



The Impact of COVID-19 on Croatian Tourism: A Prisma-Compliant Systematic Literature Review

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Abstract: COVID-19 has drastically altered the world in 2020 and influenced all aspects of people's lives and the ways businesses operate. The tourism sector was one of the economic sectors that were hit hardest by the global pandemic. Considering that the tourism sector in Croatia is one of the key economic sectors that contribute highly to the GDP, this paper provides a systematic literature review of studies investigating the impact of COVID-19 on tourism in the case of Croatia. Therefore, the goal was to survey and give a summary of the relevant papers published regarding the impact of COVID-19 on Croatian tourism as well as to investigate the current state of the art in this specific field, highlighting the findings regarding the COVID-19's impact on Croatian tourism. The PRISMA guidelines have been applied by using the keywords: „tourism“, „COVID-19“ and „Croatia“ to the Scopus scientific database from its inception to 07 October 2022, and a manual abstract and full-text screening and review of the references of relevant studies was conducted thereafter. This resulted in 18 relevant published papers in peer-indexed journals in the Scopus database. The findings could be of great practical contribution to the government, policymakers and local tourist authorities and communities.

1. INTRODUCTION

Tourism and hospitality are considered to be the most advanced economic sector globally, and “in 2019 tourism accounted for 7% of the global trade, and is overall the third-largest export sector of the world economy” (Alkier et al., 2021). Furthermore, tourism has been regarded as one of the “main economic drivers worldwide” in the past few decades (Čorak et al., 2020) and as “one of the leading economic sectors in exports and employment” (Gricar et al., 2021).

The significant role of tourism in small and open economies has been widely researched and its importance “in national economies, employment, gross domestic product (GDP), small and medium enterprises, different organisations, institutions and stakeholders” has been recognised by many scholars (Gricar et al., 2021). Moreover, its impact on overall economic development, its contribution to GDP and the creation of new jobs have resulted in tourism being seen as “one of the most contributing economic sectors globally” (Fotova Čiković et al., 2022). It is widely accepted that tourism represents an “important economic, social and cultural factor in modern societies that successfully fosters the economy” (Mataković, 2021). Tourism is also one of the key economic sectors in Croatia, due to the well-known Adriatic coast. Namely, according to data from the World Travel and Tourism Council in 2019, travel and tourism had a share of 25% of the GDP in Croatia and a quarter of the total national employment (WTTC, 2020). Due to the consideration that tourism in Croatia represents “a competitive advantage for the Croatian economy and also a sector that promotes other economic activities and sectors” (Šulc & Fuerst-Bjeliš, 2021), the impact of COVID-19 on tourism is vital to research and analyse by both scholars and tourism practitioners.

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The main aim of this systematic literature review is to identify and present a summary of the results regarding the impact of COVID-19 on Croatian tourism. This systematic literature review is compliant with the PRISMA (preferred reporting items for systematic reviews and meta-analyses) guidelines and surveys the Scopus scientific database with the keywords “TOURISM”, “COVID-19” and “CROATIA” from its inception to 07 October 2022. The selection process included abstract and full-text screening to reveal the relevant and eligible published papers in this research area. This resulted in 18 relevant papers that are qualitatively analysed and presented.

The summary of the findings and the future guidelines are invaluable for researchers, the government and policymakers, as well as local tourist communities.

This chapter is structured as follows. In the next section, a theoretical background of Croatian tourism and the impact of COVID-19 on tourism has been laid out. Section 3 reveals the research methodology. In Section 4, the research results have been presented, i.e. the 18 relevant surveyed papers have been analysed and their findings have been revealed. In the last, fifth section, a discussion has been opened and concluding remarks are given, together with the future guidelines and limitations of this work.

2. THEORETICAL BACKGROUND

2.1. Croatian Tourism

Tourism is one of the most influential economic sectors in Croatia, since “tourism revenues account for one-fifth of the GDP”, so any reduction in tourism revenues significantly impacts the economy (Roška, 2021). As Telbisz et al. (2022) state, tourism plays a “particularly important role” in Croatia.

The main characteristics of Croatian tourism are that it is “highly seasonal and the peak season is in the 3rd quarter” (Stambuj, 2021), “followed by a low share of hotel accommodation in the overall result” (Bašić & Škorić, 2020). Croatian tourism’s seasonality „is caused both by supply and demand sides and is concentrated in the summer season” (Šulc & Fuerst-Bjeliš, 2021). Moreover, it is commonly stated that Croatia is “an extremely tourism-dependent country and many accompanying economic sectors, production and service activities, labour market trends, the construction sector, as well as real estate trade depend on it” (Mikac & Kravaršćan, 2021). Moreover, many jobs in Croatia “depend on tourism development” (Čorak et al., 2020).

Therefore, the COVID-19 outbreak had an enormous impact on Croatian tourism, since tourism is the backbone of Croatia’s economy. The main motivation behind this work is to summarize the findings regarding the impact of COVID-19 on Croatian tourism, which is given in Sections 4 and 5.

2.2. COVID-19: Basic Information and Its Impact on Tourism

The outbreak of the COVID-19 virus began as an epidemic on 17 November 2019 in Wuhan City, Hubei Province, Central China (Łapko et al., 2021) and its official declaration as a pandemic on March 11, 2020, by the World Health Organization and at that time, its actual outreach and dimensions were unpredictable and unimaginable (Šulc & Fuerst-Bjeliš, 2021). Shortly after its declaration, the COVID-19 pandemic left unprecedented consequences mirrored in

the „disruptive changes in the human environment (the industrial sector, social life, education system, etc.)“ (Alkier et al., 2021). Moreover, the COVID-19 pandemic exercised the power „to paralyze the societies and their economies on a global level“ (Stojanovska-Stefanova & Magdinceva-Sopova, 2021). However, the immense impact of the COVID-19 pandemic on the global travel and tourism industry „was significantly underestimated“ (Škare et al., 2021). Namely, tourism once considered one of the largest and fastest-growing economic sectors in the world, handed over its power to the pandemic in the second quarter of 2020 (Łapko et al., 2021). This was mainly because “over 90% of the world population live in countries with some level of international travel restrictions and many of them also have some degree of restrictions on internal movement (inter- or intra-regional)” (Šulc & Fuerst-Bjeliš, 2021).

Tourism was one of the economic sectors that were hit hardest by the global COVID-19 pandemic, thus making it „even more important for tourist destinations to focus on their brand equity from the perspective of their customers—visitors“ (Cervova & Vavrova, 2021). Even though tourism faced tremendous turbulence and crises, the most recent and most serious one is the pandemic caused by the COVID-19 virus (Alkier et al., 2021).

The sharp decline of international tourists all over the globe has resulted in „deterioration of consumption and induced the collapse of domestic consumption“, which ultimately „affected the travel trade balance and caused the decline of the economy“ (Ružić & Popek Biškupec, 2021).

Taking into consideration the major contribution of tourism to Croatian GDP, the COVID-19 crisis “imposed a threat not only to companies in tourism but also to the Croatian economy as a whole” (Braje et al., 2022). As a result, the pandemic-related travel restrictions “affected hotels to face the most serious decline year-on-year”. The overnight stays in 2020 in Croatia “achieved 50 per cent of the result in 2019” (Roška, 2021). However, despite the significant drop in tourist visits in 2020, “Croatia managed to salvage 50% of tourism revenues compared to the previous year, which was an overachievement compared to initial expectations (set at around 30%)” (Bašić & Škorić, 2020). In this context, it should be taken into consideration that Croatia “was among the first EU member states to fully reopen during the 2020 summer tourist season, primarily due to the importance of tourism in the Croatian economy” (Braje et al., 2022).

Certainly, the "impact of COVID-19 on the travel and tourism industry will be incomparable to the consequence of the previous pandemic episodes" (Škare et al., 2021).

3. RESEARCH METHODOLOGY

The research process consisted of four steps. Initially, the determination of the relevant keywords for this research has been initiated. Therefore, in order to identify all the relevant published papers in this research, three keywords have been selected as follows: “TOURISM”, “COVID-19” and “CROATIA”. Moreover, in the first step, the relevant scientific database has been determined, i.e. the Scopus database. The total number of papers in the Scopus database was 37. These papers were analysed following preferred reporting items for systematic reviews and meta-analyses (PRISMA) guidelines.

In the second step, the abstract screening of the 31 published papers occurred. In this step, the title and abstract of each study were checked to identify and select the studies which met both the inclusion and exclusion criteria, and this resulted in the elimination of nine papers irrelevant

to the chosen subject. There were 22 papers left in the third step of the research process (i.e. the eligibility phase), where the author conducted a secondary screening of the full text and manually selected those papers that are relevant to this research field and eligible for this study. After this step, a total of 18 papers were left for further quantitative and qualitative analysis.

The PRISMA guidelines have been published in 2009, and were “designed to help systematic reviewers transparently report why the review was done, what the authors did, and what they found”. They were recently updated by the PRISMA 2020 27-item checklist (Page et al., 2021).

The reason for conducting a systematic literature review is threefold. First, systematic reviews “can provide syntheses of the state of knowledge in a field, from which future research priorities can be identified”; second, they “address questions that otherwise could not be answered by individual studies”; and third, they “identify problems in primary research that should be rectified in future studies” (Page et al., 2021).

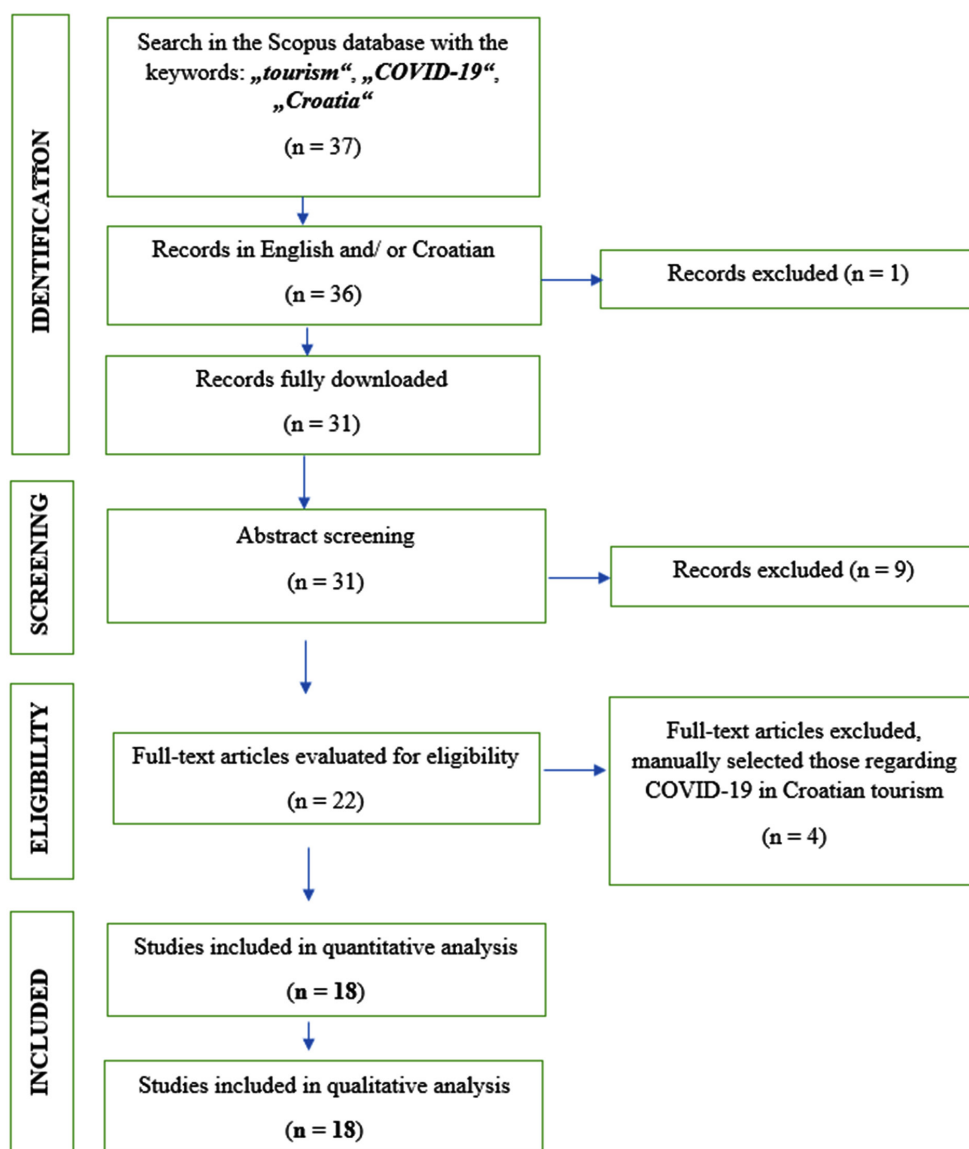


Figure 1. Preferred reporting items for systematic reviews and meta-analyses (PRISMA) flow chart of the search process

Source: Authors' work, based on Moher et al., 2009

4. RESULTS

The administered systematic literature review has surveyed the Scopus scientific database using the keywords “TOURISM”, “COVID-19” and “CROATIA”, looking for relevant studies that tackle the impact of COVID-19 on Croatian tourism. As presented in the previous section, the starting point included 37 papers, a number that decreased to a total of 18 papers after applying all the inclusion and exclusion criteria.

A tabular presentation of the relevant papers has been laid out in Table 1 and a more detailed qualitative presentation of the relevant papers and more importantly, their findings are presented thereafter.

Table 1. Papers investigating the impact of COVID-19 on Croatian tourism

<i>Authors</i>	<i>Title of the paper</i>
Domazet et al. (2022)	Perception of Dental Medicine Students on Dental Tourism
Telbisz et al. (2022)	Attitudes and preferences of visitors of Krka National Park, Croatia
Payne, Gil-Alana et al. (2022)	Persistence in Croatian tourism: The impact of COVID-19
Gričar et al. (2022)	Some considerations about tourist arrivals and the COVID-19 pandemic—evidence from Slovenia and Croatia
Payne, Nazlioglu et al. (2022)	Economic Policy Uncertainty and International Tourist Arrivals: A Disaggregated Analysis of the Croatian Adriatic Coast
Braje et al. (2022)	Building resilience in times of global crisis: the tourism sector in Croatia
Dadić et al. (2022)	Online Reservations and Hotel Distribution Channels in European Tourism: A Case of Croatia
Lapko et al. (2021)	Eco-friendly tourism decision-making during COVID-19—sailing tourism example
Cervova and Vavrova (2021)	Customer-based brand equity for a tourism destination: The case of Croatia
Šulc and Fuerst-Bjeliš (2021)	Changes of tourism trajectories in (post)covidian world: Croatian perspectives
Gricar et al. (2021)	Sustainable determinants that affect tourist arrival forecasting
Mučalo and Šulentić (2021)	Radio in the Promotion of Croatian Tourism: The Age of COVID-19 and Afterwards
Gluvačević and Grgas (2021)	The impact Assessment of the COVID-19 Pandemic on the Communication of Events in Croatian Tourism
Roška (2021)	COVID-19 tourist seasons and business activities of listed hotel companies in Croatia
Mikac and Kravaršćan (2021)	Croatian tourism sector and crisis management - A case study related to the COVID-19 pandemic
Lovrinčević et al. (2021)	Croatian economic exit strategy during COVID-19 pandemic and importance of regional economic structure
Čorak et al. (2020)	Opportunities for tourism recovery and development during and after COVID-19: Views of tourism scholars versus tourism practitioners
Grofelnik (2020)	Assessment of acceptable tourism beach carrying capacity in both normal and COVID-19 pandemic conditions – Case study of the town of Mali Lošinj

Source: Authors' work

Domazet et al. (2022) have explored the perceptions of dental medicine students on dental tourism in three analysed countries (Croatia, Bosnia and Herzegovina, and Serbia). Their sample consisted of 326 students and they filled in an anonymous online 20-question survey

questionnaire. Their findings reveal the positive perception dental medical students hold of dental tourism. Moreover, they perceived it as “a positive phenomenon” and “a desirable career choice”. The emergence and the prospects of the COVID-19 pandemic did not affect the perception and the plan to engage in dental tourism in the future.

Telbisz et al. (2022) focused on national parks and analysed the attitudes and preferences of visitors of Krka National Park in Croatia. Moreover, they included the COVID-19 pandemic and researched the questions of whether COVID-19 represented an incentive to visitors to visit natural areas (like the Krka NP) and whether it “influenced the choice of Croatia as a destination for foreign visitors”. Their primary results reveal that “both the distribution of visitors and the distribution of accommodation are highly unequal” in the Krka NP. The results regarding the impact of COVID-19 reveal that there were much fewer retirees and tourist buses as a result of the pandemic. Also, around 30% of the foreign tourists visiting NP Krka chose Croatia due to COVID-19, and around 65% of domestic tourists “chose to find a destination in Croatia because of COVID-19”. Their study contributes a great deal since it addresses the importance of the opinions of the visitors in the development of the strategy in national parks.

Payne, Gil-Alana et al. (2022) investigate the “change in the degree of persistence in the Croatian tourism indicators, foreign arrivals, and overnight stays”, as a result of the COVID-19 pandemic with the application of recursive estimation of a fractional integration model. To assess the change in the degree of persistence, they used monthly data in the period 1998 to 2020. The findings from their study reveal that the COVID-19 negative shock on tourism can be considered „permanent in nature“ and „may have established a new trend though at a much lower level“. They also tackle the difference between the traditional tourism growth model and the sustainable tourism model.

Gričar et al. (2022) applied vector autoregressive (V.A.R.) models and panel econometrics “to analyse and model the impact of the COVID-19 pandemics on tourist arrivals in Slovenia and Croatia” in 2020. The obtained results from the models (O.L.S., V.A.R. and Panel) did not show a direct impact of COVID-19 on tourist arrivals. However, “the government and policymakers influence the impact on tourist arrivals”. This study is novel since it enriches the empirical studies on the determinants of tourism demand and it represents a stepping stone for future econometric empirical studies of “sudden shocks affecting tourism demand and government decisions affecting tourism supply”.

Payne, Nazlioglu et al. (2022) investigated the impact economic policy uncertainty has on international tourist arrivals in Croatia. They have examined “the differential impact of Croatian and European economic policy uncertainty indices while controlling for the real effective exchange rate and industrial production on international tourist arrivals for the seven coastal counties of Croatia and the country as a whole”. They applied the Toda-Yamamoto long-run causality modelling approach in a combination with a Fourier approximation to evaluate structural shifts in “examining the causal dynamics between economic policy uncertainty indices and tourism flows”. The findings reveal “unidirectional causality from the respective economic policy uncertainty measures to international tourist arrivals irrespective of the coastal counties, and for the country as a whole”. Thus, an increase in the Croatian or European economic policy uncertainty index has an unfavourable effect on international tourist arrivals relative to Croatian economic policy uncertainty. Moreover, “the European economic policy uncertainty index yielding the greatest impact”.

Braje et al. (2022) examined “the interplay of public and private institutions whose aim was to support resilience in tourism and prevent negative spillovers to other sectors”. In their study, they evaluate the institutional resilience of Croatia’s sector of tourism during the COVID-19 pandemic based on three criteria: preparedness, agility and robustness. Their results show that both public and private institutions have shown “a high level of agility and resilience in their crisis management”, however, the authors highlight the “deep societal interdependence between the public and private sector in times of global crisis”. The COVID-19-specific impact on Croatian tourism is mirrored in two elements as follows: the stabilization of the situation and the communication of how the crisis unfolds to the public.

Dadić et al. (2022) explore the distribution channels in the hospitality industry and their main objective was „to identify the most successful elements of online distribution to realize future excellence in post-COVID-19 tourism”. Moreover, they illustrate the hotel accommodation booking trends in the period before COVID-19 in Croatia. For this purpose, they have conducted a survey and their findings reveal that online travel agents (OTA), tour operators, social networks and conferences (MICE segment) are the most important distribution channels, together with the global distribution system (GDS). Even though this research has several limitations as mentioned by the authors themselves, it represents a solid ground and a basis for future work and investigation on post-COVID-19 tourism.

Lapko et al. (2021) investigate and present a nautical (sailing) tourism example in a very interesting cross-country study involving 580 sailors from Poland, Germany, Croatia, Italy, France, and Turkey in early 2021. Moreover, sailing tourism is regarded as an example of eco-friendly tourism. The main research question was to what extent has the pandemic influenced European sailors’ decisions. The survey was conducted with the help of a computer-assisted web interview (CAWI) survey. The obtained results from the research reveal that “country-specific travel restrictions impact sailing tourism and cruise decisions”. Additionally, they found that COVID-19 had both negative and positive effects on sailing tourism in the six analysed European countries. This study is invaluable since it is among very few scientific research that revolves around nautical tourism.

Cervova and Vavrova (2021) set an objective to verify and develop “a model of customer-based brand equity for a tourism destination (CBBETD) and its attributes for the destination of Croatia from the perspective of Czech tourists, among whom primary research was conducted using the CAWI method”. Their sample consisted of 451 participants and the developed model “was extracted using factor analysis and a model with four dimensions (awareness, image, quality and loyalty)”. The proposed model is very applicable and beneficial since it gives Croatia guidelines and “strategic options to improve its position in the eyes of current and potential tourists”. Namely, their findings showed that tourists have expected higher degree of cleanliness and quality of infrastructure (quality subdimension); the results regarding the factor of ambience (“modern wellness resorts, good shopping facilities, exciting atmosphere, good nightlife and entertainment”) scored worse than other variables and lastly, the levels of loyalty are not satisfactory, considering that “there was a lower willingness to visit Croatia if costs were to increase”. Their findings provide large practical contributions due to their applicability in the field of destination management and are suggested to be used by the Croatian National Tourist Board.

Šulc and Fuerst-Bjeliš (2021) have tackled the changes in tourism trajectories post-COVID-19 and addressed the impact of the COVID-19 pandemic on Croatian tourism. Namely, they have analysed data based on variables such as tourism arrivals, overnight stays and tourist beds in the period January – September in 2019 and 2020. Their findings reveal two groups of factors

that impact “the processes, trends and perhaps future trajectories of tourism in a pandemic” as follows: global mobility and travel bans and restrictions and personal responses, which include “changes in motivations and behaviour, enhanced by the necessity and need to keep distance to prevent spreading (and catching) the disease”. Moreover, this study showed changes that happened due to the COVID-19 pandemic in terms of “seasonality, the spatial distribution of tourism, average stay, organization of arrival, age, origin and type of accommodation used”.

Gričar et al. (2021) investigate the “diversification effects and significant influences on tourist arrivals as a vital export direction” for Croatia and Slovenia. They have applied a cointegrated-autoregressive model, panels, sentiment and sensitivity analysis to examine the tourist arrivals, precipitations, sunny days, earthquakes, microbes and CO₂ emissions, which are variables in this study. The findings show that “there is a severe negative effect on tourist arrivals defined by viruses” and that the weather conditions have a significant decisive effect on tourist arrivals (especially in Croatia). In addition, the panel regression revealed that both Croatia and Slovenia enjoy spatial benefits, i.e. greater demand. The COVID-19 pandemic impacted the results and the number of tourist arrivals in the short term, which was generally not normally distributed because of it. Their work is original, since, it is the first study in the tourism literature that brings together and presents essential variables. They furthermore highlight the need to work towards sustainable tourism and sustainability.

Mučalo and Šulentić (2021) have investigated the role of radio in the promotion of Croatian tourism during the COVID-19 pandemic and afterward. They claim that radio could bring large benefits to the promotion of Croatian tourism because almost 50% of the EU’s population visits Croatia by car and still have the habit of listening to local radio while driving. In their study, they conducted a qualitative survey in the period January to February 2021 on a sample of 49 radio stations in the Adriatic counties of Croatia, and they received a 56% response to the survey. The findings of this study suggest that radio as a medium represents a very good medium for tourism promotion and tourism-related content. Moreover, they suggest implementing digital broadcasting (DAB+ technology) for tourism purposes.

Gluvačević and Grgas (2021) have examined how tourist events in Croatia communicate with potential visitors in the context of the COVID-19 crisis. For this study, they conducted an online survey through a questionnaire consisting of 15 questions and 6 sub-questions in the period of February – March 2021. Their sample consists of 17 well-known manifestations and tourist festivals throughout Croatia. The results of the research show that there was a change in communication to a certain extent, but not so significantly that it could be established that the pandemic had a significant impact on the communication activities of event organizers. Online communication tools had been present even before the pandemic, so their increased use and application could be regarded as a change in the preference for communication tools. The biggest change is reflected in the emphasis on the safety of visitors when organizing events, i.e. public health requirements for adapting to epidemiological measures when necessary.

Roška (2021) investigates how the COVID-19 pandemic impacted the business operations of hotel companies listed on the Zagreb Stock Exchange based in 2020. Moreover, the study analysed the overall impact of COVID-19 on the tourism sector during the pandemic period. The study employs a multiple regression analysis and a model of the common indicator is based on the ROE indicator, the ratio of business revenue and total assets and financial strength. The findings reveal that the pandemic strongly and negatively affected tourism in 2020. Moreover, the

study shows that the structure of Croatian tourism has changed, “with a significant increase in the concentration of the emitting markets for which Croatia is predominantly a road destination, while a further decrease in the share of tourists from countries from which they mainly arrive by plane”. Finally, the author claims „the hotel industry in Croatia cannot survive the COVID-19 crisis without government support measures”.

Mikac and Kravaršćan (2021) analysed the impact of COVID-19 on the tourism sector and they evaluated the coping strategies and crisis management in the tourism sector when faced with a global pandemic. In addition, they addressed the security challenges in tourism and the characteristics of Croatian tourism. The findings are threefold: first, the crisis management system in the Croatian tourism sector is fragmented; second, there was a miscoordination in communication between decision-makers and leaders in the tourism sector, and third, the response to the crisis was “reactive”. They claim that the Croatian tourism sector “has been relatively successful in preparing (for) and responding to the crisis, although it has not developed effective plans, procedures, and crisis management teams”. Their study is essential since it analyses in detail each phase of the crisis management as well as it provides “considering observations of the tourism sector's response to the coronavirus crisis to identify lessons learned and make recommendations for dealing with future crises”.

Lovrinčević et al. (2021) have analysed the multiplicative effects and intensity of regional connections and identified sectors with the greatest potential for mitigating the negative economic consequences of the spread of the COVID-19 virus in Croatia. They applied input-output tables and the cross-industry location quotient (CILQ) to two regions of Croatia (i.e. Continental and Adriatic Croatia). RIO (regional input-output) tables reveal that the largest multiplier effects were obtained for sectors that produce physical products such as agriculture, processing industry and construction, while indirect effects were mirrored in the service sector, especially tourism, due to the weak connection between the two analysed regions. Regarding the COVID-19 impact, the results show that “the COVID-19 pandemic will have a greater impact on public finances and the budget than on the decline of the economy as a whole”.

Čorak et al. (2020) have tackled the opportunities for tourism recovery and development during and after COVID-19, conducting a qualitative research design on a sample of both tourism scholars and tourism practitioners through a semi-structured interview. In addition, they have gathered and analysed the views of tourism scholars versus tourism practitioners regarding the recovery phase and possible changes to tourism in Croatia. Their findings reveal „more similarities regarding the attitudes on the recovery during the short-term period, as opposed to more dissimilarity on the long-term future of tourism in Croatia”. Moreover, they claim that the future of Croatian tourism would “benefit from the experience and knowledge of both groups combined – practitioners and scholars”.

Grofelnik (2020) has assessed the “acceptable tourism beach carrying capacity” in both normal and COVID-19 pandemic conditions with a special focus on the Town of Mali Lošinj. In his paper, a presentation and analysis of the beach capacity in the real conditions of the 2018 tourist season and three hypothetical scenarios are provided, “two of which involve the application of recommendations for COVID-19 epidemiological measures”. The main objective of this study is to provide “measurable bases for sustainable physical plans and development policies in tourism”. This work included direct fieldwork and cabinet mapping in the town of Mali Lošinj. The findings reveal that “the real and effective carrying capacity of beaches is not temporally or spatially homogeneous”, i.e. the bathing season in Mali Lošinj lasts from June to September, with

beaches being congested in July and August. Furthermore, the COVID-19 scenarios show that “anti-epidemic measures confirmed the tertiary hypothesis and indicated that the carrying capacity of beaches would be reduced so much that significant changes in tourism in the study area are necessary to offer an acceptable public health standard”.

5. DISCUSSION AND CONCLUSION

Tourism is one of the most important economic sectors globally, especially in Croatia, where “it generated around 25% of GDP and 24% of total employment” in 2017 (Škrinjarić, 2018). Therefore, it should come as no surprise that the COVID-19 pandemic in 2020 enormously affected Croatian tourism and the overall economy.

The main motivation and objective of this study are to survey, summarize and present the relevant papers published regarding the impact of COVID-19 on Croatian tourism as well as to investigate the current state of the art in this specific field, highlighting the findings regarding the COVID-19’s impact on Croatian tourism. For this reason, the SLR (systematic literature review) methodology with the application of the PRISMA guidelines has been adopted with the keywords: „tourism“, „COVID-19“ and „Croatia“ to the Scopus scientific database from its inception to 07 October 2022. A manual abstract and full-text screening and review of the references of relevant studies were conducted thereafter. This resulted in 18 relevant published papers in peer-indexed journals in the Scopus database.

The findings of the systematic literature review show that all the published papers were published in the period 2020 to 2022, i.e. 1 paper was published in 2020, 9 papers in 2021 and 8 papers in 2022. All of these 18 qualitatively analysed papers revolve around different aspects of COVID-19’s impact on Croatian tourism. A summary of their main concepts and findings are given in Table 2.

This chapter and work have two key limitations. The first one is due to the fact it only tackles the impact of COVID-19 on Croatia and it does not revolve around other EU or neighbouring countries. Secondly, the study applies the PRISMA guidelines in a systematic literature review, instead of conducting empirical research that could measure the impact of COVID-19 on overall Croatian tourism (or any aspect of the tourism sector). However, these limitations could serve as a proposal and an incentive for further future work in this direction. The findings could serve and give new insights to the government, policymakers and local tourist authorities and communities.

Table 2. Surveyed papers regarding the impact of COVID-19 on Croatian tourism: Authors, titles and main concepts and findings

<i>Authors and paper titles</i>	<i>Main concepts and findings</i>
Domazet et al. (2022): Perception of Dental Medicine Students on Dental Tourism	<ul style="list-style-type: none"> • Dental tourism in Croatia • the focus is on the perceptions of dental medicine students of dental tourism in three analysed countries (Croatia, Serbia and Bosnia and Herzegovina) • dental tourism is mostly perceived as “a positive phenomenon” and “a desirable career choice”.
Telbisz et al. (2022): Attitudes and preferences of visitors of Krka National Park, Croatia	<ul style="list-style-type: none"> • National parks (i.e. Krka National Park in Croatia) • much fewer retirees and tourist buses as a result of the pandemic • around 65% of domestic tourists “chose to find a destination in Croatia because of COVID-19”

<i>Authors and paper titles</i>	<i>Main concepts and findings</i>
Payne, Gil-Alana et al. (2022): Persistence in Croatian tourism: The impact of COVID-19	<ul style="list-style-type: none"> • exploration of the change in the degree of persistence in the Croatian tourism indicators, foreign arrivals, and overnight stays • 1998 – 2020 • the COVID-19 negative shock on tourism can be considered „permanent in nature“ and „may have established a new trend though at a much lower level“
Gričar et al. (2022): Some considerations about tourist arrivals and the COVID-19 pandemic—evidence from Slovenia and Croatia	<ul style="list-style-type: none"> • Vector autoregressive (V.A.R.) models and panel econometrics “to analyse and model the impact of the COVID-19 pandemics on tourist arrivals in Slovenia and Croatia” in 2020 • the government and policymakers largely influence the impact of tourist arrivals
Payne, Nazlioglu et al. (2022): Economic Policy Uncertainty and International Tourist Arrivals: A Disaggregated Analysis of the Croatian Adriatic Coast	<ul style="list-style-type: none"> • Exploration of the impact economic policy uncertainty has on international tourist arrivals in Croatia • an increase in the Croatian or European economic policy uncertainty index has an unfavourable effect on international tourist arrivals relative to Croatian economic policy uncertainty
Braje et al. (2022): Building resilience in times of global crisis: the tourism sector in Croatia	<ul style="list-style-type: none"> • Evaluation of the institutional resilience of Croatia’s sector of tourism during the COVID-19 pandemic based on three criteria: preparedness, agility and robustness. • “deep societal interdependence between the public and private sector in times of global crisis”
Dadić et al. (2022): Online Reservations and Hotel Distribution Channels in European Tourism: A Case of Croatia	<ul style="list-style-type: none"> • Identification of the most successful elements of online distribution to realise future excellence in post-COVID-19 tourism • Illustration of the hotel accommodation booking trends in the period before COVID-19 in Croatia
Lapko et al. (2021): Eco-friendly tourism decision making during COVID-19—sailing tourism example	<ul style="list-style-type: none"> • Nautical (sailing) tourism • a cross-country study involving 580 sailors from Poland, Germany, Croatia, Italy, France, and Turkey in early 2021 • COVID-19 had both negative and positive effects on sailing tourism in the six analysed European countries
Cervova and Vavrova (2021): Customer-based brand equity for a tourism destination: The case of Croatia	<ul style="list-style-type: none"> • Development of “a model of customer-based brand equity for a tourism destination (CBBETD) and its attributes for the destination of Croatia from the perspective of Czech tourists, among whom primary research was conducted using the CAWI method” • “there was a lower willingness to visit Croatia if costs were to increase”
Šulc and Fuerst-Bjeliš (2021): Changes of tourism trajectories in (post)covidian world: Croatian perspectives	<ul style="list-style-type: none"> • Changes in tourism trajectories post-COVID-19 and addressed the impact of the COVID-19 pandemic on Croatian tourism • included variables: tourism arrivals, overnight stays and tourist beds in the period January – September in 2019 and 2020 • global mobility and travel bans and restrictions and personal responses as two groups of factors that impact the processes, trends and perhaps future trajectories of tourism in a pandemic
Gricar et al. (2021): Sustainable determinants that affect tourist arrival forecasting	<ul style="list-style-type: none"> • Diversification effects and significant influences on tourist arrivals as a vital export direction” for Croatia and Slovenia • there is a severe negative effect on tourist arrivals defined by viruses” and that the weather conditions have a significant decisive effect on tourist arrivals (especially in Croatia).
Mučalo and Šulentić (2021): Radio in the Promotion of Croatian Tourism: The Age of COVID-19 and Afterwards	<ul style="list-style-type: none"> • The role of radio in the promotion of Croatian tourism during the COVID-19 pandemic and afterward • radio as a media represents a very good medium for tourism promotion and tourism-related content • they suggest implementing digital broadcasting (DAB+ technology) for tourism purposes

<i>Authors and paper titles</i>	<i>Main concepts and findings</i>
Gluvačević and Grgas (2021): The impact Assessment of the COVID-19 Pandemic on the Communication of Events in Croatian Tourism	<ul style="list-style-type: none"> • Exploration of how tourist events in Croatia communicate with potential visitors in the context of the COVID-19 crisis • increased use and application of online communication tools
Roška (2021): COVID-19 tourist seasons and business activities of listed hotel companies in Croatia	<ul style="list-style-type: none"> • The impact of the COVID-19 pandemic on the business operations of hotel companies listed on the Zagreb Stock Exchange based in 2020 • the hotel industry in Croatia cannot survive the COVID-19 crisis without government support measures”
Mikac and Kravaršćan (2021): Croatian tourism sector and crisis management - A case study related to the COVID-19 Pandemic	<ul style="list-style-type: none"> • the impact of COVID-19 on the tourism sector and they evaluated the coping strategies and crisis management in the tourism sector when faced with a global pandemic • security challenges in tourism • the Croatian tourism sector “has been relatively successful in preparing (for) and responding to the crisis, although it has not developed effective plans, procedures, and crisis management teams”
Lovrinčević et al. (2021): Croatian economic exit strategy during the COVID-19 pandemic and the importance of regional economic structure	<ul style="list-style-type: none"> • Multiplicative effects and intensity of regional connections, and identification of sectors with the greatest potential for mitigating the negative economic consequences of the spread of the COVID-19 virus in Croatia • the largest multiplier effects were obtained for sectors that produce physical products such as agriculture, the processing industry and construction, while indirect effects were mirrored in the service sector, especially tourism • “The COVID-19 pandemic will have a greater impact on public finances and the budget than on the decline of the economy as a whole”
Čorak et al. (2020): Opportunities for tourism recovery and development during and after COVID-19: Views of tourism scholars versus tourism practitioners	<ul style="list-style-type: none"> • qualitative research design on a sample of both tourism scholars and tourism practitioners through a semi-structured interview • there is a larger dissimilarity in the long-term future of tourism in Croatia between the two groups • recommendation to use the benefits from the experience and knowledge of both tourism practitioners and scholars
Grofelnik (2020): Assessment of acceptable tourism beach carrying capacity in both normal and COVID-19 pandemic conditions – Case study of the town of Mali Lošinj	<ul style="list-style-type: none"> • tourism beach carrying capacity • focus on the town of Mali Lošinj • three hypothetical scenarios (two of them include the COVID-19 epidemiological measures) • the anti-epidemic measures confirmed the tertiary hypothesis and indicated that the carrying capacity of beaches would be reduced so much that significant changes in tourism in the study area are needed

Source: Authors' work

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