

Emotional and behavioural outcomes of the application of sensory elements in the development of memorable tourism experiences

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Goal and objectives of the dissertation

Goal

This thesis analyses the relevance of emotionality in tourism experiences aiming at answering to the following research question: *How does the inclusion of sensory elements at the affective and cognitive level affect the evaluation, recall and behavioural intentions associated with a tourism experience?*

Objectives

Based on this overarching research question, the principal objective is to examine the effectiveness of various sensory elements in fostering affective engagement and producing positive outcomes in tourists' memory and future behaviours. To achieve this main objective, the following specific objectives (SOs) are established:

SO1: To review the current academic literature on emotionality and sensoriality in tourist behaviour.

SO2: To analyse implicit and unconscious reactions to assess the emotional and affective potential of different senses, across different stages of the tourism experience.

SO3: To investigate tourists' explicit and conscious responses to the application of sensory tools during tourism experiences.

SO4: To offer theoretical and practical implications that contribute to enhancing the design and delivery of emotionally engaging and memorable tourism experiences

Methodology

This doctoral research adopts a compendium format, comprising a set of articles, and utilises a mixed-methods approach, as necessitated by the multifaceted nature of the research objectives (Mason & Merga, 2018). The thesis integrates both qualitative and quantitative methodologies, as well as theoretical and empirical approaches, enabling a comprehensive understanding of the research problem (Hadinejad *et al.*, 2019; Lin *et al.*, 2024). Initially, a theoretical framework is developed through literature reviews. Subsequently, empirical behavioural methodologies are employed, including experimental psychophysiological techniques and self-report data, thereby ensuring methodological triangulation through a conjunctive mixed-methods design.

Results

It has been shown that the experiential and leisure-based nature of tourism has positioned sensory tools as a crucial area of research. This thesis highlights the growing academic interest in exploring how sensory elements influence tourists' emotional and cognitive responses. To address this, a series of behavioural studies were conducted (SO2), examining both conscious and unconscious reactions to visual, olfactory, and auditory stimuli during the pre-consumption and in-situ phases of tourism experiences. The findings reveal significant differences in how each sense captures attention and evokes emotions. To ensure the external validity of these insights, two real-world studies (SO3) confirmed the central role of emotional engagement in memory formation. As a result, the thesis proposes several practical implications (SO4), particularly in the strategic sensory design of tourism experiences aimed at enhancing memorability and emotional resonance.

Theoretical conclusions

The main theoretical contribution of this thesis lies in its comprehensive approach to the study of affective responses in tourism. By designing and applying multi-methodological research protocols, the thesis enables the investigation of both explicit (self-reported response) and implicit (psychophysiological response) affective reactions. These protocols are adaptable to a wide range of

tourism contexts, offering a robust framework for analysing how tourists emotionally and sentimentally engage with different types of experiences.

Some of the specific contributions that this research has made are: 1) sensory tools management is highlight as the main trigger tool for emotions and memory creation (Caruelle *et al.*, 2024; Piramanayagam *et al.*, 2020), 2) memory and behavioural intentions, as positive marketing results, must be always considered when experiences in tourism are explored and studied (Şahin & Güzel, 2020), and 3) the integral study of tourists' evaluation and decision-making processes enables academics to understand some of the variables and their interaction in creating memorable tourism experiences (Lin *et al.*, 2024).

Practical Applications of the Dissertation

Evolving experiential demands necessitate the development and implementation of effective tools capable of generating memorable and emotionally engaging tourism experiences. Based on the findings, several practical recommendations are proposed:

1. For destination management organisations (DMOs): Strategies should incorporate experiential design as a critical element in tourism planning and promotion.
2. For tourism providers: Businesses should focus on fostering emotional engagement through their offerings, enabling differentiation, enhancing enjoyment, and increasing memorability.
3. For all stakeholders: The research offers practical guidelines for the design and delivery of sensory tourism experiences, with empirical support for olfactory and musical stimuli as potent enhancers of emotions.

Content of the dissertation

Abstract of Chapter 1

This introductory chapter provides a general contextualisation of the subject matter. Employing a deductive approach, it outlines the theoretical development of the research by establishing its foundational axioms and examining consumer trends related to experientiality, as well as their influence on tourists' affective reactions and memory formation. The chapter offers a theoretical and practical justification for the study, highlighting its academic relevance and importance. The research question and objectives are clearly articulated. The structure, an overview of the content of each chapter and a rationale for the compendium of publications are included.

Abstract of Chapter 2

This thesis adopts a multi-methodological approach. This chapter details all the methods employed. It begins with the literature review process, outlining the search protocols and analytical tools used for the theoretical framework. Subsequently, it discusses the relevance of methodologies derived from consumer neuroscience and experimental research, particularly those focusing on psychophysiological responses for implicit data collection. Finally, the chapter explains the methodological approach to explicit data collection and the statistical tools employed to analyse survey responses, including multivariate techniques such as structural equation modelling (PLS-SEM) and the PROCESS macro for SPSS.

Abstract of Chapter 3

This chapter develops a theoretical framework for the various topics addressed in the research. Through multiple literature reviews, it identifies the current state of academic discourse and provides a theoretical contextualisation for the thesis. Two literature reviews are included: (1) one on the role of emotions in tourism research, and (2) another focusing on musicality and auditory elements in tourism marketing. This chapter addresses specific objective one.

Abstract of Chapter 4

This chapter presents several studies designed to evaluate the emotional impact and effectiveness of different sensory modalities across two research contexts: tourism communication and experiential tourism design. A total of four laboratory studies were conducted, employing a triangulated methodology that combines psychophysiological data and self-report measures to assess participants' affective-cognitive responses to visual, olfactory, and auditory stimuli. This chapter corresponds to specific objective two.

Abstract of Chapter 5

This chapter synthesises the studies undertaken to evaluate the explicit and conscious reactions of tourists to the use of sensory tools during tourism experiences. Two studies were conducted in the context of gastronomic tourism, using in-situ survey methods to collect data on participants' experiences, affective responses, perceived quality of life, behavioural intentions, and memory formation. The data were analysed using structural equation modelling techniques. This chapter addresses specific objective three.

Abstract of Chapter 6

This chapter presents a structured and comprehensive summary of the findings from the various studies conducted throughout the thesis. It also includes a comparative discussion that situates these findings within the broader body of literature relevant to the themes explored.

Abstract of Chapter 7

This final chapter presents the overall conclusions of the thesis, addressing both the general and specific research objectives. It outlines a series of theoretical and practical contributions, emphasising the thesis's academic significance and its potential for knowledge transfer within the tourism and marketing sectors. The chapter also discusses the limitations of the research and proposes future lines of enquiry that could build upon the work undertaken in this doctoral project.

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