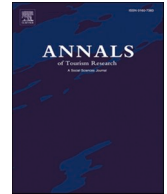




ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Annals of Tourism Research

journal homepage: www.elsevier.com/locate/annals

The experience of emotion: Directions for tourism design

Serena Volo

Faculty of Economics and Management, Free University of Bozen, Piazzetta dell'Università, 1 - Brunico (BZ), 39031, Italy

ARTICLE INFO

Associate editor: Daniel Fesenmaier

Keywords:

Emotion experience
Tourists
Constructed emotions
Population hypothesis
Design science
Emotion theorists

ABSTRACT

Tourists' emotions have a pivotal role in tourists' cognitive evaluations and behavioral responses. Fleeting but powerful, emotions are associated with individuals' biological makeup, shaped by their experiences and related to personal mental associations. The aim of this contribution is twofold: to broaden the depth and breadth of the emotion discourse in tourism and to offer principles for emotion-oriented tourism design. Mainstream emotion literature and tourism emotion contributions are critically analyzed and discussed. This study proposes novel paths to investigate emotions in our scholarly field, offers insights for the emerging tourism design science and outlines the contribution that the uniqueness of our field of research can offer to emotions' theorists.

Introduction

Research on emotions is vast in history, sociology, philosophy and psychology. Within the context of tourism, research on emotions has recently expanded its scope albeit it remains mostly rooted in consumer behavior, often embedded in cognitive psychology and typically disseminated by marketing scholars. Defining, measuring and analyzing emotions are challenging tasks. A translation of the French common term *émotion*, emotion scientifically labels -since the 19th century- a "category of mental states" (Dixon, 2012, p.338). Numerous taxonomies of specific 'states' have been proposed as emotions wherein several theorists have tried to define and systematize the construct. Indeed, the multiplicity of meanings attributed to the word emotion has contributed to its current ambiguity and misuse (Dixon, 2012; Izard, 2010; Scarantino, 2016); however, most definitions agree on the complexity of the construct and on some basic characteristics (Hockenbury & Hockenbury, 2007; Kleinginna Jr & Kleinginna, 1981). A close analysis of recent literature shows that definitions still differ quite substantially across disciplinary boundaries (Izard, 2010; Mulligan & Scherer, 2012; Dixon, 2012; Deonna, Tappolet, & Teroni, 2015; Barrett, 2016; Barrett, Lewis, & Haviland-Jones, 2016; L.F. Barrett, 2017a) where the mainstream literature has moved along two complementary paths: (1) identifying the consensual viewpoints on the nature and characteristics of emotions, and (2) highlighting the diverse responses to the critical questions about the structure of emotions.

Scholars within the tourism field have explored the nature of emotions on vacation-like settings, highlighting the complexity of the concept, but not digging deeper into the theories behind such fuzziness. This research has shown that emotions have a pivotal role in tourists' cognitive evaluations and behavioral responses, and undoubtedly tourism experiences can offer plentiful of emotions to holidaymakers. In this context, tourism design science can benefit from a deeper understanding of emotions and their interplay with experiences. Tourism emotion research has borrowed its definitions, conceptual frameworks, measurements tools and applications mostly from marketing research. Yet, emotions are associated with individuals' biological makeup, shaped by their past experiences and related to personal mental associations (Volo, 2017). Hence, in agreement with other studies (e.g. Wolff, Larsen, & Øgaard, 2019), it is argued in this article that tourists, despite the setting, apply the same mental mechanisms whether on holiday or in everyday life.

E-mail address: Serena.Volo@unibz.it.

<https://doi.org/10.1016/j.annals.2020.103097>

Received 15 September 2020; Received in revised form 26 October 2020; Accepted 29 October 2020

Available online 16 November 2020

0160-7383/© 2020 Elsevier Ltd. All rights reserved.

Thus, it is posited that tourism scholars will benefit from a discussion of the mainstream literature driving the current debate on emotions.

In this vein, the aim of this study is twofold: (1) broadening the depth and breadth of the emotion discourse in tourism research; and (2) offering emotion-oriented tourism design principles. This paper acknowledges the great diversity in conceptual definitions of emotions reflected in the variety of operationalizations and measurements. Indeed, the diverse interpretations of different schools of thoughts and the controversies among different theorists are documented within the general literature and within the tourism literature. As such, the contribution of philosophers, historians and sociologists set the frame for the study. The worldviews of psychologists -essentialism on one side (emotions as biologically hardwired) and constructionism on the other (emotions as constructed behaviors) - are presented and serve as basis to position the tourism literature. Recent theoretical studies and empirical investigations in tourism are then critically discussed to gauge the state-of-the-art in our field and to identify possible contributions to tourism design. Based on both consensual and controversial viewpoints, the study first posits five principles for emotion-oriented tourism design and then discusses three themes to guide tourism emotion research. As a conclusion, this study highlights the need to cross-fertilize disciplines within tourism while encouraging scholars of diverse disciplines to embark on exploring emotions within the tourism setting.

Research on emotions

Mainstream debates

The scientific community examining emotion is vast and multifaceted. The following is a short journey along the main disciplines useful to delineate the contribution of the relevant theorists to the development of the science of emotions. Tourism scholars might borrow one or more disciplines digging into their individual development, or better they could embrace the noticeable commonalities or contribute to the fierce disagreements emerged throughout time and across disciplines.

Philosophers' views of emotions

Philosophers have long been fascinated by emotions. Throughout the centuries, from the complex theories of ancient Greek philosophers to the recent attention of the contemporary philosophers, emotions were central in the contemplation of eminent thinkers (James, 1997; Roberts, 1988). Nineteenth century philosophers Brown and Bell inspired Darwin's work (1872) and started the debate on the location of emotions between the soul and body, the heart and brain. Brown's 1820 assertion on the difficulty of defining emotions and Bell's 1824 view of emotion as "movement of the mind", converged on the 'mental' essence of an emotion, but disagreed on the nature of its constituents (cited in Dixon, 2012). The interest of philosophers re-awakened in the 1980 with some authors emphasizing the significance of this relevant human life feature and posing several fundamental questions (Lyons, 1980; Marks, 1982; Roberts, 1988; Ross, 1984). Within the philosophical perspective, Scarantino (2016) distinguishes three traditions of emotion theories: (a) feeling tradition that sees emotions as "feelings or conscious experience of a distinctive type" (p.7); (b) motivational tradition that sees emotions as "patterns of behavior of a distinct type" (p.15); and, (c) evaluative tradition that sees emotions as "evaluations of a distinct type or caused by evaluations of a distinct type" (p. 24).

The philosophical debates examining the definition, taxonomies and disambiguation of emotions are considerable. Contemporary philosophical theorizations are strongly rooted in the early philosophers' views and enriched by contemporary developments linked to other scientific disciplines (e.g.: Deonna et al., 2015; Döring, 2003; Goldie, 2000; Griffiths, 2004; James, 1997; Scarantino, 2016; Tappolet, 2010). Nevertheless, no consensus arises from the philosophers on what emotions are, showing the inadequacy of a universalist theory and leaving room for alternative methods (componential or pluralists) to theorize emotions (Scarantino, 2016). To conclude, the contribution of modern philosophers resides in their ability: (a) to connect with emotions theorists rightly identifiable as their historical precursors, and (b) to link with the recent advancements in other sciences.

Historians' perspectives of emotions

An historical viewpoint, in addition to offering a recount of the semantic progress of the word emotion and its subsequent connotation, outlines and reinforces the existence of a "contemporary definitional malaise" (Dixon, 2012, p. 338). Historians' offer a contextualization of emotions in a wide socio-political and economic-developmental perspective. Detaching from generalizations and linearity, historians can contribute by identifying a set of nuances to the interpretation of emotions as product of history with its malleable shapes and matters (Frevort, 2016). Historiography traces back to the 17th century the common English use of the word emotion, with its meaning of physical disturbance (DiIler, 2010). Historians also date back to the 18th century the origin of the strong dichotomization between visions of emotions into the two categories passion/appetites and affection/sentiments (Dixon, 2003). Furthermore, Dixon's historical recount (2012) locates in the 19th century the development of emotion as a psychological category worth of scientific investigation and notices the shift from philosophical approaches to physiological investigations. The change of the century marks the opening of the debate between scientists: on one side those claiming the importance of logical analysis and, on the other, those asserting the relevance of physiological equipment (Ellis, 1895; Irons, 1903; James, 1884, 1994).

In the late 1930, Febvre urged scholars to engage in emotions from an historical perspective as the history of his time had showed the socio-political relevance of emotional claims (Febvre, 1973). Dixon's historical reconstruction (2012) points out the relevance of the different views that led to the contemporary definitional crisis in the use of the word emotion: too often polarized between those trying to constrain it into "discrete feelings states" and those using it as a "metacategory" (Dixon, 2012, p. 343). Frevort's history of emotions (2016) highlights the therapeutic value taken by emotions in the culture of the 1970's, and recognizes the subsequent commercialization of emotions made by capitalistic societies with their marketing. In conclusion, this short historical account

highlights the semantic developments and the complex cultural history of emotions which drives the current theories merging into the contemporary debates of several disciplines.

Sociologists' standpoints on emotions

The sociological scholarship on emotions contributes to the understanding of the interdependent and reciprocal relationship between individuals' emotions and the cultural and structural frames in which these emotions happen (Lively & Weed, 2016). In defining emotions, sociologists often debate on the lack of clarity and shared terminology. However, they agree on conceiving emotions as fundamentally social and thus allowing the possibility to have indefinable, unrecognizable and unlabeled emotions. Defined as way to express one's personal relevance about social events (Hochschild, 1983), emotions are more recently defined by sociologists as "responses to events that are linked with corporeal manifestations" (Lively & Heise, 2014, p. 68). Sociologists engaged in the theory of emotions acknowledge the existence of numerous layers of social and cultural influences on emotions. They contribute to understanding the individual creation of emotions within social groups and organizations, the role of emotions in different social endeavors, the strategies and techniques of emotion management and the emotional aspects of identity.

Sociologists of emotions work mostly under the frame of two theoretical perspectives: cultural and structural (e.g.: Clark, 1997; Simon & Nath, 2004). Within the cultural paradigm cultural expectations and rules are paramount, and scholars investigated the effect of cultures and subcultures (Hunt, 2008; Wei, 2014), cross-cultural issues (Clark, 1997; Lofland, 1985) and the role of social circumstances and status characteristics (Hochschild, 1979; Lively & Heise, 2014). Theorists favoring the structural perspective assert the effect that social structure has on the emotional lives of individuals, deepening the investigations of gender, race, status and positions in groups, societies and organizations (Cast & Cantwell, 2007; Simon & Lively, 2010; Simon & Nath, 2004). The two viewpoints are certainly often integrated and interrelated in the literature, both contributing with their nuances to the developing sociological perspective of emotions. In addition, recent contributions highlight the connections among different perspectives, propose alternative theories accounting for social and individual multiplicity of layers thus advocating for a cross-disciplinary framework (Rogers, Schröder, & von Scheve, 2014). Intricated and open to multiple disciplines, sociological views integrate individual, cultural and social aspects into their theoretical and empirical studies on emotions (Lively & Weed, 2016; Rogers et al., 2014).

Psychologist' approaches to emotions: the locationist and the constructionist

This section briefly summarizes recent debates among psychological emotion theorists considering also the latest developments in neuroscience. Scientists investigating the psychological endeavor of emotions have undertaken cognitive, neurological and physiological stances. Framing psychological approaches in the classical and in the constructionists' views, recent scientific evidence challenges traditional beliefs and opens to new frontiers in the investigation of human emotions (Barrett, 2017a; Barrett, Adolphs, Marsella, Martinez, & Pollak, 2019). A clear understanding of the basis of these debates, and of the open problems in this field, can assist tourism scholars to better define, both theoretically and operationally, the concept and construct before engaging in tourism emotion research.

The classical view of emotions. The locationist approach, also called the classical view of emotions, sees an emotion as a human distinct and recognizable phenomenon (Barrett, 2017a; Barrett et al., 2016; Lindquist, Wager, Kober, Bliss-Moreau, & Barrett, 2012; Siegel et al., 2018), and accordingly, describes 'emotion discrete categories' as consistently and precisely correspondent to diverse brain areas, otherwise called 'fingerprints' or core physical features reflecting the emotional essence (Barrett, 2017a; Siegel et al., 2018). In this view, individual emotions categories are wired in individual's brain and body, are inherited and associated with a 'brain locale' (Lindquist et al., 2012). Two sets of theorists belong to the classical school of emotions: the basic emotion theorists and the causal appraisal theorists.

The basic emotion theorists (Ekman, 1992; Izard, 2007; Panksepp, 1998a, 1998b; Plutchik, 2001) characterize the emotional space as discrete, identifying a precise number of discrete emotions and claiming the others as variations. Their theory converges on the evolutionary approach, thus seeing emotions as universally shared. Emotional states are characterized by the joint activity of all components (feeling, action tendency, appraisal, motor expression and physiological activity). The causal appraisal theorists (Ellsworth & Scherer, 2003; Roseman & Smith, 2001; Scherer, 1993, 1999, 2009) postulate that appraisal precedes and causes emotions. They recognize that the link between appraisal and the other emotion components is shaped by evolutionary pressure. In their view, appraisal is pivotal to emotions, indeed in their theory an emotion occurs when an event is seen as highly relevant as the outcome of the appraisal process. Thus, the emotional space is made of underlying 'appraisal dimensions' wherein variations in the emotion's category are observed.

The locationists view emotion categories as perceiver-independent and as having unique patterns of activity in the autonomic nervous system; that is, for them there is a one-to-one relationship between an emotion category and its corresponding autonomic nervous system physiology pattern (Barrett, 2016; Siegel et al., 2018). Variations are present but limited and within the so-called emotions families (e.g.: Ekman, 1992; Ekman & Cordaro, 2011; Levenson, 2011; Scarantino & Griffiths, 2011).

The constructionist view of emotions. The constructionist perspective postulates that emotions categories do not have fingerprints, and therefore are not unavoidable consequences of the genes, rather they emerge out, depend on context and are conceptual categories (Barrett, 2017a; Siegel et al., 2018). Several theorists belong to the constructionist school of emotions: social constructionist theorists (e.g., De Leersnyder, Boiger, & Mesquita, 2013), psychological construction theorists (e.g., Barrett, 2006a, 2006b; Barrett et al., 2016; Barrett, Mesquita, Ochsner, & Gross, 2007; Barrett & Russell, 2015; James, 1884, 1994; Russell, 2003), descriptive appraisal theorists

(e.g., Ortony & Clore, 2015), and the constructed emotion theorists (Barrett & Satpute, 2013; Barrett & Simmons, 2015; Chanes & Barrett, 2016; Barrett, 2017b, 2017; Siegel et al., 2018). Social constructionists recognize the social role and the time effect on emotions; emotions are socially constructed (Barrett, 2009) during interactions of short duration or long relationships, and thus necessarily affected by the time dimension (Boiger & Mesquita, 2012). Contemporary psychological constructionists concur that emotions “are psychological events that emerge out of more basic psychological operations that are not specific to emotion” (Lindquist et al., 2012, p.3). Descriptive appraisal theorists offer a limited contribution in studying the base of an emotion (Lindquist et al., 2012). Whereas more developments have recently been documented by the constructed emotion theorists (e.g.: Barrett, 2017a; Barrett et al., 2019; Siegel et al., 2018).

Overall, constructionist models include two main components: firstly, “mental representation of bodily changes” (Lindquist et al., 2012, p. 5) that is meaningful changes in ‘core affect’ (sensory body input) related to an ‘object’; and secondly, “conceptualization” that is the process of meaning making in context that uses memory and knowledge from prior experience and that enables the fundamental brain process of categorizations to create meaning (Lindquist et al., 2012). Further, according to Barrett (2017a), emotions occur if recognized by conceptual knowledge, variation is thus normal; social environment shapes emotions while social pressure determines the boundaries of emotions. Asserting that emotions are constructed, Barrett (2017a) empowers individuals: affected by context but vested of their own emotional authority.

Contrary to the classical view, the constructionists assert that there is substantial autonomic nervous system variation meaningfully attached to each emotional situation (Siegel et al., 2018). Thus, there is much greater variability in the constructionists’ view (e.g.: Barrett, 2009) than can be detected in the classical ‘fingerprint’ view, hence challenging the assertion that there is a dedicated circuit for each emotion. The relationship between autonomic nervous system patterns and category emotions is such that variations have meaning and are functional, behaviors and actions change from case to case during the same emotion (Siegel et al., 2018). Among the constructionists, Siegel et al. (2018) question the “emotional fingerprint paradigm”, encourage the “population hypothesis” of emotions, and suggest to “naturalistically” map and measure the heterogeneity of physiological emotional changes without expecting them to fit a certain category. Recent evidence also drives away from the overreliance on single psychophysiological measurements of emotions, calls for a multivariate approach to reliably explore emotions, and suggests measurements in contexts even exploring the opportunities offered by big data (Barrett et al., 2019). That is, emotions are not only physiological manifestations; thus, the constructionists are not concerned about the location of emotions but about the process of creation of an emotion, disagreeing with belief that postulates the uniqueness of mental processes that cause distinct emotions.

In a nutshell, the views by psychologists of emotions have evolved from a traditional discrete approach to the contemporary population hypotheses. Psychologists embed some aspects typical of other disciplines, exploit the recent developments in neuroscience, and claim the ‘construction of emotions’, thus rejecting the existence of commonly pre-programmed emotion categories and their distinct brain location.

Emotions in tourism research

Recent studies respond to the encouragement for more emotion-based research (Cohen & Cohen, 2012; Picard & Robinson, 2012; Volo, 2017) and signal a more mature interest in the topic. Indeed, the importance of emotions in designing tourists’ experiences and shaping tourism encounters is recently acknowledged and explored with theoretical studies, empirical applications and novel methods (Cohen & Cohen, 2019; Hosany, Martin, & Woodside, 2020; Kim & Fesenmaier, 2015). This next section provides a brief overview of recent developments in emotion research in tourism and explores the role of emotions in tourism design.

The purpose here is to illustrate the recent state-of-the-art of emotion research in tourism literature presenting issues and advancements. Thus, a structured search for the period 2015–2020 was performed on the top-tier tourism journals: *Annals of Tourism Research*, *Tourism Management*, *Journal of Travel Research*, *International Journal of Tourism Research*, *Current Issues in Tourism*. Indeed, these journals are the most authoritative sources in our field. The selection of the journals and the timeframe is related to the aim of this study which by no means is a systematic review of the literature. The search was performed as follows: (a) the word ‘emotion’ was searched for in the title, keywords and abstract; (b) all results were categorized based on abstract, keywords and bibliographical information (title, authors, publication year, journal); and (c) then grouped into two major areas: theoretical and empirical studies. All studies were analyzed but those articles providing useful insights to tourism design science were retained and further scrutinized. In particular, the theoretical studies were scrutinized for their ability to wed a clear discipline of reference, to build specific tourism frameworks and to recognize the standing of the tourism community in search for the meaning of emotions. The empirical contributions were examined with reference to centrality of emotion to the focus of the research, indication of a mainstream discipline, unit of analysis, methodology, contribution to tourism studies, contribution to mainstream literature, implications for industry and research with particular attention to tourism experience design. Insights useful for tourism design are later discussed and a synopsis of the studies is provided in the Appendix.

Theoretical contributions

The theoretical contributions show traces of belonging to identifiable social sciences and related fields. More emphasis is given to psychology with several contributions framed around theories, constructs or approaches emblematic of psychological studies (Christou, 2020; Hosany, Martin, & Woodside, 2020; Li, Scott, & Walters, 2015; Nawijn & Biran, 2019; Skavronskaya, Moyle, Scott, & Kralj, 2019). An anthropological perspective is presented with reference to a study on empathy (Tucker, 2016). Emotions are also studied by a few sociologists showing in the last decade a renewed interest in the topic (Cohen & Cohen, 2019; Wood, 2019). In a study of affect and emotion in dark tourism, a geographical perspective offers more food for thought in terms of disciplines used to

investigate emotion and related constructs (Martini & Buda, 2020).

Literature reviews and theoretical papers aim at systematically describing the subject of investigation and establishing pathways for future research offering a theoretical legitimization to the discipline or field and hopefully allowing cross-disciplinary exchanges. In these selected theoretical works, the disciplines, topics and the approaches used offer some useful insights to study emotions in tourism. However, a few shortcomings are noticed. In the cited contributions, only some authors explicitly refer to the main discipline, others vaguely insert it in their discourse and a few only slightly touch upon it. The works vary from offering eloquent debates on a specific emotion to an overall assessment on a generic emotion category or its development. Short labels and definitions of emotions appear in most of these contributions, even in those strongly asserting the need to deepen knowledge and improve measurements (e.g. Hosany, Martin, & Woodside, 2020).

Most studies acknowledge the variety of definitions available in literature, but rarely dig into other disciplines or approaches. Other studies use one specific definition to 'easily' differentiate emotion from other constructs, implicitly refusing to acknowledge the multiplicity of definitions and operationalizations available. Also, these authors too often use only tourism literature to define constructs that are rooted in other disciplines and therefore limit the discourse on overall emotion research to a short length. Moreover, a close investigation of the references shows only a superficial and often opportunistic tracing back to the main discipline with recent developments often ignored. The risk of these omissions is twofold: (a) tourism researchers ignore the current mainstream developments relying often only on well cited authors, and (b) mainstream scholars will not be aware of the research that takes place in the tourism field of social science.

Empirical contributions

The recent tourism literature shows growing interest in the measurement of emotions; the empirical contributions analyzed focus on emotion as generic category, on specific categories or sets (e.g. basic emotions, positive emotions) or on one specific emotion (e.g. nostalgia). Marketing seems to be the most common denominator of these studies with majority of contributions clearly rooted in tourism or destination marketing or in specific aspects (e.g. advertising). The connection between tourism marketing and psychological studies is, in most cases, only marginally documented and mostly mediated by general marketing literature. Few papers are more clearly tied to psychology while the others appear to be mostly dealing with tourism studies literature. Marketing dominates the current emotion studies resulting in two important risks: (a) emotions are considered important only when a commercial value is attributed to them, and (b) the tourism literature becomes almost unidirectional and this is far from the needs of the scientific community. The unit of analysis investigated reveals a level of observation mostly related to the demand side of tourism (tourists, visitors to attractions, attendees of events, potential tourists, individuals either selected, or volunteered and also some rewarded participants), with some studies exploring residents emotions towards tourism development, and a few involving samples of university students and only one study involving tourism industry representatives.

The well-grounded tradition of self-reported measurements contributes to most of the empirical findings in the area of tourism emotions research. The specific data collection methods used to investigate emotions are mostly surveys with face to face interviews or questionnaires, online surveys, in depth interviews, long interviews, diaries, and experimental design. Recent empirical tourism literature presents mostly a marketing-oriented approach to defining, operationalizing and investigating emotions and uses scales adopted from dated marketing contributions except for one scale specifically designed for destinations (Hosany & Gilbert, 2010). The studies that adopt other research designs (e.g. interviews) seem to acknowledge more the difficulties in theorizing emotions offering insightful suggestions to embrace emotional variety.

The recent developments in neuroscience inspired some scholars to explore psychophysiological measurements such as electrodermal activity (Kim & Fesenmaier, 2015; Shoval, Schvimer, & Tamir, 2018), skin conductance and facial electromyography (Li, Walters, Packer, & Scott, 2018a; Li, Walters, Packer, & Scott, 2018b). These studies combined the psychophysiological measures of emotion with other methods (traditional surveying techniques, self-report questionnaire, pre- and post-treatment interviews, high-resolution locational data and real-time surveying techniques). The scope of the complementary data collections methods ranged from measuring baseline emotions, to assessment of the experience, the destination or the advertising. Authors often acknowledge the difficulty in managing the data collection process due to the handling of the necessary equipment. These pioneering contributions demonstrate recent technical advancements but overlook the mainstream debates and fierce critiques of the emotion theorists. Thus, the claims on the ability of the psychophysiological measurements to capture individuals' real-time emotional responses in tourism context should be treated cautiously, as these studies omit the theoretical recent advancements, measure mostly arousal and rely on a recruited and limited sample (from two to a hundred) of participants of homogeneous nature (university students and staff, and young tourists).

Overall, the tourism literature appears marketing-driven, unable to cope with the changes in the mainstream emotion research and autoreferential with respect to investigating emotions. Despite these shortcomings, most of the reviewed studies offer explicit or implicit theoretical, methodological and empirical suggestions useful for tourism design. These suggestions are used to posit five emotion-oriented tourism design principles and to propose some novel paths which will advance tourism emotion research.

Emotion oriented tourism design principles

The role of emotions in tourism design is often discussed to offer suggestions to tourism stakeholders to better design experiences that can elicit certain emotional responses (Kim & Fesenmaier, 2015). As tourism design science emerges, tourism emotion research is asked to provide answers to several questions. The discussion of the previous sections of the mainstream literature on emotions and the findings of the tourism studies provide useful insights which can be organized into five basic principles.

Principle 1: design to extend breadth and depth of emotions

Stakeholders in tourism need to detach from the repetitive use of few basic positive emotions solely to lure tourists' attention and encourage pre-determined emotional expectations, experiences and post-trip evaluation. The vocabulary of emotions is lengthy and emotions' intensity stretchable. According to recent mainstream research, emotions are far from discrete instances traceable by a specific 'brain locale' (Lindquist et al., 2012). Stakeholders must first broaden their knowledge and understanding of the issue so as to be able to successfully embrace the emotional diversity of tourists rather than summarizing it in a few well-known emotional labels. Research confirms that summarized emotions disguises relationships between variables of interest (e.g. Hosany, Martin, & Woodside, 2020; Prayag, Hosany, Muskat, & Del Chiappa, 2017). Similarly, acknowledging the presence of mixed emotions during any type of vacation can certainly be beneficial for tourism design purposes. Furthermore, the strong call to serve the emotional needs of disable tourists (e.g. Sedgley, Pritchard, Morgan, & Hanna, 2017) and their caretakers clearly points out to some uncharted paths for designing tourism experiences. As such, it argued that designing tourism experiences means to acknowledge the diversity of tourists as individuals (e.g. Moal-Ulvoas, 2017; Yan, Zhou, & Wu, 2018), rather than squeezing tourists' emotions in a set of pre-defined categories.

Principle 2: re-evaluate the role of all encounters contexts

Stakeholders should not disregard the design of those encounters that might lead to negative emotions. The existence of mixed-emotional experiences and the relevance of negative emotions can be beneficially interpreted as a call to design educational elements of tourism (e.g. Nawijn & Biran, 2019). The context in which emotions take place is relevant, and negative emotions can eventually resonate in beneficial outcomes for individuals (e.g. Buda, 2015; Martini & Buda, 2020). Dark tourism sites or dangerous sport activities show that negative emotion can produce positive or noteworthy experiences (e.g. Knobloch, Robertson, & Aitken, 2017). Some negative emotions eventually fade away and are re-elaborated, others contribute to actions; durability of negative emotions, thus their medium- and long-term effect can vary (e.g. Weaver et al., 2018); encounters characterized by empathic pain offer insight in the re-interpretation of political and relational boundaries (e.g. Frazer & Waitt, 2016); designing around negative emotions can be thoughtfully and ethically done by including educational, meaningful and informative experiences (e.g. Nawijn & Fricke, 2015). Thus, when designing for post-vacation feedback, stakeholders should take into consideration the opportunities emerging from the re-interpretation of emotions. Finally, tourism design science should also encompass marketing encounters. Communication, advertising and social media are permeated by emotional claims and evoke emotional responses (e.g. Hudson, Roth, Madden, & Hudson, 2015; Kim & Fesenmaier, 2017; León & Araña, 2016; Li, Walters, Packer, Scott, 2018a; Li, Walters, Packer, Scott, 2018b), tourism design at both enterprise and destination level should re-evaluate the importance of these marketing encounters.

Principle 3: create environments for emotional experiences

Emotions are usually associated with high value and intense encounters (Barrett et al., 2007). Creating environments to offer tourists 'the experience of emotion' entails sophisticated examinations. Indeed, the role of 'environments' is captured with reference to a multiplicity of tourism experiences (e.g. Lee, 2015; Song, Ahn, & Lee, 2015). In these environments, the created emotions can be assigned the value of operant resource, experienced as valuable process that impact on the tourism experience and life at large, in which the emotional conductor remains the tourist (e.g. Malone, McKechnie, & Tynan, 2018). Thus, tourism destinations should seek to fully engage with tourists in those environments that can foster emotional processes. Tourism experience designers should also consider fostering novelty and surprise in tourism environments as research demonstrates that they have significant effect on emotional and memorable tourism experiences (e.g. Hosany, Prayag, Deesilatham, Caušević, & Odeh, 2015; Skavronskaya et al., 2019). Further, engaging activities and interpretative resources are also suggested with respect to emotional involvement into festival, events and museums (e.g. Gieling & Ong, 2016; S. Lee, Manthiou, Jeong, Tang, & Chiang, 2015; Wong, Wu, & Cheng, 2015). Studies show that individual emotion regulation mechanisms enable tourists to cope with emerging new situations during their vacation experiences and to adjust using strategies at "interpersonal, situational and intrapersonal" level (e.g. Gao & Kerstetter, 2018). Emotions inevitably change during a vacation for inner causes, because of external stimuli and as result of the interaction with others: tourists, residents or stakeholders. Thus, in designing tourism - tangible and intangible - environments, attention should be paid in creating opportunities for emotional modulation. Furthermore, the role of collective emotions should be considered in designing tourism environment and experiences as sharing emotions is at the core of most experiences (e.g. Wood, 2019). Additionally, pre and post vacation encounters such as exchanges on social media contribute to shaping and reinterpreting tourism experiences and their related emotions. Given the large text, photo and video sharing available online, exploiting the potential of big data analytics to explore shared emotions can be useful to tourism planners to better design their environments.

Principle 4: design turning inwards and looking outwards

The attention of tourism designers is often overly directed to the 'other' and little attention is paid to the 'self'. Stakeholders' emotions are often neglected despite their relevant role of hosts (e.g. Cohen & Cohen, 2019). Individual and collective emotions of stakeholders, managers, employees and all actors involved in the delivery of the experience are ignored, yet they influence tourists. Emotional training for employees and management should be considered in designing for tourism (e.g. Hosany, Prayag, Van Der Veen, Huang, & Deesilatham, 2017). Similarly, residents' emotions play a role for tourists and for the development of tourism in a certain

destination (e.g. Ouyang, Gursoy, & Sharma, 2017; Jordan, Spencer, & Prayag, 2019; Zheng, Ritchie, Benckendorff, & Bao, 2019). In the discourse with the other, empathy enables to mind the cultural gaps with tourists when it also involves transformative challenges for the self (e.g. Tucker, 2016). The emotional inward exercise of designers might render adjustments on their ability to modulate the emotions of others and deepen their understanding, accepting that, in the tourism environment, individuals carry their usual comforts and discomforts, their emotional easiness or burdens (e.g. Pocock, 2015). Collaborative processes in the disentangling of emotions at residents' level can also be fruitful for destination development policies. Furthermore, the relevance of two levels of analysis should be clear to tourism planners; tourism encounters – the encounter with the other – and tourism experience – one's experience – are relevant in the designing of experiences, but outcomes can vary greatly due to the interpretation of the "experience of emotions" (Barrett, 2017a; Barrett et al., 2007). Finally, combining different perspectives using emotions maps could assist tourism designers at destination level (Kim & Fesenmaier, 2015; Shoval et al., 2018).

Principle 5: elicit individual emotional outcomes, disregard pre-packaged emotions

Emotions are highly subjective and individually constructed. Recognizing the existence of different emotional quests of tourists is paramount as it supports the design of environments, experiences, interaction and engagement for and with tourists. Indeed, in designing tourism experiences, stakeholders ought to understand that while it is in their power to provide predetermined environments based on some expected emotional outcome, the emotional individual result is out of marketers' control (e.g. Knobloch et al., 2017). The research examined in this study offer some important insights on elicitation of emotions useful for experience design (e.g. Li et al., 2015). In particular, studies that provide evidence of the relationship between tourism visual stimuli and triggered emotions (e.g. Moyle, Moyle, Bec, & Scott, 2019) is limited; as such, tourism marketers should explore collaborations with experts in visual techniques and analysis. Advertisers, social media experts, artists and image engineers – certainly aware for long-time of the visual opportunities to raise bodily reactions to stimuli – could be involved in assisting tourism design at private and public level. Likewise, designing for other human senses (e.g. Christou, 2020) can be also guided by experts in the field, allowing for cross-cultural interpretations. With this background, it is argued that tourism design science should discourage high standardization of triggers which on one side are easily captured by the less emotionally empowered tourist, on the other might elicit refusal or negative reactions by those with higher emotional granularity. The uncertainty of given emotional outcomes should not be perceived by tourism designers as a negative trait, rather it should be embraced for the variety that could result. Therefore, harvesting from the population of emotions can be more rewarding than capturing a few fingerprints.

Advancing tourism emotion research

The lack of solid theoretical grounds and the extensive diversity in conceptual definitions of emotions, coupled with a shallow understating of depth and breadth of emotions largely renders the current tourism research fuzzy and erratic. Cohen and Cohen (2019) notice almost a rush in the proliferation of tourism emotions studies. Hosany, Martin, & Woodside, 2020 review methodological deficiencies and highlight the need for theorizing and testing alternative models. The present contribution notices that while a few authors bask in the opportunities offered by the novel developments in psychophysiological measurements of bodily traits of emotions, some scholars actually capture the need for elevating tourism studies above the business dimensions while others are attracted by the promise of marketizing emotional outcomes. With this said, several valuable insights to better design tourism emotion research were identified and are organized around three main themes.

Theme 1: emotion theorists and disciplines

The current developments show the convergence of mainstream emotions theorists towards definitions, models, measurements and understanding of emotions solidly grounded on their main discipline but also open to recent advancements in other sciences. Indeed, these theorists integrate individual, cultural and social aspects into their studies. The advancements in mainstream literature favor a holistic approach, encourage multidisciplinary studies and focus on emotion construction processes exploring the hypothesis of an emotion population. In the tourism literature, the current debate on emotions mostly ignores the developments of the mainstream emotion research, with scholars opportunistically selecting only a limited number of theories, models and measurements. Becoming aware of the most recent debates of philosophers, historians, sociologists and psychologists will enable to improve the connections within the disciplines, move across boundaries and embed the tourism field in its appropriate perspective. Therefore, it is essential that researchers explore the rich emotion literature beyond tourism and marketing studies before investigating emotions in tourism.

Theme 2: emotional space and its measurements

Standardized measurements of emotions often ignore the baseline emotional state of individuals, underestimate the effects of inferences caused by inner and surrounding factors, and disregard the dynamic dimension of emotions. Tourism scholars should fully recognize the difficulties to validly measure emotions as the mainstream literature shows. Avoiding the risk of using results from static measurements is essential, thus involving tourists in more stages of the emotion research design can enable better understanding of their emotional space. Scales typically used in current studies allow fast applications of validated measures at a high price. Populating our research field with repetitions and adaptations of general marketing blurs the opportunities that 'vacation space and time' can offer to dig into one's emotions. Research designs that minimize the distortion effects related to the time dimension can be successfully

implemented (e.g.: experimental designs).

Embedding tailored on-site mixed methods measurements with off-site considerations of emotions can better inform on the real structure of the tourists' emotional space, its variation and regulation mechanisms during and after the vacation. Additionally, emotions studies in tourism are too often one-off business; panel research design could unveil stimulating routes to better understand the role of tourism experiences on emotion and the role of emotions on tourism experiences. Finally, scholars should advise tourism designers of the pitfalls of using read-to-use emotions measurements and outcomes (e.g.: smiley faces). Despite the ease of use of some emotional measurements, their value is questionable. For example, simplified measurement of emotions might indicate a very low level of attention to tourists' emotions. As such, scientists should engage more with various tourism stakeholders to exploit reciprocal knowledge so as to develop mutual valuable research relationships which can more effectively guide emotion-oriented tourism design science.

Theme 3: emotional outcomes, layers and labels

Research shows that individuals are tangled in emotions, that emotions are not automated happening inside the brain but are unique experiential instances based on individuals' history, knowledge and environment. Investigating emotions from different perspectives enables researchers to focus on layers of outcomes. An emotional instance is an outcome per se. Most research in psychology and neuroscience is primarily directed to study emotions as outcomes of different set of constituents. Marketing and tourism scholars are mostly driven by learning the effect of emotions on some business-related outcome variable (e.g. satisfaction, attitude, behavior), thus the outcome of an emotional state is for them the relevant variable. The legitimate differences of distinct sciences should not be alibis to compartmentalize research. Research collaborations among tourism scholars, emotional theorists, neuroscientists, engineers and design experts can prove useful to design tourism experiences having in mind emotional outcomes. The mainstream literature also shows that emotional outcomes are culture dependent, thus more studies in different tourism settings (e.g. non-Western destinations) would be beneficial before embarking in cross-cultural studies. Scholars should engage in investigating emotions categories expressed in other cultures (some of which have no equivalent label in English) thus removing constraints typical of classical emotion labels. Further, studying tourists rather than convenience samples and mixing lab and field experiments can provide advantages leading to highly valuable outcomes.

Conclusion

This study offers insights on approaching emotions in terms of emotion research and of tourism design practice. Importantly, it appears that in tourism research there is a huge lack of theorization of emotion from relevant disciplines. There is almost no traceable contribution from tourism scholars to mainstream literature, regardless of the discipline. The recent developments in measurements of emotions justify the need for tourism scholar to venture with these novel approaches. Nonetheless, caution should be exerted in taking up the complex challenges that emotions research presents. Clearly identified conceptual disciplinary and cross-disciplinary frameworks within which the research is grounded ought to be clearly articulated. Complexity must be embraced and not just acknowledged. Last, measurements of commercialized emotions and commercialization of emotions should be discouraged as they do not render justice to the relevance of the topic neither to tourism scholarship.

Much research is needed to engage in the mainstream disciplines that seem to converge towards investigating "constructed emotions" (Barrett, 2017a; Siegel et al., 2018) and towards emotion categories seen as physical and social context-dependent variable instances (Siegel et al., 2018 p. 345). Thorough scrutiny of constructs and measurements coupled with a deeper understanding of the developments in mainstream disciplines (e.g. Lindquist et al., 2012) within the context of tourism is paramount. Decisive openness is needed to embrace a perspective of constant complexity and subjectivity, which in return could raise the scientific significance of the tourism emotion research. In this respect, pairing tourism researchers with scholars of mainstream disciplines will encourage cross-fertilization of ideas, methods and perspectives. Further, moving across disciplinary boundaries can allow for challenging but rewarding outcomes. Finally, a better understanding of emotions will allow tourism design science to provide stakeholders with valuable knowledge so as to engage tourists with the 'experience of emotion'.

This discussion is not without limitations. The literature discussed in this paper is a limited selection, used to address the issue of understanding emotions for the benefit of tourism design science. More studies on emotions are available in other tourism journals and on other types of publication outlets (e.g.: books, reports). The time frame used for this study is also somewhat limited to the most recent contributions. An investigation of published works in several outlets and for a longer time span could render a more complete view of the evolution of tourism emotions studies. Nevertheless, the direction of this review was to identify and discuss five key principles which can support the design of complex emotional experiences within tourism destinations and settings. In this vein, it is hoped that readers find this contribution useful.

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.annals.2020.103097>.

Acknowledgement

The author acknowledges the following funding source: Free University of Bozen-Bolzano (Italy) Start-up Project: "Designing tourism experiences using insights from novel data sources" CUP I56D18000040005.

Statement of contribution

1. What is the contribution to knowledge, theory, policy or practice offered by the paper?

This paper acknowledges the diverse interpretations of different schools of thoughts and the controversies among different theorists within the general literature and within the tourism literature, outlining the approaches of the different scholars. The paper revises the contribution of philosophers, historians, sociologists and the worldviews of psychologists and the recent development in neuroscience. Recent theoretical studies, literature reviews and empirical investigations within tourism research are critically discussed to draw the state-of-the-art in our field and to identify several possible contributions to tourism design. The study then posits five principles for emotion-oriented tourism design and discusses three themes to guide tourism emotion research offering theoretical, methodological and practical contributions.

2. How does the paper offer a social science perspective/approach?

The paper contributes to the multidisciplinary advancement of tourism studies, highlighting theoretical insights derived from a combination of disciplines to investigate emotions. Tourism emotion research has borrowed its definitions, conceptual frameworks, measurements tools and applications mostly from marketing research. Indeed, the tourism literature appears marketing-driven, unable to cope with the changes in the mainstream emotion research and autoreferential with respect to investigating emotions. This review of emotion research presents recent social sciences developments in the definitions and measurements of emotions and offers important implications on how emotions in our field should be approached in terms of emotion research and in terms of tourism design practice. The paper strongly advocates for collaborations across disciplines enabling cross-fertilization of ideas, methods and perspectives of diverse social sciences.

References

- Barrett, L. F. (2006a). Are emotions natural kinds? *Perspectives on Psychological Science*, 1, 28–58.
- Barrett, L. F. (2006b). Solving the emotion paradox: Categorization and the experience of emotion. *Personality and Social Psychology Review*, 10, 20–46.
- Barrett, L. F. (2009). Variety is the spice of life: A psychological construction approach to understanding variability in emotion. *Cognition and Emotion*, 23, 1284–1306.
- Barrett, L. F. (2016). Navigating the science of emotion. In H. L. Meiselman (Ed.), *Emotion measurement*. (pp. 31–63). UK: Woodhead Publishing.
- Barrett, L. F. (2017a). *How emotions are made*. New York, NY: Houghton Mifflin Harcourt.
- Barrett, L. F. (2017b). Functionalism cannot save the classical view of emotion. *Social Cognitive and Affective Neuroscience*, 12, 34–36.
- Barrett, L. F. (2017). The theory of constructed emotion: An active inference account of interoception and categorization. *Social Cognitive and Affective Neuroscience*, 12(1), 1–23.
- Barrett, L. F., Adolphs, R., Marsella, S., Martinez, A. M., & Pollak, S. D. (2019). Emotional expressions reconsidered: Challenges to inferring emotion from human facial movements. *Psychological Science in the Public Interest*, 20, 1–68.
- Barrett, L. F., Lewis, M., & Haviland-Jones, J. M. (Eds.). (2016). *Handbook of emotions*. Guilford Publications.
- Barrett, L. F., Mesquita, B., Ochsner, K. N., & Gross, J. J. (2007). The experience of emotion. *Annual Review of Psychology*, 58, 373–403.
- Barrett, L. F., & Russell, J. A. (2015). An introduction to psychological construction. In L. F. Barrett, & J. A. Russell (Eds.), *The psychological construction of emotion* (pp. 1–17). New York, NY: Guilford Press.
- Barrett, L. F., & Satpute, A. B. (2013). Large-scale brain networks in affective and social neuroscience: towards an integrative functional architecture of the brain. *Current opinion in neurobiology*, 23(3), 361–372.
- Barrett, L. F., & Simmons, W. K. (2015). Interoceptive predictions in the brain. *Nature Reviews Neuroscience*, 16, 419–429.
- Boiger, M., & Mesquita, B. (2012). The construction of emotion in interactions, relationships, and cultures. *Emotion Review*, 4(3), 221–229.
- Buda, D. M. (2015). The death drive in tourism studies. *Annals of Tourism Research*, 50, 39–51.
- Cast, A. D., & Cantwell, A. M. (2007). Identity change in newly married couples: Effects of positive and negative feedback. *Social Psychology Quarterly*, 70(2), 172–185.
- Chanes, L., & Barrett, L. F. (2016). Redefining the role of limbic areas in cortical processing. *Trends in Cognitive Sciences*, 20, 96–106.
- Christou, P. A. (2020). Tourism experiences as the remedy to nostalgia: Conceptualizing the nostalgia and tourism nexus. *Current Issues in Tourism*, 23(5), 612–625.
- Clark, C. (1997). *Misery and company: Sympathy in everyday life*. University of Chicago Press.
- Cohen, E., & Cohen, S. A. (2012). Current sociological theories and issues in tourism. *Annals of Tourism Research*, 39(4), 2177–2202.
- Cohen, S. A., & Cohen, E. (2019). New directions in the sociology of tourism. *Current Issues in Tourism*, 22(2), 153–172.
- De Leersnyder, J., Boiger, M., & Mesquita, B. (2013). Cultural regulation of emotion: Individual, relational, and structural sources. *Frontiers in Psychology*, 4, 55.
- Deonna, J., Tappolet, C., & Teroni, F. (2015). Emotion, philosophical issues about. *Wiley Interdisciplinary Reviews: Cognitive Science*, 6(3), 193–207.
- Diller, H. J. (2010). “Emotion” vs. “passion”: The history of word-use and the emergence of an a-moral category. *Archiv für Begriffsgeschichte*, 52, 127–151.
- Dixon, T. (2003). *From passions to emotions: The creation of a secular psychological category*. Cambridge University Press.
- Dixon, T. (2012). “Emotion”: The history of a keyword in crisis. *Emotion Review*, 4(4), 338–344.
- Döring, S. A. (2003). Explaining action by emotion. *The Philosophical Quarterly*, 53(211), 214–230.
- Ekman, P. (1992). An argument for basic emotions. *Cognition and Emotion*, 6, 169–200.
- Ekman, P., & Cordaro, D. (2011). What is meant by calling emotions basic. *Emotion Review*, 3, 364–370.
- Ellis, H. (1895). The psychology of emotion. *Journal of Mental Science*, 41, 159–162.
- Ellsworth, P. C., & Scherer, K. R. (2003). Appraisal processes in emotion. In *Handbook of affective sciences* (pp. 572–595). New York: Oxford University Press.
- Febvre, L. (1973). Sensibility and history: How to reconstitute the emotional life of the past. In *A new kind of history* (pp. 12–26). New York: Routledge.
- Frazer, R., & Waitt, G. (2016). Pain, politics and volunteering in tourism studies. *Annals of Tourism Research*, 57, 176–189.
- Frevert, U. (2016). The history of emotions. In *Handbook of emotions* (pp. 49–65). The Guilford Press.
- Gao, J., & Kerstetter, D. L. (2018). From sad to happy to happier: Emotion regulation strategies used during a vacation. *Annals of Tourism Research*, 69, 1–14.
- Gielsing, J., & Ong, C. E. (2016). Warfare tourism experiences and national identity: The case of airborne museum “Hartenstein” in Oosterbeek, the Netherlands. *Tourism Management*, 57, 45–55.
- Goldie, P. (2000). *The emotions: A philosophical exploration*. Oxford University Press.
- Griffiths, P. E. (2004). Emotions as natural and normative kinds. *Philosophy of Science*, 71(5), 901–911.
- Hochschild, A. R. (1979). Emotion work, feeling rules, and social structure. *American Journal of Sociology*, 85(3), 551–575.
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. Berkeley: University of California Press.
- Hockenbury, D. H., & Hockenbury, S. E. (2007). *Discovering psychology*. New York: Worth Publishers.
- Hosany, S., & Gilbert, D. (2010). Measuring tourists’ emotional experiences toward hedonic holiday destinations. *Journal of Travel Research*, 49(4), 513–526.

- Hosany, S., Martin, D., & Woodside, A. G. (2020). Emotions in tourism: Theoretical designs, measurements, analytics, and interpretations. *Journal of Travel Research*, 1–17.
- Hosany, S., Prayag, G., Deesilatham, S., Causevic, S., & Odeh, K. (2015). Measuring tourists' emotional experiences: Further validation of the destination emotion scale. *Journal of Travel Research*, 54(4), 482–495.
- Hosany, S., Prayag, G., Van Der Veen, R., Huang, S., & Deesilatham, S. (2017). Mediating effects of place attachment and satisfaction on the relationship between tourists' emotions and intention to recommend. *Journal of Travel Research*, 56(8), 1079–1093.
- Hudson, S., Roth, M. S., Madden, T. J., & Hudson, R. (2015). The effects of social media on emotions, brand relationship quality, and word of mouth: An empirical study of music festival attendees. *Tourism Management*, 47, 68–76.
- Hunt, P. M. (2008). From festies to tourrats: Examining the relationship between jamband subculture involvement and role meanings. *Social Psychology Quarterly*, 71(4), 356–378.
- Irons, D. (1903). *The psychology of ethics*. Edinburgh, UK: Blackwood.
- Izard, C. E. (2007). Basic emotions, natural kinds, emotion schemas, and a new paradigm. *Perspectives on Psychological Science*, 2, 260–280.
- Izard, C. E. (2010). The many meanings/aspects of emotion: Definitions, functions, activation, and regulation. *Emotion Review*, 2(4), 363–370.
- James, S. (1997). *Passion and action: The emotions in seventeenth-century philosophy*. Oxford: Clarendon Press.
- James, W. (1884). What is an emotion? *Mind*, 9, 188–205.
- James, W. (1994). The physical basis of emotion. *Psychological Review*, 1, 516–529 (Originally published in 1894).
- Jordan, E. J., Spencer, D. M., & Prayag, G. (2019). Tourism impacts, emotions and stress. *Annals of Tourism Research*, 75, 213–226.
- Kim, J., & Fesenmaier, D. R. (2015). Measuring emotions in real time: Implications for tourism experience design. *Journal of Travel Research*, 54(4), 419–429.
- Kim, J., & Fesenmaier, D. R. (2017). Sharing tourism experiences: The post-trip experience. *Journal of Travel Research*, 56(1), 28–40.
- Kleinginna, P. R., Jr., & Kleinginna, A. M. (1981). A categorized list of emotion definitions, with suggestions for a consensual definition. *Motivation and Emotion*, 5(4), 345–379.
- Knobloch, U., Robertson, K., & Aitken, R. (2017). Experience, emotion, and eudaimonia: A consideration of tourist experiences and well-being. *Journal of Travel Research*, 56(5), 651–662.
- Lee, S., Manthiou, A., Jeong, M., Tang, L., & Chiang, L. (2015). Does consumers' feeling affect their quality of life? Roles of consumption emotion and its consequences. *International Journal of Tourism Research*, 17(4), 409–416.
- Lee, Y. J. (2015). Creating memorable experiences in a reuse heritage site. *Annals of Tourism Research*, 55, 155–170.
- León, C. J., & Araña, J. E. (2016). The economic valuation of climate change policies in tourism: Impact of joint valuation, emotions, and information. *Journal of Travel Research*, 55(3), 283–298.
- Levenson, R. W. (2011). Basic emotion questions. *Emotion Review*, 3, 379–386.
- Li, S., Scott, N., & Walters, G. (2015). Current and potential methods for measuring emotion in tourism experiences: A review. *Current Issues in Tourism*, 18(9), 805–827.
- Li, S., Walters, G., Packer, J., & Scott, N. (2018a). A comparative analysis of self-report and psychophysiological measures of emotion in the context of tourism advertising. *Journal of Travel Research*, 57(8), 1078–1092.
- Li, S., Walters, G., Packer, J., & Scott, N. (2018b). Using skin conductance and facial electromyography to measure emotional responses to tourism advertising. *Current Issues in Tourism*, 21(15), 1761–1783.
- Lindquist, K. A., Wager, T. D., Kober, H., Bliss-Moreau, E., & Barrett, L. F. (2012). The brain basis of emotion: A meta-analytic review. *Behavioral and Brain Sciences*, 35, 121–143.
- Lively, K. J., & Heise, D. R. (2014). Emotions in affect control theory. In , *Volume II. Handbook of the sociology of emotions* (pp. 51–75). Dordrecht: Springer.
- Lively, K. J., & Weed, E. A. (2016). The sociology of emotion. *Handbook of emotions*, 66–81.
- Lofland, L. H. (1985). The social shaping of emotion: The case of grief. *Symbolic Interaction*, 8(2), 171–190.
- Lyons, W. (1980). *Emotion*. Cambridge: Cambridge University Press.
- Malone, S., McKechnie, S., & Tynan, C. (2018). Tourists' emotions as a resource for customer value creation, cocreation, and destruction: A customer-grounded understanding. *Journal of Travel Research*, 57(7), 843–855.
- Marks, J. (1982). A theory of emotions. *Philosophical Studies*, 42, 227–242.
- Martini, A., & Buda, D. M. (2020). Dark tourism and affect: Framing places of death and disaster. *Current Issues in Tourism*, 23(6), 679–692.
- Moal-Uvoas, G. (2017). Positive emotions and spirituality in older travelers. *Annals of Tourism Research*, 66, 151–158.
- Moyle, B. D., Moyle, C. L., Bec, A., & Scott, N. (2019). The next frontier in tourism emotion research. *Current Issues in Tourism*, 22(12), 1393–1399.
- Mulligan, K., & Scherer, K. L. (2012). Toward a working definition of emotion. *Emotion Review*, 4(4), 345–357.
- Nawijn, J., & Biran, A. (2019). Negative emotions in tourism: A meaningful analysis. *Current Issues in Tourism*, 22(19), 2386–2398.
- Nawijn, J., & Fricke, M. C. (2015). Visitor emotions and behavioral intentions: The case of concentration camp memorial Neuengamme. *International Journal of Tourism Research*, 17(3), 221–228.
- Ortony, A., & Clore, G. (2015). Can an appraisal model be compatible with psychological constructionism? In L. F. Barrett, & J. A. Russell (Eds.), *The psychological construction of emotion* (pp. 305–333). New York, NY: Guilford Press.
- Ouyang, Z., Gursoy, D., & Sharma, B. (2017). Role of trust, emotions and event attachment on residents' attitudes toward tourism. *Tourism Management*, 63, 426–438.
- Panksepp, J. (1998a). *Affective neuroscience*. New York: Oxford University Press.
- Panksepp, J. (1998b). *Affective neuroscience: The foundations of human and animal emotions*. New York, NY: Oxford University Press.
- Picard, D., & Robinson, M. (2012). *Emotion in motion: Tourism, affect and transformation*. London: Routledge.
- Plutchik, R. (2001). The nature of emotions: Human emotions have deep evolutionary roots, a fact that may explain their complexity and provide tools for clinical practice. *American Scientist*, 89, 344–350.
- Pocock, N. (2015). Emotional entanglements in tourism research. *Annals of Tourism Research*, 53, 31–45.
- Prayag, G., Hosany, S., Muskat, B., & Del Chiappa, G. (2017). Understanding the relationships between tourists' emotional experiences, perceived overall image, satisfaction, and intention to recommend. *Journal of Travel Research*, 56(1), 41–54.
- Roberts, R. C. (1988). What an emotion is: A sketch. *The philosophical review*, 97(2), 183–209.
- Rogers, K. B., Schröder, T., & von Scheve, C. (2014). Dissecting the sociality of emotion: A multilevel approach. *Emotion Review*, 6(2), 124–133.
- Roseman, I. J., & Smith, C. A. (2001). Appraisal theory: Overview, assumptions, varieties, controversies. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, methods, research* (pp. 3–19). New York: Oxford University Press.
- Ross, S. (1984). Evaluating the emotions. *Journal of Philosophy*, 81, 309–326.
- Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological Review*, 110(1), 145–172.
- Scarantino, A. (2016). The philosophy of emotions and its impact on affective science. In *Handbook of emotions* (pp. 3–47). Guilford Press.
- Scarantino, A., & Griffiths, P. (2011). Don't give up on basic emotions. *Emotion Review*, 3(4), 444–454.
- Scherer, K. R. (1993). Studying the emotion-antecedent appraisal process: An expert system approach. *Cognition and Emotion*, 3, 325–355.
- Scherer, K. R. (1999). Appraisal theory. In T. Dalgleish, & M. Power (Eds.), *Handbook of cognition and emotion* (pp. 637–663). Chichester, England: Wiley.
- Scherer, K. R. (2009). The dynamic architecture of emotion: Evidence for the component process model. *Emotion*, 23, 1307–1351.
- Sedgley, D., Pritchard, A., Morgan, N., & Hanna, P. (2017). Tourism and autism: Journeys of mixed emotions. *Annals of Tourism Research*, 66, 14–25.
- Shoval, N., Schvimer, Y., & Tamir, M. (2018). Real-time measurement of tourists' objective and subjective emotions in time and space. *Journal of Travel Research*, 57(1), 3–16.
- Siegel, E. H., Sands, M. K., Van den Noortgate, W., Condon, P., Chang, Y., Dy, J., & Barrett, L. F. (2018). Emotion fingerprints or emotion populations? A meta-analytic investigation of autonomic features of emotion categories. *Psychological Bulletin*, 144(4), 343.
- Simon, R. W., & Lively, K. (2010). Sex, anger and depression. *Social Forces*, 88(4), 1543–1568.

- Simon, R. W., & Nath, L. E. (2004). Gender and emotion in the United States: Do men and women differ in self-reports of feelings and expressive behavior? *American Journal of Sociology*, 109(5), 1137–1176.
- Skavronskaya, L., Moyle, B., Scott, N., & Kralj, A. (2019). The psychology of novelty in memorable tourism experiences. *Current Issues in Tourism*, 23(31), 2683–2698.
- Song, H. J., Ahn, Y. J., & Lee, C. K. (2015). Structural relationships among strategic experiential modules, emotion and satisfaction at the expo 2012 Yeosu Korea. *International Journal of Tourism Research*, 17(3), 239–248.
- Tappolet, C. (2010). Emotion, motivation, and action: The case of fear. In *The Oxford handbook of philosophy of emotion* (pp. 325–345).
- Tucker, H. (2016). Empathy and tourism: Limits and possibilities. *Annals of Tourism Research*, 57, 31–43.
- Volo, S. (2017). Emotions in tourism: From exploration to design. In D. R. Fesenmaier, & Z. Xiang (Eds.), *Design science in tourism: Foundations of destination management* (pp. 31–40). Dordrecht: Springer.
- Weaver, D., Tang, C., Shi, F., Huang, M. F., Burns, K., & Sheng, A. (2018). Dark tourism, emotions, and postexperience visitor effects in a sensitive geopolitical context: A Chinese case study. *Journal of Travel Research*, 57(6), 824–838.
- Wei, J. (2014). Mass media and the localization of emotional display: The case of China's next top model. *American Journal of Cultural Sociology*, 2(2), 197–220.
- Wolff, K., Larsen, S., & Øgaard, T. (2019). How to define and measure risk perceptions. *Annals of Tourism Research*, 79, Article 102759.
- Wong, J., Wu, H. C., & Cheng, C. C. (2015). An empirical analysis of synthesizing the effects of festival quality, emotion, festival image and festival satisfaction on festival loyalty: A case study of Macau food festival. *International Journal of Tourism Research*, 17(6), 521–536.
- Wood, E. H. (2019). I remember how we all felt: Perceived emotional synchrony through tourist memory sharing. *Journal of Travel Research*, 59(8), 1339–1352.
- Yan, Q., Zhou, S., & Wu, S. (2018). The influences of tourists' emotions on the selection of electronic word of mouth platforms. *Tourism Management*, 66, 348–363.
- Zheng, D., Ritchie, B. W., Benckendorff, P. J., & Bao, J. (2019). Emotional responses toward tourism performing arts development: A comparison of urban and rural residents in China. *Tourism Management*, 70, 238–249.

Serena Volo is an Associate Professor at the Faculty of Economics and Management of the Free University of Bozen (Italy). Her research interests include tourism marketing, consumer behavior in tourism, visual research methods, big data, tourism design, innovation and competitiveness in tourism.