

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

ELSEVIER

Contents lists available at ScienceDirect

International Journal of Hospitality Management

journal homepage: www.elsevier.com/locate/ijhm





Hospitality and tourism industry amid COVID-19 pandemic: Perspectives on challenges and learnings from India

Vikrant Kaushal^{a,*}, Sidharth Srivastava^b

- a Indian Institute of Management Sirmaur Poanta Sahib, Himachal Pradesh, India
- b Banarsidas Chandiwala Institute of Hotel Management & Catering Technology, Guru Gobind Singh Indraprastha University, Delhi, India

ARTICLE INFO

Keywords: COVID-19 SARS Hospitality Tourism Industry Themes Qualitative Interviews

ABSTRACT

COVID-19 outbreak has presented unprecedented circumstances before the fragile tourism and hospitality industry. The highly infectious novel coronavirus continues to thwart the sector and raises serious questions about the present and future survival of the sector. The research addresses two important concerns, first, pertains to the major challenges that hospitality and tourism industry faces amid current conditions; and second relates to the vital learnings for the industry. The study draws on the interviews with 15 participants in senior positions in hospitality industry, and tourism and hospitality education services. Responses to the interviews were content analysed, which resulted in 27 sub-themes that were further condensed into 4 major themes. The dominant subthemes that emerged out of the qualitative enquiry included need of multiskilling and professional development of the employees, increased sense of hygiene, sanitation and related SOPs, optimism toward revival of the industry, media roles, and need of better crisis preparedness. Subsequent overarching themes included "Human Resource Management", "Health and Hygiene", "Continuity" and "Concerns". The study critically discusses prominent themes in the light of the existing arguments from the literature and reflects on implications for the decision makers. The major implications of the study are in the form of determined themes adding to the evolving theory on COVID-19 pandemic and tourism & hospitality industry; and managerial recommendations to address host of issues while taking essential learnings stemming from the current circumstances. Limitations and scope of future research are also discussed.

1. Introduction

The decade 2020 started with a much unsettling and unfortunate occurrence of new disease in the line of over 30 novel infections that the world has experienced in past 30 years (Nkengasong, 2020). This time the nomenclature given to the new severe acute respiratory syndrome (SARS) outbreak was the novel corona virus. Later termed COVID-19, the disease represented an atypical pneumonia that started in China, and later spread across nations' the world over. Countries like United States of America, Brazil, India, Italy, Spain, France, South Korea, Italy, Iran and many more are experiencing unprecedented spread of the disease and life loss from past several months.

The impact of current corona virus outbreak till date has long surpassed those that were observed during SARS epidemic in 2002–2003. Corona virus cases stand at over 10 million worldwide and the reported deaths due to the infection have crossed 500,000 (https://www.worldometers.info/coronavirus/). The enormity of this outbreak can be

imagined from the fact that even the leaders and prominent people couldn't escape from the infection, for instance the virus infected British Prime Minister Boris Johnson, who had earlier warned citizens of the United Kingdom to prepare for the potential loss of lives in the country.

Akin to COVID 19, the previous SARS outbreak was characterized by its rapid spread, which led to travel advisories issued by World Health Organisation (WHO) (Chuo, 2007). Travel restrictions and advisories have again revealed the vulnerability of the tourism and hospitality industry (De Sausmarez, 2004; Zhang et al., 2020). The isolation of a cruise ship in Japan carrying virus infected tourists marked only the beginning of latest tragedy that still continues to unfold. The outbreak brought fears among unsuspecting tourists who had to quarantine themselves while on board. The infections and deaths on board portended the future of delicate tourism and hospitality industry across the globe. Till date researches have prominently pointed at previous SARS outbreak (2002), whenever discussion on threat (health crises) to tourism and hospitality industry was discussed (see for example

E-mail addresses: vikrant.kaushal@iimsirmaur.ac.in (V. Kaushal), sidharth@bcihmct.ac.in (S. Srivastava).

^{*} Corresponding author.

Table 1
Review summary of relevant studies.

| Authors | Health Crisis | Focus | Underlying Theory/Model/Concepts | Important Finding/ Issue addressed | Place |
|------------------------------------|-----------------------------|---|--|---|--------------------------|
| Law (2005) | SARS | SARS and hospitality and tourism education | Unspecified | Addressed the academic, internship concerns during outbreak for students in higher risk industry such as hospitality and tourism. | Hong Kong |
| Pine and McKercher (2004) | SARS | SARS impact on Hong Kong's tourism industry | Unspecified | Highlighted the fragility of sector and coping behaviour adopted by practitioners, with speculation of recovery in a year's period. | Hong Kong |
| Chen et al. (2007) | SARS | SARS impact on Taiwanese hotel stock price movement | Event-study methodology (ESM) for stock prices and normal and abnormal returns. | Documented severe damage to the hotel stocks due to the outbreak compared to several industries and highlighted strategies to offset the effects. | Taiwan |
| Henderson and Ng (2004) | SARS | SARS impact on Singapore hotel industry | Multi phased Faulkner's framework (Pre- event; Prodromal; Emergency; Intermediate; Long-term recovery; Resolution). | Categorised stages of emergencies and outlined recommendations for actions. | Singapore |
| Tse et al. (2006) | SARS | SARS impact on restaurant business | Response and recovery for malevolence- based crisis framework by Stafford et al. (2002). | Elucidated restaurants preparedness, and outlined cost reduction and revenue enhancement strategies in the face of adversaries. | Hong Kong |
| Kim et al. (2006) | SARS | SARS impact on South Korean hotel industry | Stafford et al. (2002) & Sönmez et al. (1999) Framework for Crisis Management. | Highlighted pre planning and swift response to crisis and engagement during the slowed business period. | South Korea |
| Dombey (2004) | SARS | SARS impact on Chinese tourism | Unspecified | Social and political impacts of the epidemic, the response and changes that resulted in the aftermath. | China |
| Malhotra and Venkatesh, 2009 | Various Health Crises | Crisis preparedness in hospitality & tourism | PATA framework for crisis management: Reduction; Readiness; Response & Recovery. | Two stage framework- Reduction, through standard procedures and SWOT analysis, Readiness through training and pre-planning. | |
| Wen et al. (2005) | SARS | SARS impact on Chinese tourism | General consumption and behaviour theory and crisis management. | Empirical analysis of SARS impact on travel behaviour with a sample drawn from multiple locations in China. | China |
| Chien and Law (2003) | SARS | SARS impact on hotels in Hong Kong | Unspecified | Impacts summary on hotels and recommendations related to task force for effective contingency response. | Hong Kong |
| Chuo (2007) | SARS | SARS impact on theme parks | Risk attitude (interpretation of risk content) & Risk perception (interpretation of chance of exposure to risk content). | Empirical analysis of customer profiles and theme park visit intentions during the outbreak. | Taiwan |
| Leung and Lam (2004) | SARS | SARS impact on hotels in Hong Kong | Post-crisis mitigation strategies & Employee Involuntary Separations. | Reported employee layoffs and unpaid leaves used to cope with financial losses in the sector. | Hong Kong |
| Gruman et al. (2011) | Various Health Crises | Disaster Management in Canadian hospitality industry | Organization Disaster preparedness framework levels- extra-organizational; organizational, operational, and human. | Highlighted lacunas in planning and response capabilities in times of disasters. | Canada |
| AlBattat and MatSom (2014) | Various Health Crises | Disaster planning and recovery in Malaysian hospitality sector | Unspecified | Considered disaster life cycle to conclude higher reactiveness than pro-activeness in preparations. | Malaysia |
| Min et al. (2011) | SARS | SARS impact on Taiwan's tourism inflow from Japan | Seasonal Auto Regressive Integrated Moving Average SARIMA with intervention and time series models | Time Series intervention modelling confirmed sharp decrease in Japanese tourist movement to Taiwan for almost a year. | Taiwan |
| Phelan (2015) | AIDS | Experiences of international volunteer tourists in Botswana | Voluntarism | Highlighted challenges articulated by volunteers in Botswana while participating in 'Voluntourism' (conservation, medical services, education perspectives). | Botswana |
| Yap and Ineson (2009) | AIDS | Status of HIV-infected employees in Asian hospitality sector | People Living with HIV/AIDS (PLWHA), Persons with Disabilities Act, Employment Rights Act, Industrial Tribunals Act, Disability Discrimination Acts etc. | Concerns and anticipations in staffing and managing of HIV infected employees in Hospitality industry using triangulation study. | Select Asia Countries |
| (abote et al. (2015) | AIDS | Employee Perceptions of HIV & AIDS on Hospitality in Zimbabwe | Unspecified | Unclear organisational policies and tabooed treatment of HIV/AIDS in country's hospitality segment and recommended acknowledgment, policy framework and liaising among government and NGOs. | Zimbabwe |
| Page et al. (2012) | Swine Flu | Economic crisis & Swine Flu impact on inbound tourism demand | Econometric technique to estimate tourism demand during multi-crisis periods. | Proposed econometric model to address impacts of two pronged crises (economic crisis and swine flu pandemic in 2008) on tourism demand in the UK from various source markets. | United Kingdom |
| Haque and Haque (2018) | Swine Flu | Swine flu and economic impact on tourism in Brunei | Auto Regressive Integrated Moving Average (ARIMA) & Intervention Time Series Analysis (ITSA) models. | Reported estimated loss in tourism revenues using time series model estimation considering two crises of 2008 i.e. swine flu and economic crisis. | Brunei |
| Maximiliano (2010) | Swine Flu | Role of Mass-Media in Buenos Aires during Swine Flu Outbreak | Unspecified | Analysed short newspaper columns to critically reflect upon the media reactions on swine flu outbreak. | Buenos Aire |
| Wu et al. (2010) | Swine flu | Swine flu Outbreak Swine flu impact on Hotel Occupancy Rate in Hong Kong | Independent component analysis (ICA). | Employed factor modelling to report driving forces of hotel occupancy rates in Hong Kong during the epidemic with potential implications for impacts of other disease outbreak impacts. | Hong Kong |

Table 1). However, this time onwards, COVID-19 pandemic is likely to become a prominent reference point in the related texts.

Tourism and hospitality industry thrives on the patterns of visitations and a considerable efforts are placed by decision makers to attract visitors to support the sector and enhance the multiplier effect from the industry. But due to the ongoing situation travel restrictions are being observed at national and international levels. These travel bans, border closures, events cancellations, quarantine requirements and fear of spread, have placed extreme challenges on tourism and hospitality sectors (Gössling et al., 2020a, b). Air travel, for instance, has been regarded as an amplifying and accelerating factor for influenza (Browne et al., 2016) and this segment has witnessed significant curtailments as the need of personal safety and survival has become pivotal (Nicola et al., 2020). It has also prominently reduced the need for leisure travel and search for hedonistic getaways. Despite the enormous blow, the sector is salvaging resources and ways to remain afloat for now, be it sturdier negotiations with suppliers for mutual sustenance, extensive cost reduction practices, or minimum mandatory period for accommodation bookings when visiting tourism destinations. Correspondingly, accommodation providers have extended support, mostly at some price, for those needing isolation during quarantine period and to those who are involved in treating COVID patients and cannot return to their usual place of residence. These initiatives, for now, indicate the ad hoc coping mechanisms adopted by the industry and appear to remain in place until some stability is attained.

As the situation unfolds, the extant knowledge mostly remains in the form of health and safety related literature. Tourism and hospitality related studies in light of COVID-19 crisis are only starting to emerge at this point (Higgins-Desbiolles, 2020; Hoque et al., 2020; Gössling et al., 2020a, b; Zheng et al., 2020). The research addresses two vital questions, first, what remains major challenges facing hospitality and tourism sectors amid existing pandemic? Second, what are the key learnings that industry can take from current conditions? Further, given the constantly evolving state and dearth of literature, current study attempts to summate the extant knowledge from previous similar crises and substantiates it with the qualitative enquiry involving senior industry practitioners and academicians.

The study holds relevance for the industry actors and decision makers as they face crucial task of reviving and sustaining enterprises and industry at large. It is imperative that viewpoints of key individuals are investigated for guiding others who are engaged in managing and observing this segment. The paper first apprises readers about the ongoing pandemic and goes on to summarise the literature in the context of tourism and hospitality. The remainder of the paper builds upon the responses of 15 senior practitioners and academicians who reflected upon the learnings and issues emanating from the ongoing global pandemic. These emergent themes from the analysis of responses is proposed as an important contribution of the study.

2. Review of literature

Epidemiological evidences point at the outbreak to have association with a seafood market in Wuhan (Wu et al., 2020; Xu et al., 2020), a city in Hubei province in China. The first case was reported in China (on 12 December 2020), but by the month end in January 2020, the virus had infected around two thousand people in the country (Wu et al., 2020). From the probable place of origin the zoonotic transmission began and spread in countries all over the world. This became possible due to the virus's higher tendency of getting transmitted among human population (Bai et al., 2020; Gautam and Trivedi, 2020; Liu et al., 2020).

Tourism is termed as a complicated psychological process (Cutler and Carmichael, 2010) and the impacts of SARS are also primarily psychological in nature (Wen et al., 2005). The former SARS outbreak was spread across different countries including China, Hong Kong, Taiwan, Canada, Singapore and many more. In terms of the impacts of SARS on hospitality and tourism, various studies have been published

(refer to Table 1). The tabulated review is based on the select papers that concern hospitality and tourism in the light of health crises that impacted the industry to various degrees. To that end, most relevant studies accessed through databases like Scopus, Google Scholar, Science Direct were utilised. Although the researches on varied impactful health crises in tourism and hospitality literature have been proliferating from past few decades (Barrows et al., 1996; Palmer, 1988; Ladki, 1994; Smith and Goss, 1993), to compile the review table only select relevant studies from post-SARS period were considered.

The impacts of earlier SARS outbreak on hotels in Hong Kong were severe, so much so that the staffs' were asked to take annual leaves, probationers and contract employees were terminated, and banks were appealed for loan repayment deferments for making way to pay for the employee salaries (Pine and McKercher, 2004). Similarly, on the financial front, Chen et al. (2007) identified that Taiwanese hotel stocks performance were acutely impacted during the same outbreak that triggered panic among shareholders and confirmed extreme fragility of the hotel businesses toward epidemics and also signalled at the ominous consequences of future outbreaks. The confidence building measures among investors and minimisation of panic and uncertainty, were among some measures indicated in the study (Chen et al., 2007). Dombey (2004) noted several changes that previous SARS outbreak brought about in China. This involved increased sense of hygiene at the restaurants, heightened sense of physical activities and reduction of spitting habits for healthy surroundings, regularising of temperature examination in schools and improved health services in hospitals (Dombey, 2004). Malhotra and Venkatesh (2009) contrasted the preparedness for SARS outbreak between Thailand and Hong Kong, and found Hong Kong's response to be better in containing the detrimental effects of the disease. They also accentuated on the framework proposed by Pacific Asia Travel Association (PATA) to address the eventualities. The framework included reduction (early warning signs detection), readiness (related preparedness), responses (operations during eventualities), and recovery (studier attempts to return to normalcy) (Malhotra and Venkatesh, 2009). More recently Alonso et al. (2020) attempted to explore the issue that small enterprises in hospitality faced during the ongoing crisis and offered preliminary frameworks through inductive analysis. The exploratory work resulted in nine theoretical dimensions that revealed the actions and reactions of hospitality actors toward coping with crisis.

The current pandemic may have similar origin, however unlike earlier SARS outbreak, the impact has been profound that is still unfolding in countries like United States, Brazil and India (Mohanty, 2020; Konarasinghe, 2020; Marques et al., 2020; Yeolekar et al., 2020). Effects of pandemic on tourism and hospitality in India are continuing to become serious with the sector embracing for higher unemployment rates. The potential job loss in tourism and hospitality has been estimated at 38 million, which is 70 percent of the industry workforce (Radhakrishna, 2020). Federation of Associations in Indian Tourism & Hospitality (FAITH) has doubled the estimates of losses in India's tourism sector from earlier INR 5 lakh Crore to INR 10 Lakh Crore (PTI, 2020). The pandemic effects will be effectively visible on the country's inbound, outbound and domestic tourism, adventure travel, business travel, and cruise holidays (Dash, 2020). Post lockdown predictions and preparations would need a better understanding of the current situation. To this end, trends like "staycations" and "workcations" are being opined by hospitality practitioners to remain dominant in near future (Divya, 2020). In the light of rising corona virus infections in India, government bodies have assumed multi-layered and multi-pronged approaches, wherein government at centre invoked 'National Disaster Management Act' and further activated state disaster response funds for individual Indian states to tackle the rising pandemic (Iyer, 2020). Aside from initial lockdowns and gradual unlocking of economic activities, public has been encouraged to ensure social distancing, practice appropriate hygiene, mask wearing and avoiding gatherings unless critically needed (Sharma, 2020; Tiwari, 2020). For resuming tourism

activities to revive the sector, governments at various levels have initiated check-ins with relevant COVID-19 negative reports, encouragement on minimum days stay at hospitality establishments (Condé Nast Traveller, 2020).

The ongoing pandemic has also taken a serious toll on the education sector cross the globe. COVID-19 pandemic has affected 90 percent of the student population globally, with more than 1.5 billion students from over 190 countries are out of the schools (https://en.unesco.org/co vid19/educationresponse/globalcoalition). The situation remains critical in the higher education as well, but the colleges are stepping up to the challenge of meeting the needs of students though online classes. It is worthwhile to mention that the sectorial education, such as tourism and hospitality that increasingly depend on practical sessions, are likely to be affected significantly. The previous SARS outbreak also placed a strong negative impact on hospitality and tourism education in Hong Kong (Law, 2005). Such educational effects were felt from Mainland China, Hong Kong, Singapore to even Canada (Feast and Bretag, 2005). In India's context the tourism and hospitality industry has been gaining momentum from past several years now, which has resulted in a major push to education in tourism and hospitality.

Above reflected discussion also typifies the Norris et al.'s (2008) explanation of adaptive behaviour displayed by the entities in the face of adversity. In the current context the coping mechanism for both industry and academia are important to be considered, which must include pertinent learnings and alternatives for survival amidst the pandemic and subsequent revival (Williams and Vorley, 2014; Dahles & Susilowati, 2015). It must be noted that unlike before, current pandemic has resulted in plenty of data that can help decision makers across sectors and may assist in salvaging the lost momentum (Kim, 2020; Chan, 2020). Current review attempted to synthesise major researches that affected the tourism and hospitality industry, while it is also important to note that a very few studies were found to have been conducted in regards to SARS outbreak in the backdrop of hospitality and tourism education. Nevertheless, a summary of select studies have been presented in Table 1, which may be used as a reference point for future researches.

3. Research methodology

The current investigation considers an outbreak that continues to unfold while this study is underway. The situation is novel and not much is known about this ongoing and ever expanding catastrophe. In the instances of newer problems for which understanding needs to be developed, qualitative methods can offer critical insights (Strauss and Corbin, 1998). Given the circumstances, it was felt appropriate to take a qualitative stance of research, in that the method of data collection was considered to be the email interviews. Email interviews are becoming a commonplace in qualitative research, and in current circumstances where social distancing has been widely practiced, it was felt to be most appropriate for the current investigation. In this way of data collection the interview questions may be pasted into the emails or separate document may be attached to the email (Burns, 2010). Email interviews are also termed as cost effective when compared to the telephonic or face to face interviews, yet can yield in-depth information from the participants (Ratislavová and Ratislav, 2014). In the current study with a limited sample size, judgemental sampling was used, which is a non-probability sampling. For the research problem at hand a set of senior industry personnel and academics were considered to be appropriate for garnering responses. In judgmental sampling the onus lies on the researchers to select the elements from the population based on the samples' representation of the population of interest (Malhotra and Birks, 2007). It was deemed necessary to sample individuals in senior positions, because they are met with the immediate challenge of answerability during adversities. This also restricted the sample size, yet non-probabilistic nature of sampling rendered in the selection of most suitable candidates.

The questions used in the email interviews were adapted from the reviewed literature that has underscored implications for academicians and practitioners. Some of the published works from which interview questions were derived included Bharwani and Mathews (2012), Garg (2015), Kim et al. (2006), Law (2005); Maximiliano (2010); Palmer (1988); Wen et al. (2005); Yap and Ineson (2009). The questions posed are also reported in Table 3. One important limitation of the research methodology has been the non-reporting of the inter-coder reliability. "Intercoder reliability is mostly, if not all, assessed by having two or more coders categorize content" (Feng, 2014). As in present study the coding work was done by a single researcher the same wasn't reported.

Sample size considerations in previous qualitative inquiries in tourism and hospitality have ranged from fourteen interviews (Phelan, 2015) to over thirty interviews (Yap and Ineson, 2009). For the current study at the outset 42 individuals were approached for their participation in the study. Out of those approached, 15 accepted to participate, which resulted in a response rate of 35.7 percent. As the participants were in the senior positions and were mostly occupied with various tasks the intention was to reduce delays in getting reverts. To avoid such delays occasional follow-ups were carried out. The received responses were pasted in excel spreadsheets and word documents for conducting content analysis. Content analysis has been described as "a research technique for the objective, systematic, and quantitative description of the manifest content of communication" (Berelson, 1952). Content analysis of the participants' responses resulted in several underlying themes (Lisak, 1994). A summary of the participant profiles is presented in Table 2

Content analysis of the responses resulted in varied sub-themes from the open ended questions asked in the email interviews. For the purpose of content analysis of interview responses were read and re-read several times to interpret variations and discern similarities and differences in the content. These variations and similarities resulted in several underlying sub-themes (Thyme et al., 2013; Mazaheri et al., 2013). This kind of analysis is valuable, systematic and one of the ways to recognise data and identify recurring themes (Thyme et al., 2013). The responses were coded/labelled to uncover the similarities, which turned out to be helpful in containing them under manageable heads. Coding assisted in providing the garnered content some logical level and condensation brought preciseness (Thyme et al., 2013). In that process certain responses resulted in similar patterns across broader queries. For example multiskilling, adoption of technology, planning and management of funds, appeared in responses to several interview questions. This sort of condensation and coding/labelling also made quantification possible of the recurring content and the same has been reported in Table 3. Thematic analysis is good approach in qualitative studies as it allows to discern participants' views and opinions from a set of data such as interview transcripts (Caulfield, 2019). Careful observation of 27 sub-themes resulted in four dominant themes labelled as Human Resource Management, Health and Hygiene, Continuity, and Concerns.

4. Discussion and implications

4.1. Managerial implications

Most prominent theme that emerged was related to the skills of the employees. This was visible in the way experts felt about the vital learnings from the ongoing crisis, where multiskilling was considered as a latent solution to the issue of reduced redundancy and retaining employees in the long run. This reflects that going forward managers must take cognizance of the evolving practices related to the employees' engagement in multiple job roles, which is expected to become a norm in hospitality and tourism. Research in past (Kyriakidou and Maroudas, 2010) indicates that this may be achieved by delegation of additional responsibilities, on the job training, and across departmental work projects. The added advantage of multiskilling may also reflect in the form of retaining usefulness of employees during lean seasons or in low

Table 2 Participants Profile.

| Participant | Organisational Designation/ Department | Organisation Category/Type | Participants Age (In Years) | Total Experience (In Years) | Experience In Current Organisation (In Years) | State/ Region |
|-------------|---|--|--------------------------------|--------------------------------|--|------------------|
| P1 | Indian Master Chef- Food & Beverage Production | 5 Star Deluxe Hotel | 32 | 11 | 2 | Uttar Pradesh |
| P2 | Executive Housekeeper | 4 Star Hotel | 38 | 16 | 2 | Haryana |
| P3 | Assistant Director of Sales | 5 Star Deluxe Hotel | 33 | 12 | 2 | Bihar |
| P4 | Head of Hospitality- Airport Services | Commercial Non Aero | 43 | 23 | 2.3 | Delhi |
| P5 | General Manager | 4 Star Hotel | 40 | 15.5 | 15.5 | West Bengal |
| P6 | Additional General Manager | 5 Star Deluxe Hotel | 47 | 27 | 12 | Uttar Pradesh |
| P7 | Food & Beverage Manager | 5 Star Hotel | 33 | 10 | <1 | Jharkhand |
| P8 | Director of Food & Beverage | 5 Star Hotel (Indian overseas Brand in Nepal) | 36 | 14 | 1 | - |
| P9 | Area Director | 5 Star Hotel | 34 | 12 | 7 | North India |
| P10 | Head of School | Institute | 41 | 15 | 12 | Haryana |
| P11 | Head of School | Institute | 50 | 25 | 1 | Delhi |
| P12 | Professor & Deputy Director | University | 45 | 25 | 1 | Uttar Pradesh |
| P13 | Executive Housekeeper | 5 Star Hotel | 35 | 14 | 5 | Rajasthan |
| P14 | General Manager | 5 Star Hotel | 38 | 18 | 2.5 | Rajasthan |
| P15 | Rooms Division Manager | 5 Star Hotel | 37 | 15 | <1 | Haryana |

demand (Kyriakidou and Maroudas, 2010).

Hygiene and sanitation remained a recurrent sub-theme throughout the responses, be it about foreseeable consumer behaviour or learnings for the industry and educators or trainers. The issue of hygiene has been well documented in tourism and hospitality literature (Jauhari, 2010, 2009; Tripathi et al., 2010). However, for a developing country like India that deals with issues like over-crowdedness and congestion, it is too serious a concern to be overlooked (Nath, 2003). This issue, in the light of the recent publication by Lancet (Lodder and de Roda Husman, 2020), where the researchers have speculated presence of SARS-COV-2 in human waste water becomes more consequential if not managed effectively. The seriousness of this issue can't be emphasised enough and regardless of the type and size of the establishment, next crucial aspect that is likely to govern the survival would be the presence of standards of waste management and effective sanitation practices visible in all forms of hospitality operations. Hospitality management must consider wearing masks mandatory until a sustained solution, for instance the most contemplated solution+COVID-19 vaccine, is achieved. Irrespective of type of operations, managers must consider creating dedicated task forces among employees to address hygiene issues and related training and awareness creation. Basing on the responses received it seems clear now that there is stark need of formulating national standards for tourism and hospitality enterprises, and their implementation and monitoring should be effectively carried out, failing that should invite relative penalties. The need of national standards also resonate with the recommendations made by Wen et al. (2005). One such standard practice could be mandatory temperature checking and its record keeping at the entry and exit points of work places and institutions.

The notion of retaining optimism and hopes of revival remained high. This was particularly visible with the responses pertaining to the manpower development. This viewpoint of the experts in tourism and hospitality may be attributable to their rich experiences, where they must have observed highs and lows in the industry. Although COVID-19 presents an unprecedented case before all the sectors, in that the reduced demand and revenues are obvious consequences, which can resonate with the previous crises that also had detrimental effects. However, in previous health (e.g. SARS, Swine Flu, MERS, and Ebola) or other sorts of crises (acts of terrorism, natural calamities) travellers mostly had alternatives at their disposal. This time the entire planet has been held hostage to this severe pandemic, which has brought an absolute halt on various activities, leisure sector being the prominent casualty. From the responses it is evident that alike educators, industry managers too didn't shy away from highlighting the human resilience

and seemed hopeful towards the eventual recovery, meanwhile reassuring individuals who have or intend to pursue careers in the industry.

Participants shared mixed opinions about the media response to the ongoing pandemic, where some lauded the Indian mass media's role in bringing awareness about the COVID-19 outbreak, while others expected it to be more unbiased. Recent press freedom ranking in 2020 placed country's media at 142 position (https://rsf.org/en/ranking_t able), which may, to some extent, explain the variations in the way participants reflected on the media's role. In addition, the initial surges in infections were also linked to religious congregation in the country's capital Delhi, coverage of that triggered debates over media's handling of outbreak on the grounds of particular community (see for example Slater and Masih, 2020). The participants expected media to remain unbiased and not target specific community amid pandemic for gaining viewership. However, a unanimity was observed in acknowledgment of the media's potential in assuaging the impact though positive publicity, sensitising population about hygiene and sanitation and build confidence among viewers.

Crisis management remained a reoccurring response under various categories of inquiries. Management of crisis entails creating blue print for the support during unexpected and unforeseen events. An embryonic risk can take form of crisis due to the unpredictable nature of incidents, which may ensue in unprecedented outcomes. Crisis management warrants formulation strategies at a swift pace to overcome or lessen the effect of the threat. It requires systems to be updated to meet with the unforeseen phases and be able to guide in the entire cycle of crisis management (Mitroff et al., 1987). In doing so the management of crises warrants rapid and timely coordination, not only between members within a team but also between members of different teams (Reddy et al., 2009). In the current research industry experts felt it as a crucial learning for themselves and the government to minimise damage in the event similar catastrophes make reappearance. Voices of effective crisis management have been gaining momentum, so much so that 'Journal of Tourism Futures' published perspective paper (Jamal and Budke, 2020) toward COVID-19 outbreak in barely third month of its spread in China in 2020. In addition to the suggestions made by Jamal and Budke (2020) about care for local residents, clear communication among tourism and hospitality stakeholders, and need of UNWTO and WTTC to assist industry prepare for global health emergencies and support research; current research accentuated on the crisis planning and management from three major perspectives, namely industry, trainers/educators and government. Managers in the sector are strongly advised to develop formal guidelines in the event of crises, which shall be clearly

| Emergent Sub- Themes \downarrow Broad Queries \rightarrow | Key Challenges- A | Industry Learning-B | Educators'/ Trainers' Learning-C | Governments' learning-D | Future Consumption behaviour-E | Media Response & Responsibility-F | Workforce Continuation & Redundancy-G | Expected Industry Policy Changes-H | Way Ahead for future employees- I | Total |
|---|----------------------|------------------------|--|----------------------------|--------------------------------------|--------------------------------------|---|--|---|-------|
| 1- Multiskilling/ Professional development (I) | | 3 | 6 | | | | 4 | 1 | 2 | 16 |
| 2- Hygiene Standards/Hygiene SOPs/Sanitation Standards (II) | 1 | 2 | 3 | 1 | 3 | 2 | 1 | | 2 | 15 |
| 3- Optimism/Patience for revival (III) | | 3 | 3 | | | | | | 9 | 15 |
| 4- Media for image creation/ awareness/Justified response (IV) | | | | 2 | | 10 | | | | 12 |
| 5- Crisis Management Planning (III) | | 4 | 1 | 3 | | | | | 3 | 11 |
| 6- Cash Reserves/Funds for Crisis (III) | | 6 | 1 | 1 | 1 | | | 1 | | 10 |
| 7- Digitisation/Technology Adoption/Artificial Intelligence (III) | | 2 | 6 | | 1 | | | 1 | | 10 |
| 8- Fixed Costs/Expenses (III) | 9 | | | | | | | | | 9 |
| 9- Employee Morale/Motivation (I) | 3 | 2 | 3 | | | | | | | 8 |
| 10- Reduced Travel/Demand/ outing/ gathering (IV) | 3 | | | | 5 | | | | | 8 |
| 11- Likely Layoffs/ Contract employment/pay cuts (IV) | | | | | | | 6 | 1 | | 7 |
| 12- Unimpeded Cash Flow/ Continued Revenues (III) | 5 | 2 | | | | | | | | 7 |
| 13- Continued Job/Payroll/leave benefits (I) | 3 | 2 | | | | | | 1 | | 6 |
| 14- Community unbiasedness (IV) | | | | | | 6 | | | | 6 |
| 15- Employee health/Wellbeing (II) | 3 | | | | | | | 2 | | 5 |
| 16- Better Health Care Infrastructure (II) | | | | 5 | | | | | | 5 |
| 17- Budgetary Considerations/ Tax benefits/Rebates (III) | | 1 | | 4 | | | | | | 5 |
| 18- Short haul/domestic travel over long haul/international in future (III) | 1 | | | | 2 | | | | 1 | 4 |
| 19- Students training/sessions (I) | 2 | | 2 | | | | | | | 4 |
| 20- Guest Safety/Wellbeing (II) | 1 | | | | 1 | | | 1 | | 3 |
| 21- Careful spending/Cost Control (III) | | 2 | 1 | | | | | | | 3 |
| 22- Adaptability (I) | | 1 | 1 | | | | | 1 | | 3 |
| 23- Population Control (IV) | | | | 3 | | | | | | 3 |
| 24- Market Research (III) | | 2 | | | | | | | | 2 |
| 25- Leadership (I) | | 1 | 1 | | | | _ | | | 2 |
| 26- Alternative/Multiple Career Options (III) | | | 1 | | | | 1 | | | 2 |
| 27- Packaging Consciousness/ Reduced outdoor eating (II) Broad Queries- Questions posed | | | | | 2 | | | | | 2 |

A- What are key challenges that your organisation currently faces in the times of current global pandemic?

B- According to you what are the key learnings from this crisis for the industry?

C- According to you what are the key learnings this crisis for the educators?

D- According to you what are the key learnings this crisis for the government?

E- What change in consumption behaviour do you expect in the post pandemic period?

F- How can media play a constructive role in bringing this sector to normalcy?

G- Do you see workforce becoming redundant if the aftereffects continue for a longer period? What suggestion do you have in dealing with similar situations?

H- What industry policy changes you expect in future?

I- What Educators/ Institutions should now do to prepare and encourage students to study and pursue careers in the sector?

communicated to the employees (Tse et al., 2006).

Going forward, investigation into the current pandemic is most likely to gain traction and learnings from previous researches (see for example Senbeto and Hon, 2020) which can lay empirical groundwork for the health crisis such as COVID-19 and tourist typology and its influence on short or long haul travels. Because in the current findings too, participants had signalled change in short and long haul travel behaviour in future and also cited it as a key challenge for the tourism industry.

Preparedness of employees for unforeseen contingencies and provision of reserved funds are crucial strategic areas and learnings that can be taken from earlier studies (Malhotra and Venkatesh, 2009; McCool, 2012). Businesses, large or small, face the dilemma to continue to pay employees in the event of reduced demand. Especially in the case COVID-19, impacts would arguably be damaging for the industry (Gössling et al., 2020a, b). Massive job loss and weakened contribution of the sector to the GDP is imminent, and calls of bailout are rising. Participants majorly acknowledged management of contingency funds for facing such eventualities among key industry learning and responsibility. While the sector is known to be prone to sporadic crises and economic crests and troughs owing to the seasonal variations, the effects of the current pandemic are yet to be abundantly realised.

Participants' realisation of severity of the health impacts stemming from the physical interactions and proximities was evident. The responses related to the digitalisation and need of adopting online modes of interaction were also frequently noted. Educators, for instance, stressed on the need of the adoption of technology for establishing virtual connect to minimise physical contact between individuals. Utilisation of artificial intelligence and robotics in the industry was also recommended, which falls in line with various scholarly recommendations (Ivanov and Webster, 2018; Webster and Ivanov, 2020; Yang et al., 2020). The inclusion of robotics in various tourism and hospitality operations are expected to become commonplace, where applications such as robotics in guidance, cleaning, kitchens, airports, hotels, deliveries, may see an increased adoption (Ivanov and Webster, 2017).

Furthermore, the industry heads reflected on the immediate challenge of managing fixed costs when the enterprises are continuing to lose business. Lodging and food service sectors are known to have higher fixed costs and are sensitive to the shocks and instabilities in the market (Dimitropoulos, 2018). In this regard the responses conveyed similar challenges that the organisations faced. Participant P1 reflected that

"COVID19, now globally carrying the status of a pandemic, has led to a worldwide crisis with its effects on the hospitality industry potentially heavier than those of 9/11, SARS, and the financial crisis in 2008. Challenges faced by many of the organisation in today's scenario is very common -Managing Fixed Expenses, Payroll, Morale of the Employees and specially Cash Flow".

In the similar vein participant P14 commented

"... As the payment cycle of the hospitality industry varies from 90 to 60 days except the weddings so working capital to meet out the fixed cost is a challange (sic.)".

To overcome challenge of lost revenue participant P5 responded

"Various cost cutting measures implementation wherever it is possible. Can't do much on fixed costs."

These reflections are indications of the acknowledgement by the industry actors of the ongoing struggle and the need to keep the business running while facing the uphill task of meeting their expenses on regular basis. To add to this, the industry is familiar with the variations in demand and it can be argued that unlike other sectors that may ensure steady income, tourism and hospitality oriented businesses are aware of the potential slack times arising out of various reasons like seasonal demand and crises. Employees and employers likewise need to strengthen their competencies and should sail through these tough

times, also because if cost cutting is done, for instance, in the form of employee reduction or layoffs, the re-hiring would be needed as and when the industry recovers. Retaining employees is argued to be less expensive than letting employees leave (Ineson et al., 2013). This argument holds relevance particularly in the Indian context where "it is noted that reducing staff or laying off employees may not be the most favored action" (Israeli et al., 2011, p. 373).

Some critical reflections from industry experts are worth noting. On the question of latent redundancy of employees in hotels, participant P9 voiced out that

Post Covid19, organisations will surely redesign/reorganise their business models based on the loss handled and market conditions for the future. Workforce reduction is a possibility however smarter organisations may look at utilising the available workforce in newer roles as per the need of the business. Its (sic) important to understand that hospitality is all about human connections and people will be at the heart of everything we strategize.

While bringing up the aspects of the working culture in the hotel sector, same participant also pointed out that the

Learning for hospitality industry (issues of sick leaves/higher wages cost/business continuity) is that we must continue with our work life balance approach post normalcy. Hotels to continue sending people on leaves (PLs) etc so that we must not come back to the old mindframe (sic) of long work hours and related issues of working in hotels. Employees also need to learn to support the organisations in turbulent times by being flexible in consumption of leaves and not just saving it for monetary gains.

4.2. Theoretical implications

The study's contribution to the theory is in the form of various themes that can be studied as valuable factors in future researches. From the 27 sub-themes (Table 3) derived from the participants' responses four dominant themes were labelled as Human Resource Management, Health and Hygiene, Continuity, and Concerns. These should be taken as crucial contribution to the current theory on hospitality and tourism in the light of existing pandemic. The review showed a spike in publications related to earlier SARS outbreak in the aftermath, which however started to reduce gradually. A surge in theoretical contribution is imminent during this time as well, to this end this study adds to the existing body of literature on epidemiological crisis in the backdrop of tourism and hospitality. The study also presented viewpoints of those who have the onus of preparing manpower and employing them after they complete their skills training and necessary education for the tourism and hospitality.

The impacts of the current SARS COVID-19 will be more pronounced and long lasting, especially in the light of absence of immediate vaccine to create immunity in the common masses. Although some countries have had attempted to adopt the path of herd immunity (for example Stockholm) but that approach has been questioned by a body of scientists in the absence of data to support such radical action. This is critical for the tourism and hospitality sector because of the perpetuity exhibited by the outbreak. The effects are going to remain for a longer duration and sectors that thrive on social contacts such as tourism and hospitality need to embrace for tumultuous times ahead. Going forward, it would be crucial for the governments and marketing firms to undertake research to analyse the effects of the current catastrophe on the industry (Min et al., 2011). This research too makes a case for raising awareness to view this pandemic as a wakeup call to prepare for the aftereffects. Going forward other highlighted aspects in the current study such as change in travel and dining habits, careful spending, need of adaptability, market research, leadership roles, population issues would be critical in preparing industry and stakeholders.

The focus on the Indian setting is an essential differentiating element of the study and the current theoretical (as well as managerial) contribution should be viewed as vital in the country's context. This holds particular relevance as the number of infections are on rise and the country ranks third in terms of total COVID-19 cases (https://www.worldometers.info/coronavirus/).

5. Limitations and future research

This study is subject to certain limitations that must be addressed. Some of them are highlighted here and future directions of research have been indicated. First and foremost the research is based on the qualitative analysis that although uses interview responses from managers or senior personnel, may not justifiably work toward generalisation of the results. Thus with the problem at hand robust empirical investigations are deemed necessary in immediate course to study the pandemic's industry impacts and make model based estimations and recommendations. However, this research makes a sturdier point in giving an exploratory stance to trigger other empirical investigations. The researches from here can take various variables exhibited as subthemes and major broad themes that accumulated through perspectives obtained from the industry experts and may operationalise them in future investigations. Quantitative investigations or even triangulation studies can bring deeper insights and help enrich literature. Although studies on SARS and other outbreaks have happened in past, the extent and enormity of the current pandemic is comparable to even greater health catastrophes of past. Thus scales development to study the outbreak impacts, industry response and change in travel and consumer behaviour are strongly recommended.

Another important limitation that should be addresses is that the perspectives reported in the study are from India. Several other themes may surface and some factors manifested from current research may not apply in other scenarios, which remains a strand that could be picked in future researches. Random samples from diverse geographical and cultural setups may contribute toward newer findings. It is also important to note that situation is still evolving and the matters that were prominent a few weeks or months ago may not be as influential now, for instance the rise and decline in the number of cases and its varied manifestation in various geographical settings. This increases the relevance of studies that factor in the temporal change in the circumstances. Going forward, there certainly would be need of more dedicated issues dealing with the COVID-19 outbreak for ensuring literature captures its evolution and recommends practices to mitigate the impacts. One more limitation in the study is that it mostly takes into cognizance individuals working in higher positions in hotels with few senior individuals from academics. The study didn't consider other stakeholders viewpoints. This leaves a glaring gap for future researches to consider other players in the leisure industry like travel intermediaries, airlines, restaurants at destinations, locals at destinations, other accommodation providers, travel and hospitality students and even different levels of employees' etc. Addressing to these limitations can fill potential lacunae and improve understanding of scholars and practitioners toward dealing with the ongoing crisis and minimise future fallouts.

References

- AlBattat, A.R., MatSom, A.P., 2014. Emergency planning and disaster recovery in Malaysian hospitality industry. Proc. Soc. Behav. Sci. 144, 45–53. https://doi.org/ 10.1016/j.sbspro.2014.07.272.
- Alonso, A.D., Kok, S.K., Bressan, A., O'Shea, M., Sakellarios, N., Koresis, A., et al., 2020. COVID-19, aftermath, impacts, and hospitality firms: an international perspective. Int. J. Hosp. Manag., 102654
- Bai, Y., Yao, L., Wei, T., Tian, F., Jin, D.Y., Chen, L., Wang, M., 2020. Presumed asymptomatic carrier transmission of COVID-19. JAMA 1406–1407. https://doi.org/ 10.1001/jama.2020.2565
- Barrows, C.W., Gallo, M., Mulleady, T., 1996. AIDS in the US hospitality industry: recommendations for education and policy formulations. Int. J. Contemp. Hosp. Manag. 8 (1), 5–9. https://doi.org/10.1108/09596119610108581.
- Berelson, B., 1952. Content Analysis in Communication Research. Free Press, Glencoe, IL.

- Bharwani, S., Mathews, D., 2012. Risk identification and analysis in the hospitality industry: Practitioners' perspectives from India. Worldwide Hospitality and Tourism Themes 4 (5), 410–427.
- Browne, A., Ahmad, S., Beck, C.R., Nguyen-Van-Tam, J.S., 2016. The roles of transportation and transportation hubs in the propagation of influenza and coronaviruses: a systematic review. J. Travel Med. 23 (1) tav002.
- Burns, E., 2010. Developing email interview practices in qualitative research. Sociol. Res. Online 15 (4), 24–35. https://doi.org/10.5153/sro.2232.
- Caulfield, J., 2019. How to Do Thematic Analysis. Retrieved July 01, 2020. https://www.scribbr.com/methodology/thematic-analysis.
- Chan, J.O.P., 2020. Digital transformation in the era of big data and cloud computing. Int. J. Intell. Inf. Syst. 9 (3), 16.
- Chen, M.H., Jang, S.S., Kim, W.G., 2007. The impact of the SARS outbreak on Taiwanese hotel stock performance: an event-study approach. Int. J. Hosp. Manag. 26 (1), 200–212. https://doi.org/10.1016/j.ijhm.2005.11.004.
- Chien, G.C., Law, R., 2003. The impact of the Severe Acute Respiratory Syndrome on hotels: a case study of Hong Kong. Int. J. Hosp. Manag. 22 (3), 327–332. https://doi. org/10.1016/S0278-4319(03)00041-0.
- Chuo, H.Y., 2007. Theme park visitors' responses to the SARS outbreak in Taiwan. Adv. Hosp. Leis. 3, 87–104. https://doi.org/10.1016/S1745-3542(06)03006-2.
- Condé Nast Traveller, 2020. Himachal Pradesh Reopens for Tourists, but Many Kullu-Manali Hotels to Stay Closed. Retrieved September 05, 2020. https://www.cntraveller.in/story/himachal-pradesh-covid-19-negative-test-minimum-5-day-booking-travel-new-rules-2020/.
- Cutler, S.Q., Carmichael, B., 2010. The dimensions of the tourist experience. In: Morgan, M., Lugosi, P., Ritchie, B. (Eds.), The Tourism and Leisure Experience: Consumer and Managerial Perspectives. Channel View Publications, Bristol, pp. 3–26.
- Dahles, H., Susilowati, T.P., 2015. Business resilience in times of growth and crisis. Annals of Tourism Res. 51, 34–50.
- De Sausmarez, N., 2004. Malaysia's response to the Asian financial crisis: implications for tourism and sectoral crisis management. J. Travel Tour. Mark. 15 (4), 217–231. https://doi.org/10.1300/J073v15n04 01.
- Dimitropoulos, P., 2018. Profitability determinants of the Greek hospitality industry: the crisis effect. In: Katsoni, V., Velander, K. (Eds.), Innovative Approaches to Tourism and Leisure. Springer, Switzerland, pp. 405–416. https://doi.org/10.1007/978-3-319-67603-6 31.
- Divya, A., 2020. Hospitality Sector Gears up for a New Post-Lockdown Normal. Retrieved July 01, 2020. https://indianexpress.com/article/business/hospitality-sector-gears-up-for-a-new-post-lockdown-normal-6482394/.
- Dombey, O., 2004. The effects of SARS on the Chinese tourism industry. J. Vacat. Mark. 10 (1). 4–10. https://doi.org/10.1177/135676670301000101.
- Feast, V., Bretag, T., 2005. Responding to crises in transnational education: new challenges for higher education. High. Educ. Res. Dev. 24 (1), 63–78. https://doi. org/10.1080/0729436052000318578.
- Feng, G.C., 2014. Intercoder reliability indices: disuse, misuse, and abuse. Qual. Quant. 48 (3), 1803–1815.
- Garg, A., 2015. Travel risks vs tourist decision making: A tourist perspective. Int. J. Hospitality Tourism Syst. 8 (1), 1-9.
- Gautam, S., Trivedi, U., 2020. Global implications of bio-aerosol in pandemic. Environ. Dev. Sustain. 22, 3861–3865. https://doi.org/10.1007/s10668-020-00704-2.
- Gössling, S., Scott, D., Hall, C.M., 2020a. Pandemics, tourism and global change: a rapid assessment of COVID-19. J. Sustain. Tour. 1–20. https://doi.org/10.1080/ 09669582.2020.1758708.
- Gössling, S., Scott, D., Hall, C.M., 2020b. Pandemics, tourism and global change: a rapid assessment of COVID-19. J. Sustain. Tour. 1-20.
- Gruman, J.A., Chhinzer, N., Smith, G.W., 2011. An exploratory study of the level of disaster preparedness in the Canadian hospitality industry. Int. J. Hosp. Tour. Adm. 12 (1), 43–59. https://doi.org/10.1080/15256480.2011.540980.
- Haque, T.H., Haque, M.O., 2018. The swine flu and its impacts on tourism in Brunei. J. Hosp. Tour. Manag. 36, 92–101. https://doi.org/10.1016/j.jhtm.2016.12.003.
- Henderson, J.C., Ng, A., 2004. Responding to crisis: severe acute respiratory syndrome (SARS) and hotels in Singapore. Int. J. Tour. Res. 6 (6), 411–419. https://doi.org/ 10.1002/jtr.505.
- Higgins-Desbiolles, F., 2020. Socialising tourism for social and ecological justice after COVID-19. Tour. Geogr. 1–14.
- Hoque, A., Shikha, F.A., Hasanat, M.W., Arif, I., Hamid, A.B.A., 2020. The effect of Coronavirus (COVID-19) in the tourism industry in China. Asian J. Multidiscip. Stud002E 3 (1), 52–58.
- Ineson, E.M., Benke, E., László, J., 2013. Employee loyalty in Hungarian hotels. Int. J. Hosp. Manag. 32, 31–39. https://doi.org/10.1016/j.ijhm.2012.04.001.
- Israeli, A.A., Mohsin, A., Kumar, B., 2011. Hospitality crisis management practices: the case of Indian luxury hotels. Int. J. Hosp. Manag. 30 (2), 367–374. https://doi.org/ 10.1016/j.ijhm.2010.06.009.
- Ivanov, S.H., Webster, C., 2017. Designing robot-friendly hospitality facilities.
 Proceedings of the Scientific Conference "Tourism. Innovations. Strategies" 13–14.
- Ivanov, S., Webster, C., 2018. Adoption of robots, artificial intelligence and service automation by travel, tourism and hospitality companies – a cost-benefit analysis. In: Marinov, V., Vodenska, M., Assenova, M., Dogramadjieva, E. (Eds.), Traditions and Innovations in Contemporary Tourism. Cambridge Scholars Publishing, Cambridge, pp. 190–203.
- Iyer, S., 2020. A Look at Indian Government Response to Coronavirus, so Far, Shows Some Quick Reactions but Not Enough Foresight. Retrieved September 05, 2020. Business Insider. https://www.businessinsider.in/india/news/coronavirus-upda tes-in-india-and-steps-taken-by-narendra-modi-government/articleshow/74723667. cms.

- Jamal, T., Budke, C., 2020. Tourism in a world with pandemics: local-global responsibility and action. J. Tour. Futures. https://doi.org/10.1108/JTF-02-2020-
- Jauhari, V., 2009. Hospitality, tourism and economic growth in India. Worldw. Hosp. Tour. Themes 1 (1), 7-11. https://doi.org/10.1108/17554210910949832
- Jauhari, V., 2010. How can the visitor experience be enhanced for spiritual and cultural tourism in India? Worldw. Hosp. Tour. Themes 2 (5), 559-563. https://doi.org. 10.1108/17554211011090166.
- Kabote, F., Hamadziripi, F., Vengesayi, S., Chimutingiza, F., Makoni, T.T., 2015. Employee perceptions of HIV & AIDS on the hospitality industry in Zimbabwe. Turizam 19 (2), 47-55. https://doi.org/10.5937
- Phelan, Kelly Virginia, 2015. Elephants, orphans and HIV/AIDS. Worldw. Hosp. Tour. Themes 7 (2), 127-140. https://doi.org/10.1108/WHATT-12-2014-0049.
- Kim, D.H., 2020. Health effects of the COVID-19 pandemic by sex. Korean J. Women Health Nurs. 26 (2), 106-108.
- Kim, S.S., Chun, H., Lee, H., 2006. The effects of SARS on the Korean hotel industry and measures to overcome the crisis: A case study of six Korean five-star hotels. Asia Pacific J. Tour. Res. 10 (4), 369-377. https://doi.org/10.1080/
- Konarasinghe, K.M.U.B., 2020. Modeling COVID-19 epidemic of India and Brazil. J. New Front. Healthcare Biol. Sci. 1 (1), 15-25.
- Kyriakidou, O., Maroudas, L., 2010. Training and development in British hospitality, tourism and leisure SMEs. Manag. Leis. 15 (1-2), 32-47. https://doi.org/10.1080/
- Ladki, S.M., 1994. Strategies for combating fear of AIDS in the hospitality industry. Hosp. Tour. Educ. 6 (1), 75-77. https://doi.org/10.1080/23298758.1994.1068555
- Law, R., 2005. A perspective on SARS and education in hospitality and tourism. J. Teach. Travel. Tour. 5 (4), 53-59. https://doi.org/10.1300/J172v05n04_04.
- Leung, P., Lam, T., 2004. Crisis management during the SARS threat: a case study of the metropole hotel in Hong Kong. J. Hum. Resour. Hosp. Tour. 3 (1), 47-57. https:// doi.org/10.1300/J171v03n01_05.
- Lisak, D., 1994. The psychological impact of sexual abuse: content analysis of interviews with male survivors. J. Trauma. Stress 7 (4), 525-548.
- Liu, J., Huang, J., Li, Z., Qu, X., Zheng, X., Tu, C., et al., 2020. A High-Efficiency Hospital Emergency-response Mode is Key to Successful Treatment of COVID-19 Patients in Zhuhai. https://doi.org/10.21203/rs.3.rs-20125/v1.
- Lodder, W., de Roda Husman, A.M., 2020. SARS-CoV-2 in wastewater: potential health risk, but also data source, Lancet Gastroenterol, Hepatol, 1 https://doi.org/10.1016/ S2468-1253(20)30087-X
- Malhotra, N., Birks, D., 2007. Marketing Research: an Applied Approach: 3rd European Edition, Pearson education,
- Malhotra, R., Venkatesh, U., 2009. Pre-crisis period planning: lessons for hospitality and tourism. Worldw. Hosp. Tour. Themes 1 (1), https://doi.org/10.1108. 17554210910949896.
- Marques, G., Agarwal, D., de la Torre Díez, I., 2020. Automated medical diagnosis of COVID-19 through EfficientNet convolutional neural network. Appl. Soft Comput., 106691
- Maximiliano, K., 2010. Role of mass-media in swine flu outbreak in Buenos Aires.
- Anatolia 21 (1), 169–173. https://doi.org/10.1080/13032917.2010.9687097.

 Mazaheri, M., Eriksson, L.E., Heikkilä, K., Nasrabadi, A.N., Ekman, S.L., Sunvisson, H., 2013. Experiences of living with dementia: qualitative content analysis of semistructured interviews. J. Clin. Nurs. 22 (21-22), 3032-3041.
- McCool, B.N., 2012. The need to be prepared: disaster management in the hospitality industry. J. Bus. Hotel Manag. 1 (2), 1-5. https://doi.org/10.4172/2324 9129 1000101
- Min, J.C., Lim, C., Kung, H.H., 2011. Intervention analysis of SARS on Japanese tourism demand for Taiwan, Qual. Quant. 45 (1), 91-102. https://doi.org/10.1007/s11135-
- Mitroff, I.I., Shrivastava, P., Udwadia, F.E., 1987. Effective crisis management. Acad. Manag. Perspect. 1 (4), 283-292. https://doi.org/10.5465/ame.1987.4275639
- Mohanty, S.K., 2020. Contextualising geographical vulnerability to COVID-19 in India. Lancet Glob, Health,
- Nath, K.J., 2003. Home hygiene and environmental sanitation: a country situation analysis for India. Int. J. Environ. Health Res. 13 (sup1), S19-S28. https://doi.org/ 10.1080/0960312031000102778.
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., et al., 2020. The socio-economic implications of the coronavirus pandemic (COVID-19); a review. Int.
- Nkengasong, J., 2020. China's response to a novel coronavirus stands in stark contrast to the 2002 SARS outbreak response. Nat. Med. 26, 310-311. https://doi.org/10.1038/ s41591-020-0771-1.
- Norris, F.H., Stevens, S.P., Pfefferbaum, B., Wyche, K.F., Pfefferbaum, R.L., 2008. Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. Am. J. Community Psychol. 41 (1-2), 127-150.
- Page, S., Song, H., Wu, D.C., 2012. Assessing the impacts of the global economic crisis and swine flu on inbound tourism demand in the United Kingdom. J. Travel. Res. 51 (2), 142-153. https://doi.org/10.1177/0047287511400754
- Palmer, R.A., 1988. The aids-afflicted employee: medical, operational and legal concerns for the hospitality industry. Hosp. Educ. Res. J. 12 (2), 1-9. https://doi.org/ 7/109634808801200201.
- Pine, R., McKercher, B., 2004. The impact of SARS on Hong Kong's tourism industry. Int. J. Contemp. Hosp. Manag. 16 (2), 139-143. https://doi.org/10.1108/ 09596110410520034.

- PTI, 2020. COVID-19 Pandemic Hit India's Travel and Tourism, Immediate Survival Measures Required: FAITH. Retrieved June 26, 2020. https://www.financialexpress. com/lifestyle/travel-tourism/covid-19-impact-loss-forecast-for-indias-tourismsector-doubles-to-rs-10-lakh-crore-says-faith/1949030/.
- Radhakrishna, S.A., 2020. COVID-19 | Post-pandemic, India's Tourism Sector Stares at 70% Job Loss. Retrieved June 26, 2020. https://www.thehindu.com/news/nationa l/kerala/coronavirus-tourism-sector-stares-at-70-job-loss/article31310234.ece
- Ratislavová, K., Ratislav, J., 2014. Asynchronous email interview as a qualitative research method in the humanities. Hum. Aff. 24 (4), 452-460. https://doi.org/ 10.2478/s13374-014-0240-y.
- Reddy, M.C., Paul, S.A., Abraham, J., McNeese, M., DeFlitch, C., Yen, J., 2009. Challenges to effective crisis management: using information and communication technologies to coordinate emergency medical services and emergency department teams. Int. J. Med. Inform. 78 (4), 259-269. https://doi.org/10.1016/j.
- Senbeto, D.L., Hon, A.H., 2020. The impacts of social and economic crises on tourist behaviour and expenditure: an evolutionary approach. Curr. Issues Tour. 23 (6), 740-755. https://doi.org/10.1080/13683500.2018.1546674
- Sharma, S., 2020. 2m Distancing, Masks Key to Stopping Covid-19 Spread: Study. Retrieved September 05, 2020. Hindustan Times. https://www.hindustantimes.co m/india-news/social-distancing-masks-eye-wear-and-hand-washing-work-best-in-co mbination-study/story-yROOhsGvHO0Zp7eAZpJmjJ.html.
- Slater, J., Masih, N., 2020. As The World Looks for Coronavirus Scapegoats, Muslims are Blamed in India. The Washington Post. URL: https://www.washingtonpost.com/wo rld/asia_pacific/as-world-looks-for-coronavirus-scapegoats-india-pins-blame-on-mus lims/2020/04/22/3cb43430-7f3f-11ea-84c2-0792d8591911 story.html. Accessed on 08 May 2020.
- Smith, D.A., Goss, D., 1993. HIV/AIDS and hotel and catering Employment: some implications of perceived risk. Empl. Relat. 15 (2), 25-32. https://doi.org/10.1108/ 01425459310031804
- Sönmez, S.F., Apostolopoulos, Y., Tarlow, P., 1999. Tourism in crisis: managing the effects of terrorism. J. Travel. Res. 38 (1), 13–18.
- Stafford, G., Yu, L., Armoo, A.K., 2002. Crisis management and recovery how Washington, DC, hotels responded to terrorism. Cornell Hotel Restaur. Adm. Q. 43 (5), 27–40.
- Strauss, A., Corbin, J., 1998. Basics of Qualitative Research Techniques. Sage publications, Thousand Oaks, CA.
- Thyme, K.E., Wiberg, B., Lundman, B., Graneheim, U.H., 2013. Qualitative content analysis in art psychotherapy research; concepts, procedures, and measures to reveal the latent meaning in pictures and the words attached to the pictures. Arts Psychother. 40 (1), 101–107. https://doi.org/10.1016/j.aip.2012.11.007.
- Tiwari, V., 2020. Work from Home, No Large Gathering: 10 Facts on Centre's COVID Directives. Retrieved September 05, 2020. https://www.ndtv.com/india-news /coronavirus-lockdown5-work-from-home-no-large-gathering-10-facts-on-centres -covid-directives-2237937.
- Tripathi, G., Choudhary, H., Agrawal, M., 2010. What do the tourists want? The case of the Golden Temple, Amritsar. Worldw. Hosp. Tour. Themes 2 (5), 494–506. https:// doi.org/10.1108/17554211011090111
- Tse, A.C.B., So, S., Sin, L., 2006. Crisis management and recovery: how restaurants in Hong Kong responded to SARS. Int. J. Hosp. Manag. 25 (1), 3-11. https://doi.org/ 10.1016/i.iihm.2004.12.001.
- Webster, C., Ivanov, S., 2020. Demographic change as a driver for tourism automation.
- J. Tour. Futures. https://doi.org/10.1108/JTF-10-2019-0109. Wen, Z., Huimin, G., Kavanaugh, R.R., 2005. The impacts of SARS on the consumer behaviour of Chinese domestic tourists. Curr. Issues Tour. 8 (1), 22-38. https://doi. org/10.1080/13683500508668203.
- Williams, N., Vorley, T., 2014. Economic resilience and entrepreneurship: lessons from the Sheffield City region. Entrepreneurship Reg. Dev. Int. J. 26 (3-4), 257-281.
- Wu, E.H., Law, R., Jiang, B., 2010. The impact of infectious diseases on hotel occupancy rate based on independent component analysis. Int. J. Hosp. Manag. 29 (4), 751–753. https://doi.org/10.1016/j.ijhm.2009.07.001.
- Wu, F., Zhao, S., Yu, B., Chen, Y.M., Wang, W., Song, Z.G., et al., 2020. A new coronavirus associated with human respiratory disease in China. Nature 579 (7798), 265-269. https://doi.org/10.1038/s41586-020-2008-3.
- Xu, Z., Shi, L., Wang, Y., Zhang, J., Huang, L., Zhang, C., et al., 2020. Pathological findings of COVID-19 associated with acute respiratory distress syndrome. Lancet Respir. Med. 8 (4), 420-422. https://doi.org/10.1016/S2213-2600(20)30076-X.
- Yang, L., Henthorne, T.L., George, B., 2020. Artificial intelligence and robotics technology in the hospitality industry: current applications and future trends. Digital Transformation in Business and Society. Palgrave Macmillan, Cham, pp. 211-228.
- Yap, M.H., Ineson, E.M., 2009. HIV-infected employees in the Asian hospitality industry. J. Serv. Manag. 20 (5), 503-520. https://doi.org/10.1108/09564230910995116.
- Yeolekar, A., Bhalerao, S., Bhalerao, M., 2020. The New Normal of ENT OPD-Adapting Safe Practices
- Zhang, H., Cho, T., Wang, H., 2020. The impact of a terminal high altitude area defense incident on tourism risk perception and attitude change of Chinese tourists traveling to South Korea. Sustainability 12 (1), 1-13. https://doi.org/10.3390/su12010007.
- Zheng, Y., Goh, E., Wen, J., 2020. The effects of misleading media reports about COVID-19 on Chinese tourists' mental health: a perspective article. Anatolia 31 (2), 337-340.