

A SYSTEMATIC REVIEW: MINDFULNESS APPLIED ON THE FIELD OF TOURISM

*Vivien Iacob*¹
*Saúl Neves de Jesus*²
*Cláudia Carmo*³

ABSTRACT

More advanced systematic reviews and traditional literature reviews have been an important point in assessing the epistemological progress of any field.

Mindfulness has been described as a process of bringing attention to moment-by-moment experience. In recent years, some researchers have established the influence of mindfulness on the tourists' experience, and it has been gaining a growing interest. Several studies revealed numerous psychological benefits including mental ease, tranquility, relaxation, and well-being when tourists embrace a mindfulness state. Despite this, a systematic review of this topic has not been conducted. Our main goal is to synthesize the existing studies about mindfulness in the tourism area, to provide an overview of how mindfulness has been conducted, and to explore what are the main outcomes.

A literature search was undertaken using four electronic databases, namely Science Direct, PsycInfo, PubMed, and Web of Science. Quantitative and qualitative studies were included. All studies in the review used the mindfulness concept applied in the field of tourism.

Using PRISMA guidelines, from a total of 517 records initially identified, 16 studies were selected for the review (n = 4240 participants).

The reviewed literature suggested that mindfulness is effective in improving positive travel experiences, satisfaction, loyalty, happiness, well-being, and positive psychological and physical benefit. Mindful tourists are more responsive to sustainability practices and tend to be more connected to heritage sites.

Mindfulness can be considered as a relevant concept that provides positive outcomes and may help to better understand the benefits derived by the tourists from traveling. Still, more research is needed to determine the efficacy and to clarify the contribution of processes of mindfulness to observed outcomes.

Keywords: Systematic Review, Mindfulness, Tourism, Tourist.

JEL Classification: I12, I13

1. INTRODUCTION

In recent decades mindfulness theory has been employed to understand the tourists' experiences (e.g., Barber & Deale, 2014; Rubin et al., 2016; Jiang et al., 2018; Taylor &

¹ Faculty of Human and Social Sciences (FCHS), Research Center for Tourism, Sustainability and Well-being (CinTurs), University of Algarve, Faro, Portugal (vivien_jacob@hotmail.com)

² Faculty of Human and Social Sciences (FCHS), Research Center for Tourism, Sustainability and Well-being (CinTurs), University of Algarve, Faro, Portugal (snjesus@ualg.pt)

³ Research Center for Psychology (CIP/UAL); Faculty of Human and Social Sciences (FCHS), University of Algarve, Faro, Portugal (cgcarmo@ualg.pt)

Norman, 2019; Tan et al., 2020). This concept showed to be adopted to help identify some of the complexities of the alert mind.

The postmodern society has been described by work orientation, isolation, and stress related disorders such as depression (Vizniuk et al., 2021). Some individuals prefer to engage informal and unstructured means of travel to get relief from everyday stress and to seek spiritual fulfilment. Several activities during informal travel are increasingly being recognized as a potentially effective means of increasing physical relaxation and stress reduction, contributing to physical and mental health (Kroesen & DeVos, 2020). Also, travel has been defined as an opportunity that allows an individual to move from their daily work life. Leisure activities are considered to promote mindfulness and to develop spiritual and creative transformation. The changes can occur at physical or spiritual levels and can involve achieving greater skills and values to nurture self-esteem, self-confidence, and well-being (Chen & Petrick, 2013). Cavender and colleagues (2020) states that traveling could positively transform anyone at some degree. It seems that travel often embodies a break from daily life, with a level of stimulation and change that may produce positive outcomes.

Mindfulness is an inherent human capacity that can be cultivated through a variety of techniques (Tortella-Feliu et al., 2020). This concept can be defined as “the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience” (Kabat-Zinn, 2013, p. 28). From this definition, mindfulness is regularly associated with levels of consciousness through daily activities such as learning, moving, and eating (Gupta, 2020).

There are several different perspectives of the mindfulness concept in the literature. For instance, Behmer (2019) states that mindfulness and meditation reveal a relationship between the two terms. She revealed that mindfulness is an approach to meditation and meditation is the “most focused form of self-observation” (p. 64). Van Dam and colleagues (2018) document mindfulness as a term used to characterize many practices, processes, and characteristics, largely defined in relation to the capacities of attention, awareness, acceptance, and memory. Mindfulness, understood as a cognitive style (Sternberg, 2000), is argued to positively affect various outcomes of adult development such as creativity, physical well-being, and psychological well-being (Brown & Ryan 2003; Langer 2005, 2009).

In tourism, mindfulness concept has emerged in two perspectives, socio-cognitive mindfulness (SCM) and mindfulness meditation (MM) (e.g., Chen et al., 2017; Ling et al., 2018; Loureiro et al., 2020).

Socio-Cognitive Mindfulness supports a dual information-processing model, which contrasts mental states of mindfulness or mindlessness (Langer, 2000). The SCM approach varies from the meditative method because it typically includes the social, external, and material context of individual participants (Pirson et al., 2018). Langer (2000, 2021) defines Mindfulness as a process of consciously making use of relevant information to the situation and interventions, described as introducing novelty and drawing distinctions to overcome mindlessness, as so, mindfulness is the act of noticing new things (Maymin & Langer, 2021). Langer’s perspective focuses on how these states emerge in daily life and represents the interest in thinking and solving problems. So, improving mindfulness suggests a change in a person’s awareness, becoming more open to novelty, involved in the present, and aware of multiple perceptions (e.g., Maymin & Langer, 2021). Mindfulness has been applied to enhance the experience of tourists, which in turn, supports the promotion and marketing of destinations (Moscardo, 2009). Moscardo’s (1996) mindfulness model of visitor behavior has been used in different settings to explain the effects of mindfulness on tourist experience and behavior. “Mindful tourists will be more likely...to enjoy their visits” (Moscardo, 1996, p. 382), which appear to be good predictors of overall satisfaction (Taylor & Norman, 2019) and loyalty (Rubin et al., 2016). In line with this perception, mindfulness has been

referred to as a forecaster of psychological well-being, behavioral and emotional regulation, and health (Langer & Moldoveanu, 2010). Presently, thinking about and exploring tourism settings, well-being appears as a key element (Garcês et al., 2020).

The Buddhist practice, Mindfulness Meditation described by Kabat-Zinn (1988, 2014) considers the individuals' attention to internal and external stimuli, introspection, and awareness of thought processes, and the assumption of a nonjudgmental attitude. MM is more rather than trying to get to some special meditative state or condition, the cultivation of mindfulness involves not trying to get anywhere else, or to experience some special mindful state, but rather to fully occupy the moment as it is. This perspective invites people to learn to emerge in their own awareness and over time, come to trust their intrinsic insightfulness and kindness (Kabat-Zinn & Kabat-Zinn, 2021).

From this point of view, tourists are described as being more aware of their self, thoughts, and emotions (Jiang et al., 2018). Some studies indicate that mindful consumers, compared to those who are less mindful, tend to show higher levels of trust, satisfaction, and commitment (Rubin et al., 2016). Also, is important to understand the factors that allow the tourist to engage and have a meaningful experience of the destination (Kang et al., 2008). As a result of Pine and Gilmore's (1999) study, has been given increased attention to the concept of experience as something that can be sought, bought, and consumed. The interest in the concept of an experience as a driver for consumptions results both in more research focused on the factors that contribute to satisfactory experiences from the participant perspective, and in the use of a variety of concepts from different sectors of psychology, in attempts to develop theories to explain and predict the consumer behavior. The search for authenticity and meaningful lives also produces a new set of tourists who no longer want only to sit and relax but who wish to explore and interact the new places that they visit (Garcês et al., 2020).

Indeed, mindful tourists will approach a destination with motives and preferences that make them more receptive to mindfully oriented activities and services (Frauman & Norman, 2004). Mindfulness can influence the way individuals interpret an experience and resulting feelings of happiness or unhappiness (e.g., Brown & Ryan, 2003; Ryan & Deci, 2008) because mindfulness requires openness and attention to constant interaction with the experience. Also, contemporary societies are trying to apply a new way of being to their daily routine and not only to a free time, so they are in search for better and healthier lifestyles. Actually, people are exploring new paths for equilibrium between work and relaxation time (Nunes et al., 2020).

As different approaches have been applied to mindfulness in the field of tourism, it is important to identify the main outcomes of mindfulness. This systematic review aims to provide an overview of how mindfulness has been conducted in the field of tourism and to explore the effectiveness of mindful applications. Our review question is "What are the existing frameworks that approach mindfulness theory in tourism research?"

2. METHODS

This systematic review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines (PRISMA; Page et al., 2020).

2.1 Inclusion Criteria

2.1.1 Types of Studies

All studies evaluating associations between mindfulness and tourism. The following inclusion criteria were used: a) search terms or related included on the title, abstract, and keywords;

b) articles that were in English or had an available published English translation; and c) empirical studies that focused mindfulness and tourism.

Exclusion criteria were applied to further refine the collected data, namely research notes, dissertations, conference abstracts, trends reports, books, book chapters, book reviews, and editorials were excluded.

2.1.2 Types of Participants

All studies that include tourists with mindfulness components, were eligible.

2.1.3 Types of Outcomes

Qualitative, quantitative, and mixed-methods studies that evaluated mindfulness levels, mindful experiences, well-being, and positive outcomes related to mindfulness and tourists were eligible.

2.2 Literature Search

A systematic literature search was conducted on articles listed in the Web of Science, PsycInfo, PubMed, and Science Direct databases. The dates selected were from the start of the database records to 2021, after setting exclusion and inclusion criteria. The first stage was a keyword search for relevant studies in the four databases. The search terms were “mindful and mindfulness” and “tourism, tourist or visitor”. The Boolean operator ‘AND’ was used between terms, ensuring both were included in the search. In all crossings, the truncation symbol ‘*’ was used (mindful*) allowing the inclusion of words with the same origin. The following search formula was used in an attempt to capture a broad variety of terms and phrases used in titles, abstracts and keywords: (tourist* OR tourism* OR visitor*) AND (mindful*). The Boolean operator ‘AND’ ensured that the studies with a relationship between tourism demand and mindfulness were identified, and the Boolean operator ‘OR’ captured studies using different terminology. The same applies to the use of asterisks, which help search for all varieties of words (e.g. tourism, tourist and tourists). The second stage involved a manual check of the relevant journals in the fields of tourism and mindfulness. It was conducted a manual search of reference lists of identified papers that approach mindfulness and tourism.

2.3 Extraction and Synthesis

All articles identified were imported to the reference management program Mendeley, a specific software for managing bibliographies. After the search strategy was run all duplicates were removed. Microsoft Excel software was used to create a summary table in which the bibliographic details of the 16 peer-reviewed articles were tabulated. The categories were coded by information on the author, publication information (country, year, article title, and journal-title) methodological frameworks (quantitative, qualitative, and mixed methods), research context, and characteristics of research samples. The title of the articles was screened. Then, the abstract was read and assessed based on the inclusion or exclusion criteria. Full articles were reviewed if the available data suggests that the research meets the inclusion criteria. The exclusion reasons are described in the PRISMA flow diagram. Any disagreement that occurred between reviewers was resolved through discussion, until consensus.

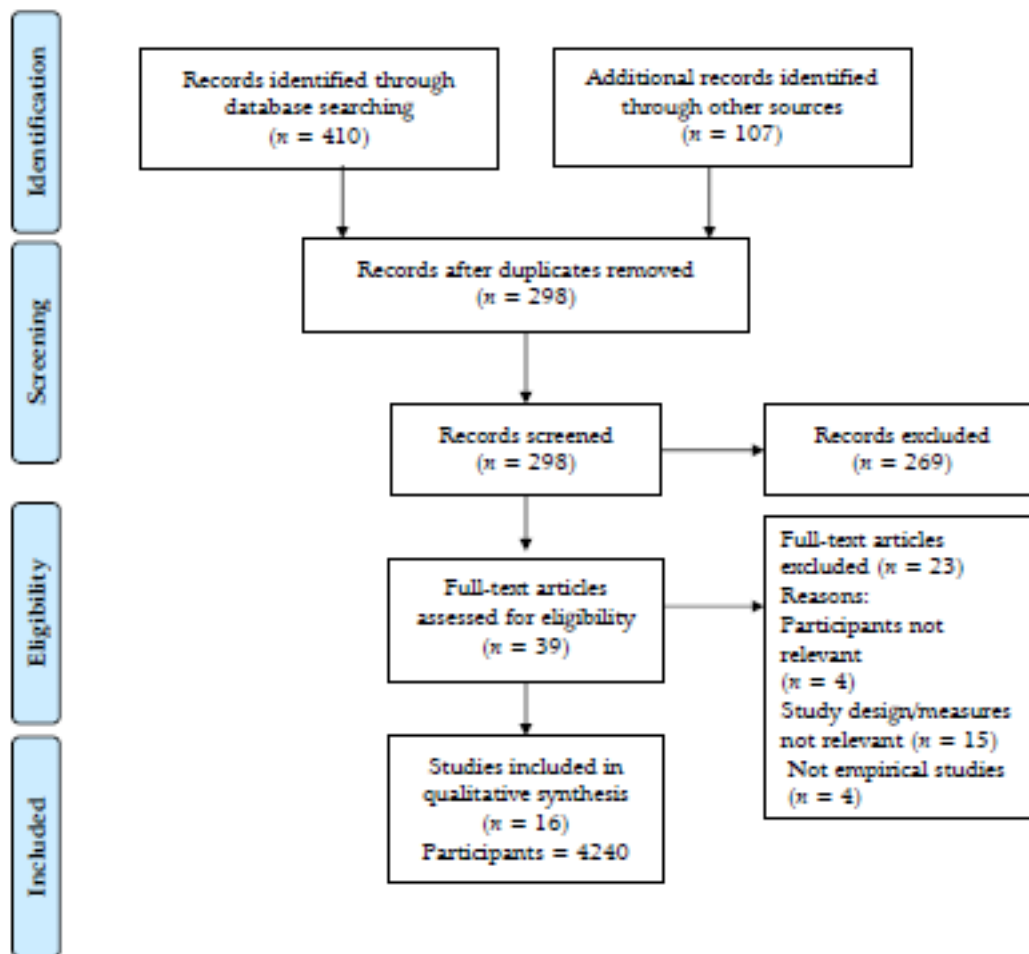
A synthesis of mindfulness on tourism was conducted including all types of tourism that meet the inclusion criteria and that are identified in the review. The results are presented using a summary table (Table 1) regarding sample characteristics, study purpose, and main findings. Besides, the results are summarized using a narrative synthesis.

3. RESULTS

3.1 Study Selection

A total of 517 records were identified, 298 after the removal of duplicates. The title and abstract of the 298 records were screened for adequacy, and 269 were excluded; excluded studies included reports and other documents than journal articles. Finally, 39 full-text articles were assessed for eligibility. Of these, 23 articles were excluded because they did not evaluate mindfulness outcomes of tourists, the sample did not include tourists as participants, and there were no empirical studies. Sixteen studies were included in the review. Figure 1 presents the flowchart of the study selection process.

Figure 1. Flowchart of the Study Selection Process



Source: Reproduced from Page et al. (2020) (p.36).

3.2 Study Characteristics

The 16 studies included were all empirical, including experimental, cross-sectional, and exploratory research, with 13 quantitative and 3 qualitative studies. The studies carried out were divided into different parts of the world. With the highest prevalence in the USA with three studies and China also with three, two studies were conducted in Malaysia, and the rest on Austria, Taiwan, Thailand, United Arab Emirates, Croatia, Australia, Fiji island, and Portugal/Spain. Most studies focus on analyze how mindfulness affects tourists' experiences, other studies analyzed the influence of mindfulness on tourists', emotions,

motivations, satisfaction, familiarity, loyalty, happiness, communication and visitor factors, and sustainable behaviors. Some studies also tried to understand how mindfulness may affect the travel anticipation phase and influence heritage sites. Other studies conducted tried to identify mindful segments and their application to the management of visitors.

3.3 The influence of Mindfulness on Tourists'

3.3.1 Main Outcomes

Mindfulness represents a state of mind expressed by actively processing available information within the surrounding environment. One research tried to develop a further understanding of the construct of mindfulness and its application in managing visitors to natural, cultural, or historically based tourism destinations. Three groups, "not very mindful," "mindful," and "very mindful," were identified. Significant differences were found among the three groups concerning benefits sought, preference for services, and participation in nature-oriented activities, with the very mindful group standing apart from the other two (Frauman & Norman, 2004).

3.3.2 Sustainable Behavior

Two studies identified that mindfulness may influence the sustainable behavior of tourists. Namely, one study indicated that highly mindful individuals were more concerned for others and society as a whole and search for products and services that have high emotional and environmental benefits. The authors suggest that understanding guests' mindfulness, may help visitors to engage in sustainable behavior (Barber & Deale, 2014).

Another study states that mindful participants are more aware of the environmental and cultural consequences of their decisions. The results highlight the positive impacts of mindfulness on individual and social well-being and focusing on the tourism context in which mindfulness and sustainability are showing important applications as well as consequences (Chan, 2019).

3.3.3 Tourists' Experiences

Tourists' experiences in touristic learning settings are largely informed by their cognitive participation, where mindfulness plays a critical role. One study aimed to understand how mindfulness affects tourists' experiences while holidaying and found that mindfulness was a likely occurrence and could impact what visitors remembered and why (Dutt & Ninov, 2016).

Loureiro and colleagues (2019) suggest that rural tourism experience dimensions are positively and significantly associated with happiness, and memory can act as mediators, at least partially, between rural tourism experience and happiness. Another study tried to analyze the effect of tourists' mindfulness in the perceived value of travel experience, through destination image components and tourist experiences. The results show the important role of mindfulness in shaping all dimensions of destination image (Loureiro et al., 2020).

3.3.4 Anticipation Phase

Previous studies have established the influence of mindfulness on the tourists' experience when they are on-site at an attraction or in a destination. However, the travel experience begins during the anticipation phase when tourists embark on the vacation planning process. Taylor and Norman (2019) researched the influence of mindfulness during the anticipation phase. The main result was to establish that mindfulness during the anticipation phase influenced the travel experience (Taylor & Norman, 2019).

3.3.5 Tourists' Motivation

The research developed by Ying and colleagues (2020) analyzed the impact of motivation and familiarity on mindfulness, and the results revealed that cognitive and psychological familiarity, intrinsic motivation each positively influence mindfulness and that the effect of familiarity can be moderated by motivation (Ying et al., 2020).

Another study analyzed the motivation of tourists on staying at Zen retreats. This research clarified four themes in knowledge growth, three themes in spiritual growth, and two mechanisms to foster knowledge and spiritual growth. Also proposed a categorization of Buddhist tourism, into Zen tourism, Zen lifestyle, and Zen retreat by the level of involvement (Wang et al., 2021).

Table 1. Main Characteristics of the Studies Included in the Review

Study	Population	Characteristics	Purpose/Outcome variables	Results
Frauman & Norman, 2004	Visitors (n = 378)	Visitors at four southeastern coastal state parks	Develop a further understanding of the construct of mindfulness and its application regarding the management of visitors to natural, cultural, or historically based destinations.	Three groups, "not very mindful," "mindful," and "very mindful," were identified. Significant differences were found among the three groups concerning benefits sought, preference for services, and participation in nature-oriented activities, with the very mindful group standing apart from the other two. The application of mindfulness principles may provide a framework for tourism destinations in meeting visitor needs while also aiding resource management efforts.
Barber & Deale, 2014	Hotel guests (n = 563)	Consumers who respond to an online survey of U.S. hotel guests.	Identify mindful segments, by seven mindfulness measures as the cluster analysis variables.	Assessing guests' mindfulness helps hoteliers make those guests aware of and responsive to hotels' sustainability practices. Highly mindful individuals were more concerned for others and society as a whole and search for products and services that have high emotional and environmental benefits.
Dutt & Ninov, 2016	Tourists (n = 205)	Tourists visiting Dubai	Understand how mindfulness affects tourists' experiences while holidaying in a popular tourist destination, such as Dubai.	Mindfulness was a likely occurrence regardless of visitor demographics and would impact what visitors remembered and why.
Rubin et al., 2016	Tourists (n = 234)	Tourists at two Coral Coast Hotels, a hotel in Nadi, and the departure lounge of the Nadi Airport.	(1) The antecedent concepts to mindfulness (novelty seeking motivation and mindful oriented services) and mindfulness, (2) mindfulness and tourist's emotions, and (3) the influence of tourist's emotions on tourist's satisfaction and destination loyalty.	Individuals' emotions influence destination loyalty intention is mediated by satisfaction with the destination, and that tourist's emotion is likely not the only indicator of satisfaction.
Chen et al., 2017	Backpackers (n = 43)	21 female and 22 male Taiwanese backpackers aged from 23 to 45.	Examine the relationship between MM and tourist experience and explore the role of mindful mental states in producing experiential outcomes. Dimensions: Attention; present moment; non-judgment; antecedents and consequences.	Links between MM and its antecedents are proposed, with nature-based tourism settings and specific activities. Links between MM and its positive psychological and physical benefit. Mental ease and well-being are like the outcomes of formal mindfulness practices, such as a state of tranquility and relaxation.
Jiang et al., 2018	Skilled meditation practitioners (n = 39)	Meditation tourists at camps in Nuonatyuan and Hongfa Temples.	Examine what motivates tourists to experience Zen meditation in Chinese temples, and how they shape those experiences.	Two main forms of experience occur through meditation tourism (secular, and sacred). The tourist context of separation from daily life, the landscape values of the locations, the temple atmosphere, the sharing of experiences with like-minded individuals, contact with monks and mentors all contribute to the sense of personal wellness that participants obtain.
Ling et al., 2019	Tourists' (n = 12)	Visitors to George Town heritage sites	Understand the influence at heritage sites, by two categories of factors that contribute to mindfulness, (1) visitor factors; (2) communication factors	Novelty emerged as the communication factor most associated with the state of mindfulness, then, also variety and perceived visitor control. Mindfulness is strongly influenced by the connection made by visitors between self and the heritage setting.
Chan, 2019	Students (n = 413)	Australian students from upper-level business courses and who had never visited Uluru before.	Analyze if mindfulness can promote sustainable behaviors in a tourism context.	Being mindfully made participants more aware of the environmental and cultural consequences of their decisions. Positive impacts of mindfulness on individual and social well-being.

Taylor & Norman, 2019	Tourists' (n = 397)	Some tourists had recently arrived at the destination while other tourists happened to take the survey near the end of their trip.	The influence of mindfulness during the travel anticipation phase; traveler's confidence that they chose the best destination for the trip; satisfaction with the trip; and loyalty to the destination.	Mindfulness during the travel anticipation phase had significant positive influences on confidence, satisfaction, and loyalty, suggesting the potential benefits for destinations to encourage mindfulness in future visitors as they plan their trip.
Loureiro et al., 2019	Rural tourists' (n = 204)	Located in farms in Dalmatia.	(1) Effect of mindfulness as a moderator on the relationship between rural experience economy and happiness (2) influence of rural experience (agritourism) on behavioral intentions through happiness and memory creation.	Rural tourism experience dimensions are positively and significantly associated with happiness. Mindfulness does not fully influence the strength or direction of the relationship between the rural experience and happiness. Happiness and memory can act as mediators, between rural tourism experience and happiness.
Choe & O' Regan, 2020	Western tourists' (n = 10)	From Western developed countries including the USA (8), New Zealand (1), and Australia (1).	Why Western tourists without religious affiliation, but with individual faith, travel to a destination with religious heritage sites, to engage in mindfulness practices.	The informants all experienced spiritual practices such as mindfulness back home. Their faith in mindfulness led them to a destination where Buddhist heritage, history, and culture are concentrated but also consumed.
Loureiro et al., 2020	Tourists' (n = 370)	Travelers departing from Lisbon International airport towards Spain.	Effect of tourists' mindfulness on the perceived value of travel experience (PVTE) through destination images (cognitive, affective, and conative) and tourist experiences.	An important role of mindfulness in shaping all dimensions of the destination image. Tourist experience acts as a mediator between destination images and PVTE.
Ying et al., 2020	Tourists' (n = 363)	Visitors of Zhejiang Provincial Museum	Impact of familiarity and motivation on mindfulness.	Cognitive familiarity, psychological familiarity, intrinsic motivation each positively influence mindfulness; the effect of familiarity can be moderated by motivation.
Cervinka et al., 2020	Forest visitors (n = 99)	Adult forest visitors in the Hallerwald, an Austrian community forest.	Changes in mood state perceived stress, restoration, connectedness, and mindfulness before and after visiting the forest.	Positive affect, restoration, connectedness with nature and the forest, and mindfulness increased pre- versus post-visits, whereas negative affect and perceived stress decreased.
Tan et al., 2020	Tourists' (n = 390)	Local and international tourists at George Town, Penang (Malaysia)	Effect of communication factors and visitor factors on visitors' mindfulness.	Significant effect of both communication factors and visitor factors on mindfulness.
Wang et al., 2021	Zen retreat participants (n = 520)	Tourists who stayed at Donghua Zen Temple	Identified motivations, and three outcomes of, staying at Zen retreats.	Clarified four themes in knowledge growth, three themes in spiritual growth, and two mechanisms to foster knowledge and spiritual growth. Also proposed a figure demonstrating Zen practitioners' lifelong journey, and a figure categorizing tourists in Buddhist tourism into Zen tourism, Zen lifestyle, and Zen retreat by the level of involvement.

Source: Own Elaboration

3.3.6 Communication and Visitor Factors, and Heritage Sites

One study tried to understand the influence of two categories of factors that contribute to mindfulness namely, visitor and communication factors, on heritage sites. The study has revealed that the connection of heritage sites to self (self-connectedness) underscores tourists' mindfulness at heritage sites (Ling et al., 2019). Similarly, another research analyzed the effect of communication and visitor factors on visitors' mindfulness. The results demonstrate the significant effect of both communication factors and visitor factors on mindfulness (Tan et al., 2020).

The study conducted by Choe and O'Regan (2020) aimed to understand why Western tourists travel to a destination with religious heritage sites, to engage in mindfulness practices. The results show that all participants experienced spiritual practices such as mindfulness back home, and their faith in mindfulness led them to a destination where Buddhist heritage, history, and culture are concentrated but also consumed (Choe & O'Regan, 2020).

3.3.7 Mental Effects

Past literature has suggested that being mindful helps increase positive mental effects. One study explored changes in mood states, perceived stress, restoration, connectedness, and mindfulness on tourists' visiting the forest. Positive affect, restoration, connectedness

with nature and the forest, and mindfulness increased after the visit, whereas negative affect and perceived stress decreased (Cervinka et al., 2020).

Another research also reveals several psychological and physical benefits including mental ease, tranquility, relaxation, well-being, and response flexibility, when adopting a mindfulness state during the travel (Chen et al., 2017). Other studies emphasize the positive impacts of mindfulness on individual and social well-being (Chan, 2019), including the positive influences on confidence, satisfaction, and loyalty (Taylor & Norman, 2019), and happiness (Loureiro et al., 2019).

4. DISCUSSION

The systematic review findings provided further evidence that mindfulness has been increasing its application in the field of tourism in recent years. Since no previous systematic review on this theme was found, we chose to analyze all the studies that appeared in the literature. It could be of interest to note that of the studies found, the oldest was from 2004, and it was verified that studies on this theme have begun to be carried out in the last few years. This review provided a view of the path that mindfulness has been tracing in tourism. There are several areas of notable strengths when considering the existing literature about mindfulness applied to the field of tourism.

From this review, 16 studies provided insight into the state of the field. Most studies reporting quantitative findings ($n = 13$) observed at least one significant, positive relationship linking mindfulness to tourism. Additionally, the studies reporting qualitative results ($n = 3$) reported at least one observed benefit related to mindful tourists. Thus, findings from this systematic review show that mindful tourists are typically associated with positive outcomes. These outcomes supported notions that mindfulness can generate a positive shift in perspective and an ability to view one's life experiences more positively. Many studies used large sample sizes with the average study including over 100 subjects, except the two qualitative researches that used smaller samples. Samples of this size allow for more assurance that analyses are adequately powered to detect potential effects.

As noted in the results, several promising outcomes may explain the benefits of mindful tourists. However, some of the studies included in the review do not use a theory or are exploratory. There is a clear need to not only use existing theory in research but to continue to develop new theories and build upon existing theories. As found by our analysis, the most used was Langer's theories (Frauman & Norman, 2004; Barber & Deale, 2014; Dutt & Ninov, 2016; Rubin et al., 2016; Ling et al., 2019; Taylor & Norman, 2019; Loureiro et al., 2019, 2020; Tan et al., 2020; Ying et al., 2020) that are based on socio-cognitive mindfulness (SCM) from social psychology. SCM and meditative mindfulness (MM) reflect different theoretical frameworks (Mikulas, 2011). SCM is based on a dual information-processing model which contrasts opposing mental states of mindfulness or mindlessness (Langer, 1992). Just a few studies approached MM (Chen et al., 2017; Jiang et al., 2018; Choe & O'Regan, 2020; Wang et al., 2021), as training that avoids associative thinking, allowing an individual to be aware of their inner experiences, thoughts, and emotions (Weick & Putnam, 2006; Kabat-Zinn, 2014). Both concepts are related to awareness and attention. However, they differ in the process of engagement in the present moment experience they describe.

According to the systematic review, it is possible to identify several benefits by combining mindfulness with tourism. Responding to the changes in post-modern society, consumers are playing an important role in the tourism industry as they are active participants of experiences rather than passive consumers (Taylor & Norman, 2019). The results of the

study conducted by Taylor and Norman (2019) show that the more mindful the tourists are during the anticipation phase, the more positive they rate their satisfaction with the trip and their loyalty to the destination. These results showed an inconsistency with previous research regarding the

influence of mindfulness in the anticipation phase on satisfaction. Previous studies on consumer goods found that an increase in conscious thought resulted in decreased satisfaction of the purchased good (Dijksterhuis & van Olden, 2006).

Attending to Frauman and Norman (2004), level of mindfulness was related to preference for mindfully oriented information services. Also, the level of mindfulness was related to benefits sought while at the destinations, these results are in line with Moscardo's (1992) work examining museum visitors' and level of mindfulness.

The main goal of some studies included in this review was to analyze tourists' experience and the possible effects of mindfulness. Thus, Dutt and Ninov (2016) found that it is a positive relationship between mindfulness and memories. This supports much of the literature which cites the benefits of mindfulness as including improved memory recall (Langer, 1992; Moscardo, 1996). Mental benefits were also identified, for example one research found that health and well-being can be promoted through a forest visit. For the visitors, the recreational forest provides beneficial mental effects such as deepening the connection with nature and the forest, positive affect, stress coping, and mindfulness in addition to physical activities (Cervinka et al., 2020). These conclusions are in line with the findings from a study that suggest that the relationship between nature relatedness and elements of subjective well-being may be in part explained by the nonreactivity and observing facets of dispositional mindfulness (Sadowski et al., 2020).

From the findings of the study conducted by Jiang and colleagues (2018), it was suggested that two main forms of experience occur through meditation tourism. One is a secular experience that enhances the senses and generates an added appreciation of landscape, culture, and the richness of human achievement. The other is a sacred experience as if reaching a sense of the divine and being able to better understand the purpose of life. Cui, Xu, and Yang (2014) pointed out that the experience of Tibetan tourism is a secular pilgrimage, belief has become a landscape and the tourists do not believe in God.

The study developed by Loureiro and colleagues (2020) has gone further to explore the influence of mindfulness on destination image, tourist experience, and the perceived value of travel experience. The direct effects of mindfulness on each of the three dimensions of destination image were significant. These results are in line with previous studies, which showed that mindful tourists tend to be more receptive to events, experiences, and realities (Brown et al., 2007) than less mindful tourists and this may lead to them having more positive affective experiences, as Cherie and Dianne (2010) argue.

The association of mindfulness with heritage sites has also been explored by some authors, such as Choe and O'Reagan (2020) who state that spiritual tourists travel to destinations for problem-solving, well-being intervention, spiritual fulfillment, and transformative potential based on their faith. Similarly, the findings of Ling and colleagues (2019) provide strong support for the mindfulness framework as suggested by Moscardo (1996), by confirming the relevance of the framework in explaining the various experiences of visitors at heritage sites.

Some research was conducted to see if mindfulness can promote sustainable behaviors in a tourism context (Barber & Deale, 2014; Chan, 2019). The results suggested that being mindful made participants more aware of the environmental and cultural consequences of their decisions (Chan, 2019). Likewise, another research found that highly mindful hotel guests are open to substantive messages and cues acquired through information sources that address sustainability practices of the hotel and surrounding community (Barber & Deale, 2014). These findings are according to previous research on mindfulness and tourism, that

found mindful tourists more open to innovative information developed to encourage their sustainability practices (Moscardo 1997, 1999).

Most of the studies referred to positive outcomes arising from mindfulness in tourists.

In sum, these conclusions are accordingly to previous research, which states that mindfulness is the process of drawing novel distinctions when evaluating new information and can lead people to experience greater sensitivity to their environment, more openness to new information, and the creation of new categories for structuring perception (Langer & Moldoveanu, 2000; Bishop et al., 2004; Frauman & Norman 2004).

Concluding, this review provided an insight into the evolution of mindfulness studies that have been conducted in tourism in recent decades. More and more studies are focusing on the benefits of mindful tourists. It was possible to identify that there is a great advantage in linking these concepts, to better understand the tourists' behaviors. In turn, this may allow adjustments on touristic offers, that may be essential to meet the specific needs presented by consumers. Mindfulness research may help to better understand the benefits derived by tourists from traveling. Still, more research is needed to determine the efficacy and to clarify the contribution of processes of mindfulness to observed outcomes.

5. CONCLUSION

Despite our systematic search strategy, we cannot declare out that we might have failed to include studies meeting the inclusion criteria. A limitation of a systematic review method is the selection of the research terms and the scope of research. The search terms employed in this review were limited to mindfulness and tourism, tourists and visitor as informed previously. This systematic review was also limited to peer-reviewed articles in English-language, and full text available. So, the financial part of investigations could also be assumed as a limitation. This may have restricted relevant articles published in different languages or other sources such as books.

Some studies used self-reports. Self-reported data should be accompanied by tests of general mental capacity or physiological parameters in future studies. Additionally, this review sheds light on a general lack of longitudinal studies and random samples. The sampling methods used raise issues regarding the study's generalizability. Also, some studies could include previous information about tourists before the travel, to gain a more complete information about all phases of travel. Furthermore, most of studies just approached a specific site, and some samples were collected at a single destination, we consider as a limitation because the results may not be reflected in other sites or countries. Further studies should consider the values, cultures, and resource of other nations. Another limitation was the fact that most of the studies only focused on a specific type of tourism, this could be improved by comparing different types of tourism and explore if there are differences. Although some studies statistically checked for common method bias, potential response bias and some lack of information about respondent may influenced some results. Only a few studies employed pre-post designs (e.g., Cervinka et al., 2020). Studies with these designs can provide stronger evidence to support a relationship between mindfulness and tourists' experiences. Based on the limitations and findings from this review, this study proposes the following areas for future research.

Results from this review indicate that a continuing investigation of mindfulness in tourism is warranted. Future research should begin employing more rigorous methods and more precise research questions to strengthen the argument for using mindfulness in the field of tourism. Further studies may employ alternative sampling methodologies, to help make the study more generalizable. The inclusion criteria may also include non-English

language academic journals and a wider source of materials. Upcoming studies could use more Meditative Mindfulness theories, instead of Socio-Cognitive Mindfulness theory. Also, it would be interesting to explore whether mindfulness episodes occur in different types of tourism contexts, and if they change. Given the growing interest in mindful practices, it would be attractive to explore how mindfulness could be applied in different cultural contexts and compare the results. There is a need for studies with a wider geographical spread of research and the inclusion of more Western research samples. They could also explore the impact of different variables and their effect on mindfulness. Additionally, future studies may distinguish between tourists who make their first visit and those who have visited the destination before. Further research is needed to understand and identify the strategies for enhancing mindfulness in tourists.

ACKNOWLEDGEMENTS

This paper is financed by National Funds provided by FCT- Foundation for Science and Technology through project UIDB/04020/2020.

REFERENCES

- Barber, N. A., & Deale, C. (2014). Tapping Mindfulness to Shape Hotel Guests' Sustainable Behavior. *Cornell Hospitality Quarterly*, 55(1), 100–114. <https://doi.org/10.1177/1938965513496315>
- Behmer, P. M. (2019). Moving to learn: A meditative yoga approach to teaching and learning anatomy and physiology in multiple contexts. *New directions for adult and continuing education* 161, 67–77.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230–241. <http://doi.org/10.1093/clipsy/bph077>
- Brown, K. W. & Ryan, R. M. (2003). The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being. *Journal of Personality and Social Psychology*, 84(4). <https://doi.org/10.1037/0022-3514.84.4.822>
- Cervinka, R., Schwab, M., & Haluza, D. (2020). Investigating the Qualities of a Recreational Forest: Findings from the Cross-Sectional Hallerwald Case Study. *International Journal of Environmental Research and Public Health Article*. <https://doi.org/10.3390/ijerph17051676>
- Chan, E. Y. (2019). Mindfulness promotes sustainable tourism: the case of Uluru. In *Current Issues in Tourism*, 22(13), 1526–1530. <https://doi.org/10.1080/13683500.2018.1455647>
- Chen, L. I. L., Scott, N., & Benckendorff, P. (2017). Mindful tourist experiences: A Buddhist perspective. *Annals of Tourism Research*, 64, 1–12. <https://doi.org/10.1016/j.annals.2017.01.013>
- Choe, J., & O' Regan, M. (2020). Faith Manifest: Spiritual and Mindfulness Tourism in Chiang Mai, Thailand. *Religiions*. <https://doi.org/10.3390/rel11040177>
- Cui, Q., Xu, H., & Yang, Y. (2014). Secular Pilgrimage: Tourist experience in Tibet. *Tourism Tribune*, 29(2), 110-117.
- Dutt, C., & Ninov, I. (2016). Tourists' Experiences of Mindfulness in Dubai, United Arab Emirates (UAE). *Journal of Travel and Tourism Marketing*, 33(8), 1195–1212. <https://doi.org/10.1080/10548408.2015.1107521>

- Frauman, E., & Norman, W. C. (2004). Mindfulness as a Tool for Managing Visitors to Tourism Destinations. *Journal of Travel Research*, 42,381-389. <https://doi.org/10.1177/0047287504263033>
- Garcês, S., Pocinho, M., Jesus, N. J., Câmara, E., & Martins, P. (2020). Exploring Creativity and Wellbeing Characteristics of Portuguese tourists. *Journal of Spatial and Organizational Dynamics*, 8(1), 4-15.
- Gupta, K. (2020). Mindfulness and Meditation as Pedagogical Methods for Adult and Higher Education. *The Journal of Continuing Higher Education*. <https://doi.org/10.1080/07377363.2020.1825315>
- Jiang, T., Ryan, C., & Zhang, C. (2018). The spiritual or secular tourist? The experience of Zen meditation in Chinese temples. *Tourism Management*, 65, 187–199. <https://doi.org/10.1016/j.tourman.2017.10.008>
- Kabat-Zinn, J., & Chapman-Waldrop, A. (1988). Compliance with an outpatient stress reduction program: Rates and predictors of program completion. *Journal of Behavioral Medicine*, 11, 333-352.
- Kabat-Zinn, J. (2014). Meditation is everywhere. *Mindfulness*, 5(4), 462–463. <https://doi.org/10.1007/s12671-014-0323-1>
- Kabat-Zinn, J. & Kabat-Zinn, M. (2021). Mindful Parenting: Perspectives on the Heart of the Matter. *Mindfulness*, 12, 266–268. <https://doi.org/10.1007/s12671-020-01564-7>
- Kim, C. S., Bai, B. H., Kim, P. B., & Chon, K. (2018). Review of reviews: A systematic analysis of review papers in the hospitality and tourism literature. *International Journal of Hospitality Management*, 70, 49–58. <https://doi.org/10.1016/j.ijhm.2017.10.023>
- Kroesen, M. & De Vos, J. (2020). Does active travel make people healthier, or are healthy people more inclined to travel actively? *Journal of Transport & Health*, 16. <https://doi.org/10.1016/j.jth.2020.100844>
- Langer, E. J. & Moldoveanu, M. (2000). The construct of mindfulness. *Journal of Social Issues*, 56(1), 1-9.
- Ling, T. P., Noor, S. M., Mustafa, H., & Kiumarsi, S. (2019). Mindfulness: Exploring visitor and communication factors at Penang heritage sites. *SEARCH Malaysia*, 11(1), 137–152.
- Loureiro, S. M. C., Breazeale, M., & Radic, A. (2019). *Happiness with rural experience: Exploring the role of tourist mindfulness as a moderator*. *Journal of Vacation Marketing*, 25(3), 279–300. <https://doi.org/10.1177/1356766719849975>
- Loureiro, M. C. S., Stylos, N., & Miranda, F. J. (2020). Exploring how mindfulness may enhance perceived value of travel experience. *The Service Industries Journal*, 40, 800–824. <https://doi.org/10.1080/02642069.2019.1600672>
- Moscardo, G. (1996). Mindful visitors: Heritage and Tourism. *Annals of Tourism Research*, 23(2), 376–397. [https://doi.org/10.1016/0160-7383\(95\)00068-2](https://doi.org/10.1016/0160-7383(95)00068-2)
- Moscardo, G. (1999). *Making visitors mindful: Principles for creating sustainable visitor experiences through effective communication*. Champaign, IL: Sagamore Publishing.
- Moscardo, G. (2009). *Understanding tourist experience through mindfulness theory*. New York, NY: Routledge.
- Nunes, C. P., Vieira, N. G. S., Pocinho, M. (2020). Exploring the Behavioural Approach for Sustainable Tourism. *Journal of Spatial and Organizational Dynamics*, 8(1), 67-75.
- Page, M. J., McKenzie, J., Bossuyt, P., Boutron, I., Hoffmann, Moher, D. (2020). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. <https://doi.org/10.31222/osf.io/v7gm2>

- Pearce, P. L. (1987). Psychological studies of tourist behavior and experience. *Australian Journal of Psychology*, (2)39, 173-182.
- Pearce, P. L. (1996). Recent research in tourist behavior. *Asia Pacific Journal of Tourism Research*, (1)1, 7-17
- Philip Z. Maymin, P. Z. & Langer, E. J. (2021). Cognitive biases and mindfulness. *Humanities and Social Sciences Communications*, 8(40). <https://doi.org/10.1057/s41599-021-00712-1>
- Pine II, B.J. and J.H. Gilmore (1999), *The Experience Economy: Work is Theatre and Every Business a Stage*. Boston, MA: Harvard Business School Press.
- Pirson, M. A. Langer, E. & Zilch, S. (2018). Enabling a Socio-cognitive Perspective of Mindfulness: The Development and Validation of the Langer Mindfulness Scale. *Journal of Adult Development*, 25, 168–185. <https://doi.org/10.1007/s10804-018-9282-4>
- Rubin, S. D., Lee, W., Morris Paris, C., Teye, V., & Morris, C. (2016). The Influence of Mindfulness on Tourists' Emotions, Satisfaction and Destination Loyalty in Fiji. *Travel and Tourism Research Association: Advancing Tourism Research Globally (54)*. <https://scholarworks.umass.edu/ttra/2011/Visual/54>
- Ryan, R. M. & Deci, E. L. (2008). A self-determination theory approach to psychotherapy: the motivational basis for effective change. *Canadian Psychology*, 49(3), 186-193.
- Sadowski, I., Böke, N., Mettler, J., Heath, N. & Khoury, B. (2020). Naturally mindful? The role of mindfulness facets in the relationship between nature relatedness and subjective well-being. *Current Psychology*. <https://doi.org/10.1007/s12144-020-01056-w>
- Tan, P. L., Md Noor, S., Rasoolimanesh, S. M., & Mustafa, H. (2020). Communication and visitor factors contributing towards heritage visitors' mindfulness. *Journal of Heritage Tourism*, 15(1), 27–43. <https://doi.org/10.1080/1743873X.2019.1586909>
- Taylor, L. L., & Norman, W. C. (2019). The influence of mindfulness during the travel anticipation phase. *Tourism Recreation Research*, 44(1), 76–90. <https://doi.org/10.1080/02508281.2018.1513627>
- Tortella-Feliu, M., Luís-Reig, J., Gea, J., Cebolla, A. & Soler, J. (2020). An Exploratory Study on the Relations Between Mindfulness and Mindfulness-Based Intervention Outcomes. *Mindfulness*, 11, 2561–2572. <https://doi.org/10.1007/s12671-020-01471-x>
- Van Dam, N. T., van Vugt, M. K., Vago, D. R., Schmalzl, L., Saron, C. D., Olendzki, A., ... Meyer, D. E. (2018). Mind the hype: A critical evaluation and prescriptive agenda for research on mindfulness and meditation. *Perspectives on Psychological Science*, 13, 3661. <https://doi.org/10.1177/1745691617709589>
- Vizniuk, I., Bilan, L., Tsokur, O., Rozheliuk, I., Podkovyrov, N., & Symonenko, T. (2021). Psychosomatic Health as a Factor of Human Social Adaptation in the Postmodern Society. *Postmodern Openings*, 12(1), 54-73. <https://doi.org/10.18662/po/12.1/245>
- Walker, K., & Moscardo, G. (2014). Encouraging sustainability beyond the tourist experience: Ecotourism, interpretation and values. *Journal of Sustainable Tourism*, 22(8), 1175–1196. <https://doi.org/10.1080/09669582.2014.918134>
- Wang, Y. C., Chen, P. J., Shi, H., & Shi, W. (2021). Travel for mindfulness through Zen retreat experience: A case study at Donghua Zen Temple. *Tourism Management*, 83, 104211. <https://doi.org/10.1016/j.tourman.2020.104211>
- Weick, K. E. & Putnam, T. (2006). Organizing for Mindfulness: Eastern Wisdom and Western Knowledge. *Journal of Management Inquiry*, 15(3). <https://doi.org/10.1177/1056492606291202>

- Ying, T., Tan, X., Ye, S., Ka, X., & Zhou, Y. (2020). Examining tourist mindfulness in museums: the roles of familiarity and motivation. *Asia Pacific Journal of Tourism Research*, 25(9), 981–996. <https://doi.org/10.1080/10941665.2020.1819835>
- Yilmaz, Y., & Anasori, E. (2021). Environmentally responsible behavior of residents: impact of mindfulness, enjoyment of nature and sustainable attitude. *Journal of Hospitality and Tourism Insights*. <https://doi.org/10.1108/jhti-07-2020-0121>