

IPASTE Framework: A Novel Perspective of Conducting Systematic Literature Review of Tourism Under the Influence of COVID 19

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Abstract

The world was discussing over tourism and in between came zero tourism with the movement of people restricted within their usual place of residence. COVID-19 no doubt has severely impacted all the sectors of economy and hence is a point of concern and research for academia as well as industry. The budding curiosity in the impact of COVID-19 on Tourism industry by the researchers increases the need of systematic review of literature on the topic and identification of future research ways in this particular field. The study is being done to investigate the comprehensive research work on influence of COVID-19 on Tourism industry and to answer the pertinent questions in this regard, like, what has been discussed and explored so far, distribution of the selected studies/ in the indexed Journals, identification of research lines, contribution of these studies in line with these research lines and the most cited studies. For the systematic review 320 research papers were gathered, 100 among them were removed due to various reasons and the remaining 220 were used as data for the analysis of the study. By conducting the systematic review, 8 research lines were identified and the selected studies were analysed in terms of their contribution with respect to the identified research lines. The novelty of this study lies in the new framework developed for systematic literature review in the form of IPASTE. The study has done a comprehensive analysis of the literature on the basis of the new framework to reveal the impact of COVID 19 on the tourism industry on the basis of its six components. The study also identifies some key themes on the basis of research focus of the selected studies. The study has wider implications for managers, researchers and academicians, to deal with the pandemic and to conduct further research.

Keywords: Tourism, COVID-19, Pandemic, IPASTE framework, systematic review.

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Introduction

Tourism no doubt has been considered as an ample contributor for employment generation, socio-economic and cultural development across the globe (McCabe, Qiao, 2020), but the advent of the deadly disease COVID-19 has triggered an enormous financial losses and caused global health and economic crises across the world (Anderson et al., 2020). The outbreak of the news regarding this deadly disease caused an abrupt reduction in the travel and tourism industry (Abbas, 2021). COVID-19 has dealt a severe blow to the tourism industry all across the world (UNCTAD, 2021). This deadly virus has changed the whole scenario of the world. Almost every sector of the economy including tourism has badly suffered in terms of economic crises and decreasing trend of international tourist arrival by 84% between march and December 2020 (UNCTAD, 2021). Both demand as well as supply has been badly affected in the tourism markets of the world (UNWTO, 2020). The occurrence of the pandemic has put a lot of pressure on financial status of tourism which might weaken the balanced financial growth of tourism since last 10 years. UNWTO reports that in COVID-19 related travel restrictions, from month of April 2020, 100% embargo has been put on the tourist's movement across the world (UNWTO, 2020b). Even economic modeling reveals the considerable opposite association between Tourism demand and Covid-19 diseases (Yanga et al., 2020). This huge impact has gained attention of academicians and researchers to study and investigate this sector and its future prospects after the pandemic is over.

Research Background and Rationale

The need for systematic review arises when wide-ranging literature is available due to the various empirical research queries related to the particular area of interest/investigation (Sofaer, Strech, 2011). Since the researchers have shown burgeoning interest in investigating the relation of COVID-19 and Tourism industry in myriad ways and examining tourism industry in line with COVID-19 has been considered utmost essential (Rivera, 2020), so the need of systematic review of the literature related to Covid-19 and tourism has also increased. Systematic review has been conducted in the field of tourism and hospitality related to loss of jobs, revenue impact, COVID-19 dispersal patterns in the industry, market demand and supply, travel behaviour of customers and safety and health with research methodologies which have shown varied research approaches like, simulation and scenario modelling (Davahli et al., 2020). Similarly literature review regarding COVID-19 and tourism in perspectives of sustainability based on 87 publications had also been conducted (PerssonFischer & Liu, 2021) which is not surprising given the impact of the pandemic on tourism. However, what specifically do tourism scholars write about the pandemic and its consequences for tourism? What new insights does the literature on COVID-19 provide to guide our practice in sustainable tourism? The pandemic can be seen as a sustainability challenge. Dealing with the pandemic and other sustainability challenges like climate change will not require exactly the same remedies, but the same kind, building resilience, adaptivity, flexibility, collaboration, and co-creation. We thus argue that the literature on tourism and the pandemic may function as a “thermometer” of the way scholars view sustainability and tourism, and that exploring this literature gives us a space to reconsider our understanding of sustainable tourism. Therefore, we have conducted a literature review of the COVID-19 literature on tourism in 2020. A total of 87 articles, in 17 journals, from 4 databases were analyzed to explore how current scholars perceive COVID-19 and tourism, in light of sustainability perspectives. As a result, through

the content analysis, this study has found six leading themes in COVID-19 and tourism and has provided valuable information with descriptive statistical analysis for its distributions by theory, methodology, and study area.”;author”:[{“dropping-particle”:"",“family”:“Persson-Fischer”,“given”:“Ulrika”,“non-dropping-particle”:"",“parse-names”:false,“suffix”:""},{“dropping-particle”:"",“family”:“Liu”,“given”:“Shuangqi”,“non-dropping-particle”:"",“parse-names”:-false,“suffix”:""}],“container-title”:"Sustainability (Switzerland.Trend of systematic review is still continuing and researchers like Yang, Y et al 2021 has also conducted review of early literature published in *Annals of Tourism Research* pertaining to the COVID-19 and Tourism. Though the review of literature pertaining to the COVID-19 and Tourism has been conducted by several authors and has showed varied results, but no study has conducted review of literature under the newly devised IPASTE framework. The current study will extend the review literature pertaining to the tourism and COVID-19 and will further consolidate the outcomes of the available manuscripts. This review is based on 220 publications and has developed and conducted the study within a new framework which gives novelty to the study.

The study is being done to investigate the comprehensive research work on COVID-19 and tourism to answer the questions like, what has been discussed and explored regarding Tourism under the shadow of COVID-19 so far and how research studies have contributed in line with the new framework devised by the study. So the main purpose of the study is to review the existing literature, to analyse the whole scenario of research work done regarding tourism and COVID-19 and to reveal the impact on the different aspects of the tourism industry as per the newly devised framework of the study.

Moreover, the study is envisioned to unveil those research areas which have not been studied yet and echoed scholarly attention from the researchers in the prevailing circumstances.

The current study has been divided into ten sections; the first section gives brief introduction about the topic with rationale and research background of the study, second section explains the adopted research methodology and inclusion and exclusion process involved in the selection of the research studies for the current study, third section describes findings and results with respect to the contribution of the selected studies, discussion about identified research lines and contribution of literature in these research lines, fourth section identifies and discusses the research lines, fifth section highlights the most cited studies regarding the topic, sixth section elaborates on the new systematic literature review framework developed by this study and the results derived in line with this new framework, seventh sections underlines the key themes of the research identified through this study, eighth section emphasizes on the managerial implications of the study and finally last section discusses the conclusion of the study.

Research Methodology

Systematic review is considered as an emerging and broadly applied research method in different fields like medical and physical sciences. This method provided systematic and broad spectrum coverages of the particular area and adoption of such method has been burgeoning in tourism academics as well (Weed, 2006). Such type of analysis is mainly carried out to investigate the academic progress and improvement of any particular area of study (Williams, Plouffe, 2007). Conductance of such literature review in any defined area provides an outline of the progression as well as recognizes research gaps and future direction for further scope of research (Creswell, 2009). In fact, it has been considered as crucial analysis to evaluate the

content of knowledge provided in defined areas with its future scope of research (Grant, Booth, 2009). Its main role is to produce the base of knowledge related to research questions inquired in any particular field. In a way, it provides overview of what has been done by the authors in particular study and what are the covered areas of research (Furunes, 2019). The current study adopted the systematic literature approach, both traditional and the novel one, to presents the various aspects of research done on the wide-ranging issues of the topic of this study based on the selected research papers.

Selection of the Sources of Data

The study attempted to collect the comprehensive data related to the area under investigation through this study. For this, different search engines like, Research Gate, Science Direct, Google scholar were used, by which various strong and authenticated databases such as Elsevier, Emerald, Taylor & Francis, Sage, Springer, WILEY, ESCI (Web of Science) and other Scopus indexed journals were targeted. In order to avoid the publication bias, other indexed journals such as RePEc, PubMed, Scientific Indexing Service (SIS), CABI, Crossref, NepJOL, Scilit, SCRIBD, DOAJ and OCLC World Cat were also selected to generate data for the study. In addition to it, repositories were also targeted, selected and later on used as unit of analysis for this study.

Data Gathering Procedure

The study carried out wideranging searches in all the above mentioned databases by using the keywords like “COVID-19 and Tourism“, “Hospitality and COVID-19“, “Tourism under Pandemic“, “Impact of COVID on Tourism industry“ and “Coronavirus and Tourism“. A total of 312 research papers were generated from the databases. During the data extraction, it was found that there was restricted access to some of the research papers, as a result of which 22 authors were requested via research gate to share their research work. Out of the 22 authors, only 8 authors responded to the request. With the addition of these 8 studies to the easily already available 312 studies, the total figure of the selected studies for the research now came to 320. These studies were classified and they form the base of this study.

Data Selection Process

For the selection of the data, studies were selected on the basis of their area of focus. In order to avoid any bias, studies conducted in different countries were selected and given equal importance. The research papers published in English language were considered only and the ones published in non-English language were discarded. The research papers which were not indexed by any of the international journal quality indices have also been discarded. Similarly, nonpublished papers were not considered for the study. Out of the studies considered for the study, 29 studies were not indexed by any of the international journal indices, 16 studies were found in the list of unpublished category, 10 studies were found to have clash in terms of duplicity and 45 studies don't fit under the study scope. Hence, only 220 studies were selected for this study and 100 research papers were removed from the total research studies generated for this study (320).

Data Analysis and Grouping

With regards to the data analysis and grouping, the filtered literature limited to the Tourism and COVID-19 pandemic were analysed to extract the outcomes which leads to the identification of main research lines for the study. These research lines were classified into eight groups depending upon the area of research of the selected studies (explained under section 4). After grouping of the data, the selected studies were analyzed in line with; the focus of their research and their contribution to the literature.

The main focus of the study is the multiframework known as IPASTE to evaluate the contribution of the research regarding the topic under study into the six important components. An in-depth analysis of the selected research studies has been done to evaluate and understand their contribution under this framework. All these components have been further elaborated in three ways. The framework identifies the varied aspects of the selected studies in terms of these components. The selected studies are further analysed under this framework in numerical terms to highlight their focus on the components of the IPASTE framework.

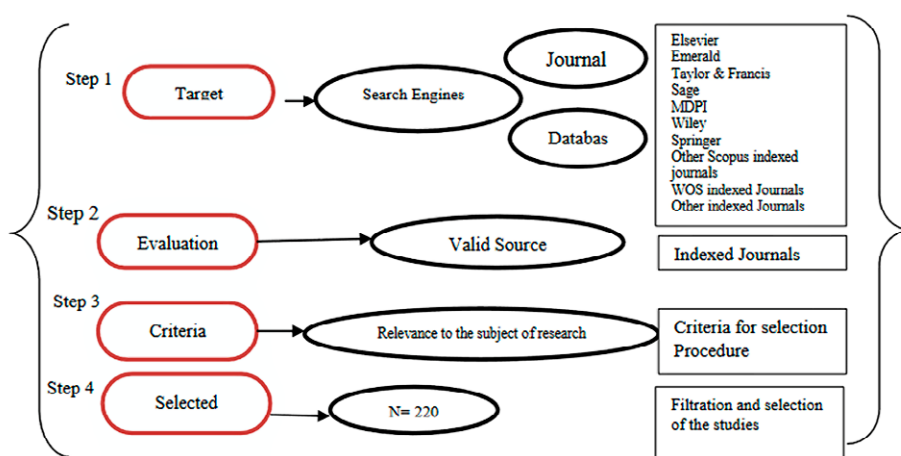


Figure 1. Inclusion and Exclusion process of the Selected Studies for the Study

The above structure reveals the inclusion and exclusion process of the selection of the research studies for the topic under study in four simple steps. The first step, Target, explains identification of the search engines, databases and journals of the published studies. Second step, Evaluation, explains the evaluation process i.e., whether these journals are indexed by international indices or not, the result yielded 79 journals from 7 leading databases and other Scopus, WOS indexed as well as other indexed journals. Third step, Criteria, explains relevance of the studies to the subject matter and the fourth step, Selection, explains the mechanism through which studies are filtered and finally selected for the study.

Findings and Results

The Pandemic has had its severe impact on all the components of the tourism industry. This has led researchers to evaluate the impact of COVID-19 on the hospitality sector, travel trade, destinations, aviation sector, transport sector, tourism service providers, etc., right from the

time when the pandemic started, to show its effect on these sectors. There are several journals which have published abundance of literature regarding impact of COVID-19 on tourism industry. The below given table presents a detailed overview of distribution of the selected studies published in the indexed journals.

Table1. *Distribution of the studies in the indexed Journals*

N ^o	Database	No. of Studies	Total No.	Percentage
Elsevier				
1.	Tourism Management	6	42	19.09%
2.	Annals of Tourism Research	19		
3.	World Development	1		
4.	Journal of Outdoor Recreation and Tourism	1		
5.	Biological Conservation	1		
6.	International Journal of Hospitality Management	6		
7.	Journal of Business Research	2		
8.	Journal of Hospitality and Tourism Management	1		
9.	Journal of Hospitality, Leisure, Sport & Tourism Education	1		
10.	Transportation Research Part E: Logistics and Transportation Review	1		
11.	Technological Forecasting and Social Change	1		
12.	Journal of Air Transport Management	1		
13.	Journal of Destination Marketing & Management	1		
Emerald				
1.	Journal of Hospitality and Tourism Insights	3	26	11.81%
2.	International Journal of Contemporary Hospitality Management	7		
3.	International Hospitality Review	1		
4.	Worldwide Hospitality and Tourism Themes	7		
5.	International Journal of Tourism Cities	2		
6.	Tourism Review	1		
7.	Journal of Islamic Marketing	1		
8.	Journal of Tourism Futures	4		
Taylor & Francis				
1.	Tourism Geographies	28	64	29.09%
2.	Current Issues in Tourism	15		
3.	Journal of Sustainable Tourism	4		
4.	Tourism Recreation Research	7		
5.	Development Southern Africa	1		
7.	European Planning Studies	1		
8.	Journal of Sport & Tourism	1		
9.	Journal of Policy Research in Tourism, Leisure and Events	1		
10.	Anatolia	5		
11.	Journal of Hospitality Marketing & Management	1		
Sage				
1.	Tourism Economics	5	10	4.54%
2.	Dialogues in Human Geography	2		
3.	Journal of Travel Research	1		
4.	Health Services Management Research	1		
5.	Tourism and Hospitality Research	1		
MDPI				
1.	Sustainability	11	19	8.63%
2.	International Journal of Environmental Research and Public Health	6		
3.	Journal of Risk and Financial Management	1		
4.	Societies	1		

Nº	Database	No. of Studies	Total No.	Percentage
Springer				
1.	Information Technology and Tourism	1	1	0.45%
Repository				
1.	Munich Personal RePEc Archive	1	2	0.90%
2.	Journal of Hospitality and Tourism Technology	1		
Other Scopus indexed Journal				
1.	International Journal of Religious Tourism and Pilgrimage	16	29	13.18%
2.	GIS Science Journal	1		
3.	Journal of Latin American Geography	1		
4.	African Journal of Hospitality, Tourism and Leisure	1		
5.	GeoJournal of Tourism and Geosites	2		
6.	Organizacija	1		
7.	International Journal of Advanced Engineering Research and Science (IJAERS)	1		
8.	Journal of Engineering Science and Technology	1		
9.	Advances in Hospitality and Tourism Research	1		
10.	Austrian Journal of SouthEast Asian Studies	1		
11.	Problems and Perspectives in Management	1		
12.	International Journal of WorkIntegrated Learning (IJWIL)	1		
13.	Economic Bulletin	1		
Web of Science				
1.	Marketing and Management of Innovations	1	2	0.90%
2.	Igdir University Journal of Social Sciences	1		
Scientific Indexing Service (SIS)				
1.	Journal of Economics and Technology Research	1	1	0.45%
CABI				
	Journal of Travel Medicine	3	3	1.36%
WILEY				
1.	International Journal of Tourism Research	1	1	0.45%
Crossref				
1.	Journal of Social Sciences	1	4	1.81%
2.	International Journal of Humanities and Innovation	1		
3.	Population and Economics	1		
4.	Journal of Tourism Management Research	1		
Cite factor				
1	Athens Journal of Tourism	2	3	1.36%
2.	International Journal of Tourism & Hospitality Review	1		
UGC Care List				
1.	Asian Journal of Multidisciplinary Studies	1	1	0.45%
International Scientific Indexing (ISI)				
1.	International Tourism and Hospitality Journal	1	1	0.45%
PubMed,				
1.	International Journal of Engineering Research & Technology (IJERT)	1	2	0.90%
2.	Journal of Association of Arab Universities for Tourism and Hospitality	1		
NepJOL				
1.	Journal of Tourism and Hospitality Education	2	4	1.81%
2.	Journal of Tourism and Adventure	2		

Nº	Database	No. of Studies	Total No.	Percentage
Scilit				
1.	Asian Business Review	1	1	0.45%
DOAJ				
1.	Revista Interamericana de Ambiente y Turismo	1	2	0.09%
2.	Studia Periegetica	1		
OCLC World Cat				
1.	Jelajah: Journal Tourism and Hospitality	1	1	0.45%
Research gate scientific network				
1.	Artech Journal of Tourism Research & Hospitality	1	1	0.45%
Total number of the selected studies = 220				

Source: Compiled by the Authors

The table 1 also depicts the percentage contribution of journals in terms of the selected studies for the present study. Maximum share of the journals is contributed by Taylor & Francis i.e., 29.09% (64) and the least by Springer and Wiley i.e., 0.45% and (1) among leading databases. The contribution of Elsevier is 19.09% (42), Other Scopus indexed journals 13.1% (29), Emerald 11.81% (26), Other indexed Journals like, Scientific Indexing Service (SIS) 0.45% (1), CABI 1.36% (3), Crossref 1.81% (4), Cite factor 1.36% (3), International Scientific Indexing (ISI) 0.45% (1), PubMed 0.90% (2), NepJOL 1.81% (4), Scilit 0.45% (1), DOAJ 0.09% (2), OCLC World Cat 0.045% (1), and Research gate scientific network 0.45% (1) including UGC Care List 0.45% (1) which collectively constitutes 10.90% (24), MDPI 8.63% (19), SAGE 4.54% (10), Web of Science indexed 0.90% (2) and finally Repositories 0.90% (2).

Research Lines

After conducting the systematic review of the studies selected for this study, eight research lines were identified based on their research area

- First research line includes those studies which are related to the impact of COVID-19 in different countries on tourism and travel industry generally and more specifically on its two main sectors, i.e., Hospitality and Airlines, to provide general and sectorial overview of the impact of pandemic on tourism industry across the world.
- Second research line includes those studies which are related to the impact of COVID-19 on Religious tourism. It further analyzed the prevailing scenario of such form of tourism during pandemic and adoptability of the new ways for continuing the worship.
- Third research line includes those studies which are related to the transformation of tourism industry as well as tourists due to the outbreak of the pandemic.
- Fourth research line includes those studies that are related to Crisis management during COVID-19 at different levels.
- Fifth research line includes those studies which are related to Sustainability of tourism amid the pandemic.
- Sixth research line includes those studies which are related to the recovery strategies adopted for healing of tourism industry from the Pandemic.
- Seventh research line includes those studies which are related to adoption of technology in tourism during the pandemic.

- Eighth research line includes those studies which show the advancement in research techniques and tools regarding the study of impact of pandemic on tourism.

In addition to the above identified research line, those selected studies which were found to have no relevance with these identified research lines were grouped separately under the title 'Studies in other areas', which includes, tourism as key factor for transmission of COVID-19 across the world specially on small island economies, restrictions as political tool, delay in some major events like postponement of Olympics 2020, empowering children as tourists and other.

Contribution of the selected studies in the identified Resreach lines

The study has analyzed the contribution of journals in terms of their focus vizaviz the identified research lines. The study has highlighted the percentage contribution of the selected journals in context with the identified eight research line. The percentage contribution has been calculated by finding out the focus of a particular journal out of the total number of journals i.e., 220, which is presented as under:

- Regarding the first research line i.e., 'Impact of COVID-19 on Tourism Industry', the study has found total literature contribution of 27.72% with internal distribution of 18.63% on total impact on overall tourism industry, 7.72% on hospitality sector and 1.3% on studying arilines under the shadow of COVID-19.
- Regarding the second research line i.e., 'Religious Tourism in face of COVID-19', the study has found total literature contribution of 8.18%.
- Regarding the third research line i.e., 'Transfromation of Tourism industry and Tour-ists under the shade of COVID-19', the study has found total literature contribution of 18.63%, with internal distribution of 13.18% on changes in tourists and 5.45 % on chang-es in tourism industry.
- Regarding the fourth research line i.e., 'Crisis Management amidst the Pandemic",the study shows literature contribution of 5.45% .
- Regarding the fifth research line i.e., 'Sustainable Tourism in the wake of COVID 19' the study shows literature contribution of 11.81%.
- Regarding the sixth research line i.e., 'Influence of Technology on Tourism during COVID 19',the study shows literature contribution of 5.90%.
- Regarding the seventh research line i.e., 'Recovery after the Pandemic' the study shows literature contribution of 8.63%.
- Regarding the eight research line i.e., 'Tourism research amidst the Pandemic' the study shows literature contribution of 9.09%.
- The studies not grouped in any of the above research line shows literature contribution of 5%.

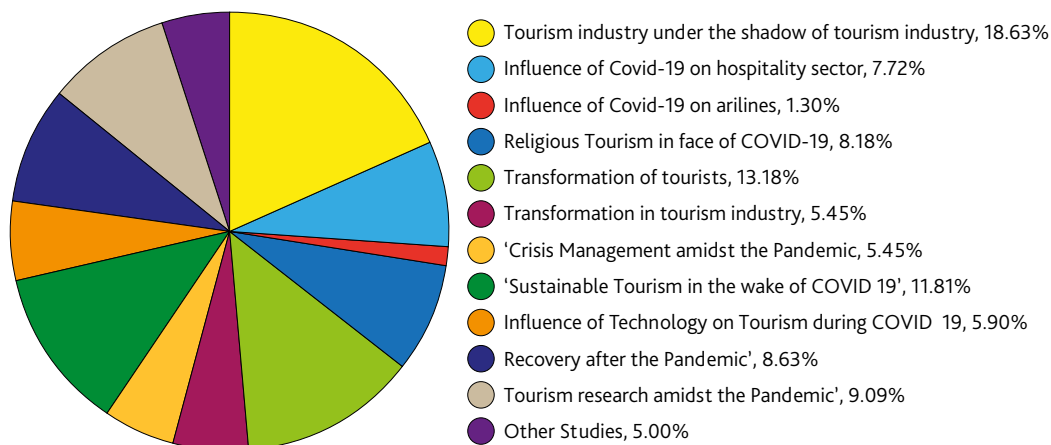


Figure 2. Percentage distribution of the contribution of the Studies in literature

Most Cited Studies till 25th May 2021

The study has analysed the top 20 selected studies in terms of their citations in order to give an understanding of the basis of the data for the present study as well as the quality of these articles, journals and the databases.

Table 2. Top 20 most cited Selected Studies (as per Google Scholar)

Nº	Title of studies	Journal	Database	No. of citations
1.	Pandemics, tourism and global change: a rapid assessment of COVID-19	Journal of Sustainable Tourism	Taylor & Francis	1118
2.	Effects of COVID-19 on business and research	Journal of Business Research	Elsevier	330
3	Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research	Journal of Business Research	Elsevier	284
4	Pandemics, transformations and tourism: be careful what you wish for	Tourism Geographies	Taylor & Francis	275
5.	Socializing tourism for social and ecological justice after COVID-19	Tourism Geographies	Taylor & Francis	266
6.	Coronavirus pandemic and tourism: Dynamic stochastic general equilibrium modeling of infectious disease outbreak	Annals of Tourism Research	Elsevier	175
7.	COVID-19: potential effects on Chinese citizens' lifestyle and travel	Tourism Review	Emerald	152
8.	Hospitality, tourism, human rights and the impact of COVID-19	International Journal of Contemporary Hospitality Management	Emerald	133
9.	The Effect of Coronavirus (COVID-19) in the Tourism Industry in China	Asian Journal of Multidisciplinary Studies	UGC care list	130
10	Reset Redux: possible evolutionary pathways towards the transformation of tourism in a COVID-19 world.	Tourism Geographies	Taylor & Francis	128

Nº	Title of studies	Journal	Database	No. of citations
11.	Effects of COVID-19 on hotel marketing and management: a perspective article	International Journal of Contemporary Hospitality Management	Emerald	122
12.	Effects of COVID-19 pandemic on hospitality industry: review of the current situations and a research agenda	Journal of Hospitality Marketing & Management	Taylor & Francis	120
13.	From high-tech to hightech: COVID-19 drives robotics adoption	Tourism Geographies	Taylor & Francis	117
14.	The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path	Tourism Geographies	Taylor & Francis	116
15.	COVID-19: from temporary deglobalisation to a rediscovery of Tourism	Tourism Geographies	Taylor & Francis	113
16.	Effect of Coronavirus disease (COVID-19) to tourism industry	International Journal of Advanced Engineering Research and Science (IJAERS)	Scopus Indexed	112
17.	Lessons from COVID-19 can prepare global tourism for the economic transformation needed to combat climate change	Tourism Geographies	Taylor & Francis	93
18.	e-Tourism beyond COVID-19: a call for transformative research	Information Technology & Tourism	Springer	88
19.	A Charter for Sustainable Tourism after COVID-19.	Sustainability	MDPI	84
20.	The Movement Control Order (MCO) for COVID-19 Crisis and its Impact on Tourism and Hospitality Sector in Malaysia"	International Tourism and Hospitality Journal	International Scientific Indexing (ISI) indexed	84

*Source: Compiled by the Authors

The above given information was derived from the Google Scholar, which shows citation of the papers in different journals. It can be analysed from the table that out of the top 20 most cited studies, most of these studies have been contributed/published by Taylor & Francis with 9 publications. Elsevier and Emerald both have contributed/published 3 research studies and the rest 5 research studies have been contributed/published by the other databases.

IPASTE Framework

The study has come up with a novel idea of doing systematic review of literature through a multiframework known as IPASTE so as to evaluate the contribution of the research done regarding the influence of COVID-19 on tourism under six important components, i.e., Industrial, Psychological, Academic, Societal, Technological and Ecological. An indepth analysis of the selected research studies has been done to evaluate and understand their contribution under this framework. All these components have been further elaborated in three ways to show the effects/changes/challenges. The framework identifies the varied aspects of the selected studies in terms of these components.

The studies which show any effects/changes/challenges in terms of Tourism sector or its subsectors, tourism forms and Destination Management thereby showing the Industrial effect/change/challenge, have been categorised under the first component of the framework i.e., Industrial. The studies which reflect the personal changes or effects with regard to behav-

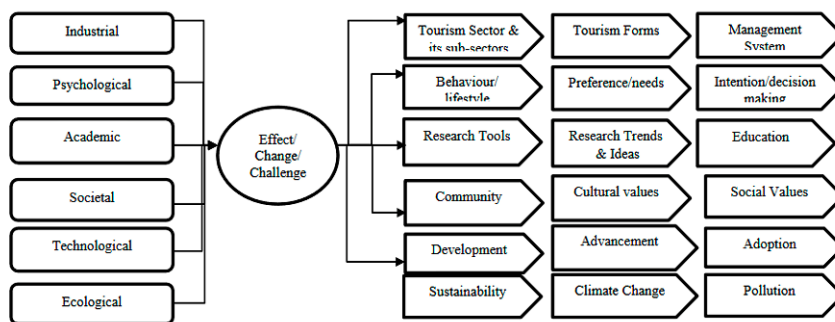


Figure 3. IPASTE Framework

our/lifestyle, preferences/needs, intention/decision making of an individual thereby shows Psychological effect/change/challenge, have been labelled Psychological. Those studies can be categorised under the category Academic which focuses on the development of research tools, research trends & ideas and education. The Societal component of the framework includes those studies which focus on the community, cultural and/or social values. The studies which reflect advancement, adoption and development in Tourism Technology are categorised under Technological component. Finally, the studies which reflect environmental aspect in terms of pollution, climate change, and sustainability are categorized under the Ecological component.

By categorizing publications into these components a holistic view of the selected studies is presented. By presenting the studies under this framework, it can be easily understood that how publications have highlighted or revealed Industrial effects/changes/challenges, Psychological changes i.e., how emphasize has been laid on understanding the changes in behaviour and other personal aspects of an individual, how new research trends and ideas are generated and accordingly new research tools are being developed, how technology is going to be the game changer and hence get the technological perspective of the studies and finally how many studies have considered and studied the ecological aspects related to tourism in the COVID-19 scenario. The framework will aid in adding a novel perspectives of evaluating the research studies in the systematic review of literature. It will help in knowing how much work has been done regarding any of the component of the framework which intern will give new insights to the researchers to know and understand what has been studied and hence identify and address research biases and research gaps.

Table 3. Analysis and Result of the Studies under the IPASTE Framework

Nº	Author/Authors	Industrial	Psychological	Academic	Societal	Technological	Ecological
1.	Chemli et al. (2020)		***				
2.	Jaipuria et al. (2020)	***					
3.	Kumudumali (2020)	***					
4.	Dahal (2020)		***				
5.	Kazmi et al. (2020)	***					
6.	Liew (2020)	***					
7.	Sharma and Nicolau (2020)	***					
8.	Ulak (2020)	***					
9.	Korinth and Ranasinghe (2020)	***					

Nº	Author/Authors	Industrial	Psychological	Academic	Societal	Technological	Ecological
10.	Khanal (2020)	***					
11.	Bakar and Rosbi (2020)	***					
12.	Williams (2020)	***					
13.	Kumar (2020)	***					
14.	Sah et al. (2020)	***					
15.	Islam and Fatema (2020)	***					
16.	Bayat (2020)	***					
17.	Fotiadis et al. (2021)	***					
18.	Patel et al. (2020)	***					
19.	Roman et al. (2020)	***					
20.	Rogerson and Rogerson (2020)	***					
21.	Gursoy and Chi (2020)	***					
22.	Rogerson and Rogerson (2020a)	***					
23.	Dube et al. (2020)	***					
24.	Karim and Haque (2020)	***					
25.	Cheer (2020)			***	***		
26.	Foo et al. (2020)	***					
27.	Amankwah Amoah (2020)	***					
28.	Lee and Chen (2020)	***					
29.	Madani et al. (2020)		***				
30.	E.D. and Y.M. (2020)	***					
31.	Forsyth et al. (2020)	***					
32.	Sigala (2020)	***		***			
33.	Gallego and Font (2020)	***					
34.	Das and Tiwari (2020)		***				
35.	Craig (2020)	***					
36.	Ahmad et al. (2020)	***	***				
37.	Karabulut et al. (2020)	***					
38.	Tran et al. (2020)	***					
39.	Couret (2020)	***			***		
40.	Kour et al. (2020)2011	***	***				
41.	Stankov et al. (2020)	***	***				
42.	GilAlana and Poza (2020)	***					
43.	Hall et al. (2020)	***					
44.	Pardo and Ladeiras (2020)	***					
45.	Mariolis et al. (2020)	***					
46.	Pan et al. (2021)	***	***				
47.	Rutynskyi and Kushniruk (2020)	***					
48.	DíazSánchez and Obaco (2020)	***					
49.	Walas and Kruczek (2020)	***	***				

Nº	Author/Authors	Industrial	Psychological	Academic	Societal	Technological	Ecological
50.	Seraphin and Dosquet (2020)	***					
51.	Buckley (2020)	***					***
52.	Newsome (2020)	***					
53.	Kourgiantakis et al. (2020)		***				
54.	Vaishar and Šťastná (2020)	***					
55.	Gössling et al. (2020)	***					
56.	Gaffney and Eeckels (2020)	***					
57.	Li et al. (2020)		***				
58.	Polyzos et al. (2020)	***					
59.	Almeida and Silva (2020)	***					
60.	Brouder (2020)	***					
61.	Zoğal et al. (2020)		***				
62.	Kement et al. (2020)		***				
63.	Knight et al. (2020)	***					
64.	Bhati et al. (2020)		***				
65.	Tomassini and Cavagnaro (2020)	***			***		
66.	Ateljevic (2020)	***					
67.	Haywood (2020)	***			***		
68.	Papanikos (2020)	***					
69.	Ayad et al. (2020)	***	***				
70.	Rahma and Arvianti (2020)	***					
71.	Duy et al. (2020)					***	***
72.	Korstanje (2020)	***					
73.	Bae and Chang (2020)		***				
74.	Yasin et al. (2020)	***					
75.	Hensley (2020)	***				***	
76.	Zhang et al. (2020)	***					
77.	Borovcanin et al. (2020)	***					
78.	Mosier et al. (2020)	***					
79.	Jiang and Wen (2020)	***					
80.	Lai and Wong (2020)	***					
81.	Awan et al. (2020)	***					
82.	Wen Wang, et al. (2020)			***			
83.	Farmaki et al. (2020)	***	***				
84.	González Torres et al. (2021)	***					
85.	Neuburger and Egger (2020)		***				
86.	Matiza (2020)		***				
87.	Hong et al. (2020)		***				
88.	Zenker and Kock (2020)			***			
89.	Qiu et al. (2020)		***		***		

Nº	Author/Authors	Industrial	Psychological	Academic	Societal	Technological	Ecological
90.	Kaushal and Srivastava (2021)	***					
91.	Baum et al. (2020)	***					
92.	Everingham and Chassagne (2020)				***		***
93.	Tan and Caponecchia (2020)		***				
94.	AngueraTorrell et al. (2020)	***					
95.	Higgins Desbiolles (2020a)				***		***
96.	Huang et al. (2020)	***					
97.	Sheller (2020)	***					***
98.	Tremblay Huet (2020)	***	***				
99.	Faris and Griffin (2020)	***					
100.	Manhas and Nair (2020)	***					
101.	Sembada and Kalantari (2020)		***				
102.	Di Giovine (2020)	***					
103.	Radhakrishnan and Griffin (2020)				***		
104.	Carr (2020)	***			***		***
105.	Chen et al. (2020)	***					
106.	Raj and Bozonelos (2020)	***					
107.	Zheng, et al. (2021)		***				
108.	Zhang et al. (2020)		***				
109.	Koh (2020)	***					
110.	Butler (2020)	***					***
111.	Olsen and Timothy (2020)	***					
112.	Kozak et al. (2021)		***				
113.	Yang et al. (2020a)	***		***			
114.	ElGohary (2020)	***					
115.	Ivona and Privitera (2020)	***					
116.	Couto et al. (2020)		***				
117.	Zammit (2020)	***					
118.	Dowson, (2020)	***					
119.	Han et al. (2020)	***	***				
120.	Cooper and Alderman (2020)	***					***
121.	Galvani et al. (2020)	***					***
122.	Soegoto et al. (2020)						***
123.	Crossley (2020)	***					***
124.	Mao et al. (2020)		***				
125.	Zhu and Deng (2020)		***				
126.	Polukhina et al. (2021)	***					
127.	Lee, et al. 2020)	***	***				
128.	JirickaPürerer et al. (2020)	***					***
129.	Khanra et al. (2021)	***				***	

Nº	Author/Authors	Industrial	Psychological	Academic	Societal	Technological	Ecological
130.	Yang et al. (2020b)	***		***			
131.	Nunes and Cooke (2021)	***				***	
132.	Félix et al. (2020)	***					
133.	Ying et al. (2020)	***		***			
134.	Assaf and Scuderi (2020)	***					
135.	Rahimizhian and Irani (2020)	***				***	
136.	Zhang et al. (2021a)	***		***			
137.	Zielinski and Botero (2020)			***			
138.	Škare et al. (2021)	***		***			
139.	Khan and Hashim (2020)	***					
140.	Mach and Ponting (2021)		***	***			
141.	Duarte et al. (2020)	***					
142.	Dayour et al. (2020)	***					
143.	Kukanja et al. (2020)	***					
144.	Pernecky (2020)			***			
145.	Edwards (2020)	***					
146.	McCartney (2020)	***					
147.	CollinsKreiner, Ram (2020)	***					
148.	Pappas (2021)		***	***			
149.	Zenker et al. (2021)		***	***			
150.	Kock et al. (2020)		***	***			
151.	Avraham (2020)	***					
152.	Radic et al. (2020)	***					
153.	Choquet, SamLefebvre (2021)	***					
154.	Wahl et al. (2020)	***			***		
155.	Rowen (2020)	***			***		
156.	Bausch et al. (2021)			***			
157.	Umukoro et al. (2020)	***					
158.	Rahmanov et al. (2020)	***					***
159.	Bilsland et al. (2020)	***				***	
160.	Qiu et al. (2020a)					***	
161.	Rogerson and Baum (2020)			***			
162.	Seraphin (2021)	***					
163.	Hillis et al. (2020)	***					
164.	Renaud (2020)	***					
165.	Jensen (2020)			***			
166.	Lew et al. (2020)	***					
167.	Higgins Desbiolles (2020b)	***					
168.	Mohanty et al. (2020)	***				***	
169.	Weed (2020)	***			***		***

Nº	Author/Authors	Industrial	Psychological	Academic	Societal	Technological	Ecological
170.	Santos Roldán et al. (2020)	***					***
171.	Uğur, Akbıyık (2020)	***	***				
172.	Ioannides, Gyimóthy (2020)	***					***
173.	Abbaspour et al. (2020)	***					
174.	Yamamura, Tsutsui (2020)		***				
175.	Niewiadomski (2020)	***					
176.	Donthu, Gustafsson (2020)	***		***			
177.	Yeh (2020)	***					
178.	Jones, Comfort (2020)	***					***
179.	Buckley, Westaway (2020)		***				
190.	Ranjith, Aparna (2020)	***					
181.	Romagosa (2020)	***					***
182.	Edelheim (2020)			***			
183.	Mostafanezhad et al. (2020)	***	***				
184.	Trupp, Dolezal (2020)	***					***
185.	Pinos Navarrete, Shaw (2020)	***					
186.	Ali et al. (2020)	***				***	***
187.	Gretzel et al. (2020)			***			
188.	Prideaux et al. (2020)	***					***
189.	Brouder et al. (2020)	***					
190.	Chirisa et al. (2020)	***				***	
191.	Fong et al. (2020)	***					
192.	Nepal (2020)	***					***
193.	Vargas (2020)	***					
194.	Benjamin et al. (2020)	***					
195.	Cardoso (2020)	***				***	***
196.	Seyitoğlu, Ivanov (2020)					***	
197.	Tsionas (2020)	***					
198.	Chang et al. (2020)	***					
199.	Spalding et al. (2020)	***					***
200.	Zeng et al. (2020)					***	
201.	Shin, Kang (2020)		***			***	
202.	Christou et al. (2020)		***			***	
203.	Sheresheva (2020)	***					
204.	Ghasemi et al. (2020)	***					
205.	Wan et al. (2020)		***			***	
206.	Shao et al. (2020)	***					
207.	Van et al. (2020)					***	
208.	Hoque et al. (2020)	***					
209.	Şengel et al. (2020)	***					

Nº	Author/Authors	Industrial	Psychological	Academic	Societal	Technological	Ecological
210.	Baum, Hai (2020)	***					
211.	Wen et al. (2021)	***	***				
212.	Hoarau (2020)	***					
213.	Iaquinto (2020)	***					
214.	Pavlović (2020)	***					
215.	Badshah et al. (2020)	***					
216.	Akbulut, Ekin (2020)	***					
217.	Seyfi et al. (2020)	***					
218.	Li et al. (2020),		***				
219.	Razaq, Kevin (2020)	***					
220.	Chebli, Said (2020)		***				

Source: Compiled by the Authors

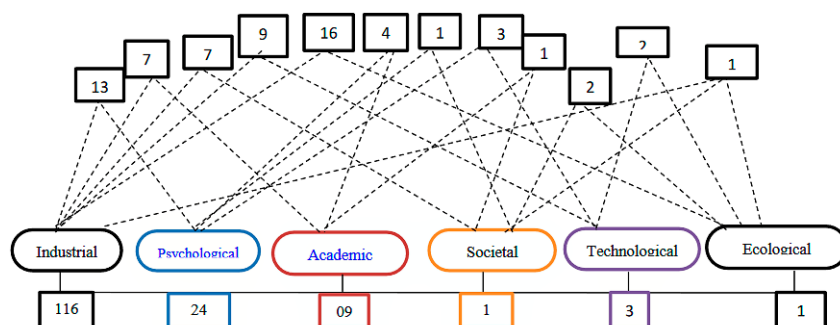


Figure 4. Contribution of Studies in different components of IPASTE Framework

The figure presents the description of the selected studies in numerical terms and their focus on the component of the IPASTE framework. It can be analysed that 116 studies had their contribution regarding the Industrial component, 24 studies had their contribution regarding the Psychological component, 9 studies had their contribution regarding the Academic component, 1 study has its contribution regarding the Societal component, 3 studies had their contribution regarding the Technological component and 1 study has its contribution regarding the Ecological component of the developed framework. It can also be analysed that some of the selected studies have shown their contribution regarding more than one component. 13 studies have been found to have focus/contribution regarding both Industrial as well as Psychological aspects, 7 studies have been found to have focus/contribution regarding Industrial as well as Academic aspects, 7 studies have been found to have focus/contribution regarding industrial as well as societal aspects, 9 studies have been found to have focus/contribution regarding Industrial as well as Technological aspects, 16 studies have been found to have focus/contribution regarding Industrial as well as environmental perspective, 4 studies have been found to have focus/contribution regarding Psychological as well as Academic perspective, 1 study has shown focus regarding Psychological and Societal aspects, 3 studies have been found to have focus/contribution regarding Psychological and Technological aspects, 1 study has shown focus/contribution regarding Societal and Academic aspects, 2 studies have shown focus regarding Societal and Ecological aspect, 2 studies have been found to have focus/contribu-

tion regarding Technological as well as Ecological aspects. Apart from the dual aspect focus reflected by some of the studies mentioned above, some other studies have been found to focus/contribute under the multiple components of the framework. 1studyis found to have focus/contribution regarding Industrial, Societal and Ecological aspects. None of the study has focus/contribution regarding all the six identified components of the framework.

Key Themes of the Study

As explained above, the study has identified some key themes from the analysis of all the selected studies, on the basis of their research area. The below given table presents the details regarding the key findings of the selected studies under the identified key themes as under.

Table 4. *The gestalt of the Study*

Nº	Authors	Research Statement	Key Theme
1.	Abbaspour et al. (2020)	Tourist opinions and destination image related to medical tourism could become important tool to help in recovery after crisis.	Recovery
2.	Ateljevic (2020)	Transformation of tourism will help in reviving the tourism system in optimistic ways.	
3.	Borovcanin et al. (2020)	After pandemic, Sport events are imperative for hotel performance in order to resume tourism.	
4.	Brouder et al. (2020)	The reaction to the modern challenge would help in reconstruct the tourism industry.	
5.	Collins Kreiner, Ram (2020)	Adoption of recommended global strategies projected by the UNWTO along with integration of national tourism strategies act as recovery agent.	
6.	Di Giovine, (2020)	Pandemic Saint i.e., Padre Pio can play a role in recovery of Religious Tourism.	
7.	Fong et al. (2021)	Effectiveness and control of government plays vital role in recovery of tourism.	
8.	Gil Alana, Poza (2020)	There is a need of strong policy for recovery of tourism sector of Spain.	
9.	Higgins Desbiolles (2020a)	Responsible behaviour like community grounded framework can aid in reconsidering and refashioning of tourism grounded on the rights and interests of indigenous communities and people.	
10.	Lew et al. (2020)	There is a need of transformations as per newest standards and protocols for revival of tourism industry.	
11.	Manhas, Nair (2020)	After pandemic, Religious Tourism at domestic level can play a role in recovery of Tourism.	
12.	Mosier et al. (2020)	Emotion impact i.e., Faith could become motivating agent for recovery of Religious Tourism.	
13.	Mostafanezhad et al. (2020)	Clearance of Geopolitical anxieties could play a role in recovery of tourism.	
14.	Pinos Navarrete, Shaw, (2020)	Spa Tourism can act helping health agent and could aid in the recovery of tourism sector.	
15.	Ranjit, Aparna (2020)	Proactive leadership from administration and industry heads in India could be an essential factor for reviving the tourism industry.	
16.	Shao et al. (2020)	Precautionary measures, tourism recovery and development, policy support, and departmental management have been identified as main themes for the recovery policy for tourism.	
17.	Uğur, Akbiyik, (2020)	Rapid increase of travel insurance packages could influence travel patterns, thereby can help in recovery of tourism.	
18.	Walas, Kruczek (2020)	Prospects in relation to the tools of marketing communication could enable the recovery of tourism industry.	

Nº	Authors	Research Statement	Key Theme
19.	Wen et al. (2021)	Traditional Chinese Medicine (TCM) plays role in recovery of domestic tourism in China.	Recovery
20.	Yeh (2020)	Open communication with administration is main and vital recovery strategy to combat with the Pandemic.	
21.	Ali et al. (2020).	Incorporation of technology in tourism industry aids in achieving sustainability development goals during COVID-19 pandemic.	Sustainability of Tourism
22.	Carr (2020)	In order to reset tourism, Indigenous people (Maori people) of New Zealand have offered positive solution for welfare of society as well as environment in the times of pandemic.	
23.	Cooper, Alderman (2020)	Pandemic aids in decreasing the concentration of GHG, thereby urges tourism industry to consider the triplebottom line for future healthy tourism.	
24.	Crossley (2020)	COVID-19 has offered hope for restitution of environment and hopeful tourism after pandemic	
25.	Galvani et al. (2020)	COVID-19 has increased mindfulness in terms of sustainability of tourism industry.	
26.	Ioannide, Gyimóthy (2020)	Pandemic has created opportunities for tourism stakeholder to bring changes in designing of tourism pattern based on green and balanced tourism.	
27.	Jiricka Pürerer et al. (2020)	Pandemic has offered chance to restart city tourism of Austria and learn several lessons to mitigate climate change effects.	
28.	Nepal (2020)	Adventure travel is believed to have an opportunity after COVID-19 to retune tourism by learning lessons from past mistakes and make it more sustainable.	
29.	Niewiadomski (2020)	Opportunity has been created by pandemic for tourism industry to reconsider as per to the principles of sustainability in terms of deglobalization.	
30.	Prideaux et al. (2020)	There is a need of economic transformation (global economy to carbon neutrality) to handle the climate change in retrieval phase.	
31.	Romagosa (2020)	COVID-19 has offered opportunity to reset tourism industry in terms of sustainable and proximity tourism.	
32.	Rowen (2020)	Transformational festival may act like a revolutionary toolbox to shift tourism activities into a more responsible and sustainable way.	
33.	Sheller (2020)	Mobility Justice provides chance to reset climate and sustainable tourism at Caribbean island.	
34.	Soegoto et al. (2020)	Pandemic aids in improving quality of air in the tourism sector, particularly for ecotourism.	
35.	Spalding et al. (2020)	There is need of comprehensive assessment of nature based tourism, as the value of nature became more apparent.	
36.	Tremblay Huet (2020)	Outbreak of pandemic has offered opportunity for tourists to reconsider their vision regarding "right of tourism" to reset the tourism industry and prioritize the host community.	
37.	Bausch et al. (2021)	Tourism should be considered as systems i.e., tourism as a subsystem and system to avoid Tsunami of Research paper.	Research
38.	Cheer (2020)	Human flourishing concept has been offered as substitute criteria of assessing impact on host communities.	
39.	Gretzel et al. (2020)	Impact of COVID-19 has demanded for the transformative e-Tourism research.	
40.	Jensen (2020)	Partigraphy was encouraged as new research methodological approach to assess pandemic.	
41.	Kock et al. (2020)	Evolutionary Tourism Paradigm was developed as novel approach to understand the impact of the pandemic on psychology/thinking of tourists.	
42.	Pappas (2021)	Fuzzy-set Qualitative Comparative Analysis and Necessary Condition Analysis as new method were used to assess holiday intention.	

Nº	Authors	Research Statement	Key Theme
43.	Pernecky. (2020)	Acceptance of hope as part of critical research is mainly cherished during the pandemic.	Research
44.	Rogerson, Baum. (2020)	There is a need to adopt a sincere transdisciplinary approach in Africa for reorientation of Tourism research.	
45.	Sigala (2020)	There is need of novel approach for assessing effect of COVID 19, rather than imitating the prevailing knowledge within the context of COVID-19.	
46.	Škare et al. (2021)	Panel Structural Vector AutoRegression (PSVAR) and System Dynamic Modelling (RealTime Data Parameters) were used to study the impact of the pandemic on the tourism industry and recovery frame.	
47.	Wen et al. (2020)	Cross disciplinary approach between tourism and public Health has been encouraged.	
48.	Yang et al. (2020a)	COVID-19 tourism index was developed as investigative tool for understanding the reclamation progression as well as impact on tourism industry.	
49.	Yang, Yet al., (2020b)	To recognize the economic effect of COVID-19 on tourism demand, DSGE (Dynamic Stochastic General Equilibrium) model was used.	
50.	Zenker, Kock (2020)	Six demonstrative examples have been shown for guiding and showing path for the research agenda.	
51.	Zenker et al. (2021)	Pandemic Anxiety Travel Scale (PATS) was developed as measuring tool to assess changes appeared in belief and behaviour of tourists.	
52.	Bilsland et al. (2020)	There is a need of integration and training of virtual internship in industry.	
53.	Chirisa et al. (2020)	Incorporation of virtual tourism help in backing fiscal growth during the pandemic.	
54.	Dowson (2020)	Outbreak of the pandemic affects religious activity which urges pilgrims to switch to Virtual pilgrimage.	
55.	DunnHensley, (2020)	Interest shown by devotees in Virtual pilgrimage highlights future resurgence of Religious tourism.	
56.	Faris, Griffin (2020)	Closure of Holy city of Karbala forced believers to switch towards Virtual pilgrimage via mobile applications and TV channels.	
57.	Qiu et al. (2020)	Technology has played a role in tourism education during the pandemic times.	
58.	Mohanty et al. (2020)	Incorporation of Augmented Reality (AR) in tourism industry aids in connecting tourism virtually and revitalising tourism after the pandemic.	
59.	Seyitoğlu, Ivanov (2020)	Service robots pose a technological guard between tourists and workers which enhances the physical and emotional distance between both.	
60.	Shin, Kang (2020)	Technology adoption diminishes anticipated interface which induces low level of perceived health risk.	
61.	Van et al. (2020)	Incorporation of AI and VR has shown considerable effect on total service quality which leads to satisfaction and loyalty of the customers.	
62.	Wan et al. (2020)	Service robots may indicate the less interpersonal connection which thereby decreases perceived threat of virus transmission and upsurges visit intention of customers.	
63.	Zeng et al. (2020)	Adoption of technology like robotics, artificial intelligence and humanrobot could help in curbing ballooning of COVID-19 in tourism industry.	
64.	Ahmad et al. (2020)	Destination image considerably influences the travel intentions and arbitrates the association between the factors and visit intention.	Travelling Behaviour & Intention of tourists
65.	Bae, Chang (2020)	Risk perception both affective as well as perceptive has revealed negative effect on behavioural intention of South Korean citizens.	
66.	Bhati et al. (2020)	Discussion on social media can affect revisit and behaviour intention of tourists.	
67.	Chebli, Ben Said, (2020)	Outbreak of the pandemic is likely to have an influence on travel behaviour with regards to personal safety, conviction and attitude as well.	
68.	Chemli et al. (2020)	Social media shows considerable influence on mindfulness of tourists regarding the perceived risk effects.	

Nº	Authors	Research Statement	Key Theme
69.	Couto et al. (2020)	Pandemic has caused changes in the travel pattern of tourists.	Travelling Behaviour & Intention of tourists
70.	Das, Tiwari (2020)	COVID-19 has indirectly affected the travel intention of Indian travellers via readiness to adopt PNPIs.	
71.	Lee, et al. (2020)	During the pandemic CSR shown by the global tourism companies have shown positive influence on attitudes and behavioural intentions of US travellers.	
72.	Kement et al. (2020)	In terms of behavioural intention, perception of both COVID-19 and NPI (Non-Pharmaceutical Intervention) do not influence behavioural intention but desire shows considerable positive influence on behavioural intention.	
73.	Kour et al. (2020)	Pandemic affects future intention of travel and guest host relationship.	
74.	Li et al. (2021)	There has been influence on planned travel behaviour of Chinese residents after pandemic.	
75.	Li et al. (2020)	Psychosomatic distance and perceived risk causes possibility of transformation of behaviour of tourists.	
76.	Matiza (2020)	Perceived risk brought by COVID-19 is expected to have influence on travel decision of tourists and future purchasing intention of tourism product.	
77.	Neuburger, Egger (2020)	There has been substantial increase in travel risk perception and travel behaviour due to outbreak of COVID-19.	
78.	Pan et al. (2021)	Travel restriction has undesirably affected behavioural intention of cruise customers.	
79.	Qiu et al. (2020)	Perception regarding health risk caused by tourism practices made people ready to pay more than usual, thereby increases there WTP (Willing To Pay).	
80.	Tan, Caponecchia, (2020)	Perception of travellers towards travel insurance coverage has been decreased.	
81.	Wen et al. (2020)	Slow tourism and smart tourism could influence the future travel patterns.	
82.	Wen et al. (2021)	Traditional Chinese Medicine (TCM) has shown influence on travel behaviour of tourists.	
83.	Zheng et al. (2021)	Fear of travel upsurges psychological resilience of people and adoption of vigilant travel behaviours.	
84.	Zhu, Deng, 2020	Risk knowledge effects on travel intention have been increased thereby effecting preference of tourists towards rural tourism.	
85.	Zoğal et al. (2020)	The interest in shifting focus on low crowded areas to avoid crowded area has been noticed among travellers.	
86.	Ayad et al. (2020)	Domestic tourism will be more focused in future with new protocols preferred by tourists.	
87.	Butler (2020)	Tourism agents are reluctant to adopt old style pattern of tourism.	
88.	Hall et al. (2020)	Transformation of tourism sector may occur at an irregular pattern.	
89.	Haywood (2020)	Future tourism community is expected to appear in refashioned manner where domestic tourism is going to lead the scene with destinations putting communities as priority.	
90.	Higgins (2020b)	Pandemic provides a chance to rethink about changes that are required to be brought in tourism industry in order to highlight that war on tourism is better against over tourism.	
91.	Koh, (2020)	COVID-19has provided a chance to shift from 'Over Tourism' to 'No Tourism'.	
92.	Pardo, Ladeiras (2020).	Present scenario caused by the pandemic provides an opportunity to recognize the novel possible tourism products as well as novel proposals for destination planning.	
93.	Stankov et al. (2020)	Changes brought by COVID-19 provide an opportunity to shift the traditional way of serving into new methods to deal with tourism.	

Source: Compiled by the Authors

Managerial Implication

The study has provided an overall overview of the researches conducted regarding the influence of COVID-19 on Tourism industry by only taking into consideration high quality research studies from the most authentic sources/databases. The study has wider managerial implication in the sense that it has presented the finding in a novel way of IPASTE framework. The study gives an indepth analysis of the research conducted regarding these six components of this novel multiframework i.e., Industrial, Psychological, Academic, Societal, Technological and Ecological. By highlighting/analyzing the research under these components, the managers/professionals will get an overall view of the impacts and contributions regarding a particular component of the framework, the learnings/research outcome can be used by them as per their need and hence they will be in a position to take an appropriate action/ decisions regarding the same in the prevailing scenario. The study has also provided the overview of the selected studies regarding their main focus interms of the key themes; Recovery, Changes in Tourism, Travelling Behaviour and Intention of tourists, Research and Sustainability of Tourism, this will also provide direction to the managers/professionals to draw lessons from them. The study has also compiled the list of top journals which have contributed substantially in publishing the top quality research in the area of focus; this will also be helpful to the tourism and hospitality managers in the long run. The above contributions of the study in the form of presenting/analysing the studies under the components of the IPASTE framework, analysis/identification of the Key themes and research lines, and top quality journals/research studies will guide scholars and academicians in understanding and conducting research in the pandemic and post pandemic times. The analysis has also identified research biases and research gaps which will be taken up the researchers and academicians for doing further research in the identified areas.

Conclusion

COVID-19 has had its effect on almost every sector and part of the world. The obvious result is the evaluation of its impact on several places and parts of the world by the academicians and researchers. Travel and Tourism no doubt has received a severe blow as is the case with various industries all across the world. The budding curiosity of impact of COVID-19 on Tourism and hospitality sector has produced several research studies done by the researchers focusing on the several areas of tourism and hospitality industry and that increases the need of systematic review of the research done on the topic. The present study has explored many search engines, journals, data bases and repositories to get the high quality research published in the indexed journals regarding the area of the study. After the thorough analysis of the selected studies, the study has identified 8 research lines which are, Impact of COVID-19 on Tourism Industry, Religious Tourism in face of COVID-19, Transfromation of Tourism industry and Tourists, Crisis Management, Sustainability of tourism, Technology Adoption, Recovery of Tourism, and Research and Tourism. The study has come up with a novel way of presentation of the systematic review of literature in the form of a multiframework known as IPASTE framework which presents the review of literature under the six important components of Industrial, Psychological, Academic, Societal, Technological and Ecological. By presenting the findings under these components the major contribution of the studies is highlighted under these six components of this framework which will be helpful to the managers and researchers to

see what have been contributed and what needs to be done. The study has also identified the key research themes from the thorough analysis of the selected studies and has highlighted the key research findings of all the studies under these Key themes. The contributions of the study will have wider implications for the businesses, academicians and researchers as they can draw direction regarding the policy decisions and further research both during the pandemic and in the postpandemic era.

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