



Impacts of COVID-19 on Tourism Education: Analysis and Perspectives

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Abstract:	<p>Though a lot of studies have analysed the impact of the pandemic on the tourism industry and several suggestions have been made to revive the sector, tourism education is largely overlooked. Tourism and cognate courses offered by higher educational institutions are essentially a part of the tourism system. This study aims to emphasize the perspective of tourism educators with respect to upcoming challenges in the tourism discipline and ways to reinvent and reboot the tourism education in the post-COVID-19 phase. The study adopted a qualitative approach and a total of 22 responses were interpreted. A thematic analysis using the Nvivo 12 plus software was done. Even though there was variability in the respondents' background, a significant emphasis on curriculum design, industry collaboration, and excellence in research was mutually suggested by the educators. The study suggests that ambidextrous management in tourism education be adopted in post-COVID-19 phase.</p>

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Impacts of COVID-19 on Tourism Education: Analysis and Perspectives

1. Introduction

The breakout of COVID-19 has disrupted tourism and related industries (Jamal & Budke, 2020). News media and academic research have discussed and analysed the impacts of the pandemic on the tourism industry. However, not much is known about the impacts of the novel coronavirus on tourism education. When tourism is hit by major external factors such as overtourism, literature (either academic or news media) are essentially focusing on the industry, forgetting that tourism is also a field of study (Seraphin & Yallop, 2020). Discussing the impacts of COVID-19 on tourism education is a reminder of the fact that whatever happens in the industry impacts the education system, and vice versa. This tends to be forgotten (Seraphin & Yallop, 2020). For instance, the growing needs of more sustainability in the tourism industry has led to the development of new curriculum and new pedagogic approaches (Ali, Murphy & Nadkarni, 2017; Camargo & Gretzel, 2017; Hales & Jennings, 2017). Similarly, Halaby (1994), Kucel (2011), and Seraphin *et al.*, (2021) explain that the range and level of training available in tourism and related subjects contribute either to under-education, over-education, or job-match position of staff in the industry, and subsequently to staff income, and whether they decide to move or not to other sectors (Boella & Goss-Turner, 2020; Guironnet & Peypoch, 2007; Nickson, 2013). A recent study by De Gruyter (2020) reported the impacts of COVID-19 in academics concerning the lower research productivity of academics, and students' recruitments. However, by the time this study was conducted, very limited information was available on the impact of COVID-19 on specific disciplines such as tourism and the related field of studies. Even in the pre-COVID-19 phase, tourism education was less acknowledged as several studies predominantly focused on tourism marketing, destination management, tourists' behaviour etc. (Ballantyne *et al.*, 2009). Further, considering education within the ambit of tourism and hospitality workforce, Baum *et al.*, (2016) reported that there is underrepresentation of studies in some of the disciplines' top journals. Thus, due to the dearth of literature on the relationship between COVID-19 and tourism education/tourism-related courses, this study aims to acknowledge the underlying gap.

Stergiou (2005, p. 285) emphasised that 'teaching is an integral part of the education system and the curriculum is interpreted and acted upon within this context of teaching. On this basis, the link between students and institutions is created and provided.' Criticising the current tourism educational pattern as traditional, Hsu (2018) suggested that the sector requires radical transformations to cater to the industrial requirements. Presently, with the onset of a transformed world after the outbreak of COVID-19, transition in working styles, skill requirements, industry's expectations, and priorities are substantially anticipated (Seraphin & Yallop, 2020). To address this, the study analyses the perception

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3 of tourism educators centred on two research questions. Firstly, what are the challenges for tourism
4 educators (teaching), and students (learning)? And, secondly, what is the perception (in terms of
5 teaching, learning and job prospects) of educators regarding the post-COVID-19 phase? To answer
6 these questions, an empirical approach based on a survey (online questionnaire) is considered. It follows
7 the six 'E' managerial framework developed by Edger & Oddy (2018) namely explore (the industry,
8 market and customer needs); engineer (concept, plan and experience); engage (with relevant
9 stakeholders); execute (what was plan at engineer level); evaluate (the impacts); and finally, evolve
10 (make some propositions).

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17 The academic community has advanced various conceptual and perception-based researches predicting
18 the post-COVID-19 period (Gössling, Scott, & Hall, 2020; Gretzel et al., 2020; Guan, Deng, & Zhou,
19 2020; Hall, Scott, & Gössling, 2020; Zheng, Goh, & Wen, 2020). After a critical analysis, it was found
20 that one broad theme around which the researches in tourism and hospitality is 'transformation of
21 tourism' (Brouder, 2020; Cheer, 2020; Irimiás, Mitev, & Michalkó, 2020; Lapointe, 2020;
22 Niewiadomski, 2020; Prideaux, Thompson, & Pabel, 2020). The need to reinvent and redefine tourism
23 by considering the shift in the consumer behaviour (Wen, Kozak, Yang, & Liu, 2020), ~~or~~ re-linking
24 tourism by adopting a community-focused approach (Higgins-Desbiolles, 2020; Lapointe, 2020), ~~or~~
25 integrating the high artificial intelligence and robots into tourism and hospitality segments (Zeng, Chen,
26 & Lew, 2020), ~~or~~ the concept of human-flourishing to be emphasised in the tourism industry in the
27 recovery phase (Cheer, 2020), ~~or~~ adopting the Renaud's (2020) idea on transiting from 'growth for
28 development to de-growth for liveability.'; Some studies have typically focused on describing the
29 current scenario after the outbreak of COVID-19 in different countries (Baum & Hai, 2020; McCartney,
30 2020; Rodriguez-Morales, Bonilla-Aldana, & Sah, 2020; Williams & Kayaoglu, 2020; Wong, Leo, &
31 Tan, 2020). Even though Baum *et al.*, (2020) criticised the impact of COVID-19 on tourism industry as
32 the loud "amplification" of normal business operation, other researches contemplate that the pandemic
33 is an opportunity for the tourism industry to reset or rethink itself (Brouder, 2020; Lapointe, 2020;
34 Tremblay-Huet, 2020; Ying, Wang, Liu, Wen, & Goh, 2020). Thus, the idea of reinvention sets the
35 theoretical positioning of this study, alongside the belief that tourism education has robust
36 transformative potential in the current situation (Seraphin & Yallop, 2020).

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49 Beyond the COVID-19 context, this study is calling for a better integration and synergy between
50 tourism education and the eponymous industry. This greater synergy would lead to the achievement of
51 Sustainable Development Goal (SDG) 4, which is 'Quality Education' (United Nations Development
52 Programme, 2015). In terms of positionality, defined by (Hammond & Wellington, (2012) Hammond
53 and Wellington (2013: 118), as 'how the study might be affected by the researchers own particular
54 background, beliefs and values' (p. 118), this study is in line with Seraphin et al (2021) who argued that
55 SDG4 should not only be based on access to education and school enrolment rates at all levels,
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particularly for girls, but also on the relationship between education and industry. This bridge between education and industry is materialised in this study in the discussion section (Triple Helix Model), and also in the conclusion (practical contribution).

2. Literature Review

2.1 COVID-19 and its impact: An overview

The highly infectious COVID-19 disease is caused due to the Severe Acute Respiratory Syndrome Coronavirus 2 or SARS-Cov-2, a family of RNA coronaviruses (Lupia, 2020). Emerged as an epidemic, the high rate of transmission of ~~nCOV-2~~ nCov (WHO, 2020) later became a global health issue (Chinazzi et al., 2020), and in March 2020, World Health Organisation declared it a pandemic (World Health Organisation-Europe, 2020) when Europe started to become the epicentre of the disease. It brought the world to a sudden halt, causing immobility of people, an unimaginable decrease in the demand for goods and services, and financial markets touching all-time low (McKibbin & Fernando, 2020; Ozili & Arun, 2020). Although secondary to the impact on the global economies, the nCov impact on the tourism business is major (Jamal & Budke, 2020). The report published by the United Nations World Tourism Organisation estimated that the industry might incur a loss of 850 million to 1.1 billion in international tourist inflow (UNWTO, 2020). Similarly, the report published by the World Travel and Tourism Council estimated a loss of 50 million jobs in the tourism and hospitality industry worldwide (WTTC, 2020). Owing to this, IATA showed concern that the tourist numbers may not reach the level of 2019 until 2023-24 (IATA, 2020). Nevertheless, due to resilient characteristic of the tourism and hospitality industry (Biggs, Hall, & Stoeckl, 2012), it is believed that as cities start to unlock, the industry will rebound with better strategies to make travel safer (Barbhuiya & Chatterjee, 2020; Wen, Wang, & Kozak, 2020).

Teaching and educational services are a part of professional services which have also witnessed a rapid digital transformation taking place within weeks (Crawford et al., 2020). Conducting classes on Zoom, Google Meet, and other online meeting platforms, Basilaia and Kvavadze (2020) reported that the online form of education has helped the teachers to gain experience for the approaching 'new normal' in educational institutions. As social distancing norms become mandatory, and Google Classrooms becoming the new virtual environment for teaching, appropriate strategies for lecture planning, dissemination of subject knowledge and assignments, redesigning curriculum are a pre-requisite for effectiveness (Basilaia & Kvavadze, 2020). Although, this study is not suggesting that e-tourism education is a new phenomenon triggered by the COVID-19 crisis, as online learning, teaching, and assessment date back with a rise in the internet and is widely adopted (Sigala, 2005). Indeed, 'internet advances have enabled students to receive and interact with educational materials and engage with teachers and peers in new ways.' (Sigala, 2005, p. 370)

2.2 Tourism education and industry performance: An Overview

Kunwar (2018) stated that tourism is the hallmark activity of contemporary times, and tourism education is believed to be the backbone in supporting the industry. Generally speaking, tourism education provision follows the trend in the industry. Indeed, in tourism and related sectors, there has been a constant increase in needs for higher educated employees (Büchel, 2002; Groot & Maassen Van Den Brink, 2000). With the expansion of tourism activities, the educational systems assume the responsibility of preparing the skilled and qualified workforce that can provide quality services in the industry (Gu, Kavanaugh, & Cong, 2007). The United Nations' World Tourism Organisation also mentioned that tourism higher education has the potential to improve the competitiveness in the industry and achieve higher levels of tourists' satisfaction (Ayikoru, Tribe, & Airey, 2009). It is further supported by Lee & Hallak (2018). For useful support to the industry, tourism education must evolve at the same pace as the industry (De Silva, 1997). However, due to the industry's Janus-faced character (Sanchez & Adams, 2008), the tourism, hospitality, and events programs (TH&E) have paved different paths for their development, which has resulted in a surplus supply of tourism graduates (Kunwar, 2018). This phenomenon is referred as over-education (Groot & Maassen Van Den Brink, 2000), which usually happens when a worker is over-educated if he/she obtains more education that what is required to perform his/her job (Mehta, Felipe, Quising, & Camingue, 2011). Thus, to overcome the challenge of over-education, Rubb (2003) suggested a 'job match' between the level of education and job occupied by an individual.

Ayertey Odonkor et al. (2011) explained that a well-trained workforce could help the industry to go through any crisis and adapt to the new context. In common parlance, the industry looks for practical skills while hiring employees (Dredge et al., 2012). However, the concerns related to high number of annual turnover rates amongst other industries (Dogru, Mody, Suess, McGinley, & Line, 2020) leading to job insecurity, seasonality of work, and the perennial norm of low wages & preference for cheaper workforce (Robinson, Martins, Solnet, & Baum, 2019) have intensified after the COVID-19 (Baum et al., 2020). With steady growth in tourism, the strained relationship between academics and industry improved as both the sectors understood that cooperation could yield benefits in the long-run (Cooper & Shepherd, 1997). For instance, A study conducted in Australia (Wang & Ryan, 2015) reported that tourism employers seek additional skills while hiring graduates. This broadly includes profound communication skills, teamwork, and problem-solving efficiency along with specialised knowledge. However, this opinion contradicted with educators who emphasised on the theoretical paradigm of the discipline. Further, the study reported another gap between academics and industry that lies in the under-development of studies in language and cross-cultural management (Wang & Ryan, 2015). Thus, similar gaps underlying between the employers' opinion of employability in the tourism industry and that embraced by tourism schools in the graduates require acknowledgment by emphasising on curricula and collaboration (Tsai, 2017).

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3 Formal education plays a vital role for improving the performance of tourism organisation (Lee &
4 Hallak, 2018), and the early researches of 19th century have attempted to identify good practices
5 (Kebow, P. K., & Fossum, 2007). This practice is assimilated to 'Comparative Education'. The term
6 which appeared for the first time in 1817 with Marx Antoine de Julien aka Julien de Paris
7 (Seraphin,2012; Kebow, P. K., & Fossum, 2007). Apart from identifying common patterns, and drawing
8 the conclusion that could be generalised, the following statement highlights the benefit of the
9 comparative education strategy."
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15 *'Comparative education provides an opportunity to explore foreign cultures and their*
16 *educational systems; it can also provide a refreshed capacity to appraise a person's own*
17 *culture and educational values (...) Comparative education also helps educators decide*
18 *what issues are most important and what factors should be considered to improve*
19 *education practice.'* (Kebow, P. K., & Fossum, 2007)
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24 Therefore, to a certain extent, the current study is correlated with the notion of comparative education
25 since the impact of COVID-19 on tourism education is going to be investigated at the international
26 level.
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29 30 2.3 Tourism education and crisis

31 Growth in tourism leads to favourable growth in employment opportunities (Gu et al., 2007), however,
32 if the sector is hampered by crises, employees are the first who face the brunt of the adversities. Hjalager
33 (2003) rightly stated that the tourism industry is dynamic and normalisation in different segments of the
34 industry is absent. Also, the industry lacks the sagacity to invest in the training and development of
35 human resources, continue to perceive this as a 'cost' than an investment (Cooper & Shepherd, 1997).
36 Currently, this perceptiveness has caused the industry in managing and leading the tourism organisation
37 in an unprecedented crisis like COVID-19.
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43 Recent articles have reflected the positive direction while addressing the issue of COVID-19 and
44 tourism education such as the introduction of India's first online tourism academy named as North-East
45 Tourism Academy (NETA) to revive the tourism system. The focus of this initiative is to excel tourism
46 education by promoting creative tourism management skills, entrepreneurial development, and research
47 works through online workshops, webinar, internships etc. (East Mojo, 2020). At a global level,
48 governments are collaborating to cope up and strengthen the tourism sector. Recently, an agreement
49 was signed between the tourism ministries of Israel and Greece to strengthen the tourism relations in
50 future. This agreement includes an exchange of information in the fields of tourism education,
51 innovation, tourism investment, sustainable tourism, and digital know-how in future (Greek Travel
52 Pages, 2020). A report suggests that Greece is also working to promote thematic tourism products and
53 services, and making the country a hub for tourism education (Paravante, 2020). In research studies,
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Edelheim (2020) emphasises the incorporation of axiology in tourism studies for the transformation of education. Yet, not much is analysed on the repercussion of COVID-19 on tourism education, this paper aims to explore the tourism educators' perception of the current scenario in various countries.

3. Methodology

A qualitative approach was considered appropriate to examine the tourism educators' perspective regarding COVID-19 on the future of tourism education (Creswell, 1998; Mei, 2017; Vaismoradi, Jones, Turunen, & Snelgrove, 2016). An interpretive paradigm was adopted to explore the educators' concerns regarding the ongoing situation (Saunders, Lewis, & Thornhill, 2009). This section is articulated around two key areas, namely data collection and data analysis. The structure is adopted by most research method books (Fox *et al.*, 2014; Brunt *et al.* 2017)

3.1 Data collection

The study used purposive sampling for collecting data through an online questionnaire. This market research format enables to obtain accurate information from respondents, and facilitate data analysis (Brunt *et al.*, 2017). The questionnaire included both close-ended and open-ended questions which were initially mailed personally to a list of 42 educators teaching tourism and hospitality courses in different institutes across the world. As surveys tend to be ignored in general (Brunt *et al.*, 2017), the respondents for this survey were selected following two criteria (in order of importance): first, all the selected respondents had collaborated in the past with the authors of this study; and secondly, their geographical location, as a global representation is wanted for this study. To ensure a balanced global representation, the questionnaire was later shared on the LinkedIn platform.

The online survey, designed in the English language, included three main sections. The first section collected the institutional information related to tourism and cognate courses (such as MICE, Airfare Ticketing etc.), annual student enrolment, number of teachers, and percentage of students who join the industry after completing their graduation (Chaisawat, 2005). The second section of the questionnaire examined the challenges faced by educational institutions in providing tourism education after the outbreak of COVID-19. The questions were adapted from Gu *et al.*, (2007), Chaisawat (2005) and Hjalager (2003). These authors analysed the career issues and institutional challenges in China, Thailand, & Thailand, respectively. Lastly, the third section included five open-ended questions related to the likely transformation of the tourism education in the post-COVID-19 phase adapted from Tan and Morgan (2001) and Sheldon *et al.* (2010), because these authors reported the relevance and future of tourism education. It included questions like what radical changes might come in the tourism education realm, skills which will be considered vital for tourism students' to obtain, and how to make tourism education robust to deal with similar crises in the future.

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3 Brunt *et al.*, (2017) emphasised that a well-presented and engaging online survey is likely to increase
4 the number of successful responses generated. Initially, 17 responses were received from the listed
5 educators (40% of the respondents targeted). ~~While qualitative research explores the themes in-~~
6 ~~depth~~ ~~Since qualitative research explores the themes in-depth~~ (Mei, 2017; Vaismoradi *et al.*, 2016), the
7 number was sufficient (Byrne, 2001). ~~However, there was over-representation of some countries in the~~
8 ~~received responses. As the balanced composition is imperative in purposive sampling to generalise the~~
9 ~~findings (Gray, 2014), the authors shared the questionnaire on social networking sites, mainly LinkedIn.~~
10 ~~After a couple of days, five more responses were added. There was no major difference in the last five~~
11 ~~responses received except that they belonged to different countries like Spain, Philippines and UAE.~~
12 ~~Subsequently, a total of 22 responses were considered in the study for further analysis. The sample size~~
13 ~~is consistent with theoretical saturation (Goulding, 2002) which we found at 22 interviews, given that~~
14 ~~no further significant codes were generated. This is also consistent with Guest, Bunce and Johnson~~
15 ~~(2006) experiment with data saturation and variability which concluded that saturation for the most part~~
16 ~~occurred after the analysis of 12 interviews.~~ However, there was over-representation of some countries
17 in the received responses. As the balanced composition is imperative in purposive sampling to
18 generalise the findings (Gray, 2014), the authors shared the questionnaire on social networking sites,
19 mainly LinkedIn. After a couple of days, five more responses were added. Thus, a total of 22 responses
20 were considered in the study for further analysis. As the primary focus was to examine at least one
21 country from each continent (Crawford *et al.*, 2020), the study includes 22 responses from 15 different
22 countries across the world such as Germany, Kenya, Philippines, India, UK, France, and Saudi Arabia
23 to name a few. This information is essential as it is part of the purposive sampling strategy of this study.
24 Indeed, part of this sampling approach includes quota sampling, which takes strata into account (Fox *et al.*
25 *et al.*, 2014).

3.2 Data analysis

41 Finally, the responses were exported verbatim to NVivo software 12. This software is used for
42 qualitative analysis which offers tools for aggregating, coding and visualising data (Brunt *et al.*, 2017).
43 The use of the application positively contributes to the efficiency of the analyses by adding rigour to
44 the study (Alhojailan, 2012). The authors, then adopted thematic analysis (Hannam & Knox, 2005;
45 Walters, 2016) to investigate the personal opinions of tourism educators (Percy *et al.*, 2015). Thematic
46 analyses look for themes and interconnections that occur in the data (Fox *et al.*, 2014).

4. Findings

4.1 Overall findings

56 The analysis highlighted the variability as tourism educators belonged to different countries. However,
57 the responses related to the implementation of digital learning and teaching, the worrisome situation of
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3 unemployment in the industry, the need to redesign the curriculum, and collaboration with the industry
4 stakeholders and government were mutually represented by the 22 respondents.
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10 The above table represents that tourism-related courses are majorly offered at under graduation under-
11 graduate- and post-graduate level. The 22 respondents belong to different institutions across 15
12 countries. Responses indicated that 50 per cent average number of students who enrol for tourism and
13 cognate courses annually are not more than 100 in each institution. Half of the respondents noted
14 that course enrolment for tourism courses was not more than 100 in their institution. Also, the
15 number of lecturers are sufficient to meet the educational requirement in colleges and universities. For
16 example, a university where less than 50 students enrolled, the number of teachers counts 1 to
17 5. The term 'sufficient' implies a favourable teacher-student ratio (Kiplinger, 2012) in the institutions
18 offering tourism and related courses. Further, tThe respondents were asked to select the top three
19 reasons which motivate students for selecting the tourism-related courses, and it was found that
20 attractive job offers, opportunities for an international career, and multifaceted use of the degree were
21 considered by students. The study conducted by Hjalager (2003) also reported that students regard
22 tourism profession as an opportunity to take up jobs abroad. Likewise, the respondents were asked to
23 select the three significant challenges that they face after the COVID-19 outbreak. The lack of practical
24 sessions, placement pressure, and low degree of students' participation were noticeably reported. The
25 question regarding educators' opinion on whether COVID-19 will affect tourism education was
26 measured through a 5-point Likert scale, and it was found that about 40 per cent think that it will have
27 a negative impact.
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30 Following are the list of themes and sub-themes which have extracted from the open-ended responses
31 related to the post-COVID-19 scenario on deterring factors, skills required by students, radical changes
32 in the tourism education system, and suggestions to make tourism courses robust.
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43 4.2 Dissuading Factors 44

45 The first theme denotes the plausible dissuading factors in taking up tourism-related courses in the post-
46 COVID-19 scenario. It was an open-ended question, and the majority of the respondents emphasised
47 that the present situation of joblessness in the industry may dissuade potential students from taking
48 admission in the tourism and cognate courses.
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4.2.1 Bleak career opportunities and joblessness

Respondents replied that the lack of job opportunities in the tourism sector after the outbreak of COVID-19 might deter potential students from taking tourism and cognate courses. A respondent quoted the example of British Airways, which has laid off employees and similar other companies in the tourism domain. A respondent opined,

"Many companies may not survive the crisis as we can see there are lay-offs in the tourism and hospitality industry. This situation will ultimately lead to fewer job opportunities in the near future. Students realise that tourism is a discretionary and dispensable industry. (Sic)"

4.2.2 Global travel restrictions

Another emerging dissuading factor was the restriction on global travel which may act as a deterrent for taking admissions in the preferred college. Due to strict airline rules, visa restrictions, and restricted movement would thwart students from travelling to foreign countries to take up admission.

[INSERT FIGURE 1 HERE]

4.3 Essential Skills for Students to counter Post-COVID-19 challenges

The second theme is related to the essential skills which students should possess to combat the challenges faced by the tourism industry currently. The respondents emphasise three significant domains- Creativity and innovation using digital media change in the academic course structure to teach skills amongst students, and vocational skills.

4.3.1 Innovation and creative skills

The emphasis on digital advancement and skills was made by 50 per cent of the respondents. Words such as digital awareness, digital knowledge, and digital marketing were prominently used by tourism educators in the survey. Along with this, the educators focused on enhancing the innovative and creative aspects in tourism education as reported by Batra (2016). However, the context was not very clear as to how innovation skills can be developed in students. A respondent replied:

"Now, students will learn more online, sitting at their native place, which will lead to the actual implementation of tourism theory in a realistic setting. It is also important that students work on the implementation of project-based learning and its effective application in realistic settings."

4.3.2 Academic courses

Various respondents stressed on the need to introduce emerging concepts in the academic curricula such as health and safety measures in tourism, crisis management, risk management, business continuity, and resilience for tourism and hospitality industry. The respondents realised that these concepts could

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3 help students prepare theoretically and practically to understand crises and help them to take critical
4 strategic decisions to survive in the market.
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7 *"I believe that crisis management related courses will be introduced (mainly at the*
8 *graduate level) that will provide necessary tools to students on how to deal with similar*
9 *situations."*
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12 13 4.3.3 Vocational Skills

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15 Soft skills such as language, IT skills, communication proficiency in English and other foreign
16 languages, analytical thinking, creativity, and social interaction skills could help students in creating a
17 niche in the industry (Ayikoru et al., 2009; Cooper & Shepherd, 1997; Tan & Morgan, 2001). One
18 faculty acknowledged the greater degree of professionalism that could be offered by tourism graduates:
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21 *"Certainly, visitors who will visit the tourism destination just immediately after COVID-19 settles down,*
22 *they will look for- professional-disciplined services in every aspect. Only the students from the tourism*
23 *department have both theoretical and practical knowledge and will understand the degree of*
24 *professionalism required to serve the tourists. I am sure employers will look to hire people from this*
25 *discipline."*
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32 [INSERT FIGURE 2 HERE]
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34 35 4.4 Radical Changes in Tourism education in the post-COVID-19 phase

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37 The third theme relates to the potential changes in the tourism education system post-COVID-19. Until
38 Until now the classroom education was considered ideal, but Ritalahati (2015) highlighted that the
39 academic community requires rethinking concerning teaching and learning. The responses also echoed
40 the upcoming transition in learning and teaching through online medium.
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43 44 4.4.1 Online Teaching and Learning

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46 The pre-dominance of the online mode of learning and teaching was noted in the survey replies. While
47 responding, around 30 per cent of the respondents, the changing paradigm in the teaching methods such
48 as a blended form of teaching, and gamification. The expansion of the interdisciplinary discipline, along
49 with practical training sessions makes it challenging to conduct online classes. Nevertheless, online
50 teaching has accepted widely positively, and one respondent noticed that:
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54 *"For our country (Algeria), the crisis has allowed the teachers to adapt to new ways of*
55 *teaching as previously they were not familiar with the distance-learning technologies. But*
56 *now, we have noticed that more and more teachers are using it easily."*
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3 In spite of the positive responses, one of the respondents criticised that the post-COVID-19 phase may
4 result in reduced admissions and may discourage and demotivate students who are currently studying
5 tourism courses. Likewise, a participant from Nigeria highlighted the dark side of the development in
6 education, saying that:
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10 *"Lack of logistics, internet limitation, and students who cannot afford to buy laptops or*
11 *smartphones to access the online platforms may face the challenge of the changes which*
12 *have taken place in the education sector within last few months."*
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16 [INSERT FIGURE 3 HERE]
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18 19 4.5 The reinvention of Tourism Education and a Robust Future Ahead

20 The last theme is related to the transformation required in the current tourism education system to make
21 it more robust and specific to meet the requirements of the industry in the post-COVID-19 phase.
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24 25 4.5.1 Research

26 Kunwar (2018) rightly said that research is the building block of knowledge, which gradually takes the
27 form of discipline. The respondents echoed his findings by emphasising the promotion of ethical
28 research works. They further responded that support from the government would be a pre-requisite for
29 funded research projects. In the same context, one respondent said:
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33 *"Expanding the educational orientation of the programs towards the normal level of*
34 *classical universities and active involvement of students into research practice should be*
35 *promoted. Even the expansion of university-based fundamental research projects should*
36 *be prioritised in the future."*
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40 41 4.5.2 Relationship between stakeholders

42 Cooper and Shepherd (1997) condemned that there is the absence of any covenant between the
43 academia, industry and the government regarding a definite composition of the tourism industry.
44 Tourism includes hospitality, events, logistics, airlines, and other small sub-sectors which makes it
45 challenging to identify the required skill-set to meet the dynamic demands and comprehend the supply
46 paradigm.
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50 *"Working for creating incubator centres for business by creating a symbiosis between*
51 *academia, industry, and government/funding agencies. The institutes that will provide*
52 *business support to learner shall be preferred one."*
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4.5.3 Curriculum Design

A vital component in every educational program is its curriculum. The curriculum planning and designing should be done in incorporating the suggestions of industry professionals (Cooper & Shepherd, 1997; Gu et al., 2007). It should focus on both theoretical and practical aspects of learning (Tribe, 2001). Thus, tourism academicians and institutes should strengthen their links with the industry for better functioning and effective outcomes.

"Tourism educators should collaborate with industry stakeholders so that they will be in a better position to prepare an adequate response by modifying their curricula. The revised curricula should include relevant courses and topics that will enable the students to tackle emerging issues."

[INSERT FIGURE 4 HERE]

5. Discussion

5.1 Stakeholders involved and impacted

It is not unique to mention that the tourism industry is the most vulnerable industry during any crises (Kebede, 2018; Kumar, 2020). The pre-COVID-19 studies indicated that salary was the major deterring factor for not choosing tourism industry (Gu et al., 2007). This study emphasised that joblessness and sectors' vulnerability may prove to be significant deterring factors for students in the post-COVID-19 scenario. As all the educators considered, the placement pressure is real. Also, it considers it as a dissuading factor soon for potential students to take up admission in the tourism courses, re-positioning and marketing of the courses is advisable. The tourism industry is labour intensive wherein employing skilled professionals has a positive effect on the service quality (Ladkin, 2002), the curriculum and teaching methods of tourism programs should be centred on the forthcoming industry requirement. The tourism educators were also confident that vocational or soft skills would play a crucial role in the recovery phase, so many of them emphasised on foreign language, relationship building, communication and digital media networking etc. It is also suggested by Dredge et al., (2012), Gu et al., (2007) and Hjalager (2003). Workshops could be conducted, to ensure transferability of theoretical knowledge into vocational skills. These workshops could develop reflective practices amongst tourism professionals (Felder & Spurlin, 2005; Lashley, 1999). About 18.1 per cent of the educators emphasised that government support would help tourism courses to remain robust in the current scenario. One such initiative was taken by Thailand government named as Tourism Academic Association of Thailand (TAAT) with a 360-degree approach to developing the tourism academics, curriculum, research activities, and teaching potentials (Chaisawat, 2005). The salient point in the redesign of tourism education was centred on curriculum design planning, similar to the suggestions given by Hsu (2018) such as including subjects like crisis management, resilience in tourism, risk management etc. Some

1
2
3 respondents highlighted the need to reshape the teachings methods such as gamification and blended
4 learning methods. The tourism educators' responses confirmed that the collaboration and partnership
5 between the industry stakeholders and tourism academia are crucial for the development of industry
6 and skills of students (Chowdhary, Tiwari, & Kainthola, 2020; Chowdhary, Tiwari, & Kainthola, 2020)
7
8 Jamal *et al.*, 2011).

11 5.2 COVID-19: An opportunity to review the Triple Helix Model in tourism education

12 The study suggests the idea to reinvent and reboot the traditional educational systems by incorporating
13 an innovative system. It is suggested to review the triple helix model (Leydesdorff, 2000) in tourism
14 education, to meet the challenges of the post-COVID-19 world. The model is established on the pillars
15 of innovation and economic development in the knowledge society with the help of integrated efforts
16 of higher educational institutions, the private sectors, and the government. Our study correlates with the
17 previous findings that the integration of the stakeholders is vital for the economic development through
18 innovation (Champenois & Etzkowitz, 2018; Etzkowitz & Dzisah, 2008; Kolehmainen et al., 2016).
19 Besides, Leydesdorff (2012) stated the plausibility of 'N-tuple' of hélices could be necessary for better
20 analysis of innovation. This analysis resulted in the addition of multiple actors in subsequent studies
21 such as Quadruple helix, Quintuple helix, and Penta helix model. The fourth actor in the quadruple helix
22 model is the wider community (Carayannis & Campbell, 2009, 2010), and by integrating all four actors
23 with the natural environment and socio-ecology, it will result in Quintuple helix (Carayannis et al. 2012;
24 Carayannis & Campbell, 2010). And, the Penta helix adds the media component along with the former
25 five components of different innovation models (Soemaryani, 2016). The present situation of tourism
26 education amidst the global health crisis allows reviewing these innovation models and bring out the
27 transformation in the existing system. For instance, with the Penta helix model, the HEIs, government,
28 and tourism industry can utilise the media platforms to combat the fear of travelling among tourists
29 post-COVID-19, and attracting students to take up courses that would help them develop crisis
30 management skills for future.

31
32 The review of the Helices model suggested in this study calls for radical innovation in tourism education
33 which is going against the current conventions (Brooker & Joppe, 2014). Presently, innovation in
34 tourism is often incremental (Brooker & Joppe, 2014), as it is implemented in reaction to a situation
35 with a short-term vision. On the contrary, radical innovation is proactive and subsequently disrupts
36 current conventions. Thus, our study suggests an ambidextrous management approach which balances
37 the incremental (to cope on the short and medium term with the impacts of COVID-19) and radical
38 innovation (to be a driver of growth). The application of ambidextrous management approach in tourism
39 is related to topics such as growth, performance improvement, sustainability (Thanh et al. 2020), and
40 even innovation is closely associated with these themes (Krizaj et al. 2014).

5.3 Comparison with other existing research

In this section, the findings of our study are compared with (1) the existing research on the impact of COVID-19 on higher education, in general, and (2) compared and contrasted with a study on the perspective of hospitality students conducted before the breakout of the virus. This approach of analysing a topic from more than one perspective is termed as 'triangulation' which enables the researcher to arrive at a reasoned conclusion (Brunt *et al.*, 2017).

Correspondingly, the results of De Gruyter (2020) study supports our finding regarding the future challenges faced, i.e. 'Bleak career opportunities and Joblessness' for students. Consequently, this may lead to the cancellation of some courses (See Table 2) as 6% of the respondents think that a lower number of students will be a potential reason for such cancellation.

[INSERT TABLE 3 HERE]

It is worth highlighting that 70 per cent of the countries that responded in De Gruyter's survey are also represented in our study (Table 3)

[INSERT TABLE 4 HERE]

A similar study is conducted in France by Caby *et al.*, (2020), based on a sample of 525 respondents (PhD students, permanent and contractual lecturers) from management domain (wherein tourism & cognate courses fit). It revealed that COVID-19 impacted the delivery of courses and most importantly, on their need to master the application of new technologies for teaching (80 per cent). Further, 69 per cent of respondents reported a negative impact on time, originally devoted to research. In support of our findings, 70 per cent of respondents suggested a radical change in existing teaching methods (Theme 3). Likewise, in 2019, [ValelVatel](#), which is one of the world's leading hospitality school, commissioned a survey through OpinionWay on 3116 [ValelVatel](#) students from 96 nationalities (OpinionWay, 2019). It revealed that the majority of respondents are thinking to make a career in hospitality, specifically in the USA. Currently, as the USA is one of most severely impacted COVID-19 destinations in the world, it is likely that the perception of students to choose the USA might change due to the change in the perceived image created by media (Cullingford, 1995).

The COVID-19 outbreak has put a halt on tourism and hospitality-related activities (Jamal & Budke, 2020), and consequently, opportunities in the area will be limited in the future (WTTC, 2020). The results of our study (Theme 1) are giving a new perspective to the results reported by OpinionWay (2019).

6. Conclusion

6.1 Summary of key findings

The study concludes that the impact of COVID-19 on the tourism industry is likely to have an indirect impact on tourism education. The instable scenario of industry concerning unemployment and financial losses would dissuade students to take up tourism and cognate courses in the coming years. This has caused substantial pressure for placements amongst institutions providing tourism related courses. A swift transition to online mode of teaching and learning is positively adapted, and virtual classrooms have become the new normal for teachers and students. However, tourism educators emphasised the need for creativity, innovation, digital knowledge, and vocational skills are essential for students along with the inclusion of subjects such as crisis management, business resilience, health and safety measures etc. be incorporated in the tourism academics. This would help them to take up challenges in the post-COVID-19 phase. It is further suggested by the tourism educators that collaboration with industry for curriculum designing and assistance for jobs, government's support in funding the research projects and acquiring digital, innovative and vocational skills by students would make the tourism education robust in the post-COVID-19 recovery phase.

6.2 Conceptual contributions of the study

The study contributes to the existing literature of COVID-19 since its impact on tourism education is still undiscovered. The notion to reinvent tourism educations should be grounded on the existing concepts of helices model for long-term sustenance and resilience during crises. There is a need to strengthen the linkages between the various stakeholders in the tourism system for the development of knowledge-based economies in the post-COVID-19 phase. Thus, for the transformation of tourism education, an ambidextrous management approach balancing the incremental and radical innovation in tourism education would be suggested.

6.3 Practical contribution

The nature of tourism education is inherently multi-disciplinary, which needs to be acknowledged in the post-COVID-19 phase. Students should be encouraged to utilise the multifaceted aspect of their degrees and work in different segments to remain flexible (Wen et al. 2020). The tourism education sector requires support from the government and the industry to recreate the trust amongst students. The national government should make plans following the international organisations such as UNWTO provided a technical assistance framework to strengthen the industry (UNWTO, 2020). Moreover, the concept of specialised schools like Valet requires an assessment as these are prone to survival challenges. The online programs for skill development of students, designing curricula with industrial cooperation, and faculty development for technical know-how of rendering lectures should be embraced in the post-COVID-19 recovery phase. Furthermore, to bridge the skills gap among the tourism graduates, badges and certificates could be utilised to motivate them. This form of micro-credentialing

offers opportunity for graduates to develop skills that are deemed vital for tourism industry (McGraw Hill, 2019).

6.4 Limitations and Future Studies

From the students' perspective, the situation may be perceived differently. Therefore, it is suggested that future studies find out the tourism students' point of view on the impact of COVID-19 on their career. Also, the significance of online faculty development programmes in tourism education, industry's requirements in the post-COVID-19 phase, longitudinal studies analysing the impact of the similar crisis on tourism and hospitality education etc. may be studied by researchers. The element of social desirability bias is one of the key limitation of this study and thus, validity through empirical data would remove this bias. Moreover, faculty and universities are continually evolving and adapting in the current situation, thus, there is a scope to analyse the effectiveness of the strategies adopted in the COVID-19 phase.

7. Disclosure statement

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Tables and Figures

Table 1: Summary of results		<i>(All values are in percent)</i>	
<i>Programmes offered in tourism</i>		<i>Number of teachers in the department</i>	
Under-Graduate/ 3-year Programme	39.5	1 to 5	23.8 22.7
Post-Graduate/ 2-year Programme	41.9	6 to 10	19 18.2
Foundation Courses	14.0	11 to 15	19 22.7
Others	4.6	More than 15	38.1 36.4
<i>Student enrolment in tourism courses</i>		<i>Placement in tourism jobs after graduation</i>	
1 to 50	28.6	Less than 30 per cent	9.1 5
51 to 100	23.8	30 to 50 per cent	22.3 7.8
101 to 150	19.0	50 to 70 per cent	18.9 2
151 to 200	4.8	More than 70 per cent	36.3 4.3
More than 200	23.8	Don't know/Not applicable	13.4 6.3
<i>Student motivation to pursue tourism courses</i>		<i>Perceived challenges due to COVID 19</i>	
Attractive job opportunities	19.7	Insufficient practical training session	24.1
Facilitates an international career	19.7	Placement pressure	18.5
Qualification can be used elsewhere	16.3	Lack of students' participation	16.7

		Lack of coordination at various levels	14.8
Interest in the subject	14.8	Curriculum not for online classes	11.1
Plan to start their enterprise	11.0	Lack of digital skills in teachers	7.4
As an alternative career	8.2	No problems faced	3.7
Due to experience in the industry	<u>7.0</u>	Others	3.7
Others	3.3		
The adverse effect of COVID-19 on tourism industry will have a negative impact on tourism education (<i>On a 5-point scale, 5-strongly agree</i>)			3.23
<u>Standard Deviation</u>			<u>1.2</u>

Table 2: CODING SCHEME

Interview question	Responses	Open Code	Axial Code
What factors may deter students to apply for tourism-related courses in the post-COVID-19 phase?	<p>Limited, I think job security is one of the main driver to study tourism. It is a more tangible motivation like cultural interest and international orientation etc.</p> <p>Concerns about future employment in the industry that is currently showing financial and large scale job losses</p> <p>Many companies may not survive the crisis as we can see there are lay-offs in the tourism and hospitality industry. This situation will ultimately lead to fewer job opportunities in the near future. Students realise that tourism is a discretionary and dispensable industry.</p> <p>Lack of jobs and business opportunities for entrepreneurship. I also feel that restriction in the international travel may also hamper students' decision to study tourism courses abroad.</p>	<p>Less Career opportunities</p> <p>Fewer jobs</p> <p>Less attractive sector owing to losses incurred in crisis</p> <p>Restricted global travel</p> <p>Lack of job security</p> <p>Joblessness</p>	Dissuading factors

<p>In the post-COVID-19 period, what key issues will radically change in the field of tourism education?</p>	<p>I believe that many tourism departments will accredit the existing programs as distance learning programs</p> <p>There shall be emergence of new businesses, new areas in the industry. All such things are going to change the course, understanding and application of tourism academics.</p> <p>Digital transformation of the tourism with respect to both industrial operations and academics.</p> <p>Adaptation to different method of teaching tourism and related courses (events, hospitality etc.) I also believe that lack of engagement with non-practical course context will be a challenge.</p> <p>Expansion of interdisciplinary view and significance of tourism education is likely to be observed.</p>	<p>Online courses</p> <p>Distant Education</p> <p>Resilient structure</p> <p>Digital transformation</p> <p>Curriculum</p> <p>Practical courses</p> <p>Flexibility</p> <p>Interdisciplinary</p>	<p>Online teaching and learning</p>
<p>What are the key knowledge areas/capabilities that students entering the industry in the post-COVID-19 phase will need to acquire in their education?</p>	<p>Professionalism, safety guidelines, significance of health and hygiene in the working premises</p> <p>I believe that crisis management courses will be introduced (mainly at the graduate level) that will provide necessary tools to students on how to deal with similar situation.</p> <p>There shall be more focus on personalised business, thus there is a need for relationship building skills, soft skills (with the help of IT). Now students will learn more online sitting at their native place which will led to actual implementation of tourism theory in realistic setting.</p>	<p>IT skills</p> <p>Digital Marketing</p> <p>Soft skills</p> <p>Crisis management course</p> <p>Business continuity management</p>	<p>Innovation and Creativity</p> <p>Vocational Skills</p>

	<p>Students need to work on implementing project-based learning and its application.</p> <p>Students need to acquire profound knowledge in resilience in tourism, business continuity management, innovation processes and soft skills</p>	<p>Project based learning</p> <p>Relationship building</p> <p>Digital skills</p>	<p>Academic Courses</p>
<p>What are your suggestions to make tourism education robust in the post-COVID-19 period?</p>	<p>It is necessary to revise the curricular, and at the same time government should involve to facilitate the internships and other training requirements.</p> <p>Students will take admission in such courses only if they see some opportunities for their career path. Thus, focusing on providing skills should be a priority. Also, more research is required in the area of tourism studies.</p> <p>Incorporate Entrepreneurship, digital marketing, and newer possible trends of tourism in courses post-COVID-19</p> <p>Teachers should use gamification platforms dedicated to e-tourism education.</p> <p>Need for a dialogue with industry stakeholders, co-creation of curriculum content, and discussions with students should be accelerated.</p> <p>Tourism educators and higher educational institutes should build close relationship with policymakers and practitioners.</p>	<p>Digital skills</p> <p>Relationship</p> <p>Stakeholders</p> <p>Curricular</p> <p>Research</p> <p>e-tourism</p> <p>Industry</p> <p>Management</p> <p>Courses</p>	<p>Research Excellence</p> <p>Curriculum Design</p> <p>Relationship with Stakeholders</p>

Table 3: Impacts of COVID-19 on some courses

Q23 What do you anticipate will be your greatest obstacles or challenges in the second half of 2020?*	Total	Female	Male	STM	SS	HUM
Global uncertainty	58%	56%	59%	57%	62%	55%
Unable to travel for research purposes e.g. conferences	55%	58%	54%	51%	57%	58%
New or further lockdowns and restrictions	54%	53%	54%	51%	59%	49%
Lack of future funding for my research	30%	31%	31%	38%	25%	28%
Budget cuts that will impact libraries	22%	19%	24%	19%	20%	27%
Poor health/risk of poor health	22%	21%	21%	22%	22%	19%
Risk of redundancy	17%	18%	16%	15%	19%	20%
Limited access to research laboratories	16%	15%	18%	23%	9%	15%
Ongoing limited access to research	15%	16%	14%	13%	14%	18%
Course I am teaching will be cancelled due to low student numbers	6%	6%	5%	6%	6%	5%

Source: De Gruyter (2020)

Table 4: Countries represented in the survey

Countries with most responses	%	Counts
Germany	26%	821
United States	7%	209
Poland	6%	184
Italy	5%	173
United Kingdom	4%	116
Romania	3%	107
India	3%	105
Spain	3%	103
Austria	2%	77
Switzerland	2%	57

Source: De Gruyter (2020)



Figure 1: Word frequency of dissuading factors amongst students in post-COVID-19 phase



Figure 2: Word Frequency of skills required by students in post-COVID-19 phase



Figure 3: Word Frequency of perceived radical Changes in post-COVID-19 phase

Impacts of COVID-19 on Tourism Education: Analysis and Perspectives

Abstract

Though a lot of studies have analysed the impact of the pandemic on the tourism industry and several suggestions have been made to revive the sector, tourism education is largely overlooked. Tourism and cognate courses offered by higher educational institutions are essentially a part of the tourism system. This study aims to emphasize the perspective of tourism educators with respect to upcoming challenges in the tourism discipline and ways to reinvent and reboot the tourism education in the post-COVID-19 phase. The study adopted a qualitative approach and a total of 22 responses were interpreted. A thematic analysis using the Nvivo 12 plus software was done. Even though there was variability in the respondents' background, a significant emphasis on curriculum design, industry collaboration, and excellence in research was mutually suggested by the educators. The study suggests that ambidextrous management in tourism education be adopted in post-COVID-19 phase. In other words, educators must become adept at the delivery of courses in a variety of modalities that would enable them to cope with the short and medium term impacts of teaching in a COVID-19 (incremental innovation), while providing by anticipation of future demands (from industry and students), cutting edge curriculum (radical innovation).

Keywords: COVID-19, Tourism education, Curriculum, Teaching, Thematic analysis