

# **A systematic literature review and lexicometric analysis on overtourism:**

## **Towards an ambidextrous perspective**

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### **Abstract**

While overtourism is a relatively recent term, it has nevertheless triggered a large number of publications because of its human, environmental and social challenges. This systematic review therefore aims to take stock of the literature on overtourism. A lexicometric analysis based on 236 articles reveals that research on overtourism is highly concentrated and articulated around three main themes: the management, the experience, and the context of overtourism. The findings also suggest that academic research has so far focused on the negative impacts of overtourism. Subsequently, this study is calling for an ambidextrous approach, taking into account both the negative effects of overtourism, while also considering it as an opportunity in addressing the problem.

**Key words:** overtourism; literature review; tourism development; sustainable tourism; tourism perception; ambidextrous approach

## **Introduction**

Defined by the World Tourism Organization (UNWTO) as “the impact of tourism on a destination, or parts thereof, that excessively influences the perceived quality of life of citizens and/or visitors in a negative way”, overtourism has now become a major concern for industry actors (Dodds & Butler, 2019a; Milano et al., 2019). According to Dodds and Butler (2019a), several factors have led to this situation. Amongst these are the development of mass tourism as a result of the generalization of paid holidays in many industrialized countries which has led to an increase in purchasing power from the 1960s, thus giving a large part of the world's population the possibility to travel (Hadjikakou et al., 2013). This first and main wave of tourists was followed by a second one in the early 2000s with the arrival on the market of tourists from destinations such as China. At the same time, the cost of traveling has been considerably reduced due to the economic growth of the tourism industry, but also as a result of the emergence of new business models such as low-cost airlines or Airbnb. On top of this list could be added a trend towards what Dodds and Butler (2019a) called a “growth-focused mindset”, which is a short-term vision of the industry that overlooks the potential long-term implications. Kuvan (2005) noted that the development of mass tourism development has been done without considering protection and sustainable use of natural and cultural resources.

These developments have therefore led to the phenomenon of overtourism, i.e. places welcoming more tourists than their carrying capacity actually allows (Li et al., 2021).

Overtourism is different from mass tourism (Koens et al., 2018). Mass tourism implies an increase in the number of tourists visiting a specific destination. While this may be the origin of overtourism in some places, others may be able to cope with the increase. Overtourism is the umbrella for all the perverse impacts related to the tourism sector, which includes “the use

of tourism destinations' natural ecological goods, the destruction of their cultural attractions and negative impacts on their social and economic environments" (Mihalic, 2020, p. 1). Even a very small increase in the number of tourists in a specific area can cause major damage. Because of these crucial issues, scholars have taken a massive interest in the subject, resulting in an exponential number of publications. However, despite significant advances in the literature, overtourism remains a "wicked problem" (Phi, 2019, p. 3), not "fully framed" (Pasquinelli & Trunfio, 2020, p.2). Furthermore, the Covid-19 pandemic has disrupted the tourism sector so much that it has also impacted overtourism (Gössling et al., 2021). We thus argue that there is a need to assess the current state of overtourism. The purpose of the literature review is twofold. First, we fully embrace the phenomenon of overtourism by examining the literature to identify the main areas that have been investigated. Second, we are positing that reviews are essential for making sense of existing research and provide directions for future studies (Jones & Gatrell, 2014).

In addition, while some literature reviews have already been conducted on the topic of overtourism, they present two main limitations. On the one hand, they are not systematic, i.e. they do not offer a complete view of the state of the literature (e.g. Capocchi et al., 2019; Dodds & Butler, 2019b). On the other hand, they study overtourism in relation with other concepts, i.e. in a more narrow perspective. For instance, Veríssimo et al. (2020) review overtourism in relation to tourismphobia, while Butler and Dodds (2022) focus on failure of strategies put in place by local authorities. In this study, we conduct a systematic review on overtourism, without specific focus, in order to have a full understanding of the phenomenon. To perform our systematic review, we use a lexicometric analysis, which is a form computerized textual analysis (Illia et al., 2014) that enables us not only to process a large number of texts, but also to limit individual biases in the analysis. This method provides an

opportunity to understand and visually represent the way research on overtourism has developed.

This study makes two contributions. First, we provide scholars with a systematic, comprehensive and structured overview of studies focusing on overtourism, notably the narrow scope of existing literature. Second, we suggest that overtourism should be investigated and discussed through an ambidextrous lens, which implies taking into consideration both its negative side while also considering at the same time the existing opportunities to draw some benefits from it.

The paper is structured as follows: first, we present a literature review on overtourism and the stages followed to perform the systematic review. Second, the results of the lexicometric analysis are provided and discussed. Then, we propose a two-step research agenda, the first step is in line with existing research, while the second one is more disruptive. Finally, we conclude with the theoretical contributions, managerial implications and directions for further research.

## **Literature review**

As a result of the growth of tourism, many tourist sites around the world are victims of their own success and receive more visitors than their infrastructures can theoretically accommodate, thus exceeding their carrying capacity (Li et al., 2021). The consequence of tourism is to profoundly modify the places (Kuvan, 2005). Over the past five years, academic research has therefore particularly focused on overtourism. However, even if it was not yet named as such, the phenomenon is not new. From the 1970s, Doxey (1975) pointed out the emerging antagonism between tourists and local residents while Rosenow and Pulsipher (1979, p. 1) observed that “on one hand, the travel industry is seen as enhancing diverse well-planned communities; supporting parks and historic preservation; providing jobs and profits;

and ensuring the maintenance of landscape and environment, and on the other as creating social, cultural, economic and environmental problems”. Since these seminal works, the literature has experienced a very important recent development under the effect of the trend of sustainable development (Koens et al., 2021).

One of the first definitions of overtourism as a contemporary phenomenon is provided by Weber (2017, p. 315) who defines it as “the phenomenon of overcrowded tourism destinations, where the (mainly social) carrying is exceeded”. In an integrative perspective, Koens et al. (2018) identify five main characteristics of overtourism: (1) overcrowding in public spaces (overcrowding on streets and transport, heavy traffic, etc.) (2) pervasiveness of visitor impact due to inappropriate behavior (noise, disturbance, etc.), (3) touristification of city centers and other well visited places (uniqueness of shops and facilities for residents, etc.), (4) residents pushed out of residential areas (less availability of housing, loss of sense of community, etc.), and (5) pressure on local environment (water use, waste, air pollution, etc.).

Because of all these negative effects, literature has mainly focused on how to mitigate them by identifying overtourism problems upstream (Mihalic, 2020) and suggesting several solutions including strategies related to revenue management (S raphin & Ivanov, 2020), economic taxation (Nepal & Nepal, 2021) and real time monitoring of tourism carrying capacity (Camatti et al., 2020). In a recent paper, Butler and Dodds (2022) have classified the initiatives to overcome overtourism into two categories: (1) local-level initiatives which involve capacity limitations, demarketing, timed and limited entry and disbursement of visitors, and (2) national-level initiatives which include restricted tourist visas, and entry permits, transfer of control on transport to local level and coordination with other sectors and levels of government. However, as Butler and Dodds (2022) are arguing, such efforts are failing because of global trends which are leaning more towards supporting mass tourism. In

this study, we argue that it is by having a comprehensive view of the way research on overtourism is articulated that the industry will be able to overcome these failures.

## **Method**

### ***Data collection***

A systematic review can be defined as “a specific methodology that locates existing studies, selects and evaluates contributions, analyses and synthesizes data, and reports the evidence in such a way that allows reasonably clear conclusions to be reached about what is and is not known” (Denyer & Tranfield, 2009, p. 671). According to Paul and Criado (2020), literature review papers fall under four main types: (1) meta-analytical review whose aim is to combine the results of multiple quantitative studies in an attempt to allow inferences; (2) method-based that aims to review a body of literature that uses a specific methodology; (3) theory-based review that focuses on the role of a specific theory in a given topic/area; and (4) domain-based review scrutinizing the subject in detail. In this research, we are adopting a domain-based approach to conduct a systematic review on the notion of overtourism.

Specifically, the systematic literature review is conducted by using the Scopus database. We selected Scopus in accordance with recent literature reviews (see for example Donthu et al., 2021; Mandják et al., 2019). Having compared PubMed, Scopus, Web of Science, and Google scholar, Falagas et al. (2008) found that Scopus is more reliable than the other databases.

The key search words included “overtourism”, “over-tourism” and “over tourism”. The combination of these three keywords was used with the “or” notation. The initial search generated 475 documents. This number was then reduced using several exclusion criteria. First, we excluded non-English documents. Second, we decided to include only peer-reviewed journal articles as they underwent a review process of screening for quality. This process

contributed to only retain articles that meet a certain level of conceptual, as well as methodological rigor (Paul & Criado, 2020). Third, we excluded articles that were not dealing with “overtourism”, but studied the impact of something “over tourism”. Fourth, the search was performed in January 2022. As a result, we decided to exclude the 6 articles of 2022 already published to consider only full years (2018, 2019, 2020 and 2021). Overall, our search yielded a total of 236 relevant articles (Figure 1).

Insert Figure 1 about here

For the 236 articles included in the study, we systematically collected the title of the article, the name of the authors, the area of the document, the key words of the article and the abstract. This enabled us to perform some descriptive statistical analysis on the final sample (Table 1).

Insert Table 1 about here

### *Lexicometric analysis*

In this study, we build on Mandják et al. (2019) who used computerized textual analysis and lexicometric analysis, more specifically in systematic reviews. Lexicometric analysis, or positioning text analysis, “produces a characterization of a part of a text in relation to other parts of the text” (Illia et al., 2014, p. 354). The text is thus considered as a semantic space in which each word is understood based on its position in this space (Lund & Burgess, 1996). A text is therefore characterized by words having a certain meaning, i.e. anchored in a specific social field, what Reinert (1990) calls a “lexical world”. A lexical world is a list of words constituting specific vocabularies anchored in contexts specific to the corpus (Reinert, 1990). Lexicometric analysis thus helps identifying the latent meanings in texts (Illia et al., 2014).

We chose to use a lexicometric analysis for five main reasons (Illia et al., 2014; Mandják et al., 2019; Wolfe et al., 1993). First, as a systematic review involves a large

number of documents, lexicometric analysis enables this voluminous data to be processed efficiently, automatically identifying and organizing keywords, recurring themes and trends within the corpus. Second, it can identify semantic similarities between articles, thus emphasizing how a field of study has developed. Third, lexicometric analysis provides visual outputs that allow results to be presented in a clear and accessible way. Fourth, lexicometric analysis helps identify biases in the literature, such as under-representation of certain themes, which can guide further research. Fifth, the use of lexicometric analysis offers a standardized methodological framework that is reproducible.

Reinert's (1990) lexicometric method was first developed in the Alceste software, but has been recently implemented in an open-source software called Iramuteq that offers new developments (Smyrnaiois & Ratinaud, 2017). Iramuteq enables to discover representations found in a specific text by calculating the statistical distribution of lexical elements (nouns, verbs, adjectives, and adverbs) (Reinert, 1990). The underlying linguistic assumption is that when scholars associate two words in the abstract of an academic article, they create a certain representation of a subject (Reinert, 1990). Based on these rules, Iramuteq computes a co-occurrence analysis of words, i.e. recognizes how words appear together in a text, and benchmarks this against other texts.

Concretely, we performed the lexicometric analysis on the abstracts of the 236 articles retained for the analysis. This equates to 125 pages of single-spaced transcribed text. We then imported all the material into Iramuteq by coding each abstract as an individual text. Iramuteq first breaks down the corpus into smaller parts called 'segments' based on punctuation and on size criteria. Then, the software classifies the segments into clusters using lemmatization. Lemmatization means for instance that 'played', 'playing' and 'plays' fall under the same umbrella, i.e. 'play'.



On that basis, we performed three different analyses. First, we conducted a descending hierarchical classification. Using Reinert's (1990) method, Iramuteq analyzes the whole corpus by identifying lexical worlds, i.e. classes of words that are related to each other. The software thus groups the active forms into distinct homogeneous worlds that emerge on the basis of the semantic proximity of the words used in the corpus. A  $\text{Chi}^2$  value is measured for each couple (shape, class) in order to estimate the intensity of their relationship. Second, we performed a factorial correspondence analysis (FCA). As a multivariate statistical technique, FCA displays and summarizes a set of data in a two-dimensional graphical form by calculating chi-squared statistic-based on contingency tables (i.e., counts of the recurrence of the proximity of words). FCA thus statistically groups words on two axes depending on the co-occurrences of words in segments. The bigger the words appearing on the graph, the more significant they are with respect to the two-axis projection. Similarly, a concentration of words in the center of the graph indicates a close proximity between the way words are used in the corpus, while a more fragmented graph with words at different corners suggests a great thematic diversity. Third, we conducted a similarity analysis. Similarity analysis is a multivariate method which enables a representation of the entire corpus in clusters based on the interdependence of words. As explained by Reinert (1990), similarity analysis provides a state of the corpus' organization.

## **Findings**

### *Descriptive statistics*

In a first step, we conducted a descriptive analysis. This analysis classifies occurrences into active forms (verbs, nouns, adjectives, etc.) and additional forms (pronouns and conjunctions such as 'the', 'of', 'and', 'to'). This analysis reveal that our corpus is comprised of 72 306 occurrences and 5071 forms, each abstract having on average 187 occurrences. Since the

additional forms concern linking words with no particular meaning, the rest of the analysis focuses only on the active forms.

The most frequently cited words are 'tourism' (1415 occurrences), 'overtourism' (642 occurrences), 'tourist' (543 occurrences), 'destination' (440 occurrences), and 'city' (387 occurrences). Furthermore, while the word 'positive' appears 38 times in our corpus, the word 'negative' appears 127 times. Moreover, if we put together the terms which have a negative connotation such as 'negative', 'issue', 'problem', 'tourismphobia' or 'excessive', it appears that this group becomes the fourth most important one, just behind the group made of words such as 'tourism', 'overtourism' and 'tourist'. This demonstrates the overall negative perspective that the literature on overtourism has adopted.

### ***Descending hierarchical classification***

In a second step, we conducted a descending hierarchical classification. The analysis reveals five lexical worlds (Figure 2). The first world, the most represented, refers to the management of overtourism. Here we find words such as 'sustainable management', 'strategy', 'policy' or even 'stakeholder management'. Managing the problems linked to overtourism appears to be the major concern of the researchers. The second lexical world includes words referring to what individuals, tourists or residents, are experiencing in these crowded places (Papadopoulou et al., 2022). The third world contains words relating to the context of the study that is being carried out, a context which has recently been strongly impacted by Covid-19. The fourth lexical world deals with the environment in which overtourism occurs, whether at the geographical level with words such as 'city' and 'urban', or related to the type of tourism, with words such as 'Airbnb' or 'hotel'. Finally, the fifth lexical world highlighted by the descending hierarchical classification is a world that we have called 'research', and which

take into account all the words used by authors to discuss their theoretical and methodological approaches.

Insert Figure 2 about here

### ***Factorial correspondence analysis***

In a third step, we conducted a FCA to identify how lexical worlds position themselves in relation to each other (Reinert, 1990). More precisely, we conducted the FCA on the active forms which appear at least 30 times in the corpus for two main reasons. First, we wanted to include in the analysis only the most significant words. Second, the purpose of an FCA being to achieve a visual representation, including too many words can affect the clarity of the outcome.

The results reveal that the overtourism literature is organized around two main axes (Figure 3). The horizontal axis suggests a continuum between contextual factors and stable factors of overtourism. Indeed, on the left of the axis, we see words such as 'pandemic', 'crisis', 'Covid' and 'situation', indicating that the literature has focused on the impacts of particular contexts on the phenomenon of overtourism. For instance, Koh (2020) questions the extent to which the pandemic could constitute a first step against overtourism. On the other side of axis 1 are words such as 'park', 'national', 'cruise' or 'event'. The literature falling under these themes therefore considers overtourism as a stable phenomenon, affecting multiple tourist sites and contexts. González (2018), for example, is interested in the impact for locals of the many cruises mooring in Venice while Tortella and Tirado (2011) investigate the effects of mass tourism on hotel water consumption in the island of Mallorca.

The vertical axis indicates a continuum between studies having adopted the perspective of understanding the phenomenon of overtourism and studies having adopted a proactive perspective to fight against the problem. Thus, at the top of the axis, the FCA identifies words

such as 'organization', 'measure', 'change', and 'alternative' indicating that part of the literature has sought to manage the problem of overtourism by proposing different measures and solutions. For example, Séraphin et al. (2019) suggest a Just-in-Time strategy for managing overtourism. At the bottom of the horizontal axis are words such as 'technology', 'experience', 'information' and 'heritage'. These words refer to works that have sought to understand the phenomenon of overtourism experienced by tourists and residents alike (these two words being located on the lower half of the graph). Studying the Slovenian city of Ljubljana, Kuščer & Mihalič (2019) have evidenced that a poor economic, sociocultural and natural management of the industry can negatively influence the satisfaction of local residents with tourism presence.

Insert Figure 3 about here

### ***Similarity analysis***

Finally, in a fourth step, we performed a similarity analysis. To perform this analysis, we excluded the research vocabulary, which corresponds to the fifth lexical worlds in Figure 2. The results presented in Figure 4 show the major topics that have been covered in the literature. A similarity analysis is interpreted in relation to the proximity of the blocks to each other. At the top of the figure, we can notice that a significant part of the work has focused on destinations management of overtourism and its consequences (orange color). For instance, Séraphin et al. (2019) study how destination branding can play a role in tackling overtourism. We can also notice a small number of words which are related to alternative strategies to tackle the phenomenon (green color), and the way in which destinations could then contribute to sustainable development (purple color).

Most of the literature is located in the center of the graph and has focused on individuals' experience of overtourism (pink color). Testing the hysteresis effect, Cheung and

Li (2019) argue that the deterioration in visitor–resident relationships resulting from overtourism may persist far beyond the original stimulus. On the left side, several branches appear and deal in particular with the contexts in which tourists are confronted with overtourism: geographical contexts (heritage sites, national parks, etc.) but also human contexts, particularly in interaction with residents. On the right side (green color), we can see that some works have focused more specifically on the question of how tourists perceive of the social and environmental consequences of overtourism, and what behaviors they should adopt to get out of it (degrowth).

Finally, at the bottom of the figure, we can observe works that have studied the development of overtourism in the places that are particularly impacted by overtourism. For instance, Adie et al. (2020) show that overtourism is perceived as being more negative in cities in comparison with rural areas. More specifically, a discrepancy can be noticed between initial works represented in yellow, which studied overtourism in traditional setting (city, urban center, historic site, events, etc.), and more recent works carried out during the pandemic (in blue), which are fleshing out the unexpected impacts of Covid-19.

Insert Figure 4 about here

### ***Discussion***

Based on the results of this study, we can come to three main conclusions. First, despite the large number of publications on overtourism, it appears that there is not a great variety of research as the overall production could be clustered within 3 groups (Figure 4) or 5 groups (figure 2). This finding is shedding light on the narrow scope of the overtourism literature, which can be summarised as follows: many (outputs), few (diversity). More specifically, the number of different stakeholders identified in Figure 2 is relatively small and limited to visitors/tourists, residents and a few other stakeholders such as public authorities. Similarly,

Figure 4 highlights only three main themes (the management of overtourism, the experience of overtourism and the context of overtourism), which is relatively limited with regards to the 236 articles analysed in the study.

Second, and in line with preceding comment, it appears that the topics covered in the literature essentially approach overtourism from a negative perspective, namely the management of the perverse effects of overtourism, the understanding of the negative experience generated by overtourism, particularly for residents, and the identification of the most negative contexts of overtourism. This negative perspective is even at the heart of the definition of what overtourism is: “a condition of overtourism is that the attitudes of a significant proportion of the local community or population shift from a neutral or a positive acceptance of the presence of tourists to a state of negative perceptions or outright rejection of tourists” (Duignan et al. 2022, p.3).

Third, we can also observe that existing studies on overtourism are not disruptive and innovative enough, which explains why there is a concentration of keywords at the center of figure 3, with a limited number of them standing out from the center. This lack of innovation in the tourism academic research as a whole was already highlighted by Brooker and Joppe (2014). This study shows that this is also the case with overtourism.

Put together, these conclusions lead us to adopt an ambidextrous approach (Mihalache & Mihalache, 2016). This approach is often associated with Janusian thinking approach, which is a reference to Janus, the Roman god who had the ability to look at opposite directions simultaneously (Rothenberg, 1996). We thus propose a research agenda intended on the one hand to continue to study the negative effects of overtourism, but also on the other hand to change perspective by adopting a more positive approach to overtourism. Thus, in the first step, we will propose avenues of research to pursue research related to important topics that we have identified, while adopting a more innovative approach and by suggesting

directions that have not yet been explored. In the second step, we will propose a research agenda disrupting current research and its homogeneity by considering overtourism as an opportunity, and by discussing the involvement of potential new stakeholders such as children and social movements.

### **Pursuing existing work**

In the first step of our research agenda, we outline some new research avenues for the three main topics addressed in the literature.

#### ***Research directions on the management of overtourism***

Regarding the management of overtourism, it is important to note that the word “innovation” appears only 14 times in our corpus. However, we believe that innovation and new technologies can be a way to mitigate the problem of overtourism. For example, Frey and Briviba (2021) have recently proposed the concept of “revived originals” which consists in replicate overcrowded sites in a suitable different location using new technologies, such as holograms. Similarly, Chaney and Séraphin (2021) discussed how Lourdes pilgrimage, one of the largest in the world, held the first virtual pilgrimage to overcome the restrictions related to the Covid-19 pandemic. Following recent research that suggest the importance of technologies to tackle overtourism (Fontanari & Traskevich, 2023), we believe that many other avenues of research remain to be explored: to what extent can artificial intelligence help to better spread the flow of visitors over time and in a given space? What role can cryptocurrencies and Non-Fungible Tokens play in filtering visitors? What alternative solution can the metaverse offer and to what extent are consumers ready to ‘travel’ in this interactive, immersive, and collaborative virtual world (Kouroupi & Metaxas, 2023) ?

In addition, given the few references to the notions of cooperation and ecosystem in our corpus, we think that future research could seek to understand how a better integration of the different actors involved in tourism can collaborate more effectively to reduce overtourism. Until now, when dealing with cooperation, the literature has mostly adopted a stakeholder perspective (e.g. Atzori, 2020). We argue that a discussion of overtourism should move beyond consideration of a destination's relationships with customers, residents and other close stakeholders to consider their role within ecosystem. As Frow et al. (2014) argue, an ecosystem differs from a stakeholder system not only in that it includes actors not generally viewed as stakeholder groups, such as 'anti-clients', activist groups and direct and indirect competitors, but also because the focus of an ecosystem is more centered on value cocreation. Within an ecosystem, "exchange occurs because no one actor has all the resources to operate in isolation, and is therefore required to participate in resource integration practices, even in the face of sometimes competing and conflicting priorities and preferences" (Frow et al., 2014, p. 6). Future research could therefore adopt an ecosystem perspective to understand how, in a broader and integrative approach, all the actors in a territory can bring their resources to propose a global offering that allows a better distribution of tourist flows.

### ***Research directions on the experience of overtourism***

Regarding the experience of overtourism, much of the literature has so far focused on how residents perceive overtourism as individuals through emotions (Gössling et al., 2020) and quality of life (Mihalic & Kuščer, 2021) and as a community (Milano et al., 2019), as well as how visitors experience overtourism and related perverse impacts such as anti-tourism and tourismphobia (Veríssimo et al., 2020). Based on this observation, two directions for further research seem to emerge. On the one hand, it would be relevant to better understand the influence of overtourism on specific individual characteristics of residents such as



vulnerability. Vulnerability is a state of powerlessness that occurs when control is not in an individual's hands, creating a dependence on external factors (Baker et al., 2005). In the case of overtourism, residents do not control the number of tourists visiting their destination and the damage these tourists can do. They can therefore experience vulnerability, i.e. feel threatened and insecure (Baker et al., 2005).

On the other hand, our literature review reveals that while the experience of residents has been well documented, what is experienced by tourists who encounter an over-visited site remains less studied. To what extent is the visitor experience impacted by the number of people present on the site? Is escapism also present in a crowded site? Does the loss of control over the experience and its dimensions impact the values derived from the experience? In addition, our lexicometric analysis indicates that previous research has not investigated how visitors cope with over-visited places. Coping strategies refer to the behavioral and psychological efforts developed to manage stressful events (Lazarus & Folkman, 1984). Many types of coping strategies have been suggested including adaptive behavioral coping which implies to adapt behaviors to reduce the stress and emotion-focused coping which involves dealing with the negative emotions generated by the problem (Lazarus & Folkman, 1984). In the case of overtourism, visitors can adapt their behavior on an ad hoc basis by avoiding crowded places or by avoiding certain peak hours, but can the experience of overtourism also leads to more stable changes by leading individuals to avoid certain tourist areas? Similarly, to what extent can emotion-focused coping strategies such as seeking social support, exercising self-control and distancing play a role in visitors' experience?

### ***Research directions on the context of overtourism***

Finally, this research suggests avenues for future research regarding the context of overtourism. First, previous research has logically studied contexts that are highly visited by

tourists including Venice (S raphin et al., 2018) and Dubrovnik (Panayiotopoulos & Pisano, 2019). However, future studies could investigate less popular destinations in order to better understand if the perception of overtourism is linked to the number of visitors in absolute or relative terms.

In addition, many destinations affected by overtourism have implemented different types of measures: Venice has limited access to its lagoon for cruise ships, Barcelona has reduced permits for new hotel construction and tourist rentals, Dubrovnik has introduced paid admission tickets for the most popular tourist sites, some Swiss destinations limit the number of visitors allowed in each day, etc. It would now be interesting to conduct longitudinal studies to test the effectiveness of these measures at different levels: is the number of tourists visiting these destinations actually decreasing? Has residents' quality of life improved? Has the environmental and ecological situation improved?

Similarly, it would be interesting to study contexts that have already adopted successful practices to tackle overtourism, such as the caves of Lascaux in France. The caves of Lascaux, sometimes nicknamed “the Sistine Chapel of parietal art”, are one of the most important decorated caves of the Upper Paleolithic. However, the tourist overexploitation of the site as well as poor conservation have generated multiple damages to the paintings. Replicas of the cave, named Lascaux 2 and 3, have therefore been created to maintain tourists' visits to the site while preserving the original. Such actions can be solutions to overtourism since, by creating replicas, it is possible to better distribute the flow of tourists. But what level of similarity between the original place and the replica is necessary for the visitor to perceive no difference in authenticity? How far apart should the two places be?

**Disrupting existing work: toward a positive perspective on overtourism**

In this second step of our research agenda, we call for a more positive perspective on overtourism. We start by outlining the general approach to achieve positive outcomes from overtourism and then present two possible examples of adopting a positive approach: turning anti-tourism movements into learning tools and children into activists.

### *Achieving positive outcomes from overtourism*

The strategies suggested so far to tackle overtourism are most of the time incremental as opposed to a more transformative approach, that would require a long-term, radical approach (Brooker & Joppe, 2014). The main difference between both approaches is that a transformative approach sees the problem as the solution, while existing approaches are looking for external fixers. This perspective is in line with Danneels and Vestal's (2020) who are arguing that more attention must be given to issues and failures for success to be reached.

However, the main difficulty in this approach is that not all individuals or organizations can face their failures, as quite often, trails of failure lead to some trauma (Välilikangas et al., 2009). It seems to be the case of the tourism industry, which is looking for solutions without exploring the problem itself as the solution. This is due to the fact that all the initiatives put in place by the industry to achieve sustainability have so far failed (Butler & Dodds, 2022), which has clearly caused some trauma. This situation can be a problem that obstructs learning, ability, and willingness to be innovative, instead of seeing failure as an opportunity (Shepherd et al., 2009). By changing perspective, we believe that overtourism can be an opportunity and therefore be itself part of the solution. Since lack of support from leadership is often at the origin of the inability to celebrate failure and therefore to bounce back, changes can mainly come from activists, namely individuals and/or organizations determined to see changes happening (Tranter, 2010). In this research, we consider two groups of activists: anti-tourism movements and children.

### *Turning anti-tourism movements into learning tools*

Overtourism, as the consequence of exacerbated strategies put in place by the stakeholders of the tourism industry (Dodds & Butler, 2019a), has contributed to the development of tensions between locals and visitors, but also to the emergence of anti-tourism movements in major visited destinations (S raphin et al., 2018). Anti-tourism movements have thus been used by visitors to voice their unhappiness, first in peaceful manner, then using violence i.e., vandalizing bikes, tour buses, etc. (Routledge, 2001). While 17 references to anti-tourism movements can be found in our corpus, a careful examination clearly indicates that previous research has mainly tried to explain how they have emerged and describe the different actions they make. One exception can be found in the literature. In Lucerne, actors from an independent theatre company developed a street show to express how locals feels about the overflow of visitors, and also to educate both visitors and locals about the impacts of overtourism (Weber et al., 2019). In line with Weber et al. (2019), this study is going a step further by suggesting a longer-term strategy which consists into turning anti-tourism movements into leaning tools for visitors.

Anti-tourist movements would therefore not only be a negative consequence of overtourism, but also an opportunity to seize. Instead of using a coercive power, we argue that anti-tourism movements should use an expertise power to tackle overtourism. The members of anti-tourism movements, who are locals, are directly confronted with the inconvenience caused by overtourism and have a detailed knowledge of the way in which this impacts their living environment. They can therefore use this knowledge to educate tourists. Indeed, education plays a significant role in the transmission of values, which in turn play a major role in unlocking changes, including sustainability (Visser, 2015). Education led by anti-tourist groups could then become a solution to increase sustainability consciousness. For example,

they could organize tours with visitors and show them the damage of overtourism (waste, noise, etc.). Future research should thus investigate the types of activities that could be put in place by these movements to educate visitors and locals, and how these activities should be delivered.

### ***Turning children into activists***

Our analysis shows that previous research on overtourism has totally overlooked children, as the word ‘child’ appears only once in our corpus. However, other fields of research such as social movement research are acknowledging the role and importance of children for the long-term sustainability of the communities they live in (de Moor et al., 2021). Following recent research which supports the idea that children can play a major role in the long-term sustainability of the tourism industry (Koščak et al., 2021), this study suggests that children and young adults should be considered as long-term agents of change.

While children have long been a neglected stakeholder of the tourism industry because they may be seen as unreliable, immature and unable to express their own opinions (Canosa & Graham, 2016), a recent body of research has increasingly focused on how to empower children, i.e. how children may find their voices, define their own values, and develop independence and autonomy (Buckingham, 2007). Several reasons can explain this development. First, children are the most affected by environmental problems (Anderko et al., 2020). Second, recent research suggests that children can quickly become accustomed to overtourism, which then negatively influences their relationship with nature, bond with the city, and pro-environmental behavior (Mandić et al., 2023). Therefore, by educating them very young on what overtourism is, it is possible to raise their awareness very early and for a long time. Third, children can be powerful agents of social change. As suggested by Séraphin

et al. (2022), when empowered about sustainability in tourism, children move from the stage of sustainability thinkers to actioners, and finally, transformers.

Three types of activities should be considered to empower children about overtourism: school activities, extra-curricular activities and family activities. Regarding school activities, previous research has already emphasized the importance of the class to educate children about sustainability in general (Bürgener & Barth, 2018). But what kind of pedagogic projects should be implemented to empower children to understand and take action against mass tourism and overtourism? Should it be a traditional pedagogy based on the transmission of content to the student, or a rather active pedagogy where children build by themselves their knowledge? Similarly, it is better to adopt a technological pedagogy, i.e. centered on the technical means made available to the learner or a more social-based pedagogy which would foster an interaction between children and their environment?

Regarding extra-curricular activities, previous research has already suggested that they have the potential to develop children's sustainability consciousness (Torres-Harding et al., 2018). These activities, which refer to youth activism, can take the form of a commitment in a non-for-profit association or the participation to school-based project. Youth activism "can foster civic engagement by enabling participation in political processes, help instill hope, and reaffirm their own personally meaningful commitments to improving their own communities" (Torres-Harding et al, 2018, p. 4). However, when it comes to overtourism, what form could activism take? Does it have to be on the basis of volunteerism, or is it necessary to make participation in this type of activity obligatory? What activities should be developed to be most effective on children and their awareness of the effects of overtourism?

Finally, the family circle can be an important place to educate children and make them move from a passive posture to an active posture at the environmental level. Schill et al. (2020) show for instance that the family microenvironment (concerns voiced by parents,

encouragement, spatial organization, etc.) is playing a critical role in the involvement of children in recycling activities. Using a similar approach, future research could seek to identify what are the best practices for educating children about overtourism in the family circle. Should children visit places affected by mass tourism with their parents to better understand its effects?

## **Conclusion**

This study is the first systematic review of overtourism covering all Scopus journals and not focusing on only one specific aspect of the phenomenon. This review thus provides scholars with a holistic overview of the scope of studies focusing on overtourism. While this study has highlighted the impact of breakout of Covid-19 in research on overtourism (Figure 3), it did not specifically study the impact that this pandemic had on the evolution of the phenomenon. The pandemic, as an unprecedented crisis, has deeply affected tourism in the short-term (Gössling et al., 2021). However, its long-term impact remains unclear. For authors such as Chaney (2022) who study the case of Thailand, the Covid-19 crisis has been an unexpected opportunity to take radical decisions against overtourism. Conversely, for scholars like Butler and Dodds (2022), the pandemic has changed nothing and mass tourism will resume as before, the problem of overtourism needing solutions more than ever.

Like Samuel Johnson's (1976) 'Rasselas Prince of Abyssinia' who embarked a world tour for his quest of happiness and came back home with no recipe for happiness, this research which is a quest for a unique solution to address overtourism, also concludes with a conclusion in which nothing is concluded. Some critical questions do not require extensive research for answers, but rather a change of perspective. The present study, which is adopting the same approach, is subsequently arguing that the final solution to overtourism cannot be found amidst existing strategies which are all suggesting short-term incremental strategies,

instead of looking for long-term radical strategies. By proposing a focus on the empowerment of children to sustainable tourism matters, the present study is implicitly suggesting that sustainability is a long-term planning strategy that takes at least one generation to see changes occurring. And by proposing that the perverse impacts of overtourism can be turned into learning tools, we also implicitly emphasize that current strategies implemented to tackle the phenomenon of overtourism are done with a Manichean vision of the context, while it has already been long established that the tourism industry is complex due to its Janus-faced character (Sanchez & Adams, 2008).

On that basis, we propose two main changes in academia and industry alike. The first change suggests involving children in practices related to overtourism. Raising awareness, from an early age through educational and communication campaigns can make children not only stakeholders of the industry, but also activists. According to Nissen et al. (2021), children's activism has three types of long-term effects: (1) biographical effect since children's activism can impact all aspects of participants' future lives including their family life, friendships, and work and career, (2) movement effect insofar as involving young adults in social movements is important for the dissemination of the identity and tactics of these movements, and (3) political effect since children's activism has the ability to gain significant media coverage and thus impact public authorities more significantly. It is therefore necessary for local authorities to develop and implement policies aimed at raising children's awareness on the topic of overtourism.

The second change is regarding cooperation. Academic literature has discussed many forms of cooperation amongst different stakeholders, but it has not happened effectively yet in the tourism industry (Sigala, 2020). In particular, this study suggests to collaborate with anti-tourist movements and consider them as an opportunity to educate visitors. By getting closer to these groups, authorities can not only benefit from a convincing educational tool insofar as



these movements are strongly committed locally, but can also make turn these groups into fully fledged stakeholders, rather than uncontrollable outsiders. The collaboration with these movements can be done for example through living labs which are virtual or physical ecosystems involving public and private stakeholders with the common aim to discuss, research and solve challenges faced on a regular basis (Westerlund & Leminen, 2011). Living labs facilitates co-creation, innovation and experimentation (Westerlund & Leminen, 2011), thus leading the bodies in charge of the industry at the international, national, and local levels to interact and coordinate their efforts.

## References

- Adie, B. A., Falk, M., & Savioli, M. (2020). Overtourism as a perceived threat to cultural heritage in Europe. *Current Issues in Tourism*, 23(14), 1737–1741.
- Anderko, L., Chalupka, S., Du, M., & Hauptman, M. (2020). Climate changes reproductive and children's health: A review of risks, exposures, and impacts. *Pediatric Research*, 87(2), 414–419.
- Atzori, R. (2020). Destination stakeholders' perceptions of overtourism impacts, causes, and responses: The case of Big Sur, California. *Journal of Destination Marketing & Management*, 17, 100440.
- Baker, S. M., Gentry, J. W., & Rittenburg, T. L. (2005). Building understanding of the domain of consumer vulnerability. *Journal of Macromarketing*, 25(2), 128–139.
- Brooker, E., & Joppe, M. (2014). Developing a tourism innovation typology: Leveraging liminal insights. *Journal of Travel Research*, 53(4), 500–508.
- Buckingham, D. (2007). Selling childhood? Children and consumer culture. *Journal of Children and Media*, 1(1), 15–24.
- Bürgener, L., & Barth, M. (2018). Sustainability competencies in teacher education: Making

- teacher education count in everyday school practice. *Journal of Cleaner Production*, 174, 821–826.
- Butler, R. W., & Dodds, R. (2022). Overcoming overtourism: a review of failure. *Tourism Review*, 77(1), 35–53.
- Camatti, N., Bertocchi, D., Carić, H., & van der Borg, J. (2020). A digital response system to mitigate overtourism. The case of Dubrovnik. *Journal of Travel & Tourism Marketing*, 37(8–9), 887–901.
- Canosa, A., & Graham, A. (2016). Ethical tourism research involving children. *Annals of Tourism Research*, 61, 219–221.
- Capocchi, A., Vallone, C., Pierotti, M., & Amaduzzi, A. (2019). Overtourism: A literature review to assess implications and future perspectives. *Sustainability*, 11(12), 3303.
- Chaney, D. (2022). From Learning How to Manage A Pandemic to Learning How to Be More Sustainable: Covid-19 Crisis Management and Double-Level Learning. *Tourism Analysis*, 27(3), 363–374.
- Chaney, D., & Seraphin, H. (2021). Covid-19 crisis as an unexpected opportunity to adopt radical changes to tackle overtourism. *Anatolia*, 1–3.
- Cheung, K. S., & Li, L.-H. (2019). Understanding visitor–resident relations in overtourism: Developing resilience for sustainable tourism. *Journal of Sustainable Tourism*, 27(8), 1197–1216.
- Danneels, E., & Vestal, A. (2020). Normalizing vs. analyzing: Drawing the lessons from failure to enhance firm innovativeness. *Journal of Business Venturing*, 35(1), 105903.
- de Moor, J., De Vydt, M., Uba, K., & Wahlström, M. (2021). New kids on the block: Taking stock of the recent cycle of climate activism. *Social Movement Studies*, 20(5), 619–625.
- Denyer, D., & Tranfield, D. (2009). Producing a systematic review. In D. Buchanan & A. Bryman (Eds.), *The Sage Handbook of Organizational Research Methods* (pp. 671–689).

Sage Publications Ltd.

Dodds, R., & Butler, R. (2019a). *Overtourism: Issues, realities and solutions* (Vol. 1). Walter de Gruyter GmbH & Co KG.

Dodds, R., & Butler, R. (2019b). The phenomena of overtourism: A review. *International Journal of Tourism Cities*.

Donthu, N., Kumar, S., Pandey, N., Pandey, N., & Mishra, A. (2021). Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis. *Journal of Business Research*, 135, 758–773.

Doxey, G. V. (1975). A causation theory of visitor-resident irritants: Methodology and research inferences. *Travel and Tourism Research Associations Sixth Annual Conference Proceedings*, 195–198.

Duignan, M. B., Everett, S., & McCabe, S. (2022). Events as catalysts for communal resistance to overtourism. *Annals of Tourism Research*, 96, 103438.

Falagas, M. E., Pitsouni, E. I., Malietzis, G. A., & Pappas, G. (2008). Comparison of PubMed, Scopus, Web of Science, and Google scholar: strengths and weaknesses. *The FASEB Journal*, 22(2), 338–342.

Fontanari, M., & Traskevich, A. (2023). Smart-solutions for handling overtourism and developing destination resilience for the post-covid-19 era. *Tourism Planning & Development*, 20(1), 86–107.

Frow, P., McColl-Kennedy, J. R., Hilton, T., Davidson, A., Payne, A., & Brozovic, D. (2014). Value propositions: A service ecosystems perspective. *Marketing Theory*, 14(3), 327–351.

González, A. T. (2018). Venice: The problem of overtourism and the impact of cruises. *Investigaciones Regionales-Journal of Regional Research*, 42, 35–51.

Gössling, S., McCabe, S., & Chen, N. C. (2020). A socio-psychological conceptualisation of

- overtourism. *Annals of Tourism Research*, 84, 102976.
- Gössling, S., Scott, D., & Hall, C. M. (2021). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20.
- Hadjikakou, M., Chenoweth, J., & Miller, G. (2013). Estimating the direct and indirect water use of tourism in the eastern Mediterranean. *Journal of Environmental Management*, 114, 548–556.
- Illia, L., Sonpar, K., & Bauer, M. W. (2014). Applying co-occurrence text analysis with ALCESTE to studies of impression management. *British Journal of Management*, 25(2), 352–372.
- Johnson, S. (1976). *The history of Rasselas, prince of Abissinia*. Penguin.
- Jones, O., & Gatrell, C. (2014). The future of writing and reviewing for IJMR. *International Journal of Management Reviews*, 16(3), 249–264.
- Koens, K., Melissen, F., Mayer, I., & Aall, C. (2021). The Smart City Hospitality Framework: Creating a foundation for collaborative reflections on overtourism that support destination design. *Journal of Destination Marketing & Management*, 19, 100376.
- Koens, K., Postma, A., & Papp, B. (2018). Is overtourism overused? Understanding the impact of tourism in a city context. *Sustainability*, 10(12), 4384.
- Koh, E. (2020). The end of over-tourism? Opportunities in a post-Covid-19 world. *International Journal of Tourism Cities*, 6(4), 1015–1023.
- Košćak, M., Knežević, M., Binder, D., Pelaez-Verdet, A., Işik, C., Mičić, V., Borisavljević, K., & Šegota, T. (2021). Exploring the neglected voices of children in sustainable tourism development: A comparative study in six European tourist destinations. *Journal of Sustainable Tourism*, 1–20.
- Kouroupi, N., & Metaxas, T. (2023). Can the Metaverse and Its Associated Digital Tools and Technologies Provide an Opportunity for Destinations to Address the Vulnerability of

- Overtourism? *Tourism and Hospitality*, 4(2), 355–373.
- Kuščer, K., & Mihalič, T. (2019). Residents' attitudes towards overtourism from the perspective of tourism impacts and cooperation—The case of Ljubljana. *Sustainability*, 11(6), 1823.
- Kuvan, Y. (2005). The use of forests for the purpose of tourism: the case of Belek Tourism Center in Turkey. *Journal of Environmental Management*, 75(3), 263–274.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Li, J., Weng, G., Pan, Y., Li, C., & Wang, N. (2021). A scientometric review of tourism carrying capacity research: Cooperation, hotspots, and prospect. *Journal of Cleaner Production*, 325, 129278.
- Lund, K., & Burgess, C. (1996). Producing high-dimensional semantic spaces from lexical co-occurrence. *Behavior Research Methods, Instruments, & Computers*, 28(2), 203–208.
- Mandić, A., Pavlić, I., Puh, B., & Séraphin, H. (2023). Children and overtourism: An experiment in cognitive neuroscience to reflect on exposure and behavioural consequences. *TTRA Europe Conference*.
- Mandják, T., Lavissière, A., Hofmann, J., Bouchery, Y., Lavissière, M. C., Faury, O., & Sohier, R. (2019). Port marketing from a multidisciplinary perspective: A systematic literature review and lexicometric analysis. *Transport Policy*, 84, 50–72.
- Mihalache, M., & Mihalache, O. R. (2016). Organizational ambidexterity and sustained performance in the tourism industry. *Annals of Tourism Research*, 56, 142–144.
- Mihalic, T. (2020). Conceptualising overtourism: A sustainability approach. *Annals of Tourism Research*, 84, 103025.
- Mihalic, T., & Kuščer, K. (2021). Can overtourism be managed? Destination management factors affecting residents' irritation and quality of life. *Tourism Review*, 77(1), 16–34.
- Milano, C., Novelli, M., & Cheer, J. M. (2019). Overtourism and degrowth: a social

- movements perspective. *Journal of Sustainable Tourism*, 27(12), 1857–1875.
- Nepal, R., & Nepal, S. K. (2021). Managing overtourism through economic taxation: policy lessons from five countries. *Tourism Geographies*, 23(5–6), 1094–1115.
- Nissen, S., Wong, J. H. K., & Carlton, S. (2021). Children and young people's climate crisis activism—a perspective on long-term effects. *Children's Geographies*, 19(3), 317–323.
- Panayiotopoulos, A., & Pisano, C. (2019). Overtourism dystopias and socialist utopias: Towards an urban armature for Dubrovnik. *Tourism Planning & Development*, 16(4), 393–410.
- Papadopoulou, N. M., Ribeiro, M. A., & Prayag, G. (2022). Psychological Determinants of Tourist Satisfaction and Destination Loyalty: The Influence of Perceived Overcrowding and Overtourism. *Journal of Travel Research*, 00472875221089049.
- Pasquinelli, C., & Trunfio, M. (2020). Overtouristified cities: an online news media narrative analysis. *Journal of Sustainable Tourism*, 28(11), 1805–1824.
- Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know? *International Business Review*, 29(4), 101717.
- Plichta, J. (2019). The co-management and stakeholders theory as a useful approach to manage the problem of overtourism in historical cities—illustrated with an example of Krakow. *International Journal of Tourism Cities*.
- Reinert, M. (1990). Alceste une méthodologie d'analyse des données textuelles et une application: Aurelia De Gerard De Nerval. *Bulletin of Sociological Methodology*, 26(1), 24–54.
- Reinert, M. (1993). Les mondes lexicaux et leur logique. *Langage & Société*, 66(1), 5–39.
- Rosenow, J. E., & Pulsipher, G. L. (1979). *Tourism the good, the bad, and the ugly*. Century Three Press.
- Rothenberg, A. (1996). The Janusian process in scientific creativity. *Creativity Research*

*Journal*, 9(2–3), 207–231.

Routledge, P. (2001). “Selling the rain”, resisting the sale: Resistant identities and the conflict over tourism in Goa. *Social & Cultural Geography*, 2(2), 221–240.

Sanchez, P. M., & Adams, K. M. (2008). The Janus-faced character of tourism in Cuba. *Annals of Tourism Research*, 35(1), 27–46.

Schill, M., Godefroit-Winkel, D., & Hogg, M. K. (2020). Young children’s consumer agency: The case of French children and recycling. *Journal of Business Research*, 110, 292–305.

Seraphin, H., Gowreesunkar, V., Zaman, M., & Lorey, T. (2019). Limitations of Trexit (tourism exit) as a solution to overtourism. *Worldwide Hospitality and Tourism Themes*.

Seraphin, H., & Ivanov, S. (2020). Overtourism: a revenue management perspective. *Journal of Revenue and Pricing Management*, 19(3), 146–150.

Seraphin, H., Sheeran, P., & Pilato, M. (2018). Over-tourism and the fall of Venice as a destination. *Journal of Destination Marketing & Management*, 9, 374–376.

Seraphin, H., Yallop, A. C., Seyfi, S., & Hall, C. M. (2022). Responsible tourism: The ‘why’ and ‘how’ of empowering children. *Tourism Recreation Research*, 47(1), 62–77.

Séraphin, H., Zaman, M., Olver, S., Bourliataux-Lajoinie, S., & Dosquet, F. (2019). Destination branding and overtourism. *Journal of Hospitality and Tourism Management*, 38(1), 1–4.

Shepherd, D. A., Covin, J. G., & Kuratko, D. F. (2009). Project failure from corporate entrepreneurship: Managing the grief process. *Journal of Business Venturing*, 24(6), 588–600.

Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, 117, 312–321.

Smyrniotis, N., & Ratinaud, P. (2017). The Charlie Hebdo attacks on Twitter: A comparative analysis of a political controversy in English and French. *Social Media+ Society*, 3(1),

2056305117693647.

- Torres-Harding, S., Baber, A., Hilvers, J., Hobbs, N., & Maly, M. (2018). Children as agents of social and community change: Enhancing youth empowerment through participation in a school-based social activism project. *Education, Citizenship and Social Justice*, 13(1), 3–18.
- Tortella, B. D., & Tirado, D. (2011). Hotel water consumption at a seasonal mass tourist destination. The case of the island of Mallorca. *Journal of Environmental Management*, 92(10), 2568–2579.
- Tranter, B. (2010). Environmental activists and non-active environmentalists in Australia. *Environmental Politics*, 19(3), 413–429.
- Välikangas, L., Hoegl, M., & Gibbert, M. (2009). Why learning from failure isn't easy (and what to do about it): Innovation trauma at Sun Microsystems. *European Management Journal*, 27(4), 225–233.
- Veríssimo, M., Moraes, M., Breda, Z., Guizi, A., & Costa, C. (2020). Overtourism and tourismphobia: A systematic literature review. *Tourism: An International Interdisciplinary Journal*, 68(2), 156–169.
- Visser, W. (2015). *Sustainable frontiers: Unlocking change through business, leadership and innovation*. Greenfield Publishing.
- Weber, F. (2017). Overtourism. An analysis of contextual factors contributing to negative developments in overcrowded tourism destinations. *BEST EN Think Tank XVII: Innovation and Progress in Sustainable Tourism*, 315–320.
- Weber, F., Egli, F., Ohnmacht, T., & Stettler, J. (2019). Lucerne and the impact of Asian group tours. In R. Dodds & R. Butler (Eds.), *Overtourism: Issues, realities and solutions* (pp. 169–184). De Gruyter Oldenbourg.
- Westerlund, M., & Leminen, S. (2011). Managing the challenges of becoming an open



innovation company: experiences from Living Labs. *Technology Innovation Management Review*, 1(1), 19–25.

Wolfe, R. A., Gephart, R. P., & Johnson, T. E. (1993). Computer-facilitated qualitative data analysis: Potential contributions to management research. *Journal of Management*, 19(3), 637–660.

Table 1. Articles characteristics

Articles characteristics	N=236	%
<b>Year of publication</b>		
2021	103	43.64
2020	64	27.12
2019	55	23.31
2018	14	5.93
<b>Subject area<sup>a</sup></b>		
<i>Social sciences (tourism)</i>	194	82.20
<i>Business, management and accounting</i>	139	58.90
<i>Environmental Science</i>	95	40.25
<i>Agricultural and Biological Sciences</i>	62	26.27
<i>Economics</i>	16	6.78
<i>Engineering</i>	6	2.54
<b>Five most cited keywords<sup>a,b</sup></b>		
<i>Tourist destination</i>	53	22.46
<i>Tourism development</i>	41	17.37
<i>Sustainability</i>	38	16.10
<i>Ecotourism</i>	31	13.14
<i>Sustainable tourism</i>	31	13.14
<b>Five most represented journals</b>		
<i>Sustainability</i>	54	22.88
<i>International Journal of Tourism Cities</i>	20	8.47
<i>Journal of Sustainable Tourism</i>	19	8.05
<i>Worldwide Hospitality and Tourism Themes</i>	16	6.78
<i>Annals of Tourism Research</i>	11	4.66

<sup>a</sup> Articles can be related to several categories

<sup>b</sup> Except the words 'overtourism' and 'tourism'

Figure 1. Literature search strategy

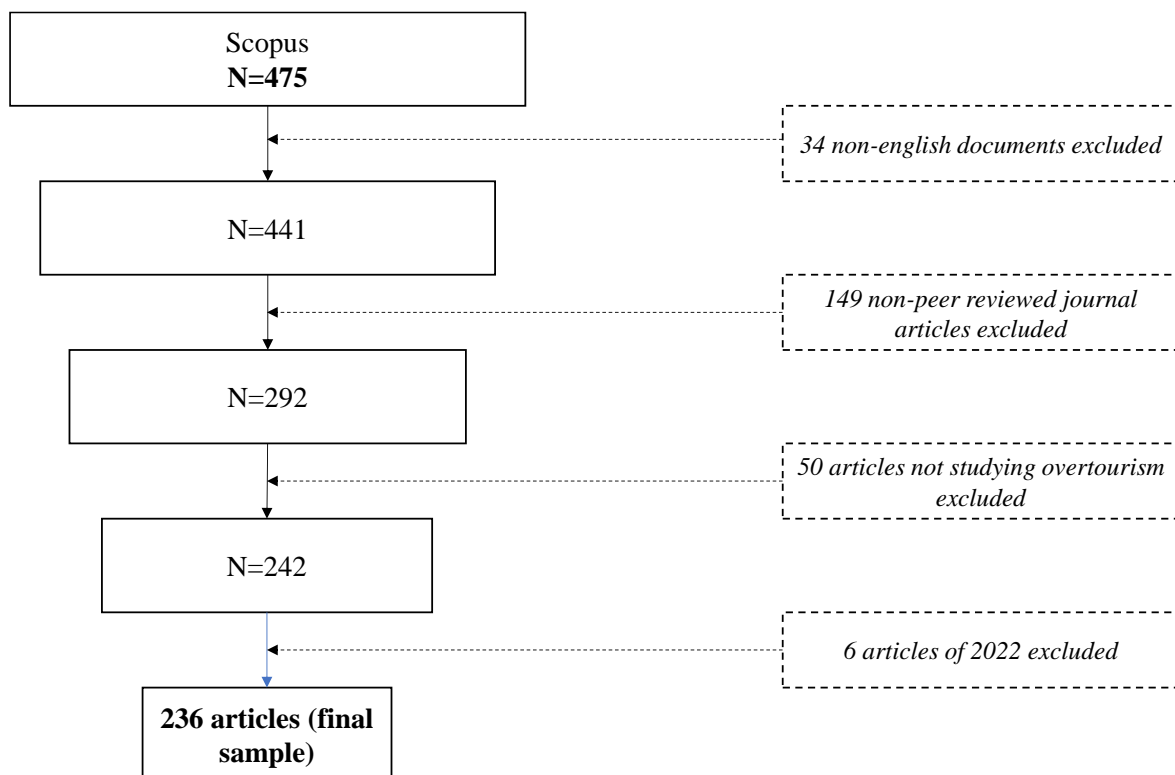


Figure 2. Descending hierarchical classification-based dendrogram

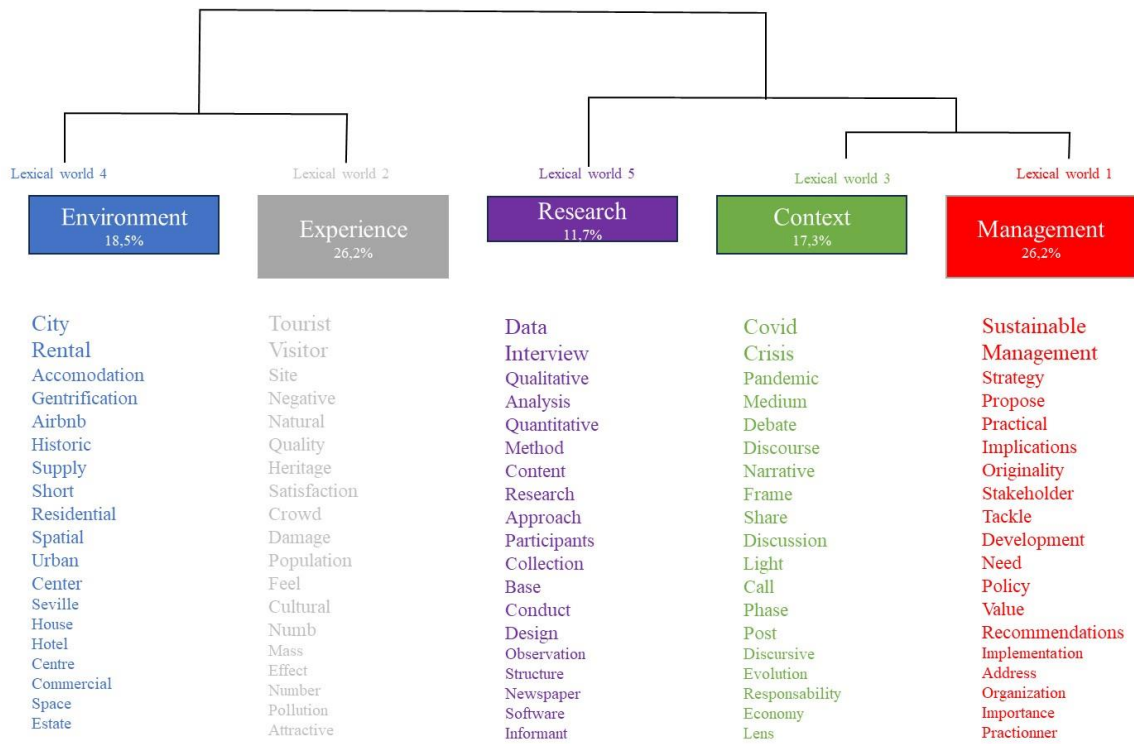


Figure 3. Factorial correspondence analysis

