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New clues for tourism planning and management from consumer neuroscience

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Abstract

The chapter's primary goal is to look at the future of tourism and discuss consumer neuroscience in the context of tourism planning and management. We first provide theoretical and concept views about the theme of neuroscience in tourism. Then, we describe the different sensors and devices that make it possible to measure and understand consumers' emotional responses. Following, we show the importance of consumer neuroscience to tourism planning and management while facing the 21st century's challenges. Through neuroscience, it is possible to understand cognitive and emotional processes inaccessible to traditional research. This chapter contributes from a bibliographic approach with a context of emerging dynamics in tourism and hospitality.

Keywords

Tourism; neuroscience; consumer; planning; management.

Introduction

Relationships between neurosciences and other disciplines give rise to new scientific knowledge: neuromarketing, neuroeconomics, and neuropsychology. Karmarkar and Plassmann (2019) delivered an overview of the growing field of consumer neuroscience. Tourism is a complex phenomenon that involves consumption and the paradigmatic view for its treatment is the General System Theory (Lohmann & Panosso Netto, 2008). Nevertheless, according to Tribe (1997) tourism has two fields, a business and a non-business field, while tourism studies draw four approaches from the world of thought (multidisciplinary, general interdisciplinarity, business interdisciplinarity) and the world of practice (extra disciplinarity). It is worth noting that the meanings and senses of tourism experience as an expression of consumption have undergone transformations during the 21st century, be it in the context of combating overtourism as witnessed before the COVID-19 pandemic, or in creating development strategies for tourism in a post-pandemic era, since confidence for travel has been shaken by the fear experienced through the pandemic (see Mayer & Coelho, 2021).

It is necessary to recuperate from social distancing impositions brought on by the pandemic. Access to destinations through virtuality in detriment of physical dislocation seems to have enhanced causing tourism consumption to transform, employing the intermediation of disruptive technologies, notably those that use the global computer network through the internet, for example, virtual tours with the aid of augmented reality goggles. This has been made possible since the advancements in Web 1.0, 2.0, 3.0, 4.0 (Latorre, 2018) and the internet of things (Ashton, 2009) which has become more and more useful for those with access to the internet. Therefore, tourism consumption and tourists' and stakeholders' behaviours are being transformed, making emotions the new frontier for tourism studies, as posited by Moyle et al. (2019).

This troubled and uncertain environment accentuates the difficulty in business planning and management and brings more uncertainties to the different agents present in the tourism value chain. As observed, changes were not restricted to tourist behaviour; on the contrary, they have also impacted the business environment and the new landscape that appears along the value chain. One of the most impactful changes is the

one resulting from mobile technologies, which have established a new enterprise-consumer relationship (Guerrero-Rodríguez et al., 2020). For example, a report of Euromonitor International (Bremner, 2020) showed the knockout suffered by tourism as a result of the COVID-19 pandemic, suggesting that the industry is expected to better recover and advance through digital media, compared to other segments in the value chain. It is noteworthy that eWOM (electronic word of mouth) through social media exerts a strong influence on tourist behaviour and travel intention. eWOM affects cognitive evaluations by consumers about available brands and their characteristics and helps to form beliefs that result in the choosing of a desirable option (Pourfakhimi et al., 2020).

Tourism dynamics demand the discovery of new theoretical and methodological perspectives for planning and management, and it is undeniable that the advances in the comprehension of consumers' emotional responses appear as an epistemological frontier for the understanding of the tourism phenomenon itself, in the present or in the future. As an example, Al-Kwafi (2015) studied brain activation from attractive images for tourists by using functional magnetic resonance (FmRI), revealing the technological impact that can be made by neuroscience's tools in planning and managing tourism destinations. However, it is important to stay vigilant, as on the other side the "*... the field of consumer neuroscience has been plagued with pseudoscience and 'neurohype' and researchers have experienced some disappointments when trying to incorporate these measures into their research*" (Niedziela & Ambrorze, in press).

From this perspective, theories, methods, and tools from neuroscience can contribute to neuro-tourism as an emergent topic in tourism research, with neuro-tourism becoming a discipline itself. This chapter's primary goal is to look at the future of tourism and discuss consumer neuroscience in tourism planning and management. The first section provides theoretical and conceptual views about the thematic. Then, we describe the different sensors and devices that measure and understand consumers' emotional responses. Following, the third section of this chapter shows the importance of consumer neuroscience to tourism planning and management, in the face of the challenges of the 21st century, before conclusions are drawn and implications are discussed.