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## Specialty grand challenge: Crisis/disaster management, resilience, and sustainability

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## The rising importance of resilience

From its early beginnings in the 1970s and 1980s as an ecological framework for understanding shifts in systems, resilience now appears in the policy documents and plans of many nation states, international organizations, and NGOs (Brown, 2011). Holling (1973) is often regarded as the founder of modern ecological resilience thought (Gunderson, 2010) and the defining feature of his work is the clarification between ecological and engineering resilience. While engineering resilience coalesces around notions of static equilibrium or ideal state and bouncing back to its original form, Holling (1973) posited that eco-systems do not have one static point of equilibrium, but rather a zone stability that allows the system to re-organize and bounce back in order to continually exists and function in the face of adversity. Furthermore, Holling proposed that different points of equilibrium can be integrated and nested within a hierarchy of systems (Cretney, 2014). The root idea of resilience is not the ability to stay the same or bounce back to the exact same state (Cutter et al., 2008; Folke, 2016) but rather the adaptation and change a system can undertake while remaining within critical system thresholds (Walker et al., 2006). While these notions have underpinned many of the recent work on tourism system resilience (Butler, 2017; Cheer and Lew, 2017; Hall et al., 2018), the challenge remains for tourism researchers to understand the zone of stability for the tourism system as a whole and the resilience of its different components, nested within a hierarchy of systems. For example, the COVID-19 pandemic has highlighted the need for tourism system resilience to be (re)built taking into consideration linkages with other service systems such as health and finance. These linkages, which create both strengths and weaknesses for the tourism system should be better understood for integration, policy development and management purposes. It must also be recognized that the prominence of resilience has risen within the context of a dominating political framework of neoliberalism that has expertly normalized and rationalized the discourses of private property, individual responsibility and market dominance (Harvey, 2005). Accordingly, resilience has been portrayed as a solution to many of the challenges faced by contemporary society.

# Resilience and crisis/disaster management in tourism

Resilience is certainly not a new concept in the tourism and hospitality fields but its application in tourism crisis and disaster management is fairly recent (Mair et al., 2016; Prayag, 2018; Berbekova et al., 2021). The COVID-19 pandemic has brought the concept in the limelight of tourism businesses, tourism-dependent communities and policy makers, with suggestions that tourism systems should become more resilient to unexpected changes. For example, the UNWTO agenda for Africa includes resilience as a key priority to achieve inclusive tourism growth and for advancing SDGs 8, 12, 13 and 16 (UNWTO, n.d.). Destinations in the region must use resilience as part of their ability to manage risks as well as implement mitigation and recovery strategies that would facilitate tourism to bounce back following crises and disasters. This requires outlining effective crisis management strategies for the tourism industry locally, regionally, and globally so that they can prepare for, respond, and recover from crises such as the COVID-19 pandemic and combat their long-term effects (UNWTO, n.d.). Yet, resilience is often a misunderstood concept in tourism and other fields (Hall et al., 2018) and has been described as a "dirty" word due to its overuse in all aspects of society, from everyday communications, through to academic literature, and governmental reports/priorities (Tan, 2022). The word resilience comes from the Latin verb resilire, meaning "to leap back." Inconsistencies in how the concept has been applied and delineated across different fields, including tourism, have led to researchers questioning its scientific value.

In the tourism field, a socio-ecological system (SES) perspective of resilience has been adopted (Cheer and Lew, 2017; Hall et al., 2018), highlighting the symbiotic relationship between the resilience of the whole system and that of its components. This approach implies that a system has the ability to learn, re-organize, and transform itself following adversity. In this way, adversity can also provide opportunities for the system to evolve from existing processes and structures to the renewal of the entire system itself and the emergence of new trajectories (Folke, 2016). These aspects need further exploration in tourism research. Likewise, the underlying mechanisms that link macrolevel environments (socio-political, economic, physical/built and natural) to meso-level factors (e.g., organizational and community processes) and micro-level factors (individuals, employees and entrepreneurs) for tourism resilience purposes are poorly understood (Amore et al., 2018; Prayag, 2020). While component level resilience of the system such as organizational (Biggs et al., 2012; Prayag et al., 2020; Ntounis et al., 2022) and community actors (Cheer et al., 2019; Yang et al., 2021; Jang and Kim, 2022) has been studied, empirical evidence on how these components strengthen overall tourism system resilience is lacking. An emerging research

strand examines individual resilience through the lens of psychological resilience (Prayag et al., 2020; Kim et al., 2022), tourist resilience (Hall et al., 2018; Fountain and Cradock-Henry, 2020; Prayag, 2020), entrepreneur resilience (Fang et al., 2020; Tanner et al., 2022), and employee resilience (Saad and Elshaer, 2020; Prayag and Dassanayake, 2022). Integration of these different resilience concepts within a broader framework of organizational, community and tourism system resilience is lacking. This leads to *ad-hoc* interventions by managers, community leaders and policy makers in their attempt to strengthen resilience at all levels.

Crisis and disaster research remains topical in tourism studies (Ritchie and Jiang, 2019; Berbekova et al., 2021) and several frameworks (e.g., Ritchie, 2004; Faulkner, 2011; Le and Phi, 2021) have been proposed to improve both crisis and disaster management. However, as Ritchie and Jiang (2019) note, these frameworks lack empirical validation and resilience has often been omitted as a key variable that can reduce the vulnerability and manage the risks for tourism organizations and destinations. In contrast to the empirical evidence that has emerged on managing risk perceptions of tourists and their crisis preparedness (Pennington-Gray et al., 2014), it is surprising that studies have failed to integrate tourist, resident or community, and tourism business resilience into "grand" models or frameworks for destination management purposes. It must also be noted that resilience is also important for individuals, destinations, and businesses in coping with not only unexpected changes but also continuous and incremental changes that can emerge from complexities in the environment (e.g., climate change). Yet, as noted by Walker and Cooper (2011, p. 17), one needs to take a critical view of resilience as a discourse that results in the "permanentization of crisis" in everyday life, which leads to not only hyper vigilance for every possible threat but also heightens security and safety needs in society as a whole. Often measures implemented by governments, local organizations and trans-national governance bodies are justified in terms of resilience but these may in practice result in further marginalization of disadvantaged populations and communities, threaten democratic processes (Walker and Cooper, 2011) and encourage the securitisation and privatization of public assets in a way that undermines wellbeing of populations as well as increase risk and vulnerability to crises and disasters.

# Resilience and sustainability in tourism

Similar to sustainability discourses, the ways in which resilience discourses are being mobilized and enacted at a popular and political level can be concerning (Walker and Cooper, 2011; Cretney, 2014). While resilience is neither good nor bad, its value lies in asking for what and for whom, and

the time frame (when), within which resilience will achieve positive things for individuals, tourism businesses, communities, and destinations. Resilience thinking cannot be devoid of questions such as: who holds power to make changes in tourism?; what influence do powerful groups have over minority groups in shaping new trajectories for tourism businesses and destinations?; who bears the burden of imbalances in sociocultural, environmental, and economic outcomes from tourism due to resilience?. While the SDGs outline key achievements by 2030, suggesting a shared responsibility for peace and prosperity of people, planet and the future, resilience discourses by governments and trans-national organizations such as the UNWTO and World Bank has often no timeframe and key achievements. More concerning is that resilience thinking in tourism studies have been devoid of consideration for equity issues in relation to gender, sexual orientation, and religious affiliation, despite these issues affecting the sustainability of tourism. Outside of the tourism field, concern has been raised with regard to the lack of consideration for politics, power and culture in concepts of resilience (Walker and Cooper, 2011). Thus, these issues remain to be addressed in a coherent way in both the broader resilience and tourism resilience literatures. Tourism studies, similar to other disciplines have presumed equality across individuals, communities and nations for coping with challenges (MacKinnon and Derickson 2012), but the reality is that tourism resource and capability endowments differ, challenging destinations and businesses to bounce back or forward from adversity. Similar to the sustainable tourism literature (e.g., Scheyvens and Cheer, 2021), multi-stakeholders partnerships and public-private partnerships will be required to deliver resilience outcomes for tourism. Partnerships in themselves can be fraught with power and equity issues, as noted in studies on sustainability issues (Adie et al., 2022).

The absence of politics and power in tourism resilience research require further consideration, despite governance as a theme being highlighted as critical for destination resilience and sustainability (Cheer and Lew, 2017; Amore et al., 2018; Hall et al., 2018). Discussions of resilience often mask the ways in which resilience discourses reinforce and create hegemonic political and ideological discourses (MacKinnon and Derickson, 2012), which has also been noted in relation to sustainability. A more reflexive understanding of knowledge and management is required to better understand the implications of knowledge circulation and legitimization and action for sustainable tourism (Hall, 2019). So far, tourism studies have lacked similar considerations in fostering resilience thinking. It is therefore not surprising that outside of tourism studies, resilience has been described as a profoundly conservative concept, actively employed as a tool to privilege and reinforce dominant political ideologies (MacKinnon and Derickson, 2012). It has been noted, in work on transformation and adaptation, that a system can transform to a different system state when it is considered

undesirable or untenable (Folke, 2016), but who determines the current system is undesirable? Terms such as vulnerability, transformation, innovation and adaptation are highly socially constructed. Depending on the beliefs, values, and governance of a society, different system states will be considered undesirable and therefore resilience might be branded as a solution for all tourism industry problems. This is where I hope that this section of *Frontiers in Sustainable Tourism* will bring to forth such debates and deepen our understanding of resilience thinking in tourism in a way that the knowledge generated can imbue other disciplines that inform crisis and disaster management.

### Conclusion

Grasping resilience in relation to crises and disasters has become a popular topic in tourism studies recently. Resilience must be viewed as a dynamic, multi-level, and evolutionary process if we are to help tourism systems to cope with adversity, adapt and transform themselves. Thus, resilience must become an emergent property of a system within a hierarchy of systems. At the same time, we need to acknowledge the dominance of neoliberalism and capitalism in shaping mainstream views on development, sustainability and what is considered. When doing so, we need to critically examine the ways in which resilience is articulated to validate these views (Cretney, 2014). Greater consideration must be given to the relational resources required to (re)build resilience. Resilience discourses recently seem to have slowly aggravated the very fragilities they aim to strengthen in the first place (Tan, 2022). Perhaps, as tourism researchers and practitioners we need to start by acknowledging the brokenness of parts of the tourism system itself and then think how do we rebuild through a more connected understanding of resilient systems, organizations, communities, destinations and individuals. By addressing interactions between these, we may be able to remove the "dirt" from the concept that has so far limited our vision and understanding of resilience in tourism and hospitality studies.

## Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

### Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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### References

Adie, B. A., Amore, A., and Hall, C. M. (2022). Just because it seems impossible, doesn't mean we shouldn't at least try: the need for longitudinal perspectives on tourism partnerships and the SDGs. *J. Sustain. Tour.* 30, 2282–2297. doi: 10.1080/09669582.2020.1860071

Amore, A., Prayag, G., and Hall, C. M. (2018). Conceptualizing destination resilience from a multilevel perspective. *Tour. Rev. Int.* 22, 235–250. doi: 10.3727/154427218X15369305779010

Berbekova, A., Uysal, M., and Assaf, A. G. (2021). A thematic analysis of crisis management in tourism: a theoretical perspective. *Tour. Manag.* 86, 104342. doi: 10.1016/j.tourman.2021.104342

Biggs, D., Hall, C. M., and Stoeckl, N. (2012). The resilience of formal and informal tourism enterprises to disasters: reef tourism in Phuket, Thailand. J. Sustain. Tour. 20, 645–665. doi: 10.1080/09669582.2011.630080

Brown, K. (2011). Policy discourses of resilience. In: Climate Change and the Crisis of Capitalism. New York, NY: Routledge, 37–50.

Butler, R. W. (2017). Tourism and Resilience. CABI. doi: 10.1079/ 9781780648330.0000

Cheer, J. M., and Lew, A. A. (2017). Tourism, Resilience and Sustainability: Adapting to Social, Political and Economic Change. Abingdon: Routledge, 344. doi: 10.4324/9781315464053

Cheer, J. M., Milano, C., and Novelli, M. (2019). Tourism and community resilience in the Anthropocene: accentuating temporal overtourism. *J. Sustain. Tour.* 27, 554–572. doi: 10.1080/09669582.2019.1578363

Cretney, R. (2014). Resilience for whom? emerging critical geographies of socioecological resilience. *Geogr. Compass.* 8, 627–640. doi: 10.1111/gec3.12154

Cutter, S. L., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E., et al. (2008). A place-based model for understanding community resilience to natural disasters. *Glob. Environ. Change.* 18, 598–606. doi: 10.1016/j.gloenvcha.2008.07.013

Fang, S. E., Prayag, G., Ozanne, L. K., and de Vries, H. (2020). Psychological capital, coping mechanisms and organizational resilience: insights from the 2016 Kaikoura earthquake, New Zealand. *Tour. Manag. Perspect.* 34, 100637. doi: 10.1016/j.tmp.2020.100637

Faulkner, B. (2011). Towards a framework for tourism disaster management. *Tour. Manag.* 22, 135–147. doi: 10.1016/S0261-5177(00)00048-0

Folke, C. (2016). Resilience (republished). *Ecol. Soc.* 21, 44. doi: 10.5751/ES-09088-210444

Fountain, J., and Cradock-Henry, N. A. (2020). Recovery, risk and resilience: post-disaster tourism experiences in Kaikoura, New Zealand. *Tour. Manag. Perspect.* 35, 100695. doi: 10.1016/j.tmp.2020.100695

Gunderson, L. (2010). Ecological and human community resilience in response to natural disasters. *Ecol. Soc.* 15, 18. doi: 10.5751/ES-03381-150218

Hall, C. M. (2019). Constructing sustainable tourism development: the 2030 agenda and the managerial ecology of sustainable tourism. *J. Sustain. Tour.* 27, 1044–1060. doi: 10.1080/09669582.2018.1560456

Hall, C. M., Prayag, G., and Amore, A. (2018). *Tourism and Resilience: Individual, Organisational and Destination Perspectives*. Channel View Publications. doi: 10.21832/9781845416317

Harvey, D. (2005). A Brief History of Neoliberalism. Oxford: Oxford University Press. doi: 10.1093/oso/9780199283262.001.0001

Holling, C. (1973). Resilience and stability of ecological systems. Ann. Rev. Ecol. Syst. 4, 1–23. doi: 10.1146/annurev.es.04.110173.000245

Jang, S., and Kim, J. (2022). Remedying Airbnb COVID-19 disruption through tourism clusters and community resilience. *J. Bus. Res.* 139, 529–542. doi: 10.1016/j.jbusres.2021.10.015

Kim, M. J., Bonn, M., and Hall, C. M. (2022). Traveler biosecurity behavior during the COVID-19 pandemic: effects of intervention, resilience, and sustainable development goals. *J. Travel Res.* 61, 1599–1618. doi: 10.1177/00472875211034582

Le, D., and Phi, G. (2021). Strategic responses of the hotel sector to COVID-19: toward a refined pandemic crisis management framework. *Int. J. Hosp. Manag.* 94, 102808. doi: 10.1016/j.ijhm.2020.102808

MacKinnon, D., and Derickson, K. D. (2012). From resilience to resourcefulness: a critique of resilience policy and activism. *Prog. Hum. Geogr.* 37, 253–270. doi: 10.1177/0309132512454775

Mair, J., Ritchie, B. W., and Walters, G. (2016). Towards a research agenda for post-disaster and post-crisis recovery strategies for tourist destinations: a narrative review. *Curr. Issues Tour.* 19, 1–26. doi: 10.1080/13683500.2014.932758

Ntounis, N., Parker, C., Skinner, H., Steadman, C., and Warnaby, G. (2022). Tourism and hospitality industry resilience during the Covid-19 pandemic: evidence from England. *Curr. Issues Tour.* 25, 46–59. doi: 10.1080/13683500.2021.1883556

Pennington-Gray, L., Schroeder, A., Wu, B., Donohoe, H., and Cahyanto, I. (2014). Travelers' perceptions of crisis preparedness certification in the United States. *J. Travel Res.* 53, 353–365. doi: 10.1177/0047287513496470

Prayag, G. (2018). Symbiotic relationship or not? understanding resilience and crisis management in tourism. *Tour. Manag. Perspect.* 25, 133–135. doi: 10.1016/j.tmp.2017.11.012

Prayag, G. (2020). Time for reset? COVID-19 and tourism resilience. *Tour. Rev. Int.* 24, 179–184. doi: 10.3727/154427220X15926147793595

Prayag, G., and Dassanayake, D. C. (2022). Tourism employee resilience, organizational resilience and financial performance: the role of creative self-efficacy. J. Sustain. Tour. doi: 10.1080/09669582.2022.2108040

Prayag, G., Spector, S., Orchiston, C., and Chowdhury, M. (2020). Psychological resilience, organizational resilience and life satisfaction in tourism firms: insights from the Canterbury earthquakes. *Curr. Issue Tour.* 23, 1216–1233. doi: 10.1080/13683500.2019.1607832

Ritchie, B. W. (2004). Chaos, crises and disasters: a strategic approach to crisis management in the tourism industry. *Tour. Manage.* 25, 669–683. doi: 10.1016/j.tourman.2003.09.004

Ritchie, B. W., and Jiang, Y. (2019). A review of research on tourism risk, crisis and disaster management: Launching the annals of tourism research curated collection on tourism risk, crisis and disaster management. *Ann. Tour. Res.* 79, 102812. doi: 10.1016/j.annals.2019.102812

Saad, S. K., and Elshaer, I. A. (2020). Justice and trust's role in employees' resilience and business' continuity: evidence from Egypt. *Tour. Manage. Perspect.* 35, 100712. doi: 10.1016/j.tmp.2020.100712

Scheyvens, R., and Cheer, J. M. (2021). Tourism, the SDGs and partnerships. J. Sustain. Tour. 30, 2271–2281. doi: 10.1080/09669582.2021.1982953

Tan, M. Z. (2022). Resilience is a dirty word: misunderstood, and how we can truly build it. *Critic. Care.* 26, 1–3. doi: 10.1186/s13054-022-04040-x

Tanner, S., Prayag, G., and Kuntz, J. C. (2022). Psychological capital, social capital and organizational resilience: a herringbone model perspective. *Int. J. Disaster Risk Reduct.* 78, 103149. doi: 10.1016/j.ijdrr.2022.103149

UNWTO. (n.d). UNWTO Agenda for Africa. Available online at: https://www.unwto.org/africa/fostering-resilience

Walker, B. H., Anderies, J. M., Kinzig, A. P., and Ryan, P. (2006). Exploring resilience in social-ecological systems through comparative studies and theory development: introduction to the special issue. *Ecol. Soc.* 11, 12. doi: 10.5751/ES-01573-11 0112

Walker, J., and Cooper, M. (2011). Genealogies of resilience: from systems ecology to the political economy of crisis adaptation. *Secur. Dialogue* 42, 143–160. doi: 10.1177/0967010611399616

Yang, E., Kim, J., Pennington-Gray, L., and Ash, K. (2021). Does tourism matter in measuring community resilience?.*Ann. Tour. Res.* 89, 103222. doi:10.1016/j.annals.2021.103222