**Reviving from The Pandemic: Strategies for Travel and** **Tourism Industry**

**Abstract**

**Introduction:** Travel restrictions due to the COVID-19 outbreak in India, types of public transportation and tourist visas are being suspended and hence India will lose tourists from various states of India as well as from other countries. The research aim is to measure the change in travellers’ preference and expectations due to COVID-19 pandemic in the state of Gujarat and to provide strategies for reviving the travel and tourism industry.

**Method:** A total of 1043 travellers from Gujarat state were selected by non-probability convenient sampling method. Data were collected by online survey through a structured questionnaire during the pandemic era. Inferential statistical tools were used to infer the data collected for its Significance.

**Result:** Data revealed the changes in travel plan, travelling duration, preferred mode of transportation and convoys’ prefer during travelling. On the other hand significant impact has been found on travel plans due to the COVID-19 outbreak.

**Discussion:** This study will help to entire links of travels to make proper strategies to cope with the challenges that the tourism sector is facing due to the COVID-19 outbreak. Executing strategies recommended in this research will help to reduce the pandemic's troublesome effects on the travel industry and it will help in building an environment that will make it simpler for travellers coming from India and from other countries.

**Keywords**

Booking; Corona virus; COVID-19; Outbreak; Public Transportation; Tourism; Travel Plan

**1. Introduction**

It is evident that the city of Wuhan in Hubei Province, China, became the epicentre of an unidentified disease first detected on December 31, 2019. The World Health Organization (WHO) was initially informed about cases of pneumonia of unknown origin. Subsequently, on January 7, 2020, Chinese authorities identified the virus as a type of coronavirus, which was later named SARS-CoV-2 by WHO. The disease caused by this virus was officially termed COVID-19. On March 11, 2020, the WHO declared COVID-19 a global pandemic, as it had already spread to over 114 countries at that time. Highly contagious in nature, the virus spread rapidly, and by August 27, 2021, a total of 214,468,601 confirmed cases and 4,470,969 deaths had been reported globally (Dashboard, 2021).

Coronaviruses are commonly found in animals such as camels, cats, and bats and they rarely spread to humans. However, this time the world witnessed the emergence of a novel coronavirus from a large family of viruses known to cause severe illnesses, including Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS). The etiological agent responsible for the current outbreak, SARS-CoV-2, is closely related to the original SARS coronavirus (Kaushik et al., 2020). In humans, SARS-CoV-2 is transmitted primarily through respiratory droplets—directly via sneezing or coughing, or indirectly through contaminated objects, surfaces, or close contact (Patel et al., 2020).

Nearly all sectors across the globe have been affected by the pandemic, but one of the most severely impacted industries is global tourism (Patel et al., 2020). The extent of vulnerability caused by COVID-19 depends on four key factors: the rate and scale of virus transmission; the timeline and effectiveness of vaccine development; the efficiency of policy responses to mitigate the health, economic, and social impacts; and the level of public anxiety, which influences all these dimensions. During the peak of the pandemic, international borders were closed across most countries. Although many have since reopened under restricted conditions, the travel and tourism industry continues to face an unprecedented level of disruption.

The pandemic caused a near-complete halt to international and domestic tourism. Travel restrictions, border closures, and public fear significantly reduced tourist mobility. The tourism industry suffered long-term disruptions in revenue, employment, and service infrastructure. India imposed stringent lockdowns and travel restrictions, affecting both inbound and domestic tourism. Gujarat, known for its cultural heritage, religious tourism, and vibrant festivals, witnessed a sharp decline in tourist arrivals.

As the pandemic moves into a recovery phase, timely research is crucial to inform strategic planning for tourism revival. Policymakers, tourism boards, and stakeholders need data-driven insights to restore tourist confidence and rebuild the sector sustainably. Hence, this study seeks to address the critical gap in understanding changing traveller Behaviour and expectations post-pandemic, and to propose targeted revival strategies that align with both public health safety and economic rejuvenation.

**2. Literature Review**

**2.1 Global and National Impact of COVID-19 on Tourism**

The estimated global economic loss due to restricted international travel during the pandemic is projected to be around $10 trillion. This disruption has impacted nearly 70% of employment directly or indirectly within the tourism sector. According to the Federation of Associations in Indian Tourism & Hospitality (FAITH), the pandemic may result in approximately 38 million job or business losses, leading to widespread bankruptcies, business closures, and unemployment across India (Dutta, 2020).

**2.2 Disruption Across Tourism Segments and Value Chain**

The tourism industry has experienced its most severe disruption to date, affecting all major segments—domestic, inbound, and outbound. Nearly every vertical within the travel sector, including leisure, adventure, heritage, MICE, cruise, corporate, and niche tourism, has been adversely impacted. The entire tourism value chain—from accommodations and travel agencies to tour operators, destinations, restaurants, entertainment venues, and transportation by air, land, and sea—has suffered considerable setbacks (PTI, 2020; Bhadeshiya et al., 2020).

**2.3 Historical Crises and Their Impact on Travel Behaviour**

Previous studies have documented how major disruptions such as epidemics (e.g., AIDS, SARS, Bird Flu), natural disasters (e.g., the Indian Ocean tsunami, Hurricane Katrina), and socio-political instabilities (e.g., terrorism, riots, and political unrest) can have a lasting impact on the perceived image of travel destinations (Beirman, 2003). These incidents influence both destination appeal and individual travel decisions. Travellers may cancel or postpone trips, change destinations, or proceed despite risks based on their personal risk perception (Dickman, 2003).

**2.4 Role of Self-Confidence and Demographics in Travel Decisions**

Researchers have explored the role of self-confidence in travellers’ responses to adverse events. A consumer self-confidence scale originally developed for product purchases was adapted for travel and revealed that self-confidence significantly influences travel-related decisions during disruptions (Valencia & Crouch, 2008). Demographic variations in travel Behaviour, with families with young children relying more on private vehicles, and gender disparities affecting travel patterns, with women being more cautious and restricted than men (Joh, 2019).

**2.5 Memorable Travel Experience and Social Media Influence**

Efforts to manage memorable travel experiences have led to the development of a reliable measurement scale encompassing seven dimensions: pleasure-seeking, nourishment, local culture, significance, knowledge, involvement, and novelty (Kim et al., 2010). A theoretical framework was developed to understand travel Behaviour by analyzing individuals' activity patterns, emphasizing how daily routines and social roles influence travel decisions (Axhausen, 2007). The growing influence of social media in tourism is notable, as platforms help create value through features that are unique and non-substitutable (Skare etal., 2021) (Ly, B., & Ly, R., 2020).

**2.6 Impact of COVID-19 on the Indian Tourism Sector**

India experienced a dramatic decline in both inbound and outbound tourism due to COVID-19-related travel restrictions. The suspension of all modes of public transport and tourist visas led to a 67% drop in inbound and a 52% decline in outbound travel (Singh, 2020). The hospitality sector witnessed mass booking cancellations, especially for cruises and corporate events. The industry lost ₹8,500 crore in just the first quarter due to suspended international travel, affecting approximately 38 million workers (IATO, 2020).

**2.7 Risk Perception and Changing Tourist Priorities**

In the context of travel, perceived risk refers to the potential for physical or financial harm that a traveller associates with a destination (Chennattuserry et al., 2022). COVID-19 has elevated health concerns and forced a shift in travel priorities, placing a spotlight on safety, security, and hygiene standards. Clear communication and visible safety protocols are essential to restore tourist confidence (Ramos, 2022).

**2.8 Infrastructure, Service Quality, and Competitiveness**

System quality and infrastructure significantly influence a tourist’s decision to visit or revisit a destination (Yuan et al., 2022; Davari et al., 2022). Delivering high-quality services and maintaining superior facilities are essential for reviving tourism. The post-pandemic landscape demands not only cleanliness and safety but also a reimagined service model focused on trust and assurance (Serra & Seabra, 2023).

The reviewed literature highlights how the pandemic has drastically affected tourism globally and in India. It also emphasizes the need to understand evolving traveller Behaviour, risk perceptions, and the role of infrastructure and digital tools in restoring tourism. The present study aims to fill this gap by examining changes in tourist Behaviour post-COVID and by developing actionable strategies to revitalize the tourism sector in Gujarat and beyond.

**3. Research Objectives**

1. To examine the impact of the COVID-19 outbreak on travellers' preferences regarding travel duration, transportation modes, and travel companions in Gujarat.
2. To assess changes in travellers’ expectations related to hygiene, safety protocols, and flexibility in travel bookings during and after the pandemic.
3. To propose strategic recommendations and policy interventions for sustainable and resilient revival of the travel and tourism sector in the post-pandemic context.

**4. Research Methodology**

The study was carried out with descriptive research design whereby primary data was collected through structured questionnaire with the help of online survey method, sent among travellers or vacationers residing in the state of Gujarat during pandemic era. Non probability convenience sampling technique was used to survey 1043 respondents from defined sampling frame. Chi-Square tests were chosen due to their suitability in identifying associations between categorical variables such as age, income, gender, and changes in travel Behaviour. The test is ideal for non-parametric data derived from large surveys (N=1043) and is commonly used in Behavioural and tourism studies.

**5. Result and Discussion**

**5.1 Descriptive of the sample**

**TABLE 1.** *Descriptive of the sample*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **A. Gender** | ***N*** | **P (%)** | **B. Age (Years)** | ***N*** | **P (%)** |
|  |  |  |  |  |  |
| Female | 416 | 60.10 | < 20 | 33 | 3.2 |
| Male | 627 | 39.90 | 21 to 30 | 893 | 85.6 |
|  |  |  | 31 to 40 | 92 | 8.8 |
|  |  |  | 41 to 50 | 17 | 1.6 |
|  |  |  | > 50 | 8 | .8 |
| Grand Total | 1043 | 100.00 | Grand Total | 1043 | 100.00 |
|  |  |  |  |  |  |
| **C. Highest Education** | ***N*** | **P (%)** | **D. Income (In INR lakhs)** | ***N*** | **P (%)** |
|  |  |  |  |  |  |
| Below HSC | 8 | .8 | < 3 | 206 | 19.8 |
| Under Graduates | 97 | 9.3 | 3 to 6 | 450 | 43.1 |
| Graduate | 220 | 21.1 | 6 to 10 | 197 | 18.9 |
| Post Graduate | 616 | 59.1 | >10 | 190 | 18.2 |
| Doctorate | 26 | 2.5 |  |  |  |
| Professional Degree | 41 | 3.9 |  |  |  |
| Other | 35 | 3.4 |  |  |  |
| Grand Total | 1043 | 100.0 | Grand Total | 1043 | 100.0 |
|  |  |  |  |  |  |
| **E. Occupation** | ***N*** | **P (%)** | **F. Family Type** | ***N*** | **P (%)** |
| Housewife | 16 | 1.5 | Joint | 401 | 38.4 |
| Students | 448 | 43.0 | Nuclear | 642 | 61.6 |
| Self-employed | 50 | 4.8 |  |  |  |
| Professional | 102 | 9.8 |  |  |  |
| Service | 290 | 27.8 |  |  |  |
| Business | 129 | 12.4 |  |  |  |
| Other | 8 | .8 |  |  |  |
| Grand Total | 1043 | 100.0 | Grand Total | 1043 | 100.0 |
|  |  |  |  |  |  |
| **G. Family Members** | ***N*** | **P (%)** |  |  |  |
| Less than 3 | 51 | 4.9 |  |  |  |
| 4 to 5 | 740 | 70.9 |  |  |  |
| 6 to 7 | 204 | 19.6 |  |  |  |
| 8 to 9 | 8 | .8 |  |  |  |
| More than 9 | 40 | 3.8 |  |  |  |
| Grand Total | 1043 | 100.0 |  |  |  |
|  |  |  |  |  |  |
| Notes: Where *N* = frequency; P= percentage. This table shows the descriptive of the sample | | | | | |

*Sources:*Author’s own analysis based on SPSS output from primary data (2020)

**5.2 Travel during Vacation period and plan to change**

**Figure 1.** Preference of travellers during Vacation period and plan to change due to Covid-19 outbreak

*Sources:*Author’s own compilation from primary survey data (2020)

Out of the total response received 93.6 % travellers prefer domestic travel and 6.4% travellers prefer global travel during vacation. And out of these 88% travellers have changed their travel plan and 22 % travellers are might change their plan due to COVID-19 outbreak. Travel plans of 15 % travellers were not going to affect due to COVID-19 outbreak.

**5.2.1 Chi-Square Analysis Performed to Identify the Association between Change in the travel plan due to COVID-19 outbreak, Annual Family Income and Age of the travellers**

**H0:** Change in the travel plan due to COVID-19 outbreak is independent to Annual Family Income groups across the different age groups.

**H1:** Change in the travel plan due to COVID-19 outbreak is not independent to Annual Family Income groups across the different age groups.

**TABLE 2.** *Chi-Square Test: Change in the travel plan due to COVID-19 outbreak -Annual Family Income - Age of the travellers*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Age** | **Pearson Chi-Square Value** | **df** | **Asymp. Sig. (2-sided)** | **Outcome** |
| Below 20 Years | 15.043 | 2 | .368 | No enough Evidence of association |
| 21 to 30 Years | 86.046 | 6 | .117 | No enough Evidence of association |
| 31 to 40 Years | 74.836 | 6 | .177 | No enough Evidence of association |
| 41 t0 50 Years | 11.057 | 2 | .143 | No enough Evidence of association |
| 51 Years and above | 14.540 | 2 | .167 | No enough Evidence of association |
| Total | 9.599 | 6 | .143 | No enough Evidence of association |

*Sources:*Author’s own analysis based on SPSS output from primary data (2020)

For the age group of 21 to 30 years which is 13.10% of the total travellers who belongs to less than Rs. 3,00,000 annual family income said that they might definitely change the plan, out of total 27.10 % travellers who belongs to less than Rs. 3,00,001 to 6,00,000 annual family income said they also might definitely change the plan, out of total 15.90% travellers who belongs to less than Rs. 6,00,001 to 10,00,000 annual family income said they will definitely change the plan while out of total 15.00% travellers who belongs to more than Rs. 10,00,000 annual family income said they are also likely to change the plan and likewise as shown in table but the Pearson Chi-Square test yielded that with chi-square value of 86.046, df=6 the p value is greater than 0.05 so null hypothesis is not being rejected. Thus, it can be concluded that for the age group of 21 to 30 years of age the annual family groups and their planning to change travel plan are independent. And so on for the rest of the variables included in the above test.

**5.3 Travelling Duration**

Following chart shows the how long the travellers used to travel before COVID-19 outbreak in Gujarat state

**Figure 2.** How long travellers used to travel before COVID-19 outbreak

*Sources:*Author’s own compilation from primary survey data (2020)

41.6 % vacationers used to have 5 to 7 days long trips, 28.8 % vacationers used to have 3 to 4 days long trip, 11.2 % vacationers used to have 8 to 14 days long trip, 10.4 % vacationers used to have 1 to 2 days long trips and 8% vacationers used to have more than 14 days long trips before COVID-19 outbreak for past 2 years.

Following figure shows the Change in travel duration due to COVID-19 outbreak in Gujarat State

**Figure 3.** Change in travel duration due to COVID-19 outbreak

*Sources:*Author’s own compilation from primary survey data (2020)

44% travellers might change their travel duration and 34.4% travellers were going to change their travel duration. Travel duration of 21.6% travellers was not going to get affected by outbreak of COVID-19.

Among these responses, researchers concluded that there is enough evidence to suggest an association between the duration of travelling before COVID-19 and their plan to change the duration after COVID -19. (χ²= 150.886, p=0.000, p<0.05).

**5.3.1 Chi-Square Analysis Performed to Identify the Association among Changes in travel duration due to COVID-19 outbreak, Gender and Age of the travellers**

**H0:** Changes in travel duration due to COVID-19 outbreak is independent to Gender and Age of the travellers

**H1:** Changes in travel duration due to COVID-19 outbreak is not independent to Gender and Age of the travellers

**TABLE 3.** *Chi-Square Test: Changes in travel duration due to COVID-19 outbreak-Gender - Age of the travellers*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Age | Pearson Chi-Square  Value | df | Asymp. Sig. (2-sided) | Outcome |
| Below 20 years | 33.000 | 1 | 0.000 | Evidence of association |
| 21 to 30 Years | 0.422 | 2 | 0.810 | No enough Evidence of association |
| 31 to 40 Years | 19.839 | 1 | 0.000 | Evidence of association |
| 41 to 50 Years | 17.000 | 1 | 0.000 | Evidence of association |
| 51 Years and above | 15.765 | 1 | 0.000 | Evidence of association |
| Total | 1.029 | 2 | 0.006 | Evidence of association |

*Sources:*Author’s own analysis based on SPSS output from primary data (2020)

For the age group below 20 years, 50% of total male travellers said that they will change their travel duration due to COVID-19 outbreak while in the same age group, 50% female travellers said that they may be changing their travel duration due to COVID-19 outbreak.

For the age group 21 to 30 years, 25.50% of total male and 16.80% female travellers said that they will change their travel duration due to COVID-19 outbreak while 15% male and 9.30% female travellers said that they will not change their travel duration due to COVID-19 outbreak and 16.90% male and 14% female travellers said that they might change their travel duration due to COVID-19 outbreak. For the age group 31 to 40 years, 45.50% of total male and 18.20% female travellers said that they will change their travel duration due to COVID-19 outbreak while 9.10% male and 27.30 % female travellers said that they may be changing their travel duration due to COVID-19 outbreak. For the age group 41 to 50 years, 50% of the total male travellers said that they will change their travel duration due to COVID-19 outbreak while in the same age group the 50% female travellers said that they will not be changing their travel duration due to COVID-19 outbreak.

The Pearson Chi-Square test yielded that with chi-square value of 4.00, df=1 the p value is less than 0.05 so null hypotheses gets rejected. Thus, it can be concluded that for the age below 20 years the change in travel duration due to COVID-19 outbreak is not independent to Gender and Age of the travellers. For other age groups, except the age group 21 to 30 years for which the p value is greater than 0.05 researchers fail to reject the null hypothesis and thus for only this age year it can be concluded that the change in travel duration due to COVID-19 outbreak is independent to Gender and Age of the travellers, while for the rest the change in travel duration due to COVID-19 outbreak is not independent to Gender and Age of the travellers.

**5.4 Preferred Mode of Public transportation by travellers domestically**

Following figure shows the Preferred Mode of Public transportation by travellers while travelling domestically

**Figure 4.** Preferred Mode of Public transportation by travellers domestically

*Sources:*Author’s own compilation from primary survey data (2020)

While travelling in domestic places 47.6 % travellers have preferred Train, 32.8 % travellers have preferred Car, 13.6 % travellers have preferred Flight and 7 % have preferred Bus.

**Figure 5.** Change in Preferred Mode of Public transportation

*Sources:* Author’s own compilation from primary survey data (2020)

While travelling in domestic places, 30.4 % travellers have already changed their preferred mode of transportation and 28 % travellers might be changing their Preferred Mode of Public transportation. There is no change in Preferred Mode of Public transportation in case of 41.6 % travellers.

Among these responses, researchers conclude that there is enough evidence to suggest an association between the mode of the transport of travelling before COVID-19 and their plan to change the mode of the transport of travelling after COVID-19. (χ²= 171.019, p=0.000, p<0.05).

**5.5 Preferred Convoy during travelling**

69.6 % travellers preferred to travel with family members, 29.6 % travellers preferred to travel with friends and 8 % travellers preferred to travel with colleagues. Out of the total 14.4 % travellers have changed their preference and 14.4 % travellers might be changing their preference of accompanies during travelling due to outbreak of COVID-19. 71.2 % travellers have not changed their preference of accompanies during travelling.

Among these responses, researchers conclude that there is no enough evidence to suggest an association between the accompanying during travelling before COVID-19 and their plan to change the accompanying during travelling after COVID-19. (χ²= 5.816, p=0.213, p>0.05).

**TABLE 4.** *Chi-Square Test Results*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pearson Chi-Square for Variables | Value | df | p-value | Outcome |
| Plane to change traveling plane | 12.055 | 2 | .002 | Evidence of association |
| Duration of Travelling | 150.886 | 8 | .000 | Evidence of association |
| Mode of transport during Travelling | 171.019 | 6 | .000 | Evidence of association |
| Accompany During Travelling | 5.816 | 4 | .213 | No enough Evidence of association |

*Sources:*Author’s own analysis based on SPSS output from primary data (2020)

**5.6 Impact of COVID-19 outbreak on travel plan**

**Following figure shows that how the travel plan has been affected due to COVID-19 outbreak in Gujarat State**

**Figure 6. Impact of COVID-19 outbreak on travel plan**

*Sources:*Author’s own compilation from primary survey data (2020)

**42.40% travellers were not planning to travel this year due to COVID-19 outbreak. 19.20% travellers had to cancel their travel plan mandatory for which they had booked earlier, 15.20% travellers willingly cancelled their travel plan that they had booked earlier, 16 % traveller have delayed their booking and travel plan of 7.20% traveller have not been affected in case of COVID-19 outbreak.**

**5.7 Expectation of future booking**

Following figure shows that after how much time traveller will plan their vacation again after a complete cure from COVID-19 if they have delayed or cancelled their travel booking

**Figure 7.** Expectation of future booking

*Sources:*Author’s own compilation from primary survey data (2020)

20 % traveller will be planning their vacation again once restriction lifted by the state and Central Government after a complete cure from COVID-19, 20 % traveller will be planning their vacation again a year after a complete cure from COVID-19, 17 % traveller will be planning their vacation again in next 7 to 9 months after complete cure from COVID-19, 15 % traveller will be planning their vacation again in next 4 to 6 months after a complete cure from COVID-19, 12 % traveller were not sure about the planning of their vacation again, 11 % traveller will be planning their vacation again in next 1 to 3 months after a complete cure from COVID-19, 3 % traveller will be planning their vacation again in next 10 to 12 months after a complete cure from COVID-19 and 2 % traveller will be planning their vacation again in next 7 to 9 months after a complete cure from COVID-19.

**5.8 Reallocate of fund that they were planning to invest on vacation if they get cancelled due to COVID-19**

Following figure shows, from where travellers might reallocate their fund that they were planning to invest on vacation before cancellation of their travel booking

**Figure 8.** Reallocate of fund that they were planning to invest on vacation if they cancelled

*Sources:*Author’s own compilation from primary survey data (2020)

If travellers cancelled their vacation then 22 % travellers might reallocate their funds to save it for future needs, 11% travellers might reallocate their fund to rebook their travel / vacation in future, 6 % travellers might reallocate their fund to spend it on other purchase, 5% travellers might reallocate their fund to spent on wellness, 5% travellers might reallocate their fund to donate it, 29 % travellers have not decided yet to reallocate their fund and 5% travellers might reallocate their fund to spend it on other purpose.

**5.9 Persuade travellers to make travel booking after a complete cure from COVID-19 outbreak**

Following figure shows, what would persuade travellers to make travel booking again after a complete cure from COVID-19 outbreak?

**Figure 9.** Persuade travellers to make travel booking after a complete curd from COVID-19 outbreak

*Sources:*Author’s own compilation from primary survey data (2020)

54.40 % travellers could not persuade to book a travel plan during this time, 18.40% travellers might get persuaded by safest travel plans offered by the agent, 5.60% travellers may be persuaded by discount in overall package, 4.80 % travellers might get persuaded if disruption caused by the Corona virus incorporate in travel insurance policy, 3.20 % travellers might be persuaded if flexibility offered by the agent in terms of the change in the location and duration after booking and 13.60% travellers may get persuaded by other category offered by agent.

**5.10 Proposed Strategic Recommendations and Policy Interventions**

It is evident that travellers’ confidence has been significantly affected due to the ongoing pandemic and the resulting uncertainty. Restoring trust in the tourism sector and public transportation is essential for the revival of the travel and tourism industry. The following strategies are recommended to help rebuild confidence in tourism:

**5.10.1 Encouraging and Promoting Domestic Tourism**

The current study found that most travellers now prefer domestic over international travel. Encouraging domestic tourism could significantly boost the economy if individuals choose to explore destinations within their own country. India has a strong local tourism market. With appropriate strategies and incentives, domestic tourism can be effectively promoted and will likely be strongly favored by travellers.

**5.10.2 Leveraging Information and Communication Technology (Digitization of Travel Industry Services)**

Evidence shows that travellers preferred online bookings and digital interactions during the COVID-19 period over in-person visits. Therefore, investing in innovative digital technologies will enable travel companies to enhance automation, offer virtual experiences, provide real-time information, and ensure the availability of contactless payments and other essential services.

**5.10.3 Implementing Virtual Reality (VR) Tourism**

Since many travellers wish to avoid in-person visits to travel agencies, the adoption of augmented and virtual reality technologies can be a promising alternative. Several countries have already implemented VR-based tourism services. These technologies offer users immersive, lifelike experiences and can promote tourism in a more engaging way. Virtual tours of hotels, booking interfaces, and travel experiences can help travellers make informed decisions.

**5.10.4 Reducing Uncertainty by Shortening Travel Duration**

Providing travellers with clear, accurate, and real-time information can help reduce uncertainty and anxiety. The study revealed that changes in travel duration due to the COVID-19 outbreak are closely associated with the gender and age of travellers. Shortening the duration of travel packages could help align with evolving preferences and build traveller confidence.

**5.10.5 Ensuring Health and Hygiene Standards for Safe Travel**

The study also indicated a link between travel plans and the preferred mode of transportation. Travellers now tend to favor private or small vehicles over public or high-capacity transport. Safety and cleanliness have become fundamental factors in destination choice and are strongly linked to travel preferences. Implementing strict safety protocols and offering contactless travel experiences will be crucial in reviving the tourism industry.

**Conclusion**

The study revealed that most travellers had changed their travel plans due to the COVID-19 outbreak. It also concluded that across different age groups and various annual family income groups, the decision to change travel plans appeared to be independent. However, researchers found sufficient evidence of association between travel duration, mode of transport, and choice of travel companions before and after the pandemic.

Most travellers from Gujarat were not planning to travel during the year. A few had to cancel their previously booked travel plans, while many others expressed their intention to wait for a year or until government restrictions were lifted. The study further indicated that a majority of travellers had not yet decided how to reallocate the funds they had initially intended to spend on vacation. The fact that most travellers could not be persuaded to book a travel plan during this period highlights the need to understand and address the barriers to changing travel behaviour. Therefore, appropriate strategies should be carefully selected, designed, and implemented by tour planners.

The findings of this study support the **Theory of Planned Behaviour** (Ajzen, 1991), demonstrating that travellers are heavily influenced by **perceived risk** (attitude**), demographic roles** (subjective norms), and **travel infrastructure** (perceived behavioural control). In line with findings by **Sujood et al. (2022)** and **Serra & Seabra (2023),** this study confirms that health-related risk perceptions have become a key determinant in travel decision-making. Travellers now prioritize hygiene, safety, and certainty over price discounts or promotional offers.

Additionally, the study aligns with the work of **Valencia & Crouch (2008),** which found that low consumer self-confidence driven by fear and financial instability results in travel avoidance. The high percentage of travellers unwilling to book trips in the near future reflects this decline in confidence. The strong preference for domestic tourism observed in this study echoes global trends noted by **UNWTO (2022)**, where 80% of post-pandemic tourism in Asia shifted to domestic travel. Gujarat's response aligns with this broader pattern and highlights new opportunities for regional tourism development and marketing.

Finally, consistent with insights from **Davari et al. (2022)** and ( Ly, B., & Ly, R., 2020)**,** the growing reliance on digital interactions and virtual experiences is more relevant than ever. This study confirms a similar trend among Indian travellers, thereby encouraging greater investment in **virtual reality (VR)/augmented reality (AR) tourism** and **contactless technologies** to support a safe and engaging travel experience.

**Implication of the study**

The study revealed notable shifts in traveller Behaviour resulting from the COVID-19 outbreak. These changes include variations in travel duration, preferences for modes of public transportation, choices of travel companions, expectations regarding future bookings, reallocation of funds initially intended for vacations, and the key factors influencing travellers’ willingness to resume bookings after the pandemic subsides. These findings provide critical insights for stakeholders across the tourism ecosystem, enabling a clearer understanding of how travel Behaviours have evolved and offering a foundation for developing strategies to address the ongoing challenges within the industry.

By implementing the recommended strategies, tourism stakeholders can help minimize the pandemic’s adverse effects and work toward restoring confidence among travellers. Proactive adoption of these measures will not only foster safer travel environments but also contribute to rebuilding trust and creating favourable conditions for tourism revival.

Governments and tourism boards are encouraged to focus more on promoting domestic tourism, which has shown growing popularity and potential for economic recovery. Safety certifications, strict hygiene protocols, and consistent, transparent communication will be essential in reinstating public trust and encouraging people to travel again. For tour operators and travel agencies, digitization of services such as booking systems and customer engagement platforms is vital. Flexible policies that include options for refunds or rescheduling will help accommodate traveller uncertainty and changing plans. Additionally, the integration of Virtual Reality (VR) and Augmented Reality (AR) technologies can serve as innovative tools to attract and engage travellers who may still be hesitant about physical travel experiences.

Transportation providers must take concrete steps to enhance safety, such as reducing vehicle occupancy, ensuring regular sanitization, and maintaining high cleanliness standards. Future tourism infrastructure should include risk mitigation features such as touch less payment systems, automated service interfaces, and crowd control technologies to meet the heightened expectations of safety-conscious travellers.

**Disclaimer (Artificial intelligence)**

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, manuscript.

**Reference**

Ajzen, I. (1991). The Theory of Planned Behaviour. Organizational Behaviour and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Axhausen, K. W. (2007). Concepts of travel Behaviour research. Retrieved from https://www.researchgate.net/publication/237262766\_Concepts\_of\_Travel\_Behaviour\_Research

Beirman, D. (2003). Restoring tourism destinations in crisis: A strategic marketing approach. Allen & Unwin.

Bhadeshiya, H., Patel, P., & Patel, B. (2020). A study on people engagement in various activities during first lockdown in Gujarat. Sodh Sanchar Bulletin, 10(40). ISSN 2229-3620.

Chennattuserry, J. C., Varghese, B., Elangovan, N., & Sandhya, H. (2022). Pandemic recovery strategies: A disaster management tourism framework. In M. E. Korstanje, H. Seraphin, & S. W. Maingi (Eds.), Tourism through troubled times (pp. 133–149). Emerald Publishing Limited. https://doi.org/10.1108/978-1-80382-311-920221008

Davari, D., Vayghan, S., Jang, S. (Shawn), & Erdem, M. (2022). Hotel experiences during the COVID-19 pandemic: High-touch versus high-tech. International Journal of Contemporary Hospitality Management, 34(4), 1312–1330. https://doi.org/10.1108/IJCHM-07-2021-0919

Dickman, S. (2003). Tourism and hospitality marketing. Oxford University Press.

Dutta, A. (2020, March 19). Coronavirus impact may render 38 mn jobless in Indian tourism industry. Business Standard. https://www.business-standard.com/article/economy-policy/coronavirus-impact-may-render-38-mn-jobless-in-indian-tourism-industry-120031901851\_1.html

Indian Association of Tour Operators (IATO). (2020). About IATO. Retrieved [December, 2024], from https://www.iato.in/

Jayawardena, C. (2022). Conclusion: What innovations would enable the tourism and hospitality industry to re-build? Worldwide Hospitality and Tourism Themes, 14(6), 610–618. https://doi.org/10.1108/WHATT-06-2022-0069/FULL/XML

Joh, C. (2019). The effect of parenthood on travel Behaviour: Evidence from the California household travel survey. Transportation Research Part A: Policy and Practice, 120, 101–115.

Juarez-Rojas, L., Alvarez-Risco, A., Campos-Dávalos, N., Anderson-Seminario, M. de las M., & Del-Aguila-Arcentales, S. (2023). Effectiveness of policies in recovering the tourist industry after COVID-19: A benchmark comparison of the ten most visited countries. In A. Alvarez-Risco, M. A. Rosen, & S. Del-Aguila-Arcentales (Eds.), Sustainable Management in COVID-19 Times (Vol. 30, pp. 211–237). Emerald Publishing Limited. https://doi.org/10.1108/S1877-636120230000030030

Kaushik, S., Kaushik, S., Sharma, Y., Kumar, R., & Yadav, J. P. (2020). The Indian perspective of COVID-19 outbreak. *Virusdisease, 31*(2), 146–153. <https://doi.org/10.1007/s13337-020-00587-x>

Kim, J.-H., Ritchie, J. R. B., & McCormick, B. (2010). Development of a scale to measure memorable tourism experiences. Journal of Travel Research, 51(1), 12–25. https://doi.org/10.1177/0047287509354444

Ly, B., & Ly, R. (2020). Effect of Social Media in Tourism (Case in Cambodia). Journal of Tourism & Hospitality, 9(1), 424. <https://doi.org/10.35248/2167-0269.20.9.424>

Patel, D., Vahoniya, D., Patel, P., & Shah, N. (2020). Impact of COVID-19 on transportation system of India. International Journal of Mechanical and Production Engineering Research and Development, 10(3), 5655–5664. <https://www.researchgate.net/publication/351658687_IMPACT_OF_COVID-19_ON_TRANSPORTATION_SYSTEM_OF_INDIA>

Patel, P., Shah, N., Sinha, K., & Thakar, H. (2020). Government response to contain the outbreak of COVID-19 with special reference to public transportation system in India. International Journal of Mechanical and Production Engineering Research and Development, 10(3), 2325–2338. http://www.tjprc.org

PTI. (2020, March 12). Coronavirus impact: Indian tourism could run into thousands of crores of rupees of loss. The Week. https://www.theweek.in/news/biz-tech/2020/03/12/coronavirus-impact-indian-tourism-could-run-into-thousands-of-crores-of-rupees.html

Ramos, K. (2022). Factors influencing customers’ continuance usage intention of food delivery apps during COVID-19 quarantine in Mexico. British Food Journal, 124(3), 833–852. https://doi.org/10.1108/BFJ-01-2021-0020

Serra, P. V., & Seabra, C. (2023). Hygiene and health in tourism, in a post-pandemic context: From expected requirement to mandatory criterion. In C. Seabra & M. E. Korstanje (Eds.), Safety and tourism (pp. 195–215). Emerald Publishing Limited. https://doi.org/10.1108/978-1-80382-811-420231011

Singh, G. (2020, March 10). Tourism industry stares at $300-m loss. The Hindu Business Line. https://www.thehindubusinessline.com/economy/tourism-industry-stares-at-300-m-loss/article31025324.ece

Skare, M., Soriano, D. R., & Porada-Rochoń, M. (2021). Impact of COVID-19 on the travel and tourism industry. Technological Forecasting and Social Change, 163, 120469. https://doi.org/10.1016/j.techfore.2020.120469

Sujood, H. S., & Bano, N. (2022). Behavioural intention of traveling in the period of COVID-19: An application of the theory of planned Behaviour (TPB) and perceived risk. International Journal of Tourism Cities, 8(2), 357–378. https://doi.org/10.1108/IJTC-09-2020-0183

UNWTO. (2022, September). World tourism barometer: September 2022 [Excerpt]. World Tourism Organization. https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2022-09/UNWTO\_Barom22\_05\_Sept\_EXCERPT.pdf?VersionId=pYFmf7WMvpcfjUDuhNzbQ\_G.4phQX79q

Valencia, J., & Crouch, G. (2008). Travel Behaviour in troubled times: The role of consumer self-confidence. Journal of Travel & Tourism Marketing, 25(1), 25–42. https://doi.org/10.1080/10548400802164835

World Health Organization. (2021). WHO coronavirus (COVID-19) dashboard. https://covid19.who.int/