Tourism and Hospitality industry resilience during the Covid-19 pandemic: Evidence from England

Nikos Ntounis, Cathy Parker, Heather Skinner, Chloe Steadman and Gary Warnaby

Institute of Place Management, Manchester Metropolitan University, Manchester, UK

ABSTRACT
The tourism and hospitality industries have been particularly impacted by the Covid-19 pandemic, with widespread closures and later re-opening times than other areas of economic activity. However, little is known about the resilience of these industries in light of the current pandemic, within the context of English towns. This paper surveys businesses dependent on tourism located in English towns, to explore perceptions of resilience in this crisis context. We consider the nuances involved in resilience to disturbances such as Covid-19, revealing the temporal dimensions of resilience. Moreover, we identify influences informing differing resilience levels within and between industries. The paper also contributes a novel Business Resilience Composite Score, which enables academics, practitioners and policy-makers to draw comparisons between tourism and hospitality industry resilience and other economic activity in urban locations.

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Introduction
The Covid-19 pandemic suddenly disrupted people and places on a global scale, with huge social, psychological, and economic impacts. The consequences have been described as ‘catastrophic’, and no industries have, arguably, been as hard-hit as tourism and hospitality (Dube et al., 2020; Legrand, 2020; Nicola et al., 2020). Although some tourism and hospitality businesses were already in a precarious state pre-pandemic (Baum et al., 2020; Gretzel et al., 2020), these industries have been particularly disrupted by the pandemic, echoing Sands et al.’s (2016, p. 2447) forewarning that places ‘dependent on travel and tourism will be more vulnerable to economic disruption from potential pandemics’. The initial ‘lockdown’ in England, beginning on 23rd March 2020, saw flights grounded and tourism and hospitality businesses closed. Upon the gradual easing of restrictions, these businesses had to adapt to new social distancing and capacity guidelines, operating curfews, a second four-week national lockdown beginning in November 2020, and, at the time of writing, now a third national lockdown resulting in falling revenues, job losses, and widespread uncertainty, which is expected to endure (Carr, 2020).

As Prayag (2020, p. 179) states, however, ‘pandemics are not new’; and the impacts of previous crises, such as SARS, on the tourism and hospitality industries have been investigated (Chen, 2011; Chien & Law, 2003; Tse et al., 2006; Zeng et al., 2005). An emerging literature concerning the impacts of Covid-19 on tourism also exists, exploring issues such as negative economic impacts, employee uncertainty, business innovations, and what the future of tourism might look like, post-Covid (e.g. Carr, 2020; Dube et al., 2020; Foo et al., 2020; Gong et al., 2020; Higgins-
Desbiolles, 2020; Knight & Reddy, 2020; Mao et al., 2020; Niewiadomski, 2020). However, there is limited research on this within an English context. Following observations that ‘resilience’ remains a concept fruitful for such research (Gong et al., 2020; Prayag, 2020), this paper draws on insights gathered from over 1000 businesses located in English Business Improvement Districts (BIDs). Our dataset of 340 tourism-dependent businesses is part of broader research, commissioned by the High Streets Task Force – a government-funded programme to provide support across England for those working to revitalize town centres (Institute of Place Management, 2020). We assess perceptions of resilience to Covid-19 among these businesses and contribute novel insights into the temporal aspects of resilience informing the pandemic’s differential impacts on these industries, relative to others. An original mechanism for calculating business resilience is also contributed, which can be adopted by academics, practitioners, and policy-makers to compare resilience of town centre tourism-dependent businesses with those in other industries.

Urban resilience: definitions and conceptual tensions

Here, the concept of urban resilience is important. We thus begin by briefly outlining this concept, before addressing specifically tourism and hospitality industry resilience, within the context of Covid-19 and other crises. Academic and policy interest in ‘resilience’ is growing, owing to increasing uncertainty within urban environments (Gong et al., 2020). However, there is no single definition of resilience, nor is its meaning static (Coaffee, 2013), since the concept is adopted across multiple disciplines to study multiple urban disturbances (Cutter et al., 2008; Meerow et al., 2016; Wardekker et al., 2020). Thus, the urban resilience concept is dynamic and has ‘fuzzy’ boundaries (Meerow et al., 2016, p. 39; see also Wardekker et al., 2020). Acknowledging its inherent interdisciplinarity, Meerow et al. synthesize existing conceptualisations to define urban resilience as

the ability of an urban system – and all its constituent socio-ecological and socio-technical networks across temporal and spatial scales – to maintain or rapidly return to desired functions in the face of a disturbance, to adapt to change, and to quickly transform systems that limit current or future adaptive capacity. (2016, p. 45)

They suggest this flexible definition enables ‘different perspectives and emphases to remain and flourish’ (2016, p. 45), and acknowledge the concept addresses six key ‘conceptual tensions’, with the first relating to what constitutes urban itself. The second concerns distinctions between single-state equilibrium (i.e. capacity to revert to a previous equilibrium, post-disturbance); multiple-state equilibrium (i.e. transformation from one stable domain to another, post-disturbance); and dynamic non-equilibrium (i.e. constant change and no singular stable state). Grinberger and Felsenstein (2014) discuss similar tensions in terms of ‘bouncing back’ (to a former stable equilibrium) or ‘bouncing forwards’ (i.e. various potential new trajectories) from urban shocks. A third conceptual tension considers whether, if urban resilience refers to a return to a post-disturbance state, it is a positive concept. The fourth conceptual tension relates to the different ‘pathways’ to a resilient state: persistence (i.e. resist disturbance, to maintain the status quo); transition (i.e. incrementally adapt while retaining system function); and transformation (where resilience-building efforts seek to purposefully change an undesired system). The fifth conceptual tension refers to the nature of adaptation, contrasting specific adaptation to known threats with more generic adaptability. A final conceptual tension incorporates temporality, with an apparent consensus on the importance of rapid recovery post-disturbance. However, this may be contextually contingent on whether the focus is on rapid-onset disasters or more gradual factors (Meerow et al., 2016), with Leitner et al. (2018) distinguishing between ‘chronic stresses’, where the urban system is weakened over time (e.g. climate change) and sudden ‘acute shocks’ (e.g. Covid-19).

Industry resilience: tourism, hospitality, and urban shocks

According to Sydnor-Bousso et al. (2011), there is limited research into the impacts of disasters on specific industries, echoing Ritchie’s (2004) view about the tourism industry specifically. Although
travel, tourism, and hospitality industries are somewhat distinct, they significantly intertwine (Baum et al., 2020), and the World Bank (2020) notes the catastrophic impact of Covid-19 on the tourism industry’s ‘entire value chain … spanning airlines, bus and train companies, cruise lines, hotels, restaurants, attractions, travel agencies, tour operators, online travel entities, and others’. Indeed, urban areas, which incorporate a range of hospitality businesses, tend to be highly attractive destinations for both international and domestic tourists (Postma & Schmuecker, 2017).

We thus focus on tourism and hospitality industry resilience to crises, more specifically. Within a tourism context, Buultjens et al. (2017, p. 84) define industry resilience as ‘the capacity of the industry to deal effectively with disasters and self-inflicted crises in order to maintain … stability … whilst also ensuring the flexibility and diversity necessary for innovation and further development’. Various studies have reported the ‘crippling effects of crises on tourism’ (Khalid et al., 2020, p. 315), indicating a lack of industry resilience to major external shocks (Chowdhury et al., 2019). Extant research into tourism and hospitality industry resilience have tended to focus on specific types of crises, for example climate change (Becken, 2013) and natural disasters (Aleffi & Cavicchi, 2020; Henderson, 2007; Sydnor-Bousso et al., 2011), economic crashes (Khalid et al., 2020), and terrorist attacks (Chen, 2011). There is also nascent literature investigating the impacts of disease outbreaks, including Ebola (Kongoley, 2015) and, most extensively, the SARS outbreak (Chen, 2011; Chien & Law, 2003; Tse et al., 2006; Zeng et al., 2005).

The scale and rapid-onset of the Covid-19 pandemic – with travel bans, quarantine restrictions, closures of borders and tourist accommodation, and the worldwide grounding of flights – has had devastating economic impacts on the tourism sector (Gössling et al., 2020). Additionally, there are social impacts due to associated furloughing and job losses, as the tourism and hospitality industries are very labour-intensive (WTO, 2020), with projections that technology may play a more important role in a post-pandemic tourism world, potentially leading to further job losses (Gretzel et al., 2020). For Baum et al. (2020), however, the pandemic’s impact on tourism and hospitality resilience is merely an amplification of normal practices (e.g. rapid-fire recruitment and retrenchment of staff based on demand), accelerated by the speed of the virus and the (in)ability of government schemes to address the social vulnerabilities of the workforce and communities in which tourism is the main industry. Jamal and Budke (2020) further observe that pandemics are likely to become a common feature of the tourism industry, requiring greater stakeholder collaboration to plan for and manage resilience.

More positively, Niewiadomski (2020, p. 4) suggests that ‘temporary processes of de-globalisation are giving the global tourism industry a unique chance for a re-boot … to re-develop in line with the tenets of sustainability’; for example, through opportunities for more domestic ‘staycations’ (Prayag, 2020). Similarly, this hiatus could lead to a pause in the global tourism system that enables a rethink of how it operates (Sigala, 2020), and an agenda for a more sustainable and resilient future that is more democratized (Carr, 2020), inclusive, and offering more opportunities for social justice with less exploitation (Higgins-Desbiolles, 2020).

However, there is limited work comparing the resilience of the tourism and hospitality industries to Covid-19, relative to others. Thus, acknowledging Lew’s (2014) stress on the importance of taking context into account when researching resilience, alongside Fromhold-Eisebith’s (2015, p. 1676) more specific contention that ‘resilience dynamics differ between industry sectors’, this paper investigates tourism and hospitality industry resilience to Covid-19 in English town centres, and draws comparisons with other sectors. It further considers business perceptions of resilience, as they can also influence the impacts experienced. As Sands et al. (2016, p. 2443) state, ‘in a media-saturated world, fear spreads faster than any disease, and it is fear that drives behavioural change and in turn, economic impact’. Lankao and Qin (2011, p. 145) further note, ‘resilience is always contested and conflict-ridden; it is a function of power around which winners and losers emerge’. This paper seeks to investigate this phenomenon.
Methodology

Urban destinations are favoured by both inbound and domestic tourists (Ashworth & Page, 2011); and hospitality businesses play a ‘vital role in the public life of cities’, bringing ‘sociability to urban spaces’ (Mand & Cilliers, 2013, p. 211). This paper analyses perceptions of resilience of managers in English town centres running businesses dependent on the tourism industry, to Covid-19 during the lockdown period, beginning on 23 March, as part of a broader multi-sector study to answer two research questions. First, how does business resilience vary across sectors in a pandemic situation? And second, what are the factors influencing the perceived resilience of tourism-dependent businesses?

To address these questions, we adopted an embedded design approach – a variant of mixed methods research combining the collection and analysis of data stemming from quantitative and qualitative research (Creswell & Plano Clark, 2011), but with data collection being single-phased and concurrent, rather than multi-stage. Our research design comprised an online survey of businesses located within a range of English towns, comprising the jurisdictional areas of BIDs that are members of UK-based place management representative organizations. The survey was primarily quantitative, but also sought, through open-ended qualitative survey items, to address the specific issues that businesses faced at the time of study, and also how they might operate in what has been described as ‘the new normal’. This enabled understanding of the ‘importance of context and the need to reflect multiple perspectives, positions and insights to address complex issues and phenomena’ (Truong et al., 2020, p. 1571). Thus, we addressed our research questions by analysing two types of data: quantitative analysis of business resilience across multiple sectors; and the adoption of a business resilience composite score providing the context for qualitatively examining the factors and challenges that tourism-dependent businesses are facing during the Covid-19 pandemic.

The survey instrument (designed using Qualtrics) was distributed through the membership/contact lists of approximately 300 BIDs. It contained questions relating to: (1) the current situation of the respondent’s business; (2) the effect of Covid-19 on trade (compared to the same time period last year); (3) the level of take-up of government and additional assistance available for businesses (and its perceived efficacy); and (4) whether businesses have continued paying business rents, business rates, business loans, etc. Respondent classification data related to: Type of business structure; Main product/service sector (using Standard Industry Classification codes); Business Ownership type: Number of staff employed in full-time equivalent (FTE) units; Approximate annual turnover (2018/2019); and Location (first 3–4 digits of postcode). The survey period was 17–27 April 2020, as a key purpose of the research was to produce a ‘snapshot’ of business opinion after one month of ‘lockdown’ to inform policy-makers, consistent with the rationale of the broader project.

Data were obtained from 1016 respondents and analysed using SPSS. Free-text comments provided by 488 respondents were subject to qualitative thematic analysis (Crang, 2005). Acknowledging issues of unitization, inter-coder reliability and agreement (Campbell et al., 2013), and consistent with Denzin’s (1978) notion of ‘investigator triangulation’, themes were refined following iterative discussions between researchers, and in accordance with the main variables affecting business resilience. All investigators immersed in the process of investigator self-questioning, based on the juxtaposition of data sets that led to alternative epistemological explanations regarding tourism and hospitality resilience. Here, the unique characteristics of tourism-dependent businesses arose from analysis of both quantitative and qualitative data, and a dialogical tension between the methods used to assess industry resilience (‘scoring’ versus ‘interpreting’) was created, which highlighted the issues of temporality and seasonality by synthesizing the main challenges of the industry at that point in time (Archibald, 2016).

Identifying tourism-dependent businesses

During the recruitment process, we included any business that could potentially be part of an urban BID, reflecting the broader remit. However, as the aim was to highlight resilience perceptions of
tourism-dependent businesses, a subsample of relevant respondents was then identified. We selected businesses that constitute the bulk of tourism expenditure in England, based on the 2019 GB Tourist Annual Report (Visit Britain, 2020a):

- Accommodation/Hospitality (Hotels, Hostels, Other Accommodation) (38% of total expenditure)
- Food & Beverage (restaurants, pubs) (eating out and drinking) (22% of total expenditure)
- Selected retail sales of non-food (such as clothing, cultural and recreation, communication, etc.) (12% of total expenditure)
- Arts, Entertainment & Recreation (Performing arts, libraries, museums, sports facilities, etc.) (6% of total expenditure).

We also assessed location data (first 3–4 digits of postcode) to identify businesses within already established tourist destinations (e.g. historic or coastal towns) or have high visitation numbers. The regional distribution of inbound visitors for 2019 (Visit Britain, 2020b) was used to identify the big regional markets that attract most visitors. Respondents also provided details about their business through short comments etc., and by this means businesses that complement the tourist experience (e.g. tour guides, travel agents, attractions and theme parks etc.) were added. Consequently, 340 businesses were classified as ‘tourism-dependent’ from 46 out of 72 locations across England (Table 1). From those businesses, 162 (47.6%) belong to the ‘food and beverage’ sector, followed by 76 (22.4%) in the ‘entertainment and leisure’ sector, and 58 (17.1%) in the ‘accommodation/hospitality’ sector. The rest of businesses included belong to the ‘support services’ sector (n = 22) (e.g. tourist agencies and guides) and retail of non-food and other service activities (n = 22). Within this subsample, a total of 192 qualitative responses were analysed thematically, with this high response rate (56%) indicative of the level of concern regarding the future of businesses during the Covid-19 pandemic.

After briefly outlining characteristics and reported performance of the 340 respondents, we outline a score for inter-sectoral comparative business resilience, before identifying possible reasons for the relative weakness of tourism and hospitality businesses, as well as differing resilience levels of businesses within this industry (drawn from our qualitative data).

**Respondent characteristics and business performance**

The majority of respondents (77.1%, n = 262) were independent businesses (i.e. 1–9 outlets), with 50.6% (n = 172) employing 1–9 FTE staff and a further 22.9% (n = 78) employing 10–49 FTEs. Consequently, most are classified as small businesses – in terms of turnover: 28.5% (n = 97) had an annual turnover of less than £100,000, with a further 18.2% (n = 62) with a turnover of £100,001–£250,000, and 18.8% (n = 63) with a turnover between £250,001 and £500,000.

Only 2.6% of respondents (n = 9) noted their business premises were open and operating normally at the time of the study. Indeed, 83.8% (n = 285) stated their premises were closed and the business not currently operational, although 13.6% (n = 46) indicated that whilst their premises were closed, the business was operating in some other way (e.g. from home via internet/phone orders, or as a takeaway business). This evidences what Meerow et al. (2016) refer to as ‘particular adaptations’, with those innovating in this way building resilience more quickly. At the time of the survey, only one respondent’s business had ceased trading permanently.

The implications for business takings are obvious – 81.8% (n = 278) of respondents stated they had seen an 81–100% decrease compared to the same period last year, and only 2.4% (n = 8) had increased takings. If these lockdown arrangements were to last up to 3–4 months, then 33.6% (n = 114) of respondents indicated they would have to permanently cease trading. A significant element of tourism-dependent business costs is rent on business premises, and 65.6% (n = 223) of respondents rented premises. Of these, 52.5% (n = 117) paid all their due rent for the last rental period, with only 27.6% (n = 94) expecting to pay all of their next rent payment.
When asked, with no additional income, how long would existing financial resources cover ongoing business costs, 72.9% of respondents (n = 218 out of 299) indicated they could carry on for up to four months, with a further 17.4% (n = 52 out of 299) stating between 4 and 6 months. Thus, financial assistance packages (e.g. staff furloughs) provided by government were important in ameliorating the situation: only 2.6% of respondents (n = 9) had not already applied for such assistance (or did not intend to do so).

Assessing business resilience

It was clear from our analysis that not all businesses have equal capacity to absorb the crippling effects of the pandemic’s systemic shock. The tourism industry in particular is highly susceptible

| Town/City          | Frequency | Percent | Cumulative percent |
|--------------------|-----------|---------|--------------------|
| Bath               | 20        | 5.9     | 5.9                |
| Birmingham         | 13        | 3.8     | 9.7                |
| Blackpool          | 6         | 1.8     | 11.5               |
| Bognor Regis       | 5         | 1.5     | 12.9               |
| Bournemouth        | 12        | 3.5     | 16.5               |
| Bradford           | 5         | 1.5     | 17.9               |
| Brighton           | 1         | 0.3     | 18.2               |
| Bristol            | 2         | 0.6     | 18.8               |
| Cambridge          | 3         | 0.9     | 19.7               |
| Canterbury         | 18        | 5.3     | 25                 |
| Chester            | 7         | 2.1     | 27.1               |
| Chichester         | 6         | 1.8     | 28.8               |
| Coventry           | 2         | 0.6     | 29.4               |
| Derby              | 10        | 2.9     | 32.4               |
| Doncaster          | 4         | 1.2     | 33.5               |
| Durham             | 1         | 0.3     | 33.8               |
| Exeter             | 8         | 2.4     | 36.2               |
| Gloucester         | 9         | 2.6     | 38.8               |
| Guildford          | 3         | 0.9     | 39.7               |
| Hemel Hempstead    | 5         | 1.5     | 41.2               |
| Hull               | 1         | 0.3     | 41.5               |
| Ilkley             | 1         | 0.3     | 41.8               |
| Isle of Wight      | 2         | 0.6     | 42.4               |
| Kendal             | 2         | 0.6     | 42.9               |
| Leamington Spa     | 6         | 1.8     | 44.7               |
| Leeds              | 14        | 4.1     | 48.8               |
| Leicester          | 5         | 1.5     | 50.3               |
| Liverpool          | 26        | 7.6     | 57.9               |
| London             | 19        | 5.6     | 63.5               |
| Manchester         | 1         | 0.3     | 63.8               |
| Minehead           | 2         | 0.6     | 64.4               |
| Northampton        | 8         | 2.4     | 66.8               |
| Norwich            | 7         | 2.1     | 68.8               |
| Nottingham         | 2         | 0.6     | 69.4               |
| Plymouth           | 3         | 0.9     | 70.3               |
| Portsmouth         | 15        | 4.4     | 74.7               |
| Preston            | 14        | 4.1     | 78.8               |
| Salisbury          | 7         | 2.1     | 80.9               |
| Southampton        | 6         | 1.8     | 82.6               |
| Southend-on-Sea    | 12        | 3.5     | 86.2               |
| Tunbridge Wells    | 7         | 2.1     | 88.2               |
| Warwick            | 1         | 0.3     | 88.5               |
| Wolverhampton      | 5         | 1.5     | 90                 |
| Worcester          | 8         | 2.4     | 92.4               |
| Worksop            | 6         | 1.8     | 94.1               |
| York               | 20        | 5.9     | 100                |
| Total              | 340       | 100     |                    |
to potential disasters, and their compounding long-term effects can be very disruptive for business viability and livelihoods (Calgaro et al., 2014). In the current pandemic, it can be theorized that the tourism system is more vulnerable than other industry systems where the socio-political, economic and environmental links between resilience and sustainability are more developed (Espiner et al., 2017; Hopkins & Becken, 2015).

We therefore calculated an original Business Resilience Composite Score (BRCS) indicating the relative resilience of tourism-dependent businesses during the Covid-19 crisis. Past literature highlights that vulnerability is a consequence of a business’s characteristics and economic capital, such as current assets, business size and fiscal resources (Song et al., 2016; Stafford & Renaud, 2019), which highlight preparedness for hazards. In addition to these established variables, the level of assistance needed during Covid-19, the current business status, the impact on turnover compared to last year, and the cease trading period estimation for each business were deemed to be significant resilience indicators, and thus included in the BRCS (Table 2). In England, tourism-dependent businesses normally belong to sectors vulnerable to Covid-19 that have fewer financing options (Bank of England, 2020). It is therefore important to examine how such businesses were equipped to navigate the crisis.

Table 2. Variables included in the business resilience composite score.

| Variables                        | Question                                                                 | Note                                                                 | Anticipated direction of effect                                                                 |
|----------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Business Size                    | Number of staff employed in full-time equivalent (FTE) units (Sole trader, 1–9 FTEs, 10–49 FTEs, 50–249 FTEs, 250+ FTEs) | Transformed into 3-scale variable. Businesses under 10 FTEs are considered micro businesses, 10–49 FTEs as small, 50–249 FTEs as medium | Smaller businesses have increased vulnerability (Song et al., 2016)                                |
| Business Situation               | Please choose one of the following that applies to your current situation | Businesses ceased trading were excluded from the analysis – 3-scale variable (Closed but operating, Closed and not operating, Open and operating) | Businesses not operating at any capacity most vulnerable                                      |
| Impact on Turnover               | Can you give an estimate (%) of the impact on takings for your business in comparison with the same period last year? | Comparison to the period of March–April 2019 vs 2020 – 10-scale variable, starting from 81% to 100% decrease to more than 100% increase | Loss of turnover increases vulnerability                                                      |
| Cease Trading Estimation         | How long would the current lockdown need to last before you (or someone else) would take the decision to permanently cease trading from the premises? | 6-scale variable (0–2 weeks, 3–4 weeks, 1–2 months, 3–4 months, 4–6 months, more than 6-months), with I don’t know/not my decision as missing variable | Less resilient if cannot hold for longer time without income (Webb et al., 2002)            |
| Eligibility for Government Assistance (Over 51 K Rateable Value) | If you have not applied for any of the Government’s business assistance measures, why is this? | 2-scale variable, not eligible/eligible for businesses with over 51 K Rateable Value | Not eligible businesses increase vulnerability                                               |
| Additional Assistance Needed     | Are you considering any other forms of financial assistance?             | 2-scale variable, yes/no                                             | Businesses seeking additional assistance more likely to fail in the future                   |
| Financial Resources              | With no additional income, how long would your financial resources cover your ongoing costs for the business? | 6-scale variable (0–2 weeks, 3–4 weeks, 1–2 months, 3–4 months, 4–6 months, more than 6-months), with I don’t know/not my decision as missing variable | Fewer financial reserves increase vulnerability (Bank of England, 2020)                      |
| Renting premises                 | Do you rent your premises?                                              | 2-scale variable, yes/no                                             | Renting premises reduces fiscal resources thus increasing vulnerability (Song et al., 2016) |
As the main goal of the BRCS was to examine the direct effects of the measures imposed in response to Covid-19 (taking into account existing business operating capacity, financial situation, and the level of assistance needed and sought), we adopted a balanced weighted average approach, where each variable contributes equally to the overall BRCS (Hahn et al., 2009). Each variable was averaged using the following equation:

$$M_{sec} = \frac{\sum_{i=1}^{n} \text{Indexed Variable}_{sec}}{n}$$

As variables were measured on different scales, they were standardized as an index value using the following formula (Ahsan & Warner, 2014):

$$\text{Indexed variable score}_i = \frac{x_i - x_{min}}{x_{max} - x_{min}}$$

where $$x_i$$ = original value of variable for each business; $$x_{max}$$ = the highest value of variable for each business; $$x_{min}$$ = the lowest value of variable for each business.

The BRCS was calculated for 787 of the 1016 businesses, as the purpose of the wider project was to assess the overall situation in England, which serves to locate tourism-dependent businesses in a broader sectoral context. In all cases, the highest value was assigned to the category that has a more negative effect on business resilience. For example, a business that had significant loss of income (impact on turnover – TRN indexed variable) was assigned the maximum value in the original data set, which after indexing, was equal to 1. Similarly, if respondents estimated their business would cease operations (CTE indexed variable) or their financial resources would last less than two weeks, a maximum value was assigned, with a similar process of indexing unfolding. Ultimately, the BRCS was determined by averaging the scores of all variables, as shown in the following equation:

$$\text{BRCS}_{sec} = \frac{\text{BUS}_{sec} + \text{BS}_{sec} + \text{TRN}_{sec} + \text{CTE}_{sec} + \text{EGA}_{sec} + \text{AAN}_{sec} + \text{FRES}_{sec} + \text{RP}_{sec}}{8}$$

Using the formulas above, we calculated and compared the BRCS scores of tourism-dependent businesses with all other businesses. Table 3 presents the mean scores of all variables for all sectors, and Table 4 presents the mean scores, sample sizes and standard deviation for the BCRS for all sectors. An ANOVA test was conducted to determine any significant difference between broad sectors. There was a significant difference between groups ($$F(6, 780) = 11.193, \ p < .001$$). The post hoc tests further revealed that businesses within the professional services sectors are significantly less affected than tourism-dependent businesses.

From the calculation of the BRCS (Table 4), it is evident that, with a score of 0.593, tourism-dependent businesses are highly vulnerable; however, they fared somewhat better than the retail (0.613) and personal services (0.639) sectors. A small sample ($$n = 15$$) of hospitality, leisure and entertainment businesses estimated to not rely on tourism also fared worse (0.631) than the tourism-dependent businesses. Even though survey respondents in tourism-dependent businesses suffered the most in terms of loss of income ($$n = 278$$ out of 340, 81.8%), their BRCS is very similar when compared with all other businesses (0.588, $$n = 543$$). Indeed, the evidence here seems initially to counter the accepted perceived wisdom (reported in the literature review) regarding the particular vulnerability of the tourism and hospitality industries to the pandemic, because other sectors appear equally impacted, at least in these early stages of the UK ‘lockdown’.

However, the qualitative data highlighted more nuanced detail regarding resilience levels, which perhaps explains such perceptions regarding the vulnerability of tourism-dependent businesses, longer-term. For example, the location where the business was situated was considered an issue for some businesses:

As a coastal destination business, I feel we are already struggling before the Covid 19 outbreak to sustain profitable business due to our location and the reliance on people travelling to the area. If going forward the
Table 3. Mean scores, sample sizes and standard deviations of variables.

| Variables                          | Tourism-Dependent Businesses | Manufacturing Businesses | Retail Businesses | Other Hospitality, Leisure & Entertainment Businesses | Professional Services Businesses | Health & Education Businesses | Personal Services & Other Businesses | Total Businesses |
|-----------------------------------|------------------------------|--------------------------|-------------------|------------------------------------------------------|---------------------------------|-------------------------------|--------------------------------------|-----------------|
|                                   | Mean (N)                     | Std. Deviation           | Mean (N)          | Std. Deviation                                      | Mean (N)                       | Std. Deviation               | Mean (N)                          | Std. Deviation |
| Business Size                     | 0.851 (340)                  | 0.24427                  | 0.8333 (22)       | 0.24427                                              | 0.9192 (293)                   | 0.2138                        | 0.807 (19)                        | 0.24427        |
| Business Situation                | 0.8772 (338)                 | 0.24757                  | 0.5682 (22)       | 0.24757                                              | 0.7595 (291)                   | 0.31413                       | 0.9474 (19)                       | 0.24757        |
| Impact on Turnover                | 0.95 (340)                   | 0.15221                  | 0.8333 (22)       | 0.15221                                              | 0.931 (293)                    | 0.18154                       | 0.9064 (19)                       | 0.18154        |
| Cease Trading Estimation          | 0.2937 (252)                 | 0.24043                  | 0.3556 (18)       | 0.24043                                              | 0.3418 (237)                   | 0.24141                       | 0.2933 (15)                       | 0.24141        |
| Eligibility for Government Assistance | 0.0971 (340)                 | 0.29647                  | 0.0909 (22)       | 0.29647                                              | 0.0478 (293)                   | 0.28673                       | 0.2105 (19)                       | 0.28673        |
| Additional Assistance Needed      | 0.426 (338)                  | 0.49523                  | 0.2727 (22)       | 0.49523                                              | 0.4124 (291)                   | 0.49183                       | 0.6316 (19)                       | 0.49183        |
| Financial Resources               | 0.4896 (299)                 | 0.28519                  | 0.4286 (21)       | 0.28519                                              | 0.5162 (265)                   | 0.28161                       | 0.4941 (17)                       | 0.28161        |
| Renting Premises                  | 0.6559 (340)                 | 0.47578                  | 0.7727 (22)       | 0.47578                                              | 0.8805 (293)                   | 0.37471                       | 0.7368 (19)                       | 0.37471        |

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landscape changes and people don’t travel outside of their near area, we will struggle to maintain the business. Hospitality is a difficult sector to be in without the added pressure of the virus.

However, the key influence on resilience among tourism-dependent businesses was the impact of temporality; hence Meerow et al.’s (2016) aforementioned temporal tensions within urban resilience. Of particular importance was the inherent seasonality of demand:

Situated in the centre of Birmingham, I am worried the annual Frankfurter Christmas market may not go ahead this year and this is vital to our Christmas trading period, which in turn is vital to our annual profitability.

This was exacerbated by the specific timing of the first English lockdown around the Easter period, and continuing into the summer months, with an uncertain timescale for potential reopening, thereby shortening the peak season for many businesses, as well as creating additional cost:

… we are very seasonal; we rely on our summer months to help us get through the winter - if this carries on for too long, with not being able to trade, it will have a massive impact on our business - perhaps having to reduce staff hours or lay off or potentially close the business permanently.

Hotels are different from a lot of other businesses as not only are we not taking money but at what would have been the start of the peak season we are paying multiple refunds and issuing credit notes which will have a knock-on effect on next year’s profits.

We are in a visitor economy and our out of season trade has fallen off massively and incrementally in the last three years. We rely on Spring and Summer takings to see us through the Autumn and Winter months. Our issue therefore will not be about reopening which shouldn’t be a problem. It’s about surviving next Winter with significantly less cash in the bank.

Consequently, the uncertainty over temporally-related issues, including the lack of information about the lockdown’s duration – was at the forefront of respondents’ concerns:

A lack of clarity in the information from government is making this harder than it should be. We need dates, even approximate dates would help, a plan, anything to work to. We’re a pub, we’ll be the last to open, but can we go in and refurbish the premises before we’re allowed to open to the public?

Moreover, respondents felt that, as their businesses would most likely be some of the last to return to some degree of normality, they would require additional ongoing assistance:

There must be longer term financial support mechanism for businesses in our sector as clearly our sector will be the last to return to any kind of opening, and even then, it will be a long time before we get back to anything like normal business levels.

Businesses within the tourism and hospitality industries, therefore, perceived themselves to be less resilient to Covid-19 than other sectors, in part owing to the perceived ‘slow process’ of recovery and being ‘one of the last to return’, meaning it would take ‘a long time’ before pre-Covid-19 business

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**Table 4. Mean scores, sample sizes and standard deviations of BCRS in broad sectors, including ANOVA post-hoc tests.**

| Broad Sectors | Business Resilience Composite Score (BCRS) | Std. Deviation | Comparing Tourism-Dependent Businesses with other businesses (ANOVA Post Hoc Tests) |
|---------------|--------------------------------------------|----------------|----------------------------------------------------------------------------------|
| Personal Services & Other Businesses | 0.6386 (93) | 0.1359 | −0.04568, \( p = .058 \) (−) |
| Other Hospitality, Leisure & Entertainment Businesses | 0.6311 (15) | 0.13028 | −0.03816, \( p = .925 \) (−) |
| Retail Businesses | 0.6131 (235) | 0.1359 | −0.02014, \( p = .613 \) (−) |
| **Tourism-Dependent Businesses** | **0.593 (244)** | **0.13028** | − |
| Health & Education Businesses | 0.5866 (28) | 0.13028 | 0.0635, \( p = 1.00 \) (−) |
| Manufacturing Businesses | 0.5335 (18) | 0.13028 | 0.05947, \( p = .491 \) (−) |
| Professional Services Businesses | 0.5231 (154) | 0.1359 | 0.06990, \( p < 0.001 \) (**) |
| **Total Businesses** | **0.5898 (787)** | **0.13412** | − |

Notes: ANOVA Post Hoc Tests; significance level: – … \( p < .05 \); * … \( p < 0.05 \); ** … \( p < 0.001 \).
levels are achieved. However, we also found differing temporalities between businesses within the industry itself, dependent, for example, on how much their trade was dependent on seasonal peaks, which reveals the importance of considering the nuances involved in resilience, as well as making broader cross-sector comparisons.

Concluding comments

In conclusion, the Covid-19 pandemic represents an ‘acute shock’ (Leitner et al., 2018) on a global scale. Some tourism-dependent businesses were struggling even before the pandemic, indicating an inherent vulnerability (Baum et al., 2020; Grimsey et al., 2020), and the tourism and hospitality industries have been identified as particularly vulnerable to the current crisis (Dube et al., 2020; Legrand, 2020; Nicola et al., 2020). However, despite emergent literature regarding tourism and Covid-19 (e.g. Foo et al., 2020; Gössling et al., 2020; Niewiadomski, 2020), there has been limited academic research exploring resilience to the pandemic in an urban English context.

Our paper addresses this by drawing on a survey of 1016 businesses located in English towns, including 340 categorized as tourism-dependent businesses. Applying our Business Resilience Composite Score, we find that, relative to some other sectors such as professional services, tourism-dependent businesses are more vulnerable to the pandemic, but other sectors, such as retail, were actually more vulnerable. Qualitative responses revealed the specific perceived vulnerabilities tourism-dependent businesses faced due, in particular, to temporal contextual factors arising from demand seasonality, longer lockdown durations, and more uncertain timeframes for reopening, which might indicate a greater vulnerability for tourism-dependent businesses over the longer-term.

The implications of this research more broadly for policymakers could include an indication of the relative prioritization of initiatives across industry sectors to ameliorate the impact of such events based on their relative resilience, derived on the basis of the BRCS. More specifically for individual industry sectors, this research indicates the existence of a series of spatio-temporal considerations which could inform prioritization of measures to enhance resilience within the different types of businesses that comprise a sector.

Given the limitations associated with the ‘snapshot’ nature of the current survey, we call for future research to longitudinally explore the longer-term impacts of Covid-19 on tourism and hospitality businesses in urban locations, since urban systems are complex, dynamic entities (Desouza & Flanery, 2013; Meerow et al., 2016). This is especially important given the ongoing uncertainties relating to potential further localized restrictions on businesses (and particularly tourism and hospitality businesses) in England at the time of writing (December 2020). Our study was undertaken at the time of the first nation-wide lockdown and the cumulative impact of successive waves of restrictions (characterized by a local/regional tiering system of regulation) will inevitably have a more complicated and nuanced spatio-temporal impact. Further investigation is urgently required into the extent that this dynamic series of circumstances will impact on a more localized basis, potentially enabling businesses within this industry to ‘bounce back’, or potentially ‘bounce forwards’ (Grinberger & Felsenstein, 2014), from the crisis on a longer-term basis.

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ORCID

Nikos Ntounis http://orcid.org/0000-0003-2517-3031
Cathy Parker http://orcid.org/0000-0002-8072-269X
References

Ahsan, M. N., & Warner, J. (2014). The socioeconomic vulnerability index: A pragmatic approach for assessing climate change led risks–A case study in the south-western coastal Bangladesh. *International Journal of Disaster Risk Reduction, 8*, 32–49. https://doi.org/10.1016/j.ijdrr.2013.12.009

Aleffi, C., & Cavicchi, A. (2020). The role of food and culinary heritage for postdisaster recovery: The case of earthquake in the Marche region (Italy). *Journal of Gastronomy and Tourism, 4*(3), 113–128. https://doi.org/10.3727/216929720X15846938924012

Archibald, M. M. (2016). Investigator triangulation: A collaborative strategy with potential for mixed methods research'. *Journal of Mixed Methods Research, 10*(3), 228–250. https://doi.org/10.1177/1558689815570092

Ashworth, G., & Page, S. J. (2011). Urban tourism research: Recent progress and current paradoxes. *Tourism Management, 32*(1), 1–15. https://doi.org/10.1016/j.tourman.2010.02.002

Bank of England. (2020). *How has Covid-19 affected small UK companies?* [Internet]. Retrieved November 18, 2020, from https://www.bankofengland.co.uk/bank-overground/2020/how-has-covid-19-affected-small-uk-companies

Baum, T., Mooney, S. K. K., Robinson, R. N. S., & Solnet, D. (2020). COVID-19’s impact on the hospitality workforce – new crisis or amplification of the norm? *International Journal of Contemporary Hospitality Management 32*(9), 2813–2829. https://doi.org/10.1108/IJCHM-04-2020-0314

Becken, S. (2013). Developing a framework for assessing resilience of tourism sub-systems to climatic factors. *Annals of Tourism Research, 43*, 506–528. https://doi.org/10.1016/j.annals.2013.06.002

Buultjens, J., Ratnayake, I., & Gnanapala, A. (2017). Sri Lankan tourism development and implications for resilience. In R. Butler (Ed.), *Tourism and resilience* (pp. 83–95). Wallingford: CABI.

Calgaro, E., Lloyd, K., & Dominey-Howes, D. (2014). From vulnerability to transformation: A framework for assessing the vulnerability and resilience of tourism destinations. *Journal of Sustainable Tourism, 22*(3), 341–360. https://doi.org/10.1080/09683500.2013.826229

Campbell, J. L., Quincy, C., Osserman, J., & Pedersen, O. (2013). Coding in-depth semi-structured interviews. Problems of uninitization and inter-coder reliability and agreement. *Sociological Methods Research, 42*(2), 294–320. https://doi.org/10.1177/0049124113500475

Carr, A. (2020). COVID-19, indigenous peoples and tourism: A view from New Zealand. *Tourism Geographies, 22*(3), 491–502. https://doi.org/10.1080/14616688.2020.1768433

Chen, M. (2011). The response of hotel performance to international tourism development and crisis events. *International Journal of Hospitality Management, 30*(1), 200–212. https://doi.org/10.1016/j.ijhm.2010.06.005

Chen, G., & Law, R. (2003). The impact of the severe acute respiratory syndrome on hotels: A case study of Hong Kong. *International Journal of Hospitality Management, 22*(3), 327–332. https://doi.org/10.1016/S0278-4319(03)00041-0

Chowdhury, M., Prayag, G., Orchiston, C., & Spector, S. (2019). Postdisaster social capital, adaptive resilience and business performance of tourism organizations in Christchurch, New Zealand. *Journal of Travel Research, 58*(7), 1209–1226. https://doi.org/10.1177/0047287518794319

Coaffee, J. (2013). Towards next-generation urban resilience in planning practice: From securitization to integrated place making. *Planning Practice & Research, 28*(3), 323–339. https://doi.org/10.1080/02697459.2013.787693

Crang, M. (2005). Analyzing qualitative materials. In R. Flowerdew & M. Martin (Eds.), *Methods in human geography: A guide for students doing a research project* (pp. 218–232). Prentice Hall.

Creswell, J. W, & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.

Cutler, S., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E., & Webb, J. (2008). A place-based model for understanding community resilience to natural disasters. *Global Environmental Change, 18*(4), 598–596. https://doi.org/10.1016/j.gloenvcha.2008.07.013

Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods*. McGraw Hill.

Desouza, K., & Flanery, T. (2013). Designing, planning, and managing resilient cities: A conceptual framework. *Cities, 35*, 89–99. https://doi.org/10.1016/j.cities.2013.06.003

Dube, K., Nhamo, G., & Chikodzi, D. (2020). COVID-19 cripples global restaurant and hospitality industry. *Current Issues in Tourism, 33*(3), 1385–1400. https://doi.org/10.1080/09614534.2020.1773416.

Espiner, S., Orchiston, C., & Higham, J. (2017). Resilience and sustainability: A complementary relationship? Towards a practical conceptual model for the sustainability–resilience nexus in tourism. *Journal of Sustainable Tourism, 25*(10), 1385–1400. https://doi.org/10.1080/09669582.2017.1281929

Foo, L., Chin, M., Tan, K., & Phua, K. (2020). The impact of COVID-19 on tourism industry in Malaysia. *Current Issues in Tourism*. https://doi.org/10.1080/09614534.2020.1777951.
Fromhold-Eisebith, M. (2015). Sectoral resilience: Conceptualizing industry-specific spatial patterns of interactive crisis adjustment. European Planning Studies, 23(9), 1675–1694. https://doi.org/10.1080/09654313.2015.1047329

Gong, H., Hassink, R., Tan, J., & Huang, D. (2020). Regional resilience in times of a pandemic crisis: The case of COVID-19 in China. Tijdschrift Voor Economische en Sociale Geografie, 111(3), 497–512. https://doi.org/10.1111/tsgs.12447

Gösslings, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. Journal of Sustainable Tourism, 29(1), 1–20 https://doi.org/10.1080/09669582.2020.1758708

Gretzel, U., Fuchs, M., Baggio, R., Hoeppken, W., Law, R., Neidhardt, J., Pesonen, J., Zanker, M., & Xiang, Z. (2020). e-Tourism beyond COVID-19: A call for transformative research. Information Technology & Tourism, 22(2), 187–203. https://doi.org/10.1007/s40558-020-00181-3

Grimes, B., Perrior, K., Trevalyan, R., Hood, N., Sadek, J., Schneider, N., Baker, M., Shellard, C., & Cassidy, K. (2020). Build back better: Covid-19 supplement for town centres. [Internet]. Retrieved June 25, 2020, from https://www.vanishinghighstreet.com/wp-content/uploads/2020/06/Grimes-Covid-19-Supplement-June-2020.pdf

Grinberger, A., & Felsenstein, D. (2014). Bouncing back or bouncing forward? Simulating urban resilience. Proceedings of the Institution of Civil Engineers - Urban Design and Planning, 167(3), 115–124. https://doi.org/10.1680/udap.13.00021

Hahn, M. B., Riederer, A. M., & Foster, S. O. (2009). The Livelihood vulnerability index: A pragmatic approach to assessing risks from climate variability and change—a case study in Mozambique. Global Environmental Change, 19(1), 74–88. https://doi.org/10.1016/j.gloenvcha.2008.11.002

Henderson, J. (2007). Corporate social responsibility and tourism: Hotel companies in Phuket, Thailand, after the Indian Ocean tsunami. International Journal of Hospitality Management, 26(1), 228–239. https://doi.org/10.1016/j.ijhm.2006.02.001

Higgins-Desbiolles, F. (2020). Socialising tourism for social and ecological justice after COVID-19. Tourism Geographies, 22(3), 610–623. https://doi.org/10.1080/14616688.2020.1757748

Hopkins, D., & Becken, S. (2015). Socio-cultural resilience and tourism. In A. A. Lew, C. M. Hall, & A. M. Williams (Eds.), The Wiley-Blackwell companion to tourism (pp. 490–499). John Wiley & Sons.

Institute of Place Management. (2020). High Street Business Resilience Survey (May 2020). Retrieved August 20, 2020, from https://www.highstreettaskforce.org.uk/resources/details/?id=0f8ea6a7-ea00-4ead-b5f3-2650e443f404.

Jamal, T., & Budke, C. (2020). Tourism in a world with pandemics: Local-global responsibility in action. Journal of Tourism Futures 6(2), 181–188. https://doi.org/10.1080/1544272201934263

Khalid, U., Okafor, L. E., & Shafiuullah, M. (2020). The effects of economic and financial crises on international tourist flows: A cross-country analysis. Journal of Travel Research, 59(2), 315–334. https://doi.org/10.1177/0047287519834360

Knight, W. A., & Reddy, K. S. (2020). Caribbean response to COVID-19: A regional approach to pandemic preparedness and resilience. The Round Table 109(4), 464–465. https://doi.org/10.1080/00358533.2020.1790759

Kongoley-MIH, P. S. (2015). The impact of Ebola on the tourism and hospitality industry in Sierra Leone. International Journal of Scientific and Research Publications, 5(12), 542–550.

Lankao, P. R., & Qin, H. (2011). Conceptualizing urban vulnerability to global climate and environmental change. Current Opinion in Environmental Sustainability, 3(3), 142–149. https://doi.org/10.1016/j.cosust.2010.12.016

Legrand, W. (2020). The 24-hour sustainable hospitality Hackathon “a world of change in hospitality”: Highlight report. [Internet]. Retrieved June 11, 2020, from https://www.hospitalitynet.org/opinion/4099112.html

Leitner, H., Sheppard, E., Webber, S., & Colven, E. (2018). Globalizing urban resilience. Urban Geography, 39(8), 1276–1284. https://doi.org/10.1080/02723638.2018.1446870

Lew, A. A. (2014). Scale, change and resilience in community tourism planning. Tourism Geographies, 16(1), 14–22. https://doi.org/10.1080/14616688.2013.864325

Mand, H., & Cilliers, S. (2013). Hospitable urban spaces and diversity. Hospitality and Society, 3(3), 211–228. https://doi.org/10.1386/hosp.3.3.211_1

Mao, Y., He, J., Morrison, A. M., & Coca-Stefaniak, A. (2020). Effects of tourism CSR on employee psychological capital in the COVID-19 crisis: From the perspective of resources theory. Current Issues in Tourism. https://doi.org/10.1080/13683500.2020.1770706

Meerow, S., Newell, J. P., & Stults, M. (2016). Defining urban resilience: A review. Landscape and Urban Planning, 147, 38–49. https://doi.org/10.1016/j.landurbplan.2015.11.011

Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. International Journal of Surgery, 78, 185–193. https://doi.org/10.1016/j.ijsu.2020.04.018

Niewiadomski, P. (2020). COVID-19: From temporary de-globalisation to a re-discovery of tourism? Tourism Geographies, 22(3), 651–656. https://doi.org/10.1080/14616688.2020.1757749

Postma, A., & Schmuecker, D. (2017). Understanding and overcoming negative impacts of tourism in city destinations: Conceptual model and strategic framework. Journal of Tourism Futures, 3(2), 144–156. https://doi.org/10.1080/JTF-2017-0022

Prayag, G. (2020). Time for reset? Covid-19 and tourism resilience. Tourism Review International, 24(2/3), 179–184. https://doi.org/10.7277/154427220X15926147793595

Ritchie, B. (2004). Chaos, crises and disasters: A strategic approach to crisis management in the tourism industry. Tourism Management, 25(6), 669–683. https://doi.org/10.1016/j.tourman.2003.09.004
Sands, P., El Turabi, A., Saynisch, P. A., & Dzau, V. J. (2016). Assessment of economic vulnerability of infectious disease crises. *The Lancet*, 388(10058), 2443–2448. https://doi.org/10.1016/S0140-6736(16)30594-3

Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, 117, 312–321. https://doi.org/10.1016/j.jbusres.2020.06.015

Song, J., Peng, Z. R., Zhao, L., & Hsu, C. (2016). Developing a theoretical framework for integrated vulnerability of businesses to sea level rise. *Natural Hazards*, 84(2), 1219–1239. https://doi.org/10.1007/s11069-016-2483-x

Stafford, S., & Renaud, A. (2019). Developing a framework to identify local business and government vulnerability to sea-level rise: A case study of coastal Virginia. *Coastal Management*, 47(1), 44–66. https://doi.org/10.1080/08920753.2019.1526011

Sydnor-Bousso, S., Stafford, K., Tews, M., & Adler, H. (2011). Toward a resilience model for the hospitality & tourism industry. *Journal of Human Resources in Hospitality & Tourism*, 10(2), 195–217. https://doi.org/10.1080/15332845.2011.536942

Truong, D., Xiaoming Liu, R., & Yu, J. (2020). Mixed methods research in tourism and hospitality journals. *International Journal of Contemporary Hospitality Management*, 32(4), 1563–1579. https://doi.org/10.1108/IJCHM-03-2019-0286

Tse, A., So, S., & Sin, L. (2006). Crisis management and recovery: How restaurants in Hong Kong responded to SARS. *International Journal of Hospitality Management*, 25(1), 3–11. https://doi.org/10.1016/j.ijhm.2004.12.001

Visit Britain. (2020a). *The GB tourist: 2019 annual report*. [Internet]. Retrieved November 29, 2020, from https://www.visitbritain.org/sites/default/files/vb-corporate/gb_tourist_annual_report_2019_final.pdf

Visit Britain. (2020b). *Regional spread of inbound tourism 2019*. [Internet]. Retrieved November 29, 2020, from https://www.visitbritain.org/sites/default/files/vb-corporate/Documents-Library/documents/foresight_174_regional_spread_of_inbound_tourism.pdf

Wardekker, A., Wilk, B., Brown, V., Uittenbroek, C., Mees, H., Driessen, P., Wassen, M., Molenaar, A., Walda, J., & Runhaar, H. (2020). A diagnostic tool for supporting policymaking on urban resilience. *Cities*, 101, 102691. https://doi.org/10.1016/j.cities.2020.102691

Webb, G., Tierney, K., & Dahlhamer, J. (2002). Predicting long-term business recovery from disaster: A comparison of the Loma Prieta earthquake and Hurricane Andrew. *Global Environmental Change Part B: Environmental Hazards*, 4(2), 45–58. https://doi.org/10.1016/S1464-2867(03)00005-6

World Bank. (2020). *Rebuilding tourism competitiveness: Tourism response, recovery and resilience to the COVID-19 crisis*. World Bank Group.

World Tourism Organization. (2020). *Supporting jobs and economies through travel & tourism – a call for action to mitigate the socio-economic impact of COVID-19 and accelerate recovery*. UNWTO.

Zeng, B., Carter, R., & De Lacy, T. (2005). Short-term perturbations and tourism effects: The case of SARS in China. *Current Issues in Tourism*, 8(4), 306–322. https://doi.org/10.1080/13683500508668220