The Role of Resilience in Research and Planning in the Tourism Industry

'Resilience has emerged as a hot topic in the tourism and hospitality literature' (Prayag et al. 2018).

The concept of resilience is attracting increasing attention across a wide range of academic disciplines and business sectors. While academic researchers have increasingly employed the concept to inform their work on sustainability, there is also growing interest in a wider conceptualisation of resilience as the focus for tourism planning. With these thoughts in mind, this exploratory paper reviews how the concept of resilience is both illuminating academic research on sustainability and guiding the development of new planning strategies, within the tourist industry and offers some wider reflections on the use of the concept within the industry.

Keywords: Resilience, Tourism, Research, Planning, Climate Change, Disruptive Technologies.

Introduction

The concept of resilience is attracting increasing attention across a wide range of academic disciplines and business sectors (Jones and Comfort 2018; Sarda and Pogutz 2018). On the one hand, academic researchers have increasingly employed the concept to inform their work on sustainability, while on the other hand, there is also growing interest in a wider conceptualisation of resilience as the focus for business planning. Within the tourism industry uncertainties about the growing impact of climate change, the increasing incidence of extreme weather events, the contributions of air traffic and cruising to greenhouse gas emissions and air and water pollution, the environmental and social impacts of tourism in fragile environments and traditional and remote communities, and the proliferation of disruptive technologies, are posing increasingly difficult challenges. These challenges are bringing the concept of resilience into seemingly ever-sharper focus within the industry. With these thoughts in mind, this exploratory paper reviews how the concept of resilience is both illuminating academic research on sustainability and guiding the development of new planning strategies for the tourist industry and offers some wider reflections on the use of the concept within the industry.

Resilience

In everyday language, resilience is seen as the ability to withstand or to bounce back from adversity and disruption. In the academic and business world, a number of meanings have been identified and while Sharifi and Yamagata (2014) suggested that 'despite the abundance of research on

resilience there is still no single, universally accepted definition for it', Fabry and Zeghui (2019) argued 'there are competing definitions of resilience.' Certainly, a number of origins and meanings are claimed for resilience. Hassler and Kohler (2014), for example, claimed that 'resilience as a design principle, was an implicit part of construction knowledge before the nineteenth century' and Sharifi and Yamagata (2014) suggested that 'the concept of resilience has traditionally been used in physics and psychology.' Davoudi (2012 et al.) acknowledged that 'resilience was first used by physical scientists' and argued that in the 1960's 'resilience entered the field of ecology.' MacKinnon and Derickson (2013) suggested that 'the concept of resilience has migrated from the natural and physical sciences to the social sciences and public policy, as the identification of global threats such as economic crisis, climate change and international terrorism has focused attention on the responsive capacities of places and social systems.' Adger (2000) defined social resilience as 'the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change.' More generally, work across the disciplines is concerned with the ability of systems to withstand and recover from major disruptions.

There is also growing recognition of the importance of resilience within the corporate world. PricewaterhouseCoopers (2017a), for example, emphasised their belief that 'enterprise resilience is the most important capability in business today.' Here enterprise resilience is defined as 'an organisation's capacity to anticipate and react to change, not only to survive, but also to evolve' (PricewaterhouseCoopers 2017b.) At the same time, there is growing interest in the creation of resilient business strategies. In introducing 'resilient business strategies', the BSR (2018), have argued 'rather than integrate sustainability into company strategy, we believe companies need to create resilient business strategies.' Such strategies are 'based on an understanding that rapidly-shifting external context — our changing demographics, disruptive technologies, economic dislocation and natural resource scarcity are not only sustainability issues but also business issues (BSR 2018).

More specifically within the tourism industry, Cheer and Lew (2017) claimed 'a paradigmatic shift is taking place in the long-term planning of tourism development, in which the prevailing focus on sustainability is being enhanced with the practical application of resilience planning.' The European Futures Tourism Institute (2019), for example, has claimed that 'the leisure and tourism industry is continuously in motion', that changes include 'changing lifestyles and consumer behaviour, new technologies such as virtual reality, terrorism, climate adaptation, the importance of sustainability, the call for new business models and forms of value creation. As such 'for the sector it is essential to react and anticipate to these developments. In other words, to be resilient' (European Futures Tourism Institute 2018). In their review of 'The Global Conference on Jobs and Inclusive Growth: Partnerships for Sustainable Tourism' held in Jamaica in 2017, Twinning-Ward et al. (2017) argued 'the key word for the conference

was resilience: not only how to build back better, but also how to build resilience into the everyday management of tourism, how to be better prepared, how to manage a crisis, and how to ensure greater shared economic and social benefits from tourism in the region.'

Research into Resilience and Sustainability within the Tourism Industry

The concept of resilience has attracted growing attention from researchers exploring sustainability within the tourism industry and a number of examples provide some flavour of the range and nature of this work. Espiner et al. (2017) suggested that while 'sustainability has endured as an important concept for tourism scholars'.... 'more recently 'resilience has generated appeal in the academic tourism literature as a term that might capture core aspects of sustainability. 'A number of studies have been published on resilience at tourist destinations and in sensitive and potentially vulnerable environments and while some have focussed on conceptual approaches to, and models of, resilience, others have a more empirical focus. Basurto-Cadeno and Pennington-Gray (2018), for example, offered 'a conceptual framework of destination resilience for developing indicators that tourist destinations can use to measure crisis resilience for their tourism industry' which 'is intended as a starting point for a wider discussion of factors that contribute to destination resilience.' Calgaro et al. (2014) adopted a 'dynamic coupled human-environment system perspective' to develop a framework to assess the vulnerability and resilience of tourist destinations.

Lew (2013) outlined a matrix model, based around both the scale and the rate of change within tourism, which presented four contexts, each with distinct resilience issues, and which, in turn, were associated with specific responses, including facilities and services maintenance programmes, training and welfare support systems. Halliday (2018), looked to 'present intersecting theories between destination resilience and sustainable tourism' and proposed a 'heuristic model to stimulate theories of destination resilience within the context of sustainable tourism.' Fabry and Zeghui (2019) identified resilience 'as an emerging concept in destination management' and claimed 'resilience is not a status but a frame of mind.' Basurto-Cadeno and Pennington-Gray (2018) claimed that 'destinations around the world are adopting a resilience framework to deal with the increasing frequency and intensity of disasters affecting the tourism industry' and proposed a scalable resilience model, which is applicable to diverse types of risks and different size destinations.

On the empirical side, Biggs (2011) examined the 'perceived resilience of reef tourism enterprises on Australia's Great Barrier Reef to large disturbances or shocks.' His findings revealed that where owners and managers are themselves 'active in reef tourism as a lifestyle choice' this enhances enterprise resilience. Further Biggs (2011) argued that 'financial and marketing support are the most important actions governments can take to support enterprises in the face of a large shock.' In a similar vein, Biggs et al.

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(2011) explored the resilience of both formal and informal tourism enterprises in a study of reef tourism in Phuket in Thailand. Recognising that coral reef tourism was particularly vulnerable to both extreme natural events and economic and political shocks, Biggs et al. (2011) stressed that enterprise resilience was central to sustainable tourism management and recommended that management policies designed to support reef tourism should encourage enterprise flexibility and facilitate cost cutting measures during times of crisis.

Orchiston (2013) looked to examine tourism disaster planning in a high seismic risk area of New Zealand's Southern Alps, and she drew on the business resilience literature to outline an alternative approach to disaster planning for small communities reliant on tourism. In a study of the remote tourist townships of Franz Josef and Fox Glacier in New Zealand's "Glacier Country" Espiner and Becken (2014), used the concepts of resilience and vulnerability to examine how change and response have shaped the community, conservation and tourism. Further Espiner and Becken (2014) concluded 'vulnerability and resilience are discrete but highly compatible concepts, offering much to the analysis of protected area tourism facing global change. Lambert et al. (2010) presented a framework for evaluating the resilience of whale watching tourism to changes in the occurrence of species and suggested that their finding could offer 'a means by which resilience to global climate change effects on cetacean species (whales, dolphins and porpoises) could potentially be provided.' More generally, Butler (2018) argued for a 'more critical review of so-called sustainable forms of tourism and a focus to shift towards increasing the resilience of destinations, particularly those in sensitive areas, in order to shield them from the effects of inappropriate or excessive tourism development.'

Though Lew (2013), suggested that 'tourism scholars had been somewhat slow to adopt recent conceptual ideas related to community resilience' this is certainly an emerging area of academic endeavour. Five years later, Cheer and Lew (2018) argued that 'for many tourism-centred communities around the globe, the process of adapting to and dealing productively with the transformations to social, political and economic contexts that influence and underline their tourism and wider prospects is an ongoing challenge.' Lew (2013) outlined a matrix model, based around both the scale and the rate of change within tourism, which presented four contexts, each with distinct resilience issues, and which, in turn, were associated with specific responses, including facilities and services maintenance programmes, training and welfare support systems. Bec et al. (2016) suggested that some of the academic work on community resilience had focused on the tourism system's ability to respond to short term problems and looked to identify core concepts of community resilience to develop a framework to explore community resilience to long term tourism decline. Amir et al. (2015) explored the resilience of communities to rural tourism development in Malaysia and Powell et al. (2017) explored how community resilience could assist sustainable tourism development in the Dong Van Geopark in Vietnam. Sydnor-Bousso et al. (2011) discussed the impact of natural disasters on jobs in the hospitality and

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tourism industry, looked to model job resilience after such disasters, and suggested that changes in jobs within the industry are a function of community resilience.

A number of studies have focused on of disaster resilience in the hotel sector. Dobie et al. (2018), for example, suggested 'the hotel and lodging industry will be especially crucial in community response and recovery, as many of these properties are located in coastal regions that are disaster prone, are a crucial component of tourist destination' economies, and often act as hubs for resilience during disasters.' The authors concluded that while many properties are engaging in Corporate Social Responsibility activities during disaster relief, 'corporate management systems have room for maturation and growth to support the resilience of their community.' Brown et al. (2017) explored how disaster and resilience are framed in the hotel sector. This review highlighted the importance of prioritising resilience building in the hotel sector but suggested that improvements were required in the sector's disaster preparedness and concluded by recommending that all stakeholders within the sector should be actively involved in the improvement process.

Researchers have also explored the role and importance of resilience leadership within tourism. Haver et al. (2014), for example, examined how general managers within the industry regulated their emotions in the face of complex and demanding leadership duties and responsibilities. The results of this research revealed that 'experienced general managers have to develop resilience through extensive experience and wise emotional regulation' (Haver et al. 2014). In a study of work engagement and frontline employees' satisfaction within the hotel industry, Karatepe and Karadas (2015) revealed that resilience was one of the best indicators of psychological capital, which inter alia, was seen to be important in managing service encounters. In looking to measure the resilience of hospitality businesses in Auckland, New Zealand, Tibay et al. (2018) concluded that leadership and management, was a key resilience attribute.

Resilient Planning Strategies in the Tourism Industry

The concept of resilience is increasingly being employed to illuminate academic research on sustainability in the tourism industry, but there is also emerging interest in developing wider resilient tourism plans. Such plans address a range of business challenges, (including disruptive technology, natural resource scarcity, and changing demographics) but climate change is very much to the fore. In 2018 the launch of the 'Queensland Climate Adaptation Strategy' (Queensland Tourist Industry Council 2018a) was billed as 'the world's first industry-led climate change response plan' (Queensland Tourism Industry Council 2018b). The plan explicitly recognised that 'climate change is both a risk and an opportunity' for 'tourism businesses' and that 'the increasing costs of extreme weather events, changes to natural resources, and

the transition to a decarbonised global economy are all highly relevant to tourism' (Queensland Tourist Industry Council 2018a).

More specifically, the plan sets out a vision for the future, structured around a number of building blocks, namely:

- 'resilient businesses, destinations and communities';
- 'stewardship and education for healthy natural assets';
- > a 'green tourism industry leading the way towards carbon neutrality';
- ➤ a 'diversified product for quality visitor experience';
- > 'sustainable branding and marketing'; and
- ➤ a 'tourism industry working together with government and communities.' (Queensland Tourist Industry Council 2018a)

The economic, environmental and social rationale for the plan embraces a wide range of issues. Economically, for example, there is the recognition that climate risks impose a range of costs on businesses across the tourism industry and that a failure to invest in a climate resilient and low carbon infrastructure carries a potentially major risk for companies and investors. At the same time there is also a recognition that the need to comply with new legislation and to disclose carbon emissions is becoming an increasingly mainstream business commitment. Environmentally, the plan emphasises not only that tourism in Queensland depends on the environment but also that it needs advocates to protect it. On the social side the plan recognises the importance of employment within the tourist industry and that tourism is deeply interwoven with communities who depend on it in a variety of ways. Ultimately, the plan argued that 'Queensland's competiveness in terms of attractiveness' 'is an important collective reason for addressing climate change' (Queensland Tourist Industry Council 2018a).

More specifically, the plan sets out a number of tools available to tourism businesses and decision makers to help them to respond to climate change. These tools cover general climate information, reduction in carbon emissions, risk assessment and resilience building, adaptation planning, coastal inundation and rises in sea level, flood management, extreme weather events and specific risks to businesses and infrastructure. In focusing on tools to reduce carbon emissions, for example, the plan drew attention to the potential for the tourist industry to increase energy efficiency and to design and to develop more energy efficient buildings and tourist attractions.

The plan also addressed a wide range of other climate hazards and risks including changes to the Great Barrier Reef, tropical cyclone intensity and changes in the distribution of wildlife and diseases. In addressing wildlife and diseases, for example, the report suggested that with increases in temperatures, rainfall and humidity, mosquito borne diseases, such as malaria and dengue fever, currently confined to northern Queensland, could spread south and become more difficult to control. There are also concerns that a warmer climate and changes in rainfall patterns could increase the range of and prevalence of food and water borne diseases with major implications for the

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public health of both tourists and residents. At the same time, changes in the climate may increase the southern spread of potentially dangerous animal species. The plan suggested that all these potential changes may affect the health and safety of tourists, which may, in turn, potentially compromise their comfort and increase their costs and more generally may cause reputational damage.

Increasing resilience to climate change is an important element in the 'Dominica National Land Use Policy' (Ministry of Environment, Natural Resources Physical Planning and Fisheries 2014), which stresses the importance of planning for 'the impacts of climate change through investment in resilient infrastructure and early warning systems.' More specifically, the focus is on 'allowing the natural environment's own systems to effectively respond to hazard impacts through integrated watershed and coastal zone management' on 'directing development into safe areas' and on 'minimising the effects of human activities that put property and public safety at risk' (Ministry of Environment, Natural Resources Physical Planning and Fisheries 2014). In 'Promoting Private Sector Engagement in Climate Resilient Tourism', the Government of Nepal Ministry of Culture, Tourism and Civil Aviation (2018) recognised that the country's 'tourism resources are highly vulnerable to climate change.' In looking to promote private sector engagement in the tourism industry, the focus is on encouraging investment for climate resilience in supply chain management, encouraging the diversification of the country's tourism products and more timely climate information management.

Resilience plans are also being developed to address concerns about the impact of the growth in tourism on natural resources and on the natural environment also underpin resilience plans. The Resilient Natural Resource Management for Tourism and Growth Project for Tanzania, launched in 2018, looks to 'improve management of natural resources and tourism assets in priority areas of Southern Tanzania and to increase access to alternative livelihood activities for targeted communities' (The World Bank 2017). The project has four components namely: to strengthen the management and improve the infrastructure in protected areas; to strengthen landscape management and infrastructure investments in and upstream of the Ruaha National Park; to strengthen alternative livelihoods for targeted communities in proximity to the protected areas; and to put measures in place for quality assurance and control and monitoring and evaluation, to ensure coordinated and timely project execution. In addressing landscape management, for example, the focus is on augmenting the dry season flow of the area's rivers, conservation working in a number of river basins, and consensus building for land and water management.

The emergence and proliferation of a range of disruptive technologies provides a range of major challenges for the tourism industry and in the face of such challenges, the Queensland Government has emphasised the importance of building the resilience and competitiveness of the industry. The *Tourism* Disruptive Technologies Project launched by the Queensland Tourism Industry

Council (2019a) recognised the 'shift towards the use of digital technology by consumers in the conceptualisation, planning and sharing of their travel experiences.' More specifically, the aim of the project is 'to develop a digital workforce and training plan for the Queensland tourism industry that identifies gaps in digital uptake among industry members, the impact and implication of new technology on the industry, and the opportunities that technology presents to enhance destination experiences' (Queensland Tourism Industry Council 2019b).

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Reflective Conclusions

The use of the concept of resilience in academic research and its wider conceptualisation in planning strategies for the tourism industry, is certainly attracting increasing attention, but three sets of issues merit discussion and reflection. Firstly, then measuring resilience is a thorny issue and the measurement process faces a number of conceptual and methodological challenges. Conceptually, different definitions of resilience do not make measurement an easy task and given that resilience is generally seen as being both time and place specific, then it is difficult to establish generic measures which facilitate comparisons over time and space. Methodologically the collection of reliable and meaningful data, particularly in environments and communities, which have suffered shocks, crises and threats, may prove difficult and here companies, organisations and researchers may resort to using available and/or surrogate data rather than looking to collect original data in the field.

Orchiston and Espiner (2018) argued 'while the empirical measurement of resilience is in its infancy within the academic discourse, there is increasing pressure from tourism practitioners and funding agencies to improve our understanding of resilience metrics and the ways in which resilience measures can be applied though adaptive business management practices to improve the social and environmental outcomes of tourism operations.' More generally, a number of resilient measurement frameworks have been developed. Schipper and Langston (2015), for example, listed 17 such frameworks but variations in their aims, scale and method of analysis make comparisons difficult. Within the tourism industry, Cox (2016), working for the National Estuarine Research Reserve System Science Collaborative, developed the 'Tourism Resilience *Index*' as a self-assessment tool for tourism industry leaders and businesses. The index includes six elements namely: business operations and plans; disaster preparedness and planning; marketing; workforce; federal, state and local resources; and resource access and knowledge. The items within each of these elements are scored on a numerical scale and this scoring system is a subjective self-assessment process, and this makes more widespread comparisons difficult.

Secondly, there are a set of issues around distributional equity and power. Matin et al. (2018), for example, have suggested that 'the apparent failure of

resilience to attend to the distributive and power dimensions of environmental and development problems is a serious limitation of the concept for analysis and practice.' Meerow and Newell (2016), argued that the 'underlying politics of resilience have been ignored' and have stressed the importance of questioning what they describe as 'the five w's of urban resilience' namely resilience for whom, of what, when, where and why. In addressing the question of resilience for whom, for example, Vale (2013) argued that 'the significance of resilience depends on whose resilience is being described.' Further Vale (2013) suggested that many governments and corporations, for example, may seek to claim the term, but asked 'how do they decide whose resilience to care about?' and 'whose resilience is omitted in the process?' In outlining the importance of the 'when' question, Meerow and Newell (2016) questioned whether the primary goal is to 'build resistance to short term disruptions (e.g. hurricanes) or long term stress (e.g. precipitation changes caused by climatic change). ' More generally Matin et al. (2018) argue that 'as resilience becomes more prevalent in policy and practice, attention to the demands of equitable resilience becomes ever more pressing.'

In addressing power, MacKinnon and Derickson (2013) argued that the concept of resilience 'is conservative when applied to the social sphere' and that, as such, it 'privileges established social structures, which are often shaped by unequal power relations.' Arguably more contentiously, some critics have argued that popularconceptions of resilience privileges the capitalist mode of production. Martin and Sunley (2014), for example, argued that 'the concept of resilience is easily captured by neoliberal ideology, to prioritise the status quo, and the importance of self-reliance, flexibility and the role of self-correcting market adjustments.' More pointedly, MacKinnon and Derickson (2013) concluded 'resilience thinking has become implicated within the hegemonic modes of thought that support global capitalism.'

In focusing on 'the Sphere of Tourism Resilience' in Sri Lanka, Cochrane (2015) claimed that 'it is in the interests of individual shareholders to grab as many of the benefits as possible.' In a similar vein, Zellmer and Gunderson's (2008) comparative analysis of ecological restoration in Glen Canyon and the Everglades in the US, revealed that 'resilience may not always be a good thing, particularly when it exhibits itself as entrenched stakeholder interests or institutions that do not embrace change.' At the corporate level, many companies, will understandably, focus primarily on their own, often short-term interests. In its response to the impact extreme weather events were having on its business the Thomas Cook Group (2018) outlined its approach to enhancing resilience which centred on 'operating more efficiently and reducing our impact on the environment and our demand for natural resources.'

Thirdly, there are issues about resilience and economic growth and the continuing demands such growth makes on the planet's finite natural resources. The Queensland Tourist Industry Council's (2018b) Climate Adaptation Strategy, for example, neatly captured this dilemma in arguing that 'one critical challenge for tourism is how to reconcile growth with effective climate responses, in particular absolute reductions in carbon emissions' and that

ultimately 'the transition requires change by everyone.' At the same time, Cheer and Lew (2018) suggested 'resilience thinking is also prone to criticisms over its hidden links to the neoliberal ideals of development' and that 'critics contend that it gives licence to increase the development exploitation of natural and human resources over concerns for conservation and resource restoration.' Arguably more positively, Cheer and Lew (2018) also argued that 'embracing resilience thinking for tourism development might offer policy, planning and practice a more workable framework that recognises the certainty of changeability, and acknowledges the need for adaptation, rather than giving a disproportionate focus to mitigation and cessation. Further, Cheer and Law (2018) concluded 'this is a more practicable approach to the planning and management of tourism's continual global growth and global reach.'

More radically, Amsler (2019) argued that 'there is a blind spot in analyses that uphold the sustainability of globalized capitalism' and that mainstream thinking, learning and policy effectively help societies to 'become resilient within harmful environments that are conceived as inevitable' rather than to 'generate possibilities for fundamentally other ways of organizing life.' This reinforces Amsler's (2009) earlier invitation 'to explore the complex processes through which competing visions of just futures are produced, resisted and realized.' Such thinking is clearly linked to the notion that resilience has become implicated in supporting global capitalism, outlined earlier, but such approaches may seem both unfamiliar and challenging to many tourism scholars and are unlikely to find any favour whatsoever within the tourism industry.

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