1%) and Albania (1%). On the other hand, a large group of respondents consists of academics from Slovenia (17%), Croatia (10%) and Turkey (9%). Respondents from North Macedonia (6%), Bosnia and Herzegovina (3%) and Bulgaria (3%) also participated in the research. We can conclude that the respondents are academics from the Balkans region.

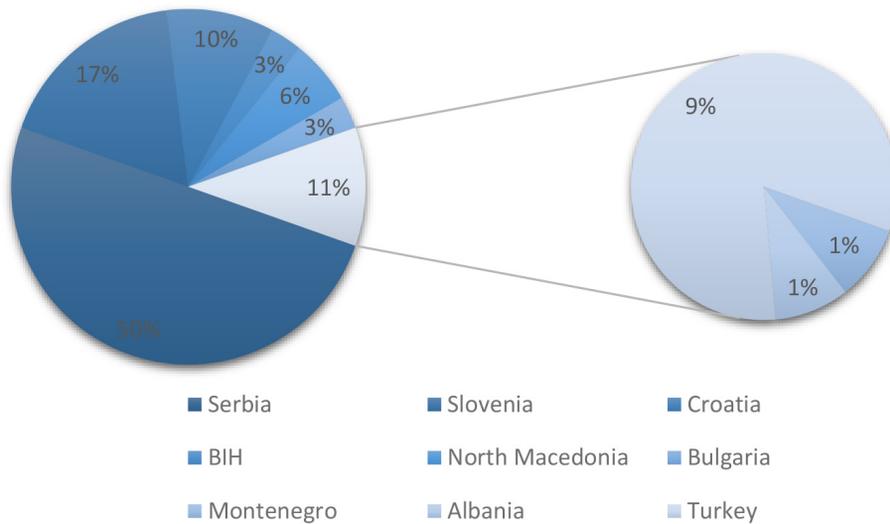


Chart 4. Nationality
Source: Authors' research

When it comes to the period in which respondents attended the conference, in Chart 5 we can see that the largest percentage of respondents attended the conference in the previous three months (67%), while the smallest number of respondents (7%) attended the conference which was held more than 12 months ago.

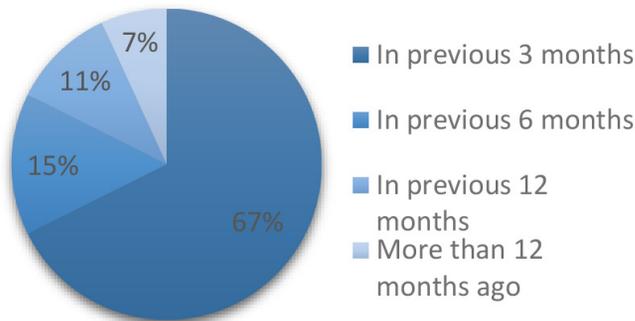


Chart 5. When the conference was held
Source: Authors' research

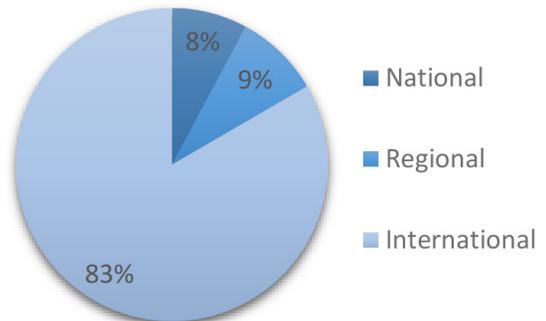


Chart 6. Conference type
Source: Authors' research

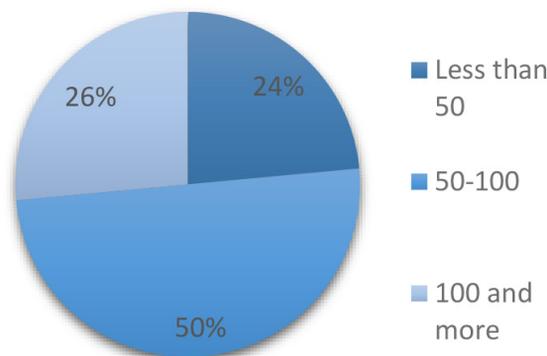


Chart 7. Number of attendees
Source: Authors' research

In the previous period, the largest percentage of respondents attended an international conference (83%), and the least a conference organized at the national level (8%) (Chart 6). When it comes to the number of attendees in given conferences, the largest number of conferences had between 50 and 100 attendees (50%), 26% of conferences had more than 100 attendees, and 24% of conferences had less than 50 attendees (Chart 7).

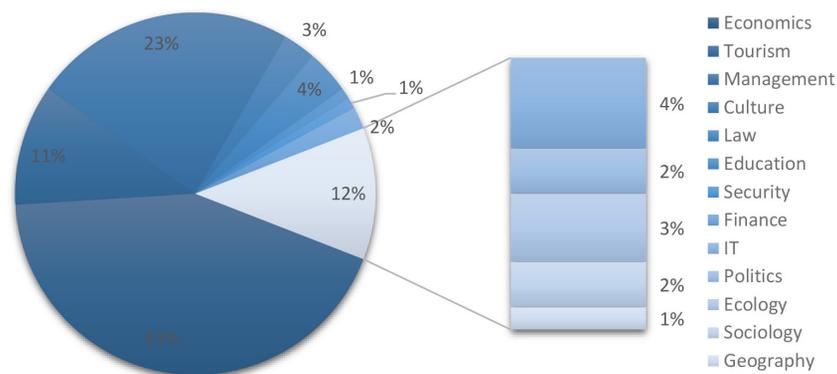


Chart 8. Conference topic

Source: Authors' research

Graph 8 presents the key topics of the conferences that respondents attended. The largest percentage of respondents were at conferences whose key topics were economics (43%), management (23%) and tourism (11%). The same number of surveyed academics (4%) were at conferences on law and IT, while the smallest number of organized conferences at which respondents participated was in the field of education (1%), security (1%) and culture (1%). The mentioned conferences were organized in the following countries: Serbia, Slovenia, Croatia, Bosnia and Herzegovina, North Macedonia, Bulgaria, Montenegro, Albania, Italy, Turkey, Russia, India, China, Greece, Portugal, Switzerland, France, Austria, Slovakia, South Korea, USA, Great Britain, Spain and Romania. Based on the above, it can be concluded that academics from the Balkans, in addition to conferences organized in their or neighboring countries, attended conferences organized not only in Europe but also in the United States and Asia.

4. RESULTS AND DISCUSSION

Table 3 shows the results of descriptive statistics. By implementing descriptive statistical analysis, the arithmetic mean and standard deviation for each question were calculated. The results of the analysis at the level of the entire sample indicate that the grades of the surveyed respondents range from 3.69 to 4.53, with a standard deviation from 0.767 to 1.152.

Respondents rated the highest: the registration process at the conference (4.53), food served during the conference (4.46), and technical assistance at the conference (4.46), while with the lowest scores were rated tourist tours organized by the organizers (3.69).

The reliability and internal consistency of the questions grouped around each variable were measured using Cronbach's alpha coefficient (Table 4). Values of Cronbach's alpha coefficient range from 0 to 1, with values greater than 0.7 being considered to indicate adequate reliability and consistency of the question (Nunnally, 1978). The values of the Cronbach's alpha coefficient in the study ranged from 0.712 (Destination) to 0.944 (Transport). The obtained values indicate adequate reliability and internal consistency of variables. Cronbach's alpha for the whole model is 0.932.

Table 3. Descriptive statistics

Questions	M	SD
Transport (by flight, bus or car) to conference city was?	4,40	,799
Transfer to conference venue was?	4,32	,869
Transport (by flight, bus or car) from the conference?	4,34	,850
The accommodation was?	4,42	,826
The breaks between presentations were?	4,44	,827
The food at the conference venue was?	4,46	,792
The peer-review process was?	4,31	,856
The registration process was?	4,53	,817
Admin./technical support at the conference was?	4,46	,767
The social program at the conference was?	4,08	1,012
The networking opportunity at the conference was?	4,04	1,033
My experience as a presenter was?	4,25	,906
My experience as a member of the audience in sessions was?	4,19	,931
The plenary sessions were?	4,06	,888
The destination experience was?	4,30	,942
The tour(s) organized by the conference was?	3,69	1,152
To what extent are you satisfied with your participation in the conference?	4,34	,850
To what extent are your expectations met?	4,09	,924

Note: M - Arithmetic mean; SD - Standard deviation

Source: Authors' research

Table 4. Reliability of variables - Cronbach's Alpha values

Variable	Cronbach's Alpha
Transport	0,944
Accommodation & Food	0,788
Communication & Organization	0,883
Social Activities	0,714
Evaluation of Experiences	0,823
Destination Experience	0,712
Satisfaction	0,875

Source: Authors' research

The results of the correlation analysis are shown in Table 5. Based on the value of the Pearson coefficient, the degree of dependence between the variables in the model was determined. There is a statistically significant degree of correlation between the model variables. The obtained results show a high degree of correlation between the Evaluation of Experiences and Satisfaction (0.837), the Evaluation of Experiences and Social activities (0.713), as well as the Social activities and Satisfaction (0.704). The lowest degree of correlation is between Transport and Communication and Organization (0.411).

In order to determine the variables that have a significant impact on the satisfaction of academic conference attendees, we use a simple linear regression (Table 6). The individual influence of independent variables on attendees' satisfaction, which is a dependent variable, was tested. The analysis of the obtained results shows that all independent variables have a significant impact on the attendees' satisfaction.

Evaluation of Experiences has the greatest impact on Satisfaction: $\beta = 0.898$, $t = 15,320$, $p < 0.01$; while the smallest influence on the Satisfaction has Destination Experience $\beta = 0.481$, $t = 7.160$, $p < 0.01$.

Table 5. Correlation matrix

	Transport	Accommodation & Food	Communication & Organization	Social Activities	Evaluation of Experiences	Destination Experience	Satisfaction
Transport							
Accommodation & Food	0,644**						
Communication & Organization	0,411**	0,519**					
Social Activities	0,444**	0,544**	0,625**				
Evaluation of Experiences	0,481**	0,577**	0,610**	0,713**			
Destination Experience	0,564**	0,472**	0,408**	0,593**	0,516**		
Satisfaction	0,532**	0,631**	0,607**	0,704**	0,837**	0,582**	

Note: ** Correlation is significant at the 0.01 level

Source: Authors' research

Table 6. Simple regression analysis (dependent variable: Satisfaction)

Variables	B	t	Sig.	R ²
Transport	0,559	6,286	,000**	0,283
Accommodation & Food	0,773	8,140	,000**	0,399
Communication & Organization	0,694	7,646	,000**	0,369
Social Activities	0,654	9,925	,000**	0,496
Evaluation of Experiences	0,898	15,320	,000**	0,701
Destination Experience	0,481	7,160	,000**	0,339

Note: p < 0.01 (**)

Source: Authors' research

By applying multiple regression, the model of joint influence of all six independent variables on the attendees' satisfaction was tested. The results of the analysis are shown in Table 7. The analysis of the obtained results shows that one variable has a significant impact on satisfaction: Evaluation of Experiences: $\beta = 0.615$, $t = 7.310$, $p < 0.01$. The relationship between independent variables and dependent variables can be described by a linearly dependent function, where the coefficient of determination (R^2) is 0.760 which means that 76% of the variability in attendees' satisfaction is described through these six independent variables, while another variability is influenced by other factors. The tested model showed that in the case of joint action of all six variables, only one variable: Evaluation of Experiences has a statistically significant impact on Satisfaction, while the other five variables do not have a significant impact on academic conference attendees' satisfaction.

Table 7. Multiple regression analysis (dependent variable: Satisfaction)

Variables	B	t	Sig.	VIF
Transport	0,032	0,423	,673	2,029
Accommodation & Food	0,170	1,880	,063	2,150
Communication & Organization	0,074	0,942	,348	1,880
Social Activities	0,087	1,148	,254	2,668
Evaluation of Experiences	0,615	7,310	,000**	2,438
Destination Experience	0,100	1,764	,081	1,878

Note: Results are significant at the level of $p < 0.01$ (**);

Results are not significant: $p > 0.05$

$R^2 = 0.76$

Source: Authors' research

In this research, the existence of the problem of multicollinearity was examined. This problem was tested through the value of the VIF coefficient. If the value of a given coefficient is greater than 5, then multicollinearity is a serious problem in the implemented study (Field, 2000). In this study, during the multiple regression, suitable values of the VIF coefficient were obtained, which range from 1,878 to 2,668.

5. CONCLUSION

Given the rapid growth of congress tourism around the world, all countries want to get involved in these types of tourism movements. Therefore, to this sector of the business tourism, known as M.I.C.E., special attention is paid. The offer for this market includes all services of economic and non-economic activities intended to meet the needs of tourists involved in congresses, conferences, meetings, events and manifestations. Conference attendees gather to exchange scientific knowledge, but also to leave everyday life for a few days and get to know different places. During the conferences, a specific offer is needed, while for free time, a tourist offer is needed, which should be appropriate in terms of its quality.

In this paper, research was conducted to determine the key determinants of academic conference attendees' satisfaction. Survey respondents generally gave high marks to the questions contained in the questionnaire, which relate to a set of services from different suppliers. As the assessment of the overall conference experience and satisfaction includes all components in the value chain of the conference as a service, the assessments of the surveyed academics testify to the existence of a relatively high degree of satisfaction among conference attendees. On the other hand, the conference attendees rated the tourist tours organized by the conference organizers with the lowest marks. Therefore, this segment represents an exceptional space for improving and increasing the participants' satisfaction. In that sense, better communication and cooperation of conference organizers with competent tourist organizations and travel agencies at the destination of the conference is needed, because if the attendee had a positive experience, it is expected that he will return for vacation, i.e. tourist activities. Also, every satisfied tourist is a potential new visitor and ambassador of the destination.

The results of the simple regression analysis confirmed the significance of all determinants of academic conference attendees' satisfaction, namely: quality of transport to and from the conference destination, accommodation and food at the conference, communication and organization, social activities, attendee experience and destination experience. However, the multiple regression analysis, which measures the cumulative impact of all six independent variables, confirmed only the statistical significance of attendees' experience on satisfaction, while the variables transport quality to and from the conference destination, accommodation and food at the conference, communication and organization, social activities and destination experience did not have a significant impact on satisfaction. Namely, the results of the research showed that by applying simple and multiple regression analysis, the attendees' experience has the most significant impact on the academic conference attendees' satisfaction. It can be concluded that the satisfaction of attendees is mostly influenced by the experience they evaluate from the aspect of the presenter at the conference, the audience member and the quality of the plenary sessions at the conference. In this regard, the most important contribution of the conference is professional development, obtaining relevant feedback for their work, getting acquainted with the work and achievements of experts in the field and space for discussion and debate on relevant and important issues of their interest, research and work. For this reason, the respondents did not attend conferences organized in their or neighboring countries, but in conferences organized in the USA and Asia.

In further research, more determinants should be included in the questionnaire, in order to obtain a more detailed overview of the impact on the academic conference attendees' satisfaction. It is necessary to increase the number of surveyed academics since the sample size is one of the limitations of the given research. Given the great variety of conferences that are organized and a large number of different institutions and organizations that deal with their organization, future researchers could test the impact of these determinants on the attendees' satisfaction in various scientific fields and disciplines. The contribution of the research is reflected in the provision of information and guidance that stakeholders can use as inputs in the process of making future decisions and strategies. Namely, the organizers of conferences through the obtained information can increase the satisfaction of attendees by increasing the quality of plenary sessions, engaging key experts in the subject area, and organizing debates and forums; Tourist organizations in the destination of the conference through cooperation with their organizers can increase the level of destination experience and conference participants "turn" into a tourist who returns to the destination for rest and entertainment. On the other hand, when selecting conferences in which they will participate, academics can give priority to those conferences that will have the greatest contribution to their work, professional development and career advancement.

REFERENCES

- Aktas, G., & Demirel, B. (2019). The genuine needs of conference attendees: An analysis by the modern quality function deployment. *International Journal for Quality Research*, 13, 13–22. <https://doi.org/10.24874/IJQR13.01-02>
- Alananzeh, O., Maaiah, B., Al-Badarneh, M., & Al-Shorman, A. (2018). The geographic distribution of conferences in Jordan from 2014 to 2016 using predictive GIS modeling. *Journal of Convention & Event Tourism*, 19(2), 167–185. <https://doi.org/10.1080/15470148.2017.1406832>
- Baloglu, S., & Love, C. (2005). Association meeting planners' perceptions and intentions for five major US convention cities: The structured and unstructured images. *Tourism Management*, 26(5), 743–752. <https://doi.org/10.1016/j.tourman.2004.04.001>
- Bjeljac, Ž. (2006). *Teorijsko-metodološke osnove manifestacionog turizma, Posebna izdanja knj. 67* (I. Popović, Ed.). Beograd: SANU - Geografski institut "Jovan Cvijić."
- Bučić, A., Dragičević, V., & Cimballević, M. (2015). Komparativna analiza kongresnog turizma Beograda i Praga. *Zbornik Radova - Geografski Fakultet Univerziteta u Beogradu*, 63, 119–146.
- Campos, R., Leon, F., & McQuillin, B. (2018). Lost In the Storm: The Academic Collaborations That Went Missing In Hurricane Issac. *The Economic Journal*, 128(610), 995–1018. <https://doi.org/10.1111/eoj.12566>
- Chalvatzis, K., & Ormosi, P. L. (2021). The carbon impact of flying to economics conferences: Is flying more associated with more citations? *Journal of Sustainable Tourism*, 29(1), 40–67. <https://doi.org/10.1080/09669582.2020.1806858>
- Cieślukowski, K., & Brusokas, A. (2020). Selected attractiveness factors of academic conferences as a product on the international tourism market. *Tourism*, 30(1), 13–20. <https://doi.org/10.18778/0867-5856.30.1.13>
- Crouch, G. I., Del Chiappa, G., & Perdue, R. R. (2019). International convention tourism: A choice modelling experiment of host city competition. *Tourism Management*, 71, 530–542. <https://doi.org/10.1016/j.tourman.2018.10.002>
- Crouch, G., & Louviere, J. (2004). The Determinants of Convention Site Selection: A Logistic Choice Model from Experimental Data. *Journal of Travel Research*, 43(2), 118–130. <https://doi.org/10.1177/0047287504268233>

- de Leon, F. L. L., & McQuillin, B. (2020). The Role of Conferences on the Pathway to Academic Impact: Evidence from a Natural Experiment. *Journal of Human Resources*, 55(1), 164–193. <https://doi.org/10.3368/jhr.55.1.1116-8387R>
- Dragičević, V. (2008). *Stanje i perspektive kongresnog turizma u Novom Sadu*. Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo, Novi Sad, Serbia.
- Dragičević, V., Plavša, J., Štetić, S., & Stankov, U. (2009). Destinacije kongresnog turizma u svetu i Srbiji. *Collection of the Papers*, 57, 199–214. Faculty of Geography, University of Belgrade.
- Edelheim, J. R., Thomas, K., Åberg, K. G., & Phi, G. (2018). What do conferences do? What is academics' intangible return on investment (ROI) from attending an academic tourism conference? *Journal of Teaching in Travel & Tourism*, 18(1), 94–107. <https://doi.org/10.1080/15313220.2017.1407517>
- Ficarelli, S., Sendra, S., Parra, L., & Lloret, J. (2013). Congress and Meetings Tourism and Destination Brand. *The Fifth International Conference on Creative Content Technologies*, 7–15. Universidad Politécnic de Valencia.
- Field, A. (2000). *Discovering Statistics Using SPSS for Windows: Advanced Techniques for the Beginner*. Sage Publications.
- Fowler, B., Cardon, P., Marshall, B., & Elder, K. (2021). What do conference attendees want from academic presentations? A study of an information systems professional organization. *Issues in Information Systems*, 22(3), 96–106. https://doi.org/10.48009/3_iis_2021_107-119
- Gorodnichenko, Y., Pham, T., & Talavera, O. (2021). Conference presentations and academic publishing. *Economic Modelling*, 95, 228–254. <https://doi.org/10.1016/j.econmod.2020.12.017>
- Grado, S. C., Strauss, C. H., & Lord, B. E. (1997). Economic Impacts of Conferences and Conventions. *Journal of Convention & Exhibition Management*, 1(1), 19–33. https://doi.org/10.1300/J143v01n01_03
- Gür, Ş., Hamurcu, M., & Tamer, E. (2016). Selection of Academic Conferences Based on Analytical Network Processes. *Multiple Criteria Decision Making*, 11, 51–62.
- Han, H., Lee, S., Al-Ansi, A., Kim, H.-C., Ryu, H. B., Kim, J. J., & Kim, W. (2019). Convention Tourism and Sustainability: Exploring Influencing Factors on Delegate Green Behavior That Reduce Environmental Impacts. *Sustainability*, 11(14). <https://doi.org/10.3390/su11143903>
- Hauss, K. (2021). What are the social and scientific benefits of participating at academic conferences? Insights from a survey among doctoral students and postdocs in Germany. *Research Evaluation*, 30(1), 1–12. <https://doi.org/10.1093/reseval/rvaa018>
- Hobson, J. S. P. (1993). Not another conference. *International Journal of Hospitality Management*, 12(2), 115–118. [https://doi.org/10.1016/0278-4319\(93\)90002-Q](https://doi.org/10.1016/0278-4319(93)90002-Q)
- Holloway, C., Humphreys, C., & Davidson, R. (2009). *The Business of Tourism, Eight edition*. Pearson Education Limited, England.
- International Congress and Convention Association. (2019). *ICCA Statistics report country & city rankings*. Amsterdam. Retrieved from <https://www.iccaworld.org/newsarchives/archivedetails.cfm?id=3189909>
- Jae Lee, M., & Back, K. (2005). A review of economic value drivers in convention and meeting management research. *International Journal of Contemporary Hospitality Management*, 17(5), 409–420. <https://doi.org/10.1108/09596110510604832>
- Kadaifci, C., Asan, U., & Topcu, I. (2020). A Fuzzy Cognitive Mapping Approach to the Conference Selection Problem. *International Journal of Information Technology & Decision Making*, 19(6), 1451–1484. <https://doi.org/10.1142/S0219622020500352>
- Kim, S., Lee, J.-S., & Kim, M. (2012). How different are first-time attendees from repeat attendees in convention evaluation? *International Journal of Hospitality Management*, 31(2), 544–553. <https://doi.org/10.1016/j.ijhm.2011.07.014>

- Kim, S. S., Chon, K., & Chung, K. Y. (2003). Convention industry in South Korea: An economic impact analysis. *Tourism Management*, 24(5), 533–541. [https://doi.org/doi.org/10.1016/S0261-5177\(03\)00006-2](https://doi.org/doi.org/10.1016/S0261-5177(03)00006-2)
- Lawson, F. (2000). *Congress, Convention And Exhibition Facilities: Planning, Design And Management*. Architectural Press.
- Lee, J.-S., & Back, K.-J. (2008). Attendee-based brand equity. *Tourism Management*, 29(2), 331–344. <https://doi.org/10.1016/j.tourman.2007.03.002>
- Lewis, C., & Kerr, G. (2012). Towards the Development of an Evaluation Questionnaire for Academic Conferences. *Event Management*, 16(1), 11–23. <https://doi.org/10.3727/152599512X13264729827514>
- Lovelock, C., & Wirtz, J. (2007). *Services marketing: People, technology, strategy*. New Jersey: Prentice Hall.
- Mair, J., Lockstone-Binney, L., & Whitelaw, P. A. (2018). The motives and barriers of association conference attendance: Evidence from an Australasian tourism and hospitality academic conference. *Journal of Hospitality and Tourism Management*, 34, 58–65. <https://doi.org/10.1016/j.jhtm.2017.11.004>
- Marinković, V. (2012). *Marketinški aspekti satisfakcije i lojalnosti – Orijentacija na potrošače u savremenom bankarskom poslovanju*. Ekonomski fakultet, Kragujevac.
- Marques, J., & Pinho, M. (2021). Collaborative research to enhance a business tourism destination: A case study from Porto. *Journal of Policy Research in Tourism, Leisure and Events*, 13(2), 172–187. <https://doi.org/10.1080/19407963.2020.1756307>
- McCarthy, J. F., McDonald, D. W., Soroczak, S., Nguyen, D. H., & Rashid, A. M. (2004). Augmenting the Social Space of an Academic Conference. *Proceedings of the 2004 ACM Conference on Computer Supported Cooperative Work*, 39–48. New York, NY, USA: Association for Computing Machinery. <https://doi.org/10.1145/1031607.1031615>
- Mihajlović, M., & Stošić Mihajlović, L. (2017). Preduzetništvo u sektoru usluga sa akcentom na poslovna putovanja i kongresni turizam. *Zbornik Radova ITOP17*, 155–162. Fakultet tehničkih nauka u Čačku, Univerzitet u Kragujevcu.
- Nunnally, J. C. (1978). An Overview of Psychological Measurement. In B. B. Wolman (Ed.), *Clinical Diagnosis of Mental Disorders: A Handbook* (pp. 97–146). Boston, MA: Springer US. https://doi.org/10.1007/978-1-4684-2490-4_4
- Oppermann, M., & Chon, K.-S. (1997). Convention participation decision-making process. *Annals of Tourism Research*, 24(1), 178–191. [https://doi.org/10.1016/S0160-7383\(96\)00049-7](https://doi.org/10.1016/S0160-7383(96)00049-7)
- Otto, J. E., & Ritchie, J. R. B. (1996). The service experience in tourism. *Tourism Management*, 17(3), 165–174. [https://doi.org/10.1016/0261-5177\(96\)00003-9](https://doi.org/10.1016/0261-5177(96)00003-9)
- Pavluković, V., & Cimbaljević, M. (2020). Factors affecting conference participation decision-making. *Journal of the Geographical Institute "Jovan Cvijic", SASA*, 70(1), 31–43. <https://doi.org/10.2298/IJGI2001031P>
- Pavluković, V., Vuković, S., & Cimbaljević, M. (2021). Determining success factors for business tourism destinations: Evidence from Zlatibor (Serbia). *Turizam*, 25(3), 110–120. <https://doi.org/10.5937/turizam25-28201>
- Pizam, A., Neumann, Y., & Reichel, A. (1978). Dimensions of tourist satisfaction with a destination area. *Annals of Tourism Research*, 5(3), 314–322. [https://doi.org/10.1016/0160-7383\(78\)90115-9](https://doi.org/10.1016/0160-7383(78)90115-9)
- Rabotić, B. (2013). *Selektivni oblici turizma (Special Interest Tourism)*, 2nd edn. Visoka turistička škola strukovnih studija Beograd.
- Rittichainuwat, B. N., Beck, J. A., & Lalopa, J. (2001). Understanding Motivations, Inhibitors, and Facilitators of Association Members in Attending International Conferences. *Journal of Convention & Exhibition Management*, 3(3), 45–62. https://doi.org/10.1300/J143v03n03_04

- Severt, D., Wang, Y., Chen, P.-J., & Breiter, D. (2007). Examining the motivation, perceived performance, and behavioral intentions of convention attendees: Evidence from a regional conference. *Tourism Management, 28*(2), 399–408. <https://doi.org/10.1016/j.tourman.2006.04.003>
- Sikošek, M. (2020). Congress Destination Attractiveness: The Case of Supply-Side of Business Tourism in Slovenia. *Academica Turistica, 13*(1), 81–95.
- Štetić, S. (2006). M.I.C.E. industrija—Budućnost razvoja turističke destinacije. *Turizam, 10*, 21–24.
- Štetić, S. (2007). *Posebni oblici turizma*. Beograd.
- Šušić, V., & Mojić, J. (2014). Kongresni turizam kao tržišna niša poslovnog turizma. *Ekonomске Teme, 52*(4), 523–539.
- Swarbrooke, J., & Horner, S. (2001). *Business Travel and Tourism* (1st Edition). London: Routledge.
- Weber, K., & Ladkin, A. (2003). The Convention Industry in Australia and the United Kingdom: Key Issues and Competitive Forces. *Journal of Travel Research, 42*(2), 125–132. <https://doi.org/10.1177/0047287503257489>
- Whitfield, J. (2007). Why build purpose-built conference venues? Forecasting new build. *Journal of Retail and Leisure Property, 6*(1), 47–60. <https://doi.org/10.1057/palgrave.rlp.5100045>
- Whitfield, J. E. (2009). Why and How UK Visitor Attractions Diversify Their Product to Offer Conference and Event Facilities. *Journal of Convention & Event Tourism, 10*(1), 72–88. <https://doi.org/10.1080/15470140902768210>
- Yoo, J. J.-E., & Chon, K. (2008). Factors Affecting Convention Participation Decision-Making: Developing a Measurement Scale. *Journal of Travel Research, 47*(1), 113–122. <https://doi.org/10.1177/0047287507312421>

