Analyzing Tourism Agents’ Perceptions of the Use of Artificial Intelligence

H. A. Sampaio¹,²,⁴,⁸(✉), A. I. Correia³,⁴,⁵, C. Melo⁴,⁶,⁷, L. Brazão⁸, and S. Shehada⁹

¹ Instituto de Ciências Sociais, Universidade do Minho, Braga, Portugal
² Laboratório de Paisagens, Património e Território, Braga/Guimarães, Portugal
³ Escola Superior de Tecnologia e Gestão, Instituto Politécnico de Viana do Castelo, Viana do Castelo, Portugal
⁴ Escola Superior de Hotelaria e Turismo, Instituto Politécnico do Porto, Porto, Portugal
⁵ Unidade de Investigação Aplicada à Gestão, Bragança, Portugal
⁶ Centro de Investigação em Turismo, Inovação e Desenvolvimento, Coimbra, Portugal
⁷ Centro de Investigação Para a Valorização de Recursos Endógenos, Portalegre, Portugal
⁸ Escola Superior de Hotelaria e Turismo, Instituto Politécnico do Câvado e do Ave, Barcelos, Portugal
⁹ Faculty of Arts, Department of Archaeology, Helwan University, Cairo, Egypt

Abstract. In Tourism, artificial intelligence already has numerous applications, facilitating processes, adding value to experiences, and improving competitiveness. However, its use raises several questions for companies and tourist destinations. As this research subject in tourism is still limited, the present study, based on nine semi-structured interviews, aims to identify and analyze the perceptions of tourist agents (companies and destinations) about the advantages and/or disadvantages, challenges, implications of use, and also of non-use, of artificial intelligence in the current situation of COVID-19 and in the future. The results underline the unanimous perception of the importance of using technology that does not replace the human component but adds value to it. The implications and suggestions for future work will also be presented.

Keywords: Tourism • AI • Tourist offer • Technology • Portugal

1 Introduction

Artificial intelligence (AI) is increasingly used in tourism, both in the context of destinations [1, 2] and in companies [3]. Given its range and potential impacts, AI is considered to be advantageous because, for instance, it allows large amounts of information to be collected, stored and processed [2]. However, the use of technology also raises several issues, such as the (potential) replacement of jobs by machines [4] and the reduction of tourist value [5].

Research on the impact of the use of autonomous services is still scarce in tourism [2, 6]. Thus, there is the need to better understand the dimension and complexity of its
use and its multiplicity of applications. It is also important to better understand the perceptions of consumers and employees, how companies may adopt these technologies [4] and their future impacts on the industry, also considering the current COVID-19 context [7].

This paper aims to analyze tourism agents’ perceptions concerning the use of AI, and its potential role in the future of the sector, also within the context of COVID-19. The research questions are: do these agents recognize the potential applying AI in different areas of the sector? What are their perceptions of its advantages, disadvantages and challenges? And what are the potential consequences of not adopting it? How has it been used in tourism and how can it contribute to the recovery of tourism in the COVID-19 scenario?

This study is structured in five sections: introduction, literature review, methodology, data analysis and conclusions, including the implications, limitations and recommendations for future research.

2 Literature Review

Since the 1960s, the use of AI has brought about the most modern and efficient use of technology in different areas [8], including tourism [9]. Advances in robotics, processing large amounts of information simply, fast and efficiently [10], improved robot performance and low acquisition and maintenance costs have contributed to its growing application in the tourism sector [6].

The use of AI in tourism has been developed in several domains, from activity recommendations systems [11], destination management and marketing [1], smart destination implementation [12], restaurants, hotels, theme parks, events, museums, art galleries and travel agencies [3, 6], mobile devices and human mobility [12] to transportation [13].

The use of AI in tourism brings several advantages, such as more efficient planning of tourist services, data on tourists [15] including consumption patterns [12], the quality of service and customer experience [2], improved competitiveness and management of human resources, infrastructures and costs [4, 12]. The combination of information and technology has contributed to the enhancement of experiences and to efficiency of service [3, 6]. Regarding customer experience, technology is used to customize and monitor service in real-time [2, 14], based on online customer interaction [10]. On the other hand, by using big data and based on demographic data, length of stay and tourist feedback [14], it is possible to provide appropriate services to customers, according to their needs and preferences [12, 14]. Technological development improves the capacity of companies and stakeholders who, with no technological training, can know tourists’ needs, expectations and motivations [12, 14].

Regardless of improvements, the use of AI raises certain questions, in particular in the field of data protection. Some opinions hold that tourism entities should make the information produced by the use of technologies available free of charge [14]. Even if data can be shared, the possible risks of such sharing should be minimized [14]. On the other hand, the adoption of AI can suggest replacing workers with machines, resulting in employees resisting it. However, the application of AI does not necessarily imply
replacing the human component [4], as it reinforces the need to take different perspectives on AI in tourism into account. Therefore, since there is limited research on the future use of AI and its impact on the tourism industry [2, 6], a better understanding is needed of the phenomenon and also how it is accepted by customers, companies and employees [4], and destinations. Further, considering the current pandemic context, it is also imperative to seek understanding of the applications of AI in the industry [7].

3 Methodology

This exploratory study used semi-structured interviews for data collection. Despite the initial identification of the questions, the interview was conducted in a flexible way, allowing different aspects to be explored [16, 17].

Based on the literature review, eleven questions were devised. They aimed to understand: (Q1) the level of awareness with AI in general and in the tourism sector; (Q2) the most interesting examples of AI for respondents’ specific activity; (Q3) the current use of AI in the business/organization and its objective [3]; (Q4 and Q5) the impacts of the use and advantages and disadvantages of technologies in tourism [6]; (Q6) the main challenges in implementation and use [5]; (Q7) examples considered most important intended for use in the future [2]; (Q8) customer responsiveness [14]; (Q9) the role of AI in the recovery of the sector in the current context of COVID-19 [7]; (Q10) the main challenges of future applications of AI in tourism; and (Q11) the (potential) consequences of its non-use in tourism [12]. Respondents were also given the opportunity to add relevant information, considering their experience and the specific characteristics of their activity.

In total, nine interviews were held with agents from different areas of the tourism sector, as data that would reflect a comprehensive view of the sector needed to be obtained. Of these, eight were responsible for 4-star and rural hotels, leisure, restaurants, a travel agency and tourist attraction (museum). An interview was also conducted with a stakeholder with responsibilities in destination planning and management, in particular, the context of smart destinations. Companies and respondents were selected through a convenience sampling method [18]. They were selected based on different criteria: the legal classification and their positioning. In addition to their willingness to participate in the study, the selected companies are renowned in Minho, northern Portugal, the region where the interviews were applied. The interviews were conducted in person, from June 22nd to 26th, 2020, and recorded with authorization from all respondents. The interviews lasted an average of 50 min each.

The content of the interviews was transcribed and later interpreted through a collaborative software for qualitative analysis (webQDA, www.webqda.com). This software was considered suitable for the present exploratory study, as it is not dependent on a specific type of research design and allows qualitative data resulting from interviews to be explored and analyzed, while creating relationship maps between the analyzed aspects to answer the research questions [19]. Moreover, the software gives full and flexible control over the data and analysis without bias. The choice of software was also based on its use in qualitative studies in tourism [20].

A thematic analysis was carried out to identify recurrent messages and dominant themes and relate them to the typology of respondent organization, when relevant.
The themes which emerged from the global analysis of the responses were later crosschecked with the literature review to ensure consistency. Analysis and codification were conducted by the multidisciplinary authors. Codification based on the typology of the organization was used to ensure the anonymity of the participants.\(^1\)

## 4 Data Analysis

In Q1, all agents state they are familiar with the use of AI, in general and in tourism. ‘Robots’ are the most cited, particularly their use in customer service. Facial recognition applications and check-in procedures are the second most cited, followed by weather forecasts (2 references), big data (1), digital marketing (1), robotics (3), chatbots (1), logistical planning (1), machine learning (1) and driverless vehicles (1).

In Q2, a brief initial contextualization was made of the main existing and projected applications of AI in tourism. When asked about which examples they consider the most interesting for their activity, they indicated big data (TA, R, D), reservation applications, (self-)check-in and check-out (4-starH, RH, R), and augmented reality (M, L). Sensors (M), chatbots (L) and car parking systems (D) were also mentioned.

The main reasons for their answers are related to information optimization and operations management. The former was mentioned by eight interviewees, given its decisive role in getting to know customers better, improving and personalizing service. In operations management, simplification of procedures and time reduction allow users “to resolve some issues and above all also end up saving time and directing our activity and our relationship with the customer” (TA).

In Q3, all respondents mentioned the use of some form of AI in their companies/organizations, although in different degrees and complexities (Table 1). The agents of 4-starH, M and L listed the largest number of technologies. However, they were greatly concerned about the possible reduction in human interaction and emphasized the need for personalization and proximity to customers (4-starH).

The type of technology used by each of the companies is related to its activity: weather forecasting applications (LS), audio guides (M) or food automation (R).

The specific use of each of the applications is related to service customization (M, 4-starH, LC), information management (D and TA) and visitors flow management (D).

In Q4, respondents pointed out the main advantages of using AI as the contribution to information management, operation management, market segmentation and attraction of new tourist markets.

In information management, “technologies allow agents to access specialized information (…) about the client” (TA); and “evidence collection (…), analysis and management are important to achieve better results” (4-starH). They also allow “reducing costs and labor” (TA), “saving time” (LN) and “dematerializing services” (4-starH), clear advantages in operations procedures.

---

\(^1\) TA-Travel Agency; 4-star Hotel-4-star H; R-Restaurant; LS-Leisure Surfing; LC-Leisure Cultural Tours; LN-Leisure Nature-based; M-Museum; RH-Rural Hotel; D-Destination.
The segmentation and attraction of new markets are other advantages mentioned since technology contributes to knowing the consumer profile, and adapting supply: “The customer’s profile, what he seeks, main trends, how much he intends to spend, allows us to be more assertive” (TA). AI also allows attraction of specific markets, “people with reduced mobility and intellectual disability, visually impaired” (M) and adapting “positioning and distribution” to the specific characteristics of different markets (LC).

Reference is also made to the consumer experience, “richer and differentiated” (M), monitoring of visitor flows (LC), cost reduction (R) and market promotion (LC).

References to human interaction show that the advantages of using AI do not result in the possible replacement of the human aspect by technology, because in some situations it is human presence that gives technology its greatest value (M, TA, D). The contribution of AI also improves the market segmentation, monitoring of visitor flows (D) and information management (TA, D).

In Q5, the disadvantages related to the possible reduction of human interaction are highlighted: “Tourism is about feelings, emotions; people look for the experience, sensations and machines cannot transmit those sensations” (TA). The use of AI is seen as a complement: “there will always have to be some human contact” (4-starH).

Security/privacy issues are also seen as drawbacks: “[we must] be aware of how we access customer information because we may be invading privacy”; one cannot “be too invasive, which is also related to data protection” (4-starH). From another perspective, “democratization and access to information bring a lot of people” and “those who do sports like to do so with few people around, because they have more freedom” (LS).

The cost of technology is another disadvantage: “it’s not always financially possible to follow the evolution of technology” (LN). By company typology, the results show that maintenance/assistance seems to be particularly relevant for M, but moreover that human interaction is important for TA and HR. The impact of AI on human resources seems to be more relevant for R and cost/investment for L.

In Q6, the need for knowledge and/or training in technologies is pointed out as the main challenge when using AI in tourism, either from the perspective of the customer

| Companies/organizations | AI applications |
|-------------------------|-----------------|
| Museum                  | Audio guides | interactive sensors | interactive displays | 4D movie |
| Rural Hotel             | Online check-in | online wine and meal menus |
| 4-star Hotel            | QR codes | apps | smart TV | customer relationship management | newsletter | body temperature measurement by image |
| Travel Agency           | Website analytics | big data |
| Leisure                 | Chatbots | weather forecast apps | billing management with customer history | augmented reality |
| Restaurant              | QR codes | online reservation systems | automation systems (food processing) |
| Destination             | Destination dashboard (big data) | flow management apps |
(M, TA) or that of human resources (4-starH). For customers to benefit from the technological background, they must have knowledge about it: “many visitors, not being directed and accompanied, give up because handling these technologies implies some kind of explanation” (M). As for human resources, “access to training increases. If people feel that this helps the work process and improves service, there is no resistance” (4-starH).

In addition to the abovementioned, cost is also seen as a challenge, as “many of these technologies are inaccessible” (LC); “the main challenge is the investment, which is not small. In the short term it can bring a return” (M).

Selecting appropriate technologies and monitoring their evolution are other challenges. It is crucial to “identify the most useful technologies” and assess the “suitability of their application to certain types of services” (HR). Identification and evaluation must consider change, because “technology is always evolving, while the client wants something modern and attractive” (LC). Its useful life is short and often, “When the company can meet the conditions necessary to acquire it (...) another more advanced one has already been developed” (LC).

It should also be noted that it is L that shows the greatest concern regarding the challenges of knowledge/training, technology cost and evolution.

In Q7, regarding the intention to adopt/reinforce the future use of AI, only one agent stated that “According to the service concept and quality, our objective is to assure human interaction more than technological components” (RH). The others show interest in adopting other AI technologies, underlining apps related to information management and optimization of consumer behavior.

Information management through apps is the most mentioned domain that may contribute to quality and personalized/tailor-made services: “Having a technology that informs us about the time that a certain client usually has a meal, if he/she eats dessert (…), would be useful” (R); managing and disclosing internal information to the hotel team (4-starH); analyzing markets, allowing updated evaluations, and being more efficient when allocating human resources to different tasks: “if I need to analyze market trends, I would lose too much time, and I will not be able to focus on other management aspects or attending clients” (TA).

Consumer experience, the second-most mentioned domain, relates the potential contribution of AI to enhancing experiences linked to interactivity and adaptation to specific needs: “In the future we expect the use of new technologies, interaction of characters; updating the 4D movie with different languages selected by the users; improving audio guides with sensors and equipment; making the room more interactive” (M).

It is worth mentioning the real-time and relevant information offered for tourists to enjoy the experience: “Something that may help to supply all types of geographic information in real-time (...) so that during the journey, the tourist could access the route, have information about fire risks, etc.” (LN). In addition, management and monitoring of tourist flows is also mentioned: “An app monitoring the level of saturation, managing flows” (LS).

Service personalization, safety, operation and customer management and market analysis are also cited. Generally speaking, information management is the area most underlined by TA, L and R and consumer experience by L.
Clients’ receptivity to AI, the topic of Q8, shows that the majority seem receptive, although levels vary according to the market segment and the price of the product/experience. From different market segments, “the feedback is positive, especially families with children” (M). For seniors or honeymoon tourists “it will depend on the technology” (TA). Acceptance “depends on the client profile. Some look for sport to disconnect. Others could easily adhere, even if only for some moments, for example, after doing sport” (LS). The price influences acceptance: “Usually yes, but it also depends on the price”, and this is why “we specify what they can afford when paying” (M).

Transversely, all the agents underline personalization and the human component in attendance as priorities: “our clients still prefer contact and direct information” (LN), since “clients need to be in a physical space” (TA).

Relating the contribution of AI to recovery after COVID-19, only one answer in Q9 considers a limited input: “AI itself no, I think it would be a complement, a support tool, as it has been so far” (D). The remaining answers consider AI important, especially to re-establish consumer confidence and to promote competitive positioning. Concerning promotion and competitive positioning, L representatives emphasize that AI is “important during the post COVID-19 context, because it can help to distinguish and promote places that have good security and health policies, especially in Europe” (LS). RH shares this opinion since AI “helps to quickly boost destinations’ image, for example, at the level of Safe & Clean certification, already advertised online”.

AI can also contribute to recovering consumer confidence with “body temperature reading video cameras with alarm sounds” (4-starH). However, “it is also crucial to have confidence in people, not in technology” (TA).

Companies of L recognize the efficiency of AI for recovering tourism activity (8 in 16 references): “I think it will be decisive to the revival” (LC); “it can facilitate contact with the client and secure maintenance of activities” (LN); “it can help to quickly reach important information” (RH), and helps “reinforce confidence” (R).

In Q10, the main challenges in adopting AI in tourism, costs and investment, are the utmost references, tuned to the nature of each business: “Mainly the costs and access to these technologies. Small companies do not have the financial capacity” (RH), they “will not have conditions to acquire these tools, maybe at a collective level” (D).

The importance of technical knowledge and training skills in the future adoption of such technologies is also mentioned: “adaptation at the level of skills of human resources to function with those equipment” (RH); “the challenge will be to gather necessary conditions to technically and financially create and implement those technologies” (LS); “training and access to companies that may present solutions” (R).

A list of other challenges, like loss of human interaction, conditioning service personalization, safety/privacy, and reaching new markets, is also referenced. Comparing the analysis of challenges related to implementation and use of AI until the present/recent past (Q6) and future uses (Q10), it turns out that the volume of investment and necessary knowledge are, in both cases, the most relevant challenges. However, a variation is observed according to the relative importance given: future use is based on the dimension of costs, while past/current use is based on knowledge.
Finally, Q11 approaches the consequences of not adopting AI in tourism. Perceptions are unanimous related to companies and destinations losing competitiveness. “There should be an increasing investment, otherwise they will stop being competitive” (TA); “they will lose market share” (LN); “it will be even more difficult to catch the train” (LC). In the COVID-19 context it seems even worse, whereas “companies not prepared for this reality will experience less demand” (4-starH).

It is generally accepted that “compilation of and access to data about clients’ histories” (LC) implies consequences that need to be considered, “especially in terms of collection and analysis of client information” (D).

Summing up, generalized ideas assume that “AI is here to stay and evolve” (LS), due to the “tendency of tourism modernization using AI” (M) and “it will also be important to revitalize urban centers by using new technologies” (M).

Some comments reinforce the role of AI as an easy complement (not a substitute) to tourism operations and experiences, and the need to adapt the level of technology to each market segment (D). The perspective of 4-starH and LS support this idea: “there will always be a public that wants to disconnect, like others preferring to be online” (4-starH) and “we need to know what clients value more” (LS).

Finally, and considering the total amount of references by those interviewed, each domain of analysis shows the relation with the specific company activity. This is the example of the concentration of references by D (flow management, 9 references), M (consumer experience, 7), or L (information management, 8).

5 Conclusions

This paper aimed to analyze the perceptions of tourist stakeholders about the advantages and/or disadvantages of AI and the challenges and implications of its use and non-use in the current COVID-19 scenario and also in the future.

The results show that respondents are familiar with AI in tourism. All recognize the potential application of AI in different areas of the industry and associate its usefulness with their specific business area. It is generally perceived that its use can improve businesses’ performance in different tourism activities.

Amongst the main advantages are information and operation management, and issues associated with markets (segmentation, the capture of new tourist markets and customer experience). These results are in line with the literature review, notably in collecting and processing large amounts of information [10] and reaching customers more quickly [12], influencing consumer behavior and planning the tourism offer [15]. The worth of the human aspect is underlined, even without denying or resisting the introduction of technologies. They add value to tourism supply. This does not imply replacing the human component with technology, but the opposite in some cases, as it is the human presence that adds the greatest value to technology. This is in line with other studies [2, 14] that show that the application of technology serves to personalize, improve services, monitor and optimize experiences.

As for the disadvantages, the results underline the existing concern about the possible reduction of human interaction, the cost of technology and safety/privacy-related
issues. Risks of information sharing are identified by [14], which reinforces the importance of these issues for tourism stakeholders.

The main challenges are associated with the cost of acquisition and selection of the most interesting and suitable technology. These results are in line with other studies that note the importance of investing in AI to create and/or reinforce service quality and competitiveness [12].

The results show that tourism stakeholders already use certain forms of AI, although with different degrees and complexity. In line with the literature review, the most mentioned examples are QR codes and online check-in, for instance regarding activity recommendation systems [11] or the use of mobile devices [12].

AI is important in the recovery of confidence and of the sector, as it is perceived as a competitive advantage in the post-COVID-19 scenario and especially useful in strategic positioning for companies and destinations. Considering the inevitable technological progress and its increasing use in tourism, companies and destinations that do not adopt AI in the future will lose competitiveness.

Given the current pandemic situation and its significant impact on the tourist sector, this study has practical implications. The data provided can help organizations in the sector to identify and implement initiatives, such as training on the range, diversity, trends, and applicability of technologies that can be used in the sector.

Some limitations of this study should be addressed. First, the small sample and representativeness of the different types of companies, as not all areas of the tourism sector are covered (e.g. events). This implies some attention in the data analysis and its non-generalization. The delimited geographical context of the sample may influence the perceptions analyzed, so it can also be considered a limitation.

Regarding future research, a more detailed analysis of the supply perspective of AI is suggested, by comparing perceptions through the size and typology of the company, within different territories. Also suggested is an exploration other stakeholders’ involvement in a collaborative process of co-creation of technological and monitoring solutions with varied applications, for example to perceive the impact on the different areas of the tourism sector (e.g. visitor flow management). Moreover, and given the critical role of the human component in tourism, it is important to understand the perceptions of AI of both demand and human resources.

References

1. Stalidis, G., Karapistolis, D., Vafeiadis, A.: Marketing decision support using Artificial Intelligence and Knowledge Modeling: application to tourist destination management. Procedia – Soc. Behav. Sci. 175, 106–113 (2015)
2. Tsaih, R.H., Hsu, C.C.: Artificial intelligence in smart tourism: a conceptual framework. Artificial Intelligence (2018)
3. Law, R., Bhualis, D., Cobanoglu, C.: Progress on information and communication technologies in hospitality and tourism. Int. J. Contemp. Hospitality Manage. 26(5), 727–750 (2014)
4. Ivanov, S., Webster, C.: Adoption of robots, artificial intelligence and service automation by travel, tourism and hospitality companies - a cost-benefit analysis. In: International Scientific Conference “Contemporary tourism – traditions and innovations”, pp. 1–9 Sofia University, Sofia (2017)
5. Sigala, M.: New technologies in tourism: From multi-disciplinary to anti-disciplinary advances and trajectories. Tourism Manage. Perspec. 25, 151–155 (2018)
6. Ivanov, S., Webster, C., Berezina, K.: Adoption of robots and service automation by tourism and Hospitality. Revista Turismo Desenvolvimento 27(28), 1501–1517 (2017)
7. Sigala, M.: Tourism and COVID-19: impacts and implications for advancing and resetting industry and research. J. Bus. Res. 117, 312–321 (2020)
8. Minsky, M.: Steps toward artificial intelligence. Proc. IRE 49(1), 8–30 (1961)
9. Mondal, B.: Artificial Intelligence: State of the Art. In: Balas, V., Khumar, R., Srivastava, R. (eds.) Recent Trends and Advances in Artificial Intelligence and Internet of Things, pp. 389–425. Springer International Publishing, Cham (2020)
10. Kazak, A.N., Chetyrbok, P.V., Oleinikov, N.N.: Artificial intelligence in the tourism sphere. In: IOP Conference Series: Earth and Environmental Science, vol. 421(4), pp. 042020. IOP Publishing, Krasnoyarsk (2020)
11. Moreno, A., Valls, A., Isern, D., Marin, L., Borràs, J.: SigTur/E-Destination: Ontology-based personalized recommendation of Tourism and Leisure Activities. Eng. Appl. Artif. Intell. 26, 633–651 (2013)
12. Lamsfus, C., Martin, D., Alzua-Sorzabal, A., Torres-Manzanera, E.: Smart tourism destinations: an extended conception of smart cities focusing on human mobility. In: Tussyadiah, I., Inversini, A. (eds.) Information and Communication Technologies in Tourism, pp. 153–162. Springer, Cham (2015)
13. Zheng, W., Liao, Z., Lin, Z.: Navigating through the complex transport system: a heuristic approach for city tourism recommendation. Tour. Manag. 81, 104–162 (2020)
14. Buhalis, D., Amaranggana, A.: Smart tourism destinations enhancing tourism experience through personalisation of services. In: Information and Communication Technologies in Tourism, pp. 377–389. Springer International Publishing, Cham (2015)
15. Minazzi, R., Mauri, A.G.: Mobile technologies effects on travel behaviours and experiences. A preliminary analysis. In: Tussyadiah, I., Inversini, A. (eds.) Information and Communication Technologies in Tourism, pp. 153–162. Springer, Cham (2015)
16. Smith, S.L.J.: Practical Tourism Research, 2nd edn. CABI International, Oxfordshire (2017)
17. Rubin, H.J., Rubin, I.S.: Qualitative Interviewing: The Art of Hearing Data. Sage, California (2011)
18. Robinson, O.C.: Sampling in interview-based qualitative research: a theoretical and practical guide. Q. Res. Psychol. 11(1), 25–41 (2014)
19. Souza, F.N., Costa, A.P., Moreira, A.: Análise de dados qualitativos suportada pelo software WebQDA. In VII Conferência Internacional de TIC na Educação: Perspetivas de Inovação, pp. 49–56. Universidade do Minho, Braga (2011)
20. Costa, C., Bakas, F.E., Breda, Z., Durão, M.: ‘Emotional’ female managers: How gendered roles influence tourism management discourse. J. Hospitality Tourism Manage. 33, 149–156 (2017)