

RETHINKING TOURISM UNDER THE PANDEMIC LENS: THE FOCUS ON SUSTAINABILITY ISSUES

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Abstract

Purpose – The main purpose of this research is to investigate the current state of the art of tourism and sustainability-related discussions and find out what could be possible ways and research potentials in the context of the global pandemic and future similar health emergencies.

Methodology – We conducted a content-analysis based literature review, analyzing key findings of previous studies in the field, aiming to propose future research lines.

Findings – The negative impacts brought about by the pandemic have induced worldwide prevention measures in controlling the diffusion of COVID-19. Recovery strategies and business reconstructions have aroused main attention in tourism-related subsectors, especially for the most suffering industries like hospitality and transportation, in the pursuit of a sustainable system and resolution of realistic problems as over-tourism, job insecurity, tourist trustfulness and revisitation, and stakeholder wellbeing. Tourism practitioners are also faced with intractable socio-cultural issues, like unemployment problems, indecent jobs, racial and cultural discrimination and loss of customer trust. The utilization of new technologies is expected to provide vital guidance for the improvement of decision-making and strategic planning in the acceleration of tourism resilience by fulfilling tourist experiences and promoting local destination management when the pandemic comes to a stabilization.

Contribution – This article contributes to enriching the existing literature in tourism sustainability studies, highlighting the current academic interests in tourism resilience and tourism sustainable transformation, especially in the face of the global severe health crises like the COVID-19. It also provides implications for future researchers, tourism practitioners and local destinations in finding possible way-out, research and investment potentials in the resolution of social problems, improvement of satisfied tourism experience and responsible destination marketing, governance and long-term local development.

Keywords: COVID-19, tourism sustainability, sustainable transformation, tourism resilience, destination management, crisis management.

INTRODUCTION

In the long history of human development, we have witnessed the continuous progress of human civilization through overcoming disasters one after another. The pervasive diffusion of the pandemic has caused severe damage over global economy, huge job losses and even political conflicts out of unstable country image (Zenker and Kock 2020). As a consequence, worldwide scholars have developed a lot of research on economic recovery also in the tourism industry, as a sector seriously damaged by the pandemic (Abbas et al. 2021). Main research concentrates in the investigation over industrial recovery and resilience especially in hospitality, restaurant and transportation industries (e.g., customer communication, effective risk and service management, food

security, green transformation, resource allocation) (Brizek et al. 2021; Foroudi et al. 2021; Gössling et al. 2020; Wieckowski 2021), the pandemic crisis management (e.g., prevention and control over the pandemic transmission and human mobility, safety supervision, public disinfection, social distancing) (Le and Phi 2021; Liu and Chang 2020), reconstruction of local destinations (Abraham et al. 2021; Balakrishnan and Sambasivana 2022), and the most important, the sustainable transformation of the whole industry (Brouder 2020; Song et al. 2022; Zenker and Kock 2020).

From previous studies, we could find similar strategies illustrated in the context of severe global crises like SARS, Ebola, etc. (Chen et al. 2021; Novelli, et al. 2018), aiming to provide practical and realistic solutions to avoid the reemergence of this kind of health diseases. Nowadays, faced with the gradual revival of global tourism and mobility due to the finale of the global pandemic in the majority of worldwide countries, it is still the right time to build up a holistic reflection over previous thoughts and key findings, and come up with new thinking and ideas in finding tourism research directions especially considering post-pandemic sustainable recovery aspects. Content analysis is beneficial in investigating the current state of existing literature by categorizing main themes and contents within a certain field and topics (Şengel et al. 2020), and it would be contributable in revealing the main discussions in terms of tourism sustainability issues from several dimensions when faced with the global pandemic. As a consequence, the main objective of this paper is to conduct a comprehensive content analysis upon the tourism sustainability related issues emphasized especially under the pandemic backgrounds, and to propose possible research potentials for the post-pandemic tourism reconstruction and recovery for relevant researchers and tourism practitioners.

1. RESEARCH METHODOLOGY

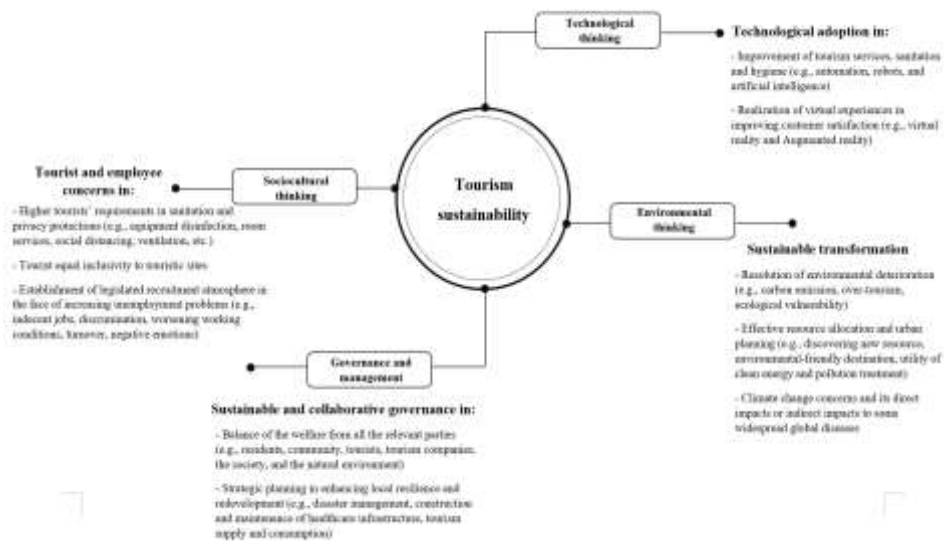
We sought to have a comprehensive overview over previous literature on the tourism sustainability issues, especially in the context of the COVID-19 pandemic backgrounds. Thus, we collected relevant data applying the following steps and procedures. We started stating key terms that are related to our research, considering 1) the pandemic terms and synonyms as “COVID-19” and “coronavirus”, 2) tourism related synonyms as travel and traveling. We then used the searching functions in the Web of Science core collection database and defined the keywords as (COVID* OR pandemic* OR "coronavirus") AND (touris* or travel*), through utilizing a “*” wildcard so as to include tourism related entities like tourists, travelers and other similar expressions (Yang et al. 2022a). We also refined other inclusion criteria as – time span in 2020 and 2021 (the most severe periods of the pandemic), article type – only article, and language – English only, and obtained a total number of 3850 articles. Subsequently, we took a careful look over all the retrieved articles, examining all titles, keywords, abstracts and key contents and obtained 1068 papers, which constituted our sample. Other papers were excluded due to irrelevance of research fields or topics, like papers concentrating only on the COVID-19 transmission routine, treatment, vaccines, or those involved with tourism debates without discussing the COVID-19 impacts in this field. We kept all the information from tourism and other related industries and entities like hospitality industries, hotel industries, transportation, tourism destinations, touristic cities, and so on. In a further step, an in-depth content literature analysis was conducted, analyzing key findings of previous studies of this field

as well as proposing future research lines. We also targeted keywords - “sustainability” or “sustainable tourism” or “sustainable development” within this database and found that 310 papers concentrated on this issue, thus it became the central topic to be illustrated in the following section.

2. RESEARCH FINDINGS AND DISCUSSION

Throughout the reviewing of previous literature, we have found several key issues, such as the resolution of environmental protection, socio-cultural concerns like wage gaps, unequal working conditions, and unbalanced local destination management, and so on, that are worthy further in-depth thinking and attention by both tourism academics and practitioners. Their revision will be useful to find possible solutions in the tourism resilience and for coming up with some new thoughts in rethinking the previous tourism development model and pursuing a sustainable transformation. The definition of tourism sustainable development has been illustrated by UNWTO (UNWTO 2023), in enhancing the needs of tourist, the industry, the local community and the natural environment, under the consideration of both current and future environmental, socio-cultural and economic impacts. Based on this concept, we categorized and summarized these key issues into four dimensions (see Figure 1) - the environmental, socio-cultural, technological and governance related topics (Utkarsh and Sigala 2021; Yang et al. 2022a) from a broader sense, embraced with the main focus – the development of tourism sustainability under the pandemic lens.

Figure 1: Summary of the Content Analysis in Tourism Sustainability Issues under the Pandemic Lens



Source: Elaborated by the authors

2.1. Environmental-related thinking

One of the main concerns focused on the environmental topic relates to the questioning of the volume-driven tourism model (Brouder 2020; Gössling et al. 2020; Hall et al. 2020; Higgins-Desbiolles 2020), especially when confronting carbon emission, over-tourism, ecological vulnerability and other similar problems that would deteriorate the nature environments, happened frequently in some popular tourism destinations and touristic cities (Agrusa et al. 2021; Cristiano and Gonella 2020; Monteiro et al. 2021; Santos Roldán et al. 2020). In this dimension, we could find favorable voices in the support of effective tourism resource reallocation, to less-discovered fields and regions, like in-near rural and adventurous areas, which are expected to relieve the current over-tourism and cross transmission puzzles, as well as to preserve historical and natural scenic spots (Charalambous and Violaris 2021). Other opinions shed light on the utilization of modern technologies in enhancing tourism management over local tourism flow, strategic urban planning upon tourism mobility, for the construction of environmental-friendly tourism destinations with less external interventions to the local ecosystem, environments and communities (Im et al. 2021; Värzaru et al. 2021; Zeng et al. 2020).

At the same time, faced with the gradual reduction of global carbon footprints due to large decrement of global mobility, especially in the reduction of international air travels, advocative opinions consolidated in the continuance of this green model (Gössling and Higham 2020), also; in a further step, developed into a sustained mode, through increasing the utility of clean energy and pollution treatment (Gössling 2020). In recent research, Bakreen et al. (2022) found similar results in optimizing the operational resilience of aviation industries towards a more sustained development model, mainly through improving capacity and operational efficiencies, passenger communication, worker and stakeholder transversal abilities in the combat over the extreme uncertainties.

There was also an increasing concern related to the climate change and its direct impacts (e.g., food and waterborne diseases) or indirect impacts to some widespread global diseases (e.g., vector-borne diseases and infectious diseases), from which a predictive scenario in terms of climate, socio-economic and environmental perspectives has been expected to be reconsidered under the conjoint efforts from all relevant stakeholders, as the government, the local community, residents, professionals, scholars, etc. (Semenza and Paz 2021). It is also worth mentioning the possibility of proposing active risk assessments under the consideration of both climate and infectious disease, like the current pandemic, to mitigate both the negative impacts from them, and also to the human health.

2.2. Sociocultural-related thinking

From this dimension, main considerations manifested the significance in rethinking the benefits from two tourism related entities – the tourists and employees of the tourism sectors. From the tourist perspective, on the one hand, traveling preferences were found to be changed dramatically – towards a chase of nature tourism, with slow pace, less human disturbance and more interactions with the nature (Donaire et al. 2021; Flores-

Ruiz et al. 2021; Jeon and Yang 2021). At the same time, higher sanitation and privacy protection (e.g., higher requirements in equipment disinfection, room services, social distancing, ventilation, etc.) were proposed during travels out of the avoidance to cross infection and exposure to COVID-19 virus (Bae and Chang 2020; Kourgiantakis et al. 2021). From this dimension, recent studies pointed out that the huge reduction of tourists due to the pandemic actually had a favorable effect on the sustainable tourism development; notwithstanding, future efforts should be paid into the construction of local sustained tourism infrastructures (e.g., environmental-friendly projects, innovative stimulus, clean energy, vaccine and mask usage, tourism coupons, positive media promotion, etc.) so as to reduce customer fears in traveling and encourage their revisit intentions (Ahmad et al. 2023; Hüsser and Ohnmacht 2023). Moreover, under the arising safety concerns and anxieties of tourists, tourism companies ought to provide transparent and flexible information upon open, booking, cancelation policies, and sanitation standards (Rodríguez-Antón and Alonso-Almeida 2020; Kaushal and Srivastava 2021), which would be helpful in regaining customer trustfulness during and after the pandemic periods (Foroudi et al. 2021; Yacoub and Eihajjar 2021). As a consequence, we could expect more sustainable practices from both the governments and tourism practitioners in the development of post-pandemic tourism plans and protocols in the stimulation of sustainable traveling behaviors without deteriorating the environment, which would be worthy of future endeavor.

Previous literature identifies that country image, its influence on tourist, and their perceptions towards tourism places had an either positive or negative impact on travel intentions. For example, tourists might plan their travels due to place attachment of a certain touristic site, attracted by the positive promotion of destination image, or conversely, cancel their arrangements because of higher probability of local exposure to the COVID-19 (Abraham et al. 2021; Qiao et al. 2021; Wang et al. 2020). As a consequence, how to improve the destination safety image and effectively convey this image to current and potential travelers would become major concerns for local destination managers (Song et al. 2022; Xie et al. 2021) in regaining customer trustfulness and confidence. On the other hand, another perspective that drew the concern was a discriminative experiences sense of exclusivity of local tourism from Chinese tourists by virtue of cultural discrepancy, racial and gender bias due to misleading media coverage. It was discovered by Yang and Wong (2020) that these kinds of experiences would deteriorate tourists' mental wellbeing, whereas positive social media participations and open communication might relieve this impact. It has thus raised further thinking towards how to effectively reduce this symptom and improve the tourist equal accessibility to the touristic sites without being offended by cultural issues, when the global tourism turns into a rehabilitation (Yang et al. 2022a).

Regarding the second entity of employees in the tourism sector, the global pandemic also enlarged the health disparities for people with less decent jobs, the minorities, and those from the developing and unstable countries, and increased the exposure risks for those who have to work in the first front stage like in the services and healthcare industries (Sorensen et al. 2021). Faced with the huge increment of global unemployment rate, turnovers, worsening working conditions and triggered negative emotions, many scholars stated the necessity of establishing legislated recruitment atmosphere (e.g., well-documented contract, career training, undiscriminated and equal corporate culture, labor

rights protection, etc.) (Baum et al. 2020; Salem et al. 2021; Zhang et al. 2021). In addition, it was also essential to pay attention to some undeclared jobs and ignored groups due to racial, regional or cultural discriminations (Higgins-Desbiolles 2020). As the pandemic comes to a stability, recent research shed lights on some new trends in the global reemployment, in the gradual recovery of reskilling, less labor migration, better working flexibility with teleworking, and so on. However, all of these trends remain further verification and examination out of the everlasting impact of the COVID-19 on the global health conditions, and some controversial voices still exist in the implementation of these new policies (e.g., staff adaptability to new working environments, rotations and the utilization of modern technologies, self-psychological adjustment to new changes and learning new skills, etc.) (Peters et al. 2022).

2.3. Technological-related thinking

The widespread of the pandemic bolstered the application of new technologies such as automation, robots, and artificial intelligence in improving tourism service qualities, reducing social anxiety and the risks of human exposure to the COVID-19 (Lau 2020), and boosting corporate competitiveness accomplished through more flexible operations and reducing costs in the long-term (Ivanov et al. 2022; Seyitoğlu and Ivanov 2020). Recent studies provided similar thoughts in the development of big data, to be utilized into public health surveillance, pandemic supervision, trends forecasting and mobility tracing (Piccarozzi and Aquilani 2022). These kinds of modern technologies have also been expected to be applied into the tourism fields, in the monitory of customer physical conditions (e.g., temperature, cough and other symptoms, etc.) and touristic mobilities (e.g., length of stays, preferable routines, tourism peak, etc.) in main destinations so as to optimize urban city pandemic preventions (Cheng et al. 2023; Yang et al. 2022b).

Moreover, it was advisable to recover the human services according to the customer preferences to bring about more physical interactions and intimacy (Kim et al. 2021; Seyitoğlu and Ivanov 2020). In the post-pandemic era, it was also crucial to arouse customer confidence towards tourism products, where virtual reality technology would gain possible growths and contribute to the recovery of the whole industry (Yung et al. 2021). Previous researchers stressed that immersive and unforgettable virtual experiences would not only improve customer satisfaction (Li et al., 2021; Van et al. 2020), but also promote psychological wellbeing to the tourists because of personalized services and virus isolation (Mohanty et al. 2020; Yang et al. 2021). Recent findings also confirmed this idea that virtual experiences could provide positive sentiments to the tourists motivated by the sense of design, novelty, and innovation, as well as the traveling convenience and lower costs it brought when faced with crisis situations; however, this positive sentiment proved to be unstable when people are able to access the onsite tourism again (Zhang et al. 2022).

2.4. Governance and management-related thinking

The last perspective concern lied in the discussion over sustainable tourism and collaborative governance issues, as suggested by Dangi and Petrick (2021). They also

advocated the idea that a sustainable governance should be of critical relevance to the benefits of all the stakeholders – the residents, the community, the society, and the natural environment, under the enhancement of the vigorous development and more opportunities to all of the related entities. To be more specific, this would include promoting local re-employment by supporting tourism business of new start-ups, small and medium-sized corporates, effective allocation of governmental financial stimulus; at the same time, equilibrating the welfare of tourists and local resident, in creating both meaningful tourism experience and local satisfaction (Sigala 2020; Renaud 2020). At the same time, it was advocated by Le and Phi (2021) that the short-term profit model could be transformed into a diverse one, which emphasized in advance crisis preparedness and recovery of financial resources and stability in front of any kind of provoking diseases and social uncertainties.

In recent research, we could find similar voices in the support of long-term business resilience governance and management over external crisis, proposed by Sanchis et al. (2022), in providing vital practical implications for Spanish enterprises. In this research, they emphasized the importance of environmental adaptability when confronted with distressing outside challenges, like the pandemic. As a consequence, transparent communications and coordinated strategies put forward by all the relevant parties, as well as alleviation of the nervous moods from the party members, especially the employees, would be of vital significance in handling this kind of difficulties (Sanchis et al. 2022). In a further step, this corporate-based mechanism could be extended to a broader meaning of sense, like touristic destinations, in the pursuit of possible local tourism resilience and redevelopment in the future path. At the same time, Nandi (2022) stressed several key points to be considered in the disaster management in enhancing the real-time supervision over local healthcare condition, capacity, full involvement of the locality and communities, and maintaining the global supply and logistic networks in promoting the orderly resumption of economic activities. We could also forecast a similar management strategy in allocating global resources and energies in the reconstruction of global tourism, through coordinating the multi-stakeholder strategy into the tourism sustainable management and governance, and promoting the responsible actions from all the parties (Yang et al. 2022a).

CONCLUSION

This article has revised tourism sustainability related research under the pandemic lens, through in-depth content analysis upon the previous literature developed in 2020 and 2021 - the most severe pandemic periods, and proposed the following thinking in the environmental, socio-cultural, technological and governance perspectives. To be more specific, from the environmental dimension, several key themes have been paid great attention in the resolution of environmental deterioration, ecological vulnerability and climate change (Agrusa et al. 2021; Higgins-Desbiolles 2020), from which a sustained tourism development model, under the consideration of effective resource allocation, strategic tourism management and stakeholder-friendly protocols would be expected to be constructed out of the benefits of all the relevant stakeholders (Gössling et al. 2020; Vărzaru et al. 2021; Zeng et al. 2020).

Socio-cultural related thinking lies in the review over tourist and tourism employee issues – on the one hand, we have witnessed dramatic changes in tourist traveling behaviors towards cleaner and safer destinations with better sanitation, disinfection and privacy protection measures (Bae and Chang 2020; Kourgiantakis et al. 2021). Moreover, upcoming puzzles like tourist discrimination due to cultural discrepancy and negative tourist destination perceptions in the lack of safety local image, also became intractable issues to be appropriately solved for the tourism destinations so as to win back the customer confidence (Song et al. 2022; Xie et al. 2021; Yang and Wong 2020). On the other hand, the global pandemic has widened the disparities for the rich and the poor, resulted by larger amounts of unemployment, turnovers, job insecurities, cultural and racial discriminations (Higgins-Desbiolles 2020; Sorensen et al. 2021). As a consequence, a more legislated working system is expected to be established in the recovery of global workforce, through mitigating unequal employment and anxious staff emotions; notwithstanding, it needs further testification in how to effectuate these practices (Baum et al. 2020; Peters et al. 2022; Salem et al. 2021; Zhang et al. 2021).

From the technological dimension, previous studies advocate the utilization of modern technologies like automation, robots and virtual reality into the tourism fields to not only improve tourism services but also provide unique tourism experiences in order to attract more customers (Lau 2020; Zhang et al. 2022). Faced with the pandemic backgrounds, we could also expect technological related implementations on the pandemic preventions into local touristic sites, hotels and other places, to create better urban city planning and management (Cheng et al. 2023; Yang et al. 2022b). However, as the global pandemic comes to stability, more voices have appealed closing back to the society, to the people and to the nature. Thus, we might question how to counterbalance both the utilization of modern technologies into the tourism industries and also, the fulfillment of personal intimacy and reinteractions (Kim et al. 2021; Seyitoğlu and Ivanov 2020).

The last concern concentrates on the establishment of sustainable and collaborative tourism governance, under the equilibration of the benefits from all the relevant parties, in the construction of environmental-friendly society, community satisfaction and industrial resilience (Dangi and Petrick 2021). This would need the conjoint efforts of all the stakeholders in developing sustainable tourism management and governance proposals through open communications and collaborations for the same wish in constructing a more responsible future (Yang et al. 2022a).

Overall, this paper has enriched the current state of the art in investigating tourism sustainability related issues, especially in the context of the global pandemic backdrops. This paper has revealed some realistic issues enlarged and triggered by the pandemic, like the deteriorating natural environment (Cristiano and Gonella 2020; Monteiro et al. 2021; Santos Roldán et al. 2020), unequal tourism experiences and employee treatment (Baum et al., 2020; Salem et al. 2021; Sorensen et al. 2021; Yang and Wong 2020; Zhang et al. 2021), as well as proposed some possible solutions and research directions to these problems, such as the utilization of modern technologies into improving tourism management, services, public place sanitation and disinfection, etc. (Im et al. 2021; Piccarozzi and Aquilani 2022; Vărzaru et al. 2021). All the aforementioned perspectives would be of crucial significance in helping tourism scholars explore research potentials and ideas in their research fields. In addition, the research also emphasizes the

importance in the construction of collaborative and sustainable tourism governance, which would provide vital implications to the tourism destination managers, practitioners and local governments in proposing tourism resilience protocols against this global health crisis and other similar diseases in the future (Yang et al. 2022a)

Based on the review of previous literature and discussions over the current findings, we also propose several future research lines that would worthy further considerations in terms of tourism sustainability issues. From the environmental perspective, we could expect more practices in the resolution of environmental preservation, especially in dealing with climate change and over-tourism problems, when combined with more technological efforts. Moreover, tourism practitioners and researchers might pay more attention to the implementation of clean energy, resource allocations into less-discovered areas and fields, so as to relieve the above-mentioned problems. From the technological aspect, research potentials lie in how to combine these technologies into the construction of the modernized society, urban cities and tourism destinations, not only in the improvement of local pandemic prevention, but also in the development of local resilience, in a more sustainable and innovative way. From both the socio-cultural and governance dimensions, several key questions might be raised as:

- 1) How to conduct sustained tourism infrastructures, (e.g., the utilization of modern techs in improving tourism services like ventilation, disease prevention, mobility detection, etc.) in improving both the tourism and local life quality (e.g., the utilization of high-tech and other methods in enhancing tourist experiences and physiological wellbeing).
- 2) How to equilibrate and measure the results of tourism redevelopment and the locality satisfaction (e.g., quantitative numerations of tourism recovery like economic profits, measurements of sustainable practices from local tourism practitioners and governments).
- 3) How to generate collaborative and sustained protocols and plans in resolve tackle problems like staff and tourist discriminative experiences.
- 4) How to make these protocols effectively implemented, especially in some over-tourism areas, especially when faced with unbalanced local governance.

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