

The Impact of Cultural Contact, Destination Image, Smart Tourism technology and Memorable Experiences on Revisit Intention of Tourists through Tourist Satisfaction in Hebei Province of China

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Abstract

This study investigates the direct effects of cultural contact, destination image, smart tourism technology, and memorable experiences on tourists' intention to revisit Hebei province. Adopting a quantitative research approach, data was collected through surveys from tourists visiting the province. Statistical techniques were employed for rigorous analysis of the collected data. The findings reveal significant associations between the studied factors and tourists' satisfaction, which in turn positively influences their intention to revisit. Specifically, cultural contact and a positive destination image are identified as key factors enhancing tourists' satisfaction. Furthermore, the effective use of smart tourism technology and the creation of memorable experiences are found to contribute significantly to satisfaction and revisit intention. These insights have important implications for tourism policymakers and industry stakeholders seeking to enhance tourist satisfaction and promote repeat visitation in Hebei province.

Keyword: Cultural Contact; Destination Image; Smart Tourism Technology; Memorable Experiences; Revisit intention

Introduction

In recent years, the tourism industry has witnessed significant advancements in smart tourism technologies, which have revolutionized the way tourists interact with destinations (Um and Chung, 2019). Moreover, the role of social media in enhancing the tourist experience has become increasingly recognized, offering new avenues for engagement and communication between tourists and destinations (Pai, 2020). The importance of understanding customer satisfaction in these relationships within the context of Hebei Province in China has been highlighted (Nengovhela, 2020).

According to the previous study, many researchers investigated the importance of tourists' satisfaction on tourists' revisit intention. However, a few researchers investigated that cultural contacts, destination image and smart tourism technologies could influence tourists' revisit intention about tourists' satisfaction, and these factors could also influence tourists' revisit intention about tourists' memorable experiences, as mentioned in the previous section. Previous studies have shown that memorable experiences can influence tourists' intention to revisit. Hebei Province is located around the economic development center of Beijing-Tianjin-Hebei, and is deeply affected by the local radiation of the Beijing-Tianjin-Hebei region. On the one hand, the Beijing-Tianjin-Hebei region attracts more tourists, accounting for a large

proportion of the national tourism market, and tourism is an important source of local economic income. On the other hand, exploring the willingness of tourists to revisit Hebei Province can help the local people understand the reasons for the current limited development, and help to explore the advantages and disadvantages of the development of the region, so as to promote the regional economic development. Studying the factors influencing tourists' willingness to revisit in Hebei Province can help scholars explore the reasons for the increase in tourists' willingness in the tourism industry, further promote the economic development of the local tourism industry, and help the government and other relevant departments to designate more effective measures to increase the economic benefits brought by the tourism industry. Therefore, this study examined the influences of tourist satisfaction as a mediator between tourism strategies in the relationship between cultural contact, destination image, smart tourism technology, memorable experiences and tourists' revisit intention in Hebei province.

This study uses quantitative research methods to determine whether tourists' cultural contact, destination image, intelligent technology and unforgettable experience are related to tourists' satisfaction, whether tourists' cultural contact, destination image, intelligent technology and unforgettable experience can affect tourists' satisfaction, and judge the influence path of tourists' satisfaction.

The purpose of this study is to explore the relationship between tourists' cultural contact, destination image, intelligent technology and unforgettable experience and tourists' willingness to revisit, and to include tourists' satisfaction in the relationship between tourists' cultural contact, destination image, intelligent technology and unforgettable experience and tourists' willingness to revisit, and to further explore how tourists' satisfaction plays an intermediary role in influencing factors of tourists' willingness to revisit.

Research Objectives

1. To investigate the direct effects of cultural contact, destination image, smart tourism technology, and memorable experiences on tourists' intention to revisit Hebei province.
2. To examine the indirect effects of cultural contact, destination image, smart tourism technology, and memorable experiences on tourists' intention to revisit Hebei province through tourists' satisfaction.
3. To analyze how tourist satisfaction mediates the relationship between cultural contact, destination image, smart tourism technology, memorable experiences and tourists' revisit intention.

Research Methodology

The survey should use quantitative data analysis methods to carefully review the collected data: We will apply statistical methodologies to scrutinize numerical data. This comprises descriptive statistical analyses such as mean, standard deviation, and frequency distribution. Concurrently, we will use correlation analysis to examine the interrelations between variables and execute regression analysis to establish causal relationships between variables.

Population and Sample

According to a report by Chinanews, Hebei province will receive 780 million tourists in 2023, generating 930 billion yuan in tourism revenue(CHINANES,2003). The purposive sampling technique utilized in this study involved selecting population who had previously visited Hebei Province as tourists. This approach was chosen to ensure that the participants had firsthand experience and knowledge of the tourism offerings in the region. By specifically targeting individuals who had visited Hebei Province, the study aimed to gather detailed and specific insights into their travel experiences, preferences, and perceptions.

As a rule of thumb, the minimum sample size for each observation construct should be between 10 observations. This study consists of 36 questions with a minimum sample size of 360. This study distributed questionnaires to about 500 users who had travel experience in Hebei Province, and the sample size obtained was sufficient to meet the minimum sample size of 360 samples. This questionnaire collection will be collected online, and the questionnaire will be distributed on the China Questionnaire Star platform, which can be filled out through the website, or by sending the questionnaire QR code in wechat friends, wechat group, friend circle and other ways.. Data collection will be completed between May 1, 2024 and July 1, 2024.

Questionnaire design

The survey questionnaire used in the study included validated scales to measure various constructs such as satisfaction, perceived value, and destination image. A Likert scale(1 = “completely disagree,” 5 = “completely agree”) , a commonly used psychometric tool in surveys, was employed to assess participants' attitudes and opinions on these constructs.

The specific measurement items of each variable are shown in the following table:

Table 1 Measurement item of Cultural contact

No.	Questions	Questionnaire source
1	I am interested in the scenic culture of Hebei Province	Chen and Rahman (2018)
2	The scenic culture of Hebei Province is very attractive to me	
3	I like the traditional culture of Hebei Province	
4	I understand the traditional culture of Hebei	
5	The traditional culture of Hebei Province has increased my desire to travel	

Table. 2 Measurement item of Destination image

No.	Questions	Questionnaire source
1	I think Hebei Province provides me with a destination	Prayag and Ryan's (2012)
2	Hebei Province has a good destination image	
3	I think most people have a positive destination image about Hebei Province	
4	The locals in Hebei Province are friendly to tourists	
5	I think Hebei Province is a popular tourist destination	

Table.3 Measurement item of Smart tourism technology

No.	Questions	Questionnaire source
1	When traveling in Hebei Province , I can use Smart Tourism Technology anytime and anywhere.	Chen-Kuo (2020)
2	When traveling in Hebei Province, I can easily use Smart Tourism Technology	
3	When traveling in Hebei Province, I can easily find Smart Tourism Technology.	
4	When traveling in Hebei Province, Smart Tourism Technology provides me with useful information about the travel destination and the trip	
5	When traveling in Hebei Province, Smart Tourism Technology improve my satisfaction of tourism	

Table. 4 Measurement item of Memorable experience

No.	Questions	Questionnaire source
1	I really enjoyed this tourism experience in Hebei Province	Kim, Hallab, and Kim (2012)
2	I revitalized through this tourism experience in Hebei Province	
3	I learned something about myself from this tourism experience in Hebei Province	
4	I had a chance to closely experience the local culture of Hebei Province	
5	“I experienced something new (e.g., food and Smart tourism) during this tourism experience in Hebei Province	

Table 5 Measurement item of Tourist satisfaction

No.	Questions	Questionnaire source
1	I have really enjoyed the visit in Hebei Province	Westbrook and Oliver (1981)
2	I am satisfied with my decision to visit Hebei province	
3	I prefer this destination of Hebei Province to others.	
4	I have positive feelings regarding Hebei Province	
5	This was a pleasant visit in Hebei Province	

Table 6 Measurement item of Revisit intention

No.	Questions	Questionnaire source
1	I will revisit Hebei Province	Chi and Qu (2008)
2	I want to visit Hebei Province within the next two years	
3	I would positively recommend Hebei Province to other people.	
4	I have positive feelings regarding Hebei Province	
5	Revisiting Hebei Province would be worthwhile	
6	You often visit Hebei Province	

Statistical Tools and statistics analysis

Reliability and validity analyses primarily examine the measurement aspect of questionnaire scale data. Reliability assesses internal consistency reliability of questionnaires while validity tests their internal consistency as well. Cronbach's alpha coefficient serves as a key measure for assessing reliability. This research conducts confirmatory factor analysis (CFA) for conducting to test whether the data fit the hypothesized measurement model derived from the theoretical framework.

In the study, a quantitative data analysis was conducted using structural equation modeling (SEM) to analyze the relationships between multiple variables related to tourists' decision to revisit Hebei Province. SEM is a statistical technique that allows for the examination of complex relationships among variables by incorporating both measurement and structural models.

The IBM SPSS Amos software is employed to conduct an analysis of the model's parameter value using Maximum Likelihood Estimates and 13 congruence indices as criteria, in accordance with Yuth Kaiwan's (2013) concept for assessing the congruence between the constructed model and empirical data. The criteria encompass P-value ≥ 0.05 , Chi-square/df ≤ 5.00 , GFI $\geq .90$, AGFI ≥ 0.90 , CFI ≥ 0.90 , NFI ≥ 0.90 , NNFI ≥ 0.90 , IFI ≥ 0.90 , RFI ≥ 0.90 , CN ≥ 200 , RMR ≤ 0.05 , SRMR $\leq .05$, and RMSEA $\leq .05$. The criterion for evaluating congruence between the developed model and empirical data stipulates that a minimum of three indices must satisfy the specified criteria to consider the structural equation model as congruent with empirical data (Yuth Kaiwan, 2013).

Overall Model Fit Test: In general, the fit indices primarily include χ^2/df , RFI, AGFI, NFI, TLI, CFI, and RMSEA. According to Table 4.7, it can be seen that the simulated fit indices are within the reference range, indicating a good match between the actual test results and theoretical data.

Table 7 Model fit index evaluation table

Commonly used indicators	chi-square	df	p	Chi-square DOF ratio χ^2/df	GFI	RMSEA	RMR	CFI	NFI	NNFI
Judging criteria	-	-	> 0.05	< 3	> 0.9	< 0.10	< 0.05	> 0.9	> 0.9	> 0.9
value	485.097	419	0.014	1.158	0.931	0.020	0.031	0.992	0.944	0.991
Other indicators	TLI	AGFI	IFI	PGFI	PNFI	PCFI	SRMR	RMSEA 90% CI		
Criteria for judgment	> 0.9	> 0.9	> 0.9	> 0.5	> 0.5	> 0.5	< 0.1	-		
value	0.991	0.918	0.992	0.786	0.851	0.894	0.023	0.010 ~ 0.027		

Default Model: $\chi^2(465)=8692.120$, $p=1.000$

Convergent validity can be evaluated by comparing the coefficient of reliability (CR) and the average variance extracted (AVE), and it is generally considered effective when the construct validity is greater than 0.7 and AVE is greater than 0.5.

Research Conceptual framework

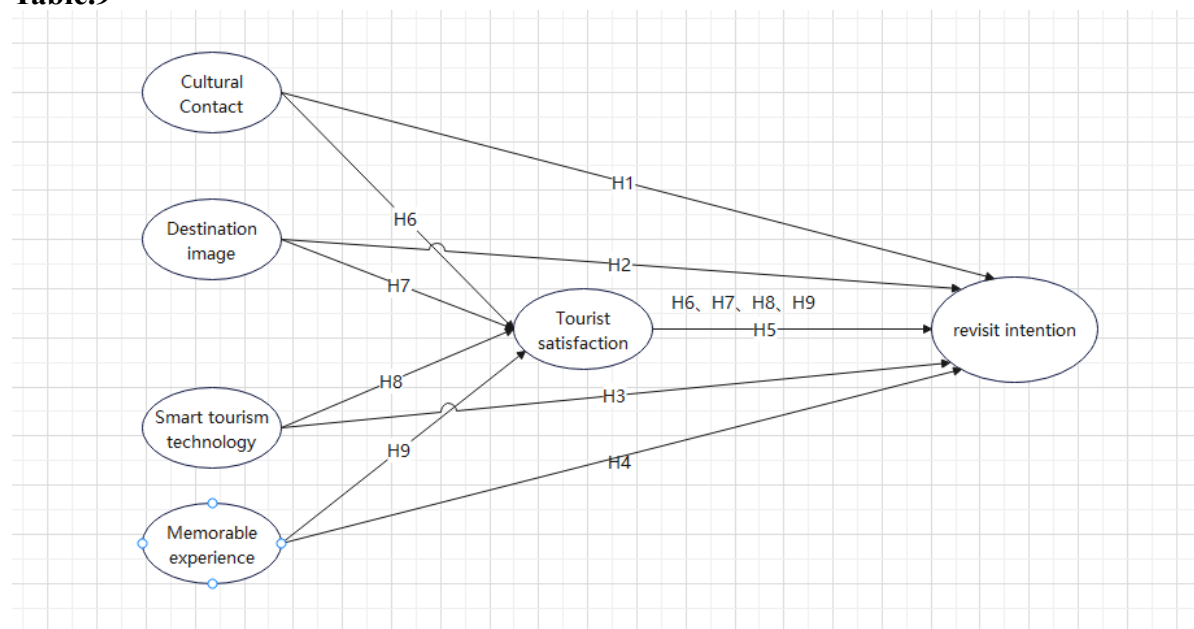
Relevant studies have found the factors that affect tourists' satisfaction and willingness to revisit. Martin et al. (2019) established a comprehensive model based on tourist satisfaction, dividing destination image into four dimensions and influencing tourist behavior from four perspectives. The findings of Azis et al. (2020) show that smart travel technologies and memorable travel experiences play a crucial role in increasing tourist satisfaction and destination loyalty. Jeong et al.(2019) pointed out that destination image has a direct impact on tourist satisfaction, attitude loyalty and behavior loyalty. Fras-jamilena et al. (2018) studied the influence of cultural factors on tourist destination image. Through a series of studies, this paper attempts to construct a bridge between variables and establish a hypothetical relationship to explore the model mechanism that affects tourists' satisfaction and revisit intention. Based on this, we propose the following hypothesis:

Table. 8

H1: Cultural Contact positively affects Revisit intention
H2: Destination image positively affects revisit intention
H3: Smart tourism technology positively affects revisit intention
H4: Memorable experience positively influences revisit intention
H5: Tourist satisfaction positively affects the revisit intention
H6: Cultural Contact has indirect impacts on Revisit Intention through tourist satisfaction.
H7: Destination image has indirect impacts on Revisit Intention through tourist satisfaction.
H8: Smart tourism technology has indirect impacts on Revisit Intention through tourist satisfaction.
H9: Memorable experience has indirect impacts on Revisit Intention through tourist satisfaction.

These hypothesis become a framework below:

Table.9



Research Findings

The correlation between cultural contact, destination image, smart tourism technology, memorable experiences, tourist satisfaction and Revisit intention.

Table 10 Correlation of cultural contact, destination image, smart tourism technology, memorable experience, Tourist satisfaction and Revisit intention

	Willingness to re-visit	Tourist satisfaction	Memorable experiences	Smart Tourism Technology	Destination image	Cultural contact
Revisit intention	1					
Tourist satisfaction	0.903 **	1				
Memorable experiences	0.888 **	0.904 **	1			
Smart tourism technology	0.867 **	0.878 **	0.869 **	1		
Destination image	0.861 **	0.834 **	0.825 **	0.890 **	1	
Cultural contact	0.861 **	0.869 **	0.843 **	0.842 **	0.837 **	1

* p<0.05 ** p<0.01

The results indicate a significant positive correlation between the intention to revisit and tourist satisfaction, memorable experiences, smart tourism technology, destination image, and cultural contact. Specifically, the correlation coefficient between the revisit intention and tourist satisfaction is as high as 0.903 with a significance level of 0.01, indicating that when tourists are satisfied with their travel experience, they are more inclined to revisit the destination. Similarly, the correlation coefficient between the revisit intention and memorable experiences is also substantial at 0.888 (significant at 0.01), suggesting that memorable experiences during travel greatly enhance the intention to revisit. Furthermore, there is a strong correlation between smart tourism technology and the intention to revisit (correlation coefficient of 0.867), as well as between destination image and cultural contact with respective correlation coefficients of 0.861 each—all significant at the 0.01 level—indicating that utilizing smart tourism technology, fostering a positive destination image, and promoting in-depth cultural contact effectively strengthen tourists' intentions to revisit.

Table 11 Path coefficient analysis of structural equation

			Standardized path Coefficient	S.E.	C.R.	P
Satisfaction	<---	Cultural contact	111.	276.	400.	* * *
satisfaction	<---	Smart Tourism technology	319.	653.	488.	* * *
Satisfaction	<---	Memorable Experience	1.027	540.	1.901	057.
Satisfaction	<---	Destination image	- 396.	454.	- 871.	* * *
Revisit intention	<---	Satisfaction	177.	970.	182.	* * *
Revisit intention	<---	Cultural contact	637.	599.	1.064	* * *
Revisit intention	<---	Destination image	- 530.	703.	- 754.	* * *
Revisit intention	<---	Smart Tourism technology	1.914	1.369	1.398	162.
Revisit intention	<---	Memorable Experience	1.097	1.517	723.	* * *

The following research will conduct path coefficient analysis on the hypothesized relationships between visitor perceived value, satisfaction, and willingness to return, and conduct hypothesis testing.

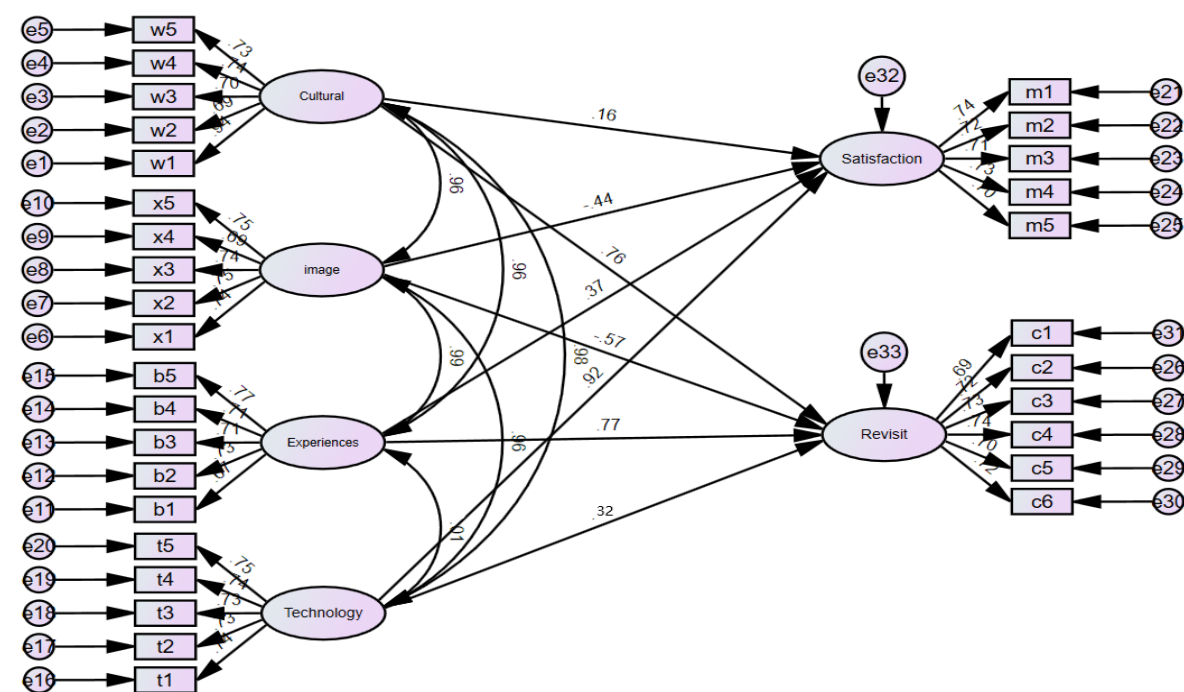


Figure. 1 Structural Equation Model

Discussion

Differential Analysis of Demographic Characteristics in Population Statistics. Research indicates that gender does not exhibit significant differences in tourists' evaluations of cultural exposure, destination image, smart tourism technology, unforgettable experiences, tourist satisfaction, and willingness to revisit, and the criteria for selecting travel destinations do not significantly influence travelers' experiential evaluations, indicating that the selection method is not a critical factor. Through structural equation modeling analysis, the study further validated the influence pathways of various factors on tourism satisfaction and repeat visit intention. The findings indicate that cultural exposure, smart tourism technology, and memorable experiences positively contribute to satisfaction, while destination image has a negative impact. Regarding repeat visit intention, satisfaction, cultural exposure, smart tourism technology, and memorable experiences all demonstrate positive effects, whereas destination image continues to exert a negative influence.

According to Roguljić (2018), in-depth understanding of Hebei Province's rich culture is facilitated by cultural contact, which enriches the tourist experience. Dalton (2011) emphasizes the significant impact of destination image on tourists' satisfaction and their likelihood to revisit a destination. Smart tourism technology, as highlighted by Cheok (2016), enhances the personalized and accurate level of tourism services, leading to improved tourist satisfaction. Additionally, Thornycroft (2001) stresses that creating memorable experiences is crucial in motivating visitors to return.

Our thorough and methodical research has uncovered numerous crucial findings. The interaction with local culture in Hebei Province, which allows for a deep immersion into its rich cultural heritage, significantly enhances the experience of tourists (Roguljić, 2018). This engagement helps to deepen tourists' understanding and appreciation of the local culture,

leading to a more fulfilling visit (Roguljić, 2018). Additionally, our study emphasizes the significant impact of destination image on tourist satisfaction and their likelihood of returning (Dalton, 2011). A positive and strong destination image can leave a lasting impression and increase the chances of repeat visits by tourists (Dalton, 2011). The use of smart tourism technology is demonstrated to improve personalization and precision in tourism services, ultimately enhancing tourist satisfaction (Cheok, 2016). Lastly, we identify the creation of memorable experiences as a key factor in encouraging tourists to revisit (Thornycroft, 2001). These impactful experiences become cherished memories that draw visitors back for more (Thornycroft, 2001).

Suggestions

Suggestions for Current Research:

- 1) Application of findings: The results of this study can be applied across various sectors including government, businesses, and academia to enhance tourism in Hebei Province.
- 2) Target marketing: Tourism stakeholders can utilize these findings to identify and target potential visitors more effectively, craft compelling marketing messages, and allocate marketing resources efficiently.
- 3) Sustainable tourism development: Tourism operators in Hebei Province can develop strategies that support sustainable tourism by balancing economic benefits with the preservation of local culture and environment, based on the factors influencing tourist satisfaction and revisit intention identified in this study.
- 4) Enhancing tourist experience: Focus on improving destination image, leveraging cultural contact opportunities, integrating smart tourism technology, and creating memorable experiences to increase tourist satisfaction and revisit intention.

Suggestions for Future Research:

- 1) Cultural tourism impact: Future studies should analyze the specific impact of Hebei's cultural tourism offerings on repeat tourism intention.
- 2) Smart tourism technology: Further research is needed on the influence of the application and development of smart tourism technology on visitor satisfaction in Hebei Province.
- 3) Long-term effects: Conduct longitudinal studies to examine the long-term effects of the identified factors on tourism patterns in Hebei Province.
- 4) Comparative analysis: Perform comparative studies with other provinces or regions to identify unique factors influencing tourism in Hebei Province.

References

- Cheok, J. (2016). 'Friction' in cross-cultural service interactions: Narratives from guests and service-providers of a five-star luxury hotel.
- Cheok, J., Chai, Y. C., Chee, W. L., Cheong, J. Y., Fong, M. S., & Yap, M. C. (2020). "Gen X tourist's intention to visit non-endorsed world heritage sites in Malaysia - a modification of uncertainty reduction theory"
- Dalton, R. (2011). Cultural Tourism Experiences: A Development Framework.
- Jeong, M., & Shin, H. H. (2020). Tourists' experiences with smart tourism technology at smart destinations and their behavior intentions. *Journal of Travel Research*, 59 (8), 1464-1477. doi:10.1177/0047287519883034.
- Nasir. Azis., Muslim, Amin., Syafruddin, Chan., & Cut, Aprilia. (2020). How smart tourism technologies affect tourist destination loyalty. *Journal of Hospitality and Tourism Technology*, (4), 603-625. doi: 10.1108/JHTT-01-2020-0005
- Nengovhela, M., Ochara, N. M., & Nethengwe, T. M. (2020). Confirmation and validation of smart tourism technology attributes: the case study of city of tshwane. *African Journal of Hospitality Tourism and Leisure*, 9 (3), 38-56. doi:10.46222/ajhtl.19770720-3.
- Pai, C. K., Liu, Y., Kang, S., & Dai, A. (2020). The role of perceived smart tourism technology experience for tourist satisfaction, happiness and revisit intention. *Sustainability*, 12 (16), 6592. doi:10.3390/su12166592.
- Roguljić, S. (2018). Neki aspekti društvenih kontakata u turizmu.
- Thornycroft, F. M. E. (2001). Cultural tourism as memories: Cultural representations as memories of European holiday making among Edinburgh residents.
- Um, T., & Chung, N. (2019). Does smart tourism technology matter? lessons from three smart tourism cities in south korea. *Asia Pacific Journal of Tourism Research*, 1-19. doi:10.1080/10941665.2019.1595691.