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Contents lists available at ScienceDirect

Tourism Management

journal homepage: http://www.elsevier.com/locate/tourman

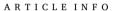


Research note

The coronavirus pandemic – A critical discussion of a tourism research agenda

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Keywords: Crises Disasters Coronavirus Covid-19 Pandemic Research agenda

ABSTRACT

Unquestionable, the coronavirus (Covid-19) pandemic is one of the most impactful events of the 21st century and has tremendous effects on tourism. While many tourism researchers worldwide are currently 'Covid-19 research gap spotting', we call for more deliberateness and rigor. While we agree that the coronavirus pandemic is unique and relevant to research, we argue that not all effects are worth researching or novel to us. Previous research on crises and disasters do show similar patterns and existing theories can often very well explain the current phenomena. Thus, six illustrative examples are shown how a research agenda could look like. This includes parts where theoretical explanations from tourism are missing, as well as where we think existing knowledge might be subject to a tourism paradigm-shift due to the coronavirus pandemic.

1. Introduction

The coronavirus (Covid-19) pandemic is one of the most impactful events of the 21st century. Even in its early stage, the impact on tourism is tremendous. Current estimations see 75 million jobs in tourism at immediate risk and the industry to lose more than 2.1 trillion US\$ in turnover (WTTC, 2020). Borders are closed, cruise vessels are docked, whole air fleets are grounded, and hotels, restaurants and touristic sights are shutdown.

Understandably, many tourism researchers worldwide are now in the early stage of 'Covid-19 research gap-spotting' or already conducting case studies. Reiterating that incremental gap-spotting (Kock, Assaf, & Tsionas, 2020) and conducting simple descriptive single case studies on such events is of limited use (Pennington-Gray, 2018; Ritchie & Jiang, 2019), the aim of this research note is to urge us to more deliberateness and rigor. The coronavirus pandemic is unquestionable unique and relevant to research. However, not all effects are worth researching or novel to us. Previous research on crises and disasters do show similar patterns and existing theories can often very well explain the currently observed phenomena. Anecdotal and descriptive data is catchy, but often yields neither theoretical advancements nor novel managerial implications. Therefore, we call for a simple research paradigm: *Do not go for the obvious and purely descriptive*. This paradigm should motivate researchers to look for the deeper underlying relationships – and

especially how they might change due to the coronavirus pandemic.

2. Crises and disasters

In general, crises and disasters are well-researched phenomena. We distinguish between a crisis as "disruption that physically affects a system as a whole and threatens its basic assumptions, its subjective sense of self, its existential core" (Pauchant & Mitroff, 1992, p. 15) and disasters as "situations where an enterprise [...] is confronted with a sudden unpredictable catastrophic change over which it has little control" (Scott & Laws, 2005, p. 151). The main difference is "whether the cause is due to some internal organizational failure to act (a crisis) or an external event over which the organization has no control (a disaster)" (Ritchie & Jiang, 2019, p. 2).

We further distinguish between natural disasters (e.g., earthquakes, flooding or epidemics) and socio-political/human-made disasters (e.g., wars, terrorist attacks, political or economic crises). The conceptualization of these events is, however, fluent and varies in the literature (as human-made disasters are often rather crises and some natural disasters are man-made).

The coronavirus pandemic is a natural, but additionally a sociopolitical or human-made disaster (e.g., if the focus of research lies on the economic development through the management of the pandemic). It could be researched as a crisis, if the focus is on the organizational

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(political or business) acts. Categorizing the event might be helpful to understand from which previous research we can derive conclusions – and where they might be incomparable. Not all aspects of Covid-19 are novel to us: Tourism studies on SARS (Zeng, Carter, & De Lacy, 2005), the bird-flu (Rittichainuwat & Chakraborty, 2009), Ebola (Cahyanto, Wiblishauser, Pennington-Gray, & Schroeder, 2016; Novelli, Burgess, Jones, & Ritchie, 2018) and influenza pandemics (Page, Yeoman, Munro, Connell, & Walker, 2006) show comparable patterns on smaller scales.

If we look at the coronavirus-induced economic crisis, we can find similarities with papers like Papatheodorou, Rosselló, and Xiao (2010) on the 2008 economic crisis, or on travellers' behaviour and rationalization following tourists' economizing strategies during economic crises (Campos-Soria, Inchausti-Sintes, & Eugenio-Martin, 2015).

The political aspect of the coronavirus pandemic shares similarities (and theories in-use) of tourism research during the Arabic Spring uprising (Avraham, 2015), the refugee-crisis (Zenker, von Wallpach, Braun, & Vallaster, 2019), or how country image is affected by political conflicts (e.g., Alvarez & Campo, 2014).

Tourist behaviour studies on crises are helpful as well to understand the current development. For instance, Hajibaba, Gretzel, Leisch, and Dolnicar (2015) conceptualise a segment of crisis-resistant tourists that might explain why some tourists keep travelling, and Seabra, Dolnicar, Abrantes, and Kastenholz (2013) examine the safety perceptions of international tourists.

Looking at the management of disasters and crises, Okuyama (2018) analyses the optimal timing of recovery policies, Ritchie (2004) provides a strategic approach to crisis management and Wang and Ritchie (2012) research managers' crisis management.

On the meta-level, attempts have been made to show structural breaks in tourism over time, caused by disasters and crises (Cró & Martins, 2017) and three recent literature reviews summarize relevant findings (Jiang, Ritchie, & Benckendorff, 2017; Mair, Ritchie, & Walters, 2016; Ritchie & Jiang, 2019).

3. Potential Corona research paths

Thus, not all aspects of the current situation are novel and worth investigating. As a response, we illustrate six paths that constitute a starting point for a research agenda beyond obvious crisis-induced research areas (such as crisis management). This includes paths where we miss (theoretical) explanations and where we think existing knowledge might be subject to a paradigm-shift (Kuhn, 2012) after the coronavirus pandemic.

The Level of Complexity: Unquestionable, the coronavirus pandemic is unique in scale and constitutes a blend of several disaster and crisis typologies (Ritchie & Jiang, 2019). It is a combination of a natural disaster, a socio-political crisis, an economic crisis and a tourism demand crisis. While many previous crisis and disasters showed multi-typologies, we still lack in understanding how these crisis categories affect each other (Pennington-Gray, 2018), or as Ritchie and Jiang (2019, p.6) state: "Few studies have compared these impacts and discussed strategies based on crisis and disaster typologies." Future research thus should not focus on an isolated aspect of the coronavirus pandemic, but must be able to build a complex and connected typology.

Research start to mention this issue of complexity in tourism, but we too often still fail to address this aspect (Pappas, 2019; Pennington-Gray, 2018). To deal with this high complexity and interconnectedness, we suggest to employ both chaos theory (Faulkner & Russell, 2000; Zahra & Ryan, 2007) and system theory (Luhmann, 2002), especially for revealing non-linear relations. Chaos theory recognizes the complex and unpredictable or random dynamics of a system, without assuming that they are inevitably random or disordered (Speakman & Sharpley, 2012). It "deals with systems that have many interacting agents and although hard to predict, these systems have structure" (Zahra & Ryan, 2007, p. 855). For the coronavirus pandemic it implies that a small change of one

parameter (e.g., length of lockdowns) might create a very different outcome on many variables; thus, various aspects that interact with each other have to be taken into account. This is, for instance, helpful for forecasting during and after crises (Prideaux, Laws, & Faulkner, 2003). So-called scenario-forecast models (e.g., Sadovnikova et al., 2013) are capable of incorporating the different chaotic parameters and predict several outcomes for diverse chaotic and complex scenarios.

This discourse can also borrow from system theory (Luhmann, 2002) focusing on complex systems (i.e., the economic, political and societal) as non-linear, spontaneous and highly interrelated structures. Each system follows thereby its own logic, creating often conflicting goals, and its own way of language and communication. Especially during crises, we can observe how one some system (e.g., politics) is using the logic and argumentation of another system (e.g., economics), thereby creating strong resistance against its decisions by stakeholders (e.g., citizens) who are subject to a different system-logic.

This is also in line with other system-thinking approaches, as service ecosystems (Vargo, Wieland, & Akaka, 2015). In tourism, for instance, the idea of the sharing-economy as ecosystem (e.g., Leung, Xue, & Wen, 2019) is criticized by other tourism stakeholders (e.g., residents) for the negative consequences it has, because it does not always follow the logic of the other systems. System theory can be used to untangle these arguments in regards to the different systems (e.g., following and economic, political and a health system logic) to explain the created conflict.

Thus, Covid-19 research should acknowledge both the chaos and complexity of the system and the call from Pappas (2019, p.19) is in this case more true than ever: "in fact, travel and tourism research has not sufficiently investigated the theories of chaos and complexity because it has followed, until now, a predominantly reductionist approach."

Change in Destination Image: A focal concept to predict tourists' destination choice is destination image, or more precisely destination imagery, defined as "an individual's diverse cognitive and affective associations relating to a destination" (Kock, Josiassen, & Assaf, 2016, p. 32). Existing research indicates that images can change across time; hence, there is a need to examine how the coronavirus pandemic alters images of particular destinations. Specifically, some destinations (e.g., Austria, Italy, Spain, New York or parts of China) were suffering from high infection rates, and this may have altered the images that potential tourists attribute to them. Potentially influenced imagery dimensions include perceptions of health infrastructure, safety, or otherwise Covid-19-impaired associations such as nightlife, mass-tourism events or perceptions of crowdedness. Kock et al. (2016) provide a methodological approach for how to develop and empirically test such tailored image measures. Two coronavirus-induced phenomena are thinkable. First, the destinations exposed to Covid-19 may face a liability in future attempts to attract tourists because of their worsened image, particularly among those tourists who are risk-sensitive and vulnerable. Second, in contrast, these destinations may benefit from a charitable attitude of future tourists who choose these coronavirus-shaken destinations to economically support them. Such considerations should go hand in hand with the field of tourist segmentation/targeting because certain groups will be more relevant during the recovery phase of this crisis (Hajibaba et al., 2015), depending on how they respond to the crisis. Backer and Ritchie (2017), for instance, highlight especially visiting friends and relatives as a relevant target group for recovering destinations, as they act less invasive than 'normal' tourists - making this also an aspect of tourist behaviour.

Change in Tourist Behaviour: Indeed, we suggest that the coronavirus pandemic can create deep marks in the tourist's thinking and feeling, and change how tourists travel. This view is different from and theoretically more sophisticated than merely descriptive and technical approaches that showcase decreasing numbers of travellers and bookings as a direct consequence of the pandemic and travel restrictions. Existing psychology research provides comprehensive evidence that a pathogen threat shapes behaviour in important and often hidden ways,

and these insights can help to understand how the coronavirus threat reshapes tourist behaviour: First, research shows that people become more collectivistic (Cashdan & Steele, 2013) when exposed to a disease threat. As a result, tourists may increasingly select domestic over foreign destinations in an attempt support the own economy – a behaviour that existing research has coined tourism ethnocentrism (Kock, Josiassen, Assaf, Karpen, & Farrelly, 2019a). This reaction may constitute a shift in tourist behaviour away from far-distant destinations to domestic ones.

Second, research found that pathogen threats make people more alert of and avoid crowdedness (Wang & Ackerman, 2019). This propensity could initiate a mind shift in tourists' travel behaviour, resulting in the avoidance of overcrowded and mass-tourism destinations in the favour of more remote, less populated destinations.

Third, a pathogen threat motivates individuals to avoid unknown things (i.e., xenophobia; Faulkner, Schaller, Park, & Duncan, 2004). Thus, also tourists could show more tourism xenophobia (Kock, Josiassen, & Assaf, 2019b), resulting in less foreign travel, avoidance of foreign food, more group travel and purchase of travel insurance.

Change in Resident Behaviour: Drawing on the same theory, also residents may become less welcoming of incoming tourists and less supportive of tourism development. The coronavirus pandemic may therefore give rise to in-group/out-group biases among both residents and tourists, a phenomenon that is still under-researched (Chien & Ritchie, 2018) and future research is needed to understand xenophobic tendencies among residents. In summary, the coronavirus pandemic may subconsciously reshape both tourist and resident behaviour in important ways that future tourism research needs to examine.

Change in the Tourism Industry: Also on the business-side, changes are expected. Especially, innovative capabilities play a key role in crisis recovery (Martínez-Román, Tamayo, Gamero, & Romero, 2015), while tourism businesses often suffer innovation deficiencies (Hjalager, 2002). Particularly small operators (often being the backbone of the tourism industry) are vulnerable in this regards, owing to path-dependent behaviour and low levels of collaboration (Sundbo, Orfila-Sintes, & Sørensen, 2007). The coronavirus pandemic however requires (on the macro-level) a strong collaboration with external systems, such as the health or emergency systems. On the micro-level, it urges businesses into new ways of operating under, for instance, social distancing rules. Collaborative action and social bricolage (Johannisson & Olaison, 2007) might thus have a stronger importance for the tourism industry during and post-Covid-19.

Long-term and Indirect Effects: Most research on crises is focusing on immediate effects thereof, yet, in order to grasp the full impact of the coronavirus pandemic, one has to take into account the long-term and indirect effects as well.

One example is sustainability in the tourism industry (e.g., Garay, Font, & Pereira-Moliner, 2017) which was a high priority for many tourism stakeholders before Covid-19 – while being this prioritization starts to be questioned currently. Sustainability is a good example for the complexity of the situation, as we see currently two different scenarios: On the one hand, the government and businesses seek to preserve the existing economic system, by financial support and deregulations. During the upcoming recession, also customers might rather look at the lowest price, not on the most sustainable option. At the company level, financial resources planned for sustainability investments will be needed to keep businesses alive. However, sustainability behaviour in the tourism industry is highly driven by an internal stakeholder consent and industry best practices (Garay et al., 2017). If too many businesses signal different directions, this might lead to a vicious cycle of reducing the effort towards sustainability.

Another scenario might constitute a real paradigm-shift (Kuhn, 2012): Due to the external shock, many tourism companies will close down. This might be a market-entry opportunity for new business models to develop. Having seen previously that investing in sustainability initiatives and financially performance are positively correlated in the tourism industry (Singal, 2014), it is likely that these new

businesses will invest in sustainability and might be more open to change and innovation. Urged by this development, other businesses might follow this path (Garay et al., 2017). Customers might see the pandemic also as a reason to behave more sustainably. In this case, the cycle would increase itself in a more sustainable development. Due to this hard to predict long-term and indirect effects, our current research needs to be careful with prediction, and more long-term research projects are needed.

4. Conclusion

Sentences like 'things will never be the way they used to be' are often heard after disasters and crises—but mostly proved wrong as we go back to our normal routines. However, this time some aspects of our behaviour might be affected by true paradigm-shifts. In science, these moments are the most relevant ones, because they lead to a change in our world-view. Following Kuhn's structure of scientific revolutions (Kuhn, 2012), this is a time of alternative concepts to theorize and understand our world. As a next step then, we will enter a pre-paradigm phase, where we as researchers have to make sense out of this little anarchic period of research. After that, new paradigms will be agreed on and revolutions will become visible.

Importantly, this pandemic underlines that tourism has to be understood in the greater global economic and political context that will define the future world that tourism will operate in. We will live in a 'new-normal' tourism world – and it is our task to understand and explain it right now. In particular, if our underlying theories and understandings have changed due to the coronavirus pandemic. This means there is a lot to research yet to be conducted. Let us start, but do not go for the obvious and purely descriptive.

Impact statement

This paper addresses the tourism research community and calls for deliberateness and rigor in research about the current coronavirus (Covid-19) pandemic. By highlighting what we know and how existing research on disasters and crises shows similar patterns or existing theories explaining current phenomena, we argue that not all foci are worth researching and contribute to scientific knowledge, or the wider society, economy, public policy or services, and/or health during and after this pandemic.

We critically discuss six illustrative coronavirus research parts (i.e., complexity of the situation; changes in destination image; change in tourism behaviour; change in resident behaviour; change in the tourism industry; long-term and indirect effects). In doing so, this paper shows paths where existing tourism research could intensify, or where we even expect a paradigm-shift in tourism due to the coronavirus pandemic.

Contribution

Both authors contributed equally to all parts of the paper.

Declaration of competing interest

None.

CRediT authorship contribution statement

Sebastian Zenker: Conceptualization, Writing - original draft, Writing - review & editing. **Florian Kock:** Conceptualization, Writing - original draft, Writing - review & editing.

Acknowledgements

none.

References

- Alvarez, M. D., & Campo, S. (2014). The influence of political conflicts on country image and intention to visit: A study of Israel's image. *Tourism Management*, 40, 70–78.
- Avraham, E. (2015). Destination image repair during crisis: Attracting tourism during the Arab Spring uprisings. *Tourism Management*, 47, 224–232.
- Backer, E., & Ritchie, B. W. (2017). VFR travel: A viable market for tourism crisis and disaster recovery? *International Journal of Tourism Research*, 19(4), 400–411.
- Cahyanto, I., Wiblishauser, M., Pennington-Gray, L., & Schroeder, A. (2016). The dynamics of travel avoidance: The case of Ebola in the US. *Tourism Manag. Perspect.*, 20, 195–203
- Campos-Soria, J. A., Inchausti-Sintes, F., & Eugenio-Martin, J. L. (2015). Understanding tourists' economizing strategies during the global economic crisis. *Tourism Management*. 48, 164–173.
- Cashdan, E., & Steele, M. (2013). Pathogen prevalence, group bias, and collectivism in the standard cross-cultural sample. *Human Nature*, 24(1), 59–75.
- Chien, P. M., & Ritchie, B. W. (2018). Understanding intergroup conflicts in tourism. Annals of Tourism Research, 72(September), 177–179.
- Cró, S., & Martins, A. M. (2017). Structural breaks in international tourism demand: Are they caused by crises or disasters? *Tourism Management*, 63, 3–9.
- Faulkner, B., & Russell, R. (2000). Turbulence, chaos and complexity in tourism systems: A research direction for the new millennium. In R. Faulkner, G. Moscardo, & E. Laws (Eds.), *Tourism in the 21st century: Lessons from experience* (pp. 328–349). London: Continuum.
- Faulkner, J., Schaller, M., Park, J. H., & Duncan, L. A. (2004). Evolved disease-avoidance mechanisms and contemporary xenophobic attitudes. *Group Processes & Intergroup Relations*, 7(4), 333–353.
- Garay, L., Font, X., & Pereira-Moliner, J. (2017). Understanding sustainability behaviour: The relationship between information acquisition, proactivity and performance. *Tourism Management*, 60, 418–429.
- Hajibaba, H., Gretzel, U., Leisch, F., & Dolnicar, S. (2015). Crisis-resistant tourists. Annals of Tourism Research, 53, 46–60.
- Hjalager, A. M. (2002). Repairing innovation defectiveness in tourism. *Tourism Management*, 23(5), 465–474.
- Jiang, Y., Ritchie, B. W., & Benckendorff, P. (2017). Bibliometric visualisation: An application in tourism crisis and disaster management research. Current Issues in Tourism, 22(16), 1–33.
- Johannisson, B., & Olaison, L. (2007). The moment of truth—reconstructing entrepreneurship and social capital in the eye of the storm. *Review of Social Economy*, 65(1), 55–78.
- Kock, F., Assaf, A. G., & Tsionas, M. (2020). Developing courageous research ideas. Journal of Travel Research. https://doi.org/10.1177/0047287519900807. advance online publication.
- Kock, F., Josiassen, A., & Assaf, A. G. (2016). Advancing destination image: The destination content model. Annals of Tourism Research, 61, 28–44.
- Kock, F., Josiassen, A., & Assaf, A. G. (2019b). The xenophobic tourist. Annals of Tourism Research, 74, 155–166.
- Kock, F., Josiassen, A., Assaf, A. G., Karpen, I., & Farrelly, F. (2019a). Tourism ethnocentrism and its effects on tourist and resident behavior. *Journal of Travel Research*, 58(3), 427–439.
- Kuhn, T. S. (2012). The structure of scientific revolutions (4th ed.). Chicago: University of Chicago press.
- Leung, X. Y., Xue, L., & Wen, H. (2019). Framing the sharing economy: Toward a sustainable ecosystem. *Tourism Management*, 71, 44–53.
- Luhmann, N. (2002). Einführung in die Systemtheorie. Heidelberg: Carl-Auer Verlag. Mair, J., Ritchie, B. W., & Walters, G. (2016). Towards a research agenda for post-disaster and post-crisis recovery strategies for tourist destinations: A narrative review. Current Issues in Tourism, 19(1), 1–26.
- Martínez-Román, J. A., Tamayo, J. A., Gamero, J., & Romero, J. E. (2015).
 Innovativeness and business performances in tourism SMEs. Annals of Tourism Research, 54, 118–135.
- Novelli, M., Burgess, L. G., Jones, A., & Ritchie, B. W. (2018). "No Ebola... still doomed"—The Ebola-induced tourism crisis. *Annals of Tourism Research*, 70, 76–87.
- Okuyama, T. (2018). Analysis of optimal timing of tourism demand recovery policies from natural disaster using the contingent behavior method. *Tourism Management*, 64, 37–54.
- Page, S., Yeoman, I., Munro, C., Connell, J., & Walker, L. (2006). A case study of best practice—visit Scotland's prepared response to an influenza pandemic. *Tourism Management*, 27(3), 361–393.
- Papatheodorou, A., Rosselló, J., & Xiao, H. (2010). Global economic crisis and tourism: Consequences and perspectives. *Journal of Travel Research*, 49(1), 39–45.
- Pappas, N. (2019). UK outbound travel and Brexit complexity. Tourism Management, 72, 12–22.
- Pauchant, T. C., & Mitroff, I. I. (1992). Transforming the crisis-prone organization: Preventing individual, organizational, and environmental tragedies. San Francisco, CA: Jossey-Bass Inc.
- Pennington-Gray, L. (2018). Reflections to move forward: Where destination crisis management research needs to go. Tourism Manag. Perspect., 25, 136–139.

- Prideaux, B., Laws, E., & Faulkner, B. (2003). Events in Indonesia: Exploring the limits to formal tourism trends forecasting methods in complex crisis situations. *Tourism Management*, 24(4), 475–487.
- Ritchie, B. W. (2004). Chaos, crises and disasters: A strategic approach to crisis management in the tourism industry. *Tourism Management*, 25(6), 669–683.
- Ritchie, B. W., & 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. *Annals of Tourism Research*, 79 (November). 102812.
- Rittichainuwat, B. N., & Chakraborty, G. (2009). Perceived travel risks regarding terrorism and disease: The case of Thailand. *Tourism Management*, 30(3), 410–418.
- Sadovnikova, N., Parygin, D., Gnedkova, E., Kravets, A., Kizim, A., & Ukustov, S. (2013).
 Scenario forecasting of sustainable urban development based on cognitive model. In Proceedings of the IADIS international conference ICT (pp. 115–119). Society and Human Beings.
- Scott, N., & Laws, E. (2005). Tourism crises and disasters: Enhancing understanding of system effects. *Journal of Travel & Tourism Marketing*, 19(2/3), 151–160.
- Seabra, C., Dolnicar, S., Abrantes, J. L., & Kastenholz, E. (2013). Heterogeneity in risk and safety perceptions of international tourists. *Tourism Management*, 36, 502–510.
- Singal, M. (2014). The link between firm financial performance and investment in sustainability initiatives. *Cornell Hospitality Quarterly, 55*(1), 19–30.
- Speakman, M., & Sharpley, R. (2012). A chaos theory perspective on destination crisis management: Evidence from Mexico. *J. Destin. Market. Manag.*, 1(1–2), 67–77.
- Sundbo, J., Orfila-Sintes, F., & Sørensen, F. (2007). The innovative behaviour of tourism firms—comparative studies of Denmark and Spain. Research Policy, 36(1), 88–106.
- Vargo, S. L., Wieland, H., & Akaka, M. A. (2015). Innovation through institutionalization: A service ecosystems perspective. *Industrial Marketing Management*, 44, 63–72.
- Wang, I. M., & Ackerman, J. M. (2019). The infectiousness of crowds: Crowding experiences are amplified by pathogen threats. *Personality and Social Psychology Bulletin*, 45(1), 120–132.
- Wang, J., & Ritchie, B. W. (2012). Understanding accommodation managers' crisis planning intention: An application of the theory of planned behaviour. *Tourism Management*, 33(5), 1057–1067.
- WTTC. (2020). Latest research from WTTC. World Travel & Tourism Council (WTTC). Retrieved 8th of April 2020, from https://www.wttc.org/about/media-centre/press-releases/press-releases/2020/latest-research-from-wttc-shows-an-increase-in-jobs-at-risk-in-travel-and-tourism/.
- Zahra, A., & Ryan, C. (2007). From chaos to cohesion complexity in tourism structures: An analysis of New Zealand's regional tourism organizations. *Tourism Management*, 28(3), 854–862.
- Zeng, B., Carter, R. W., & De Lacy, T. (2005). Short-term perturbations and tourism effects: The case of SARS in China. *Current Issues in Tourism*, 8(4), 306–322.
- Zenker, S., von Wallpach, S., Braun, E., & Vallaster, C. (2019). How the refugee crisis impacts the decision structure of tourists: A cross-country scenario study. *Tourism Management*, 71, 197–212.



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