

# **RESEARCH ARTICLE**

# Health safety measures of the host destination: A new perception of tourists in destination attractiveness

Bindu Roy<sup>1</sup>, Millo Yaja<sup>2</sup>, Anuj Kumar<sup>3,\*</sup>

<sup>1</sup> Department of Commerce, DAV Centenary College, Faridabad, Haryana 121001, India

<sup>2</sup> Faculty of Tourism, Department of Tourism and Hospitality Management, Mizoram University, Aizawl, Mizoram 796004, India

<sup>3</sup> Department of Management, Apeejay School of Management, Dwarka, New Delhi, Delhi 110077, India

\* Corresponding author: Anuj Kumar, profanuj15@gmail.com

## ABSTRACT

The aims of this study are to analyze the tourists' perceptions about the impact of factors affecting destination attractiveness on the tourists' satisfaction level after a major shift in the tourism industry due to the recent COVID-19. The second is to assess the tourists' perceptions about the new health safety measures or potential of virtual tourism in tourist destinations. The researchers have investigated tourists' perceptions after this pandemic period using a sample of 417 tourists visiting 5 major tourist spots in Uttarakhand namely Almora, Nainital, Dehradun, Haridwar, and Rishikesh. The judgmental sampling design is used in the study. Descriptive statistics and SEM (structural equation modelling) techniques are used for data analysis. The findings of the study entail that health safety has been marked as an important attribute for tourism destination selection for many tourists due to the COVID-19. As COVID-19 has emphasized the tourist destination stakeholders to follow the safety measure and health protocols to reset the tourism industry and tackle the health crisis, hence improving health safety and building travelers' confidence is the immediate challenge that needs to tackle first. Findings also show the potential of virtual tourism as a new market that needs to be tapped by the host stakeholders.

Keywords: health safety measures; virtual tourism; tourist perceptions; COVID-19 pandemic

# **1. Introduction**

On 11-03-2020, the World Health Organization declared COVID-19 a worldwide pandemic<sup>[1]</sup>. Every section of the economy was affected around the world<sup>[2]</sup>. However, the tourism and hospitality sectors are unquestionably some of the industries that have affected the most. Although the current phase of tourism has historically demonstrated extraordinary adaptation and tenacity. The tragic events of 9/11<sup>[3]</sup>, SARS in Asia<sup>[4]</sup>, International terrorist acts<sup>[5]</sup>, and the global financial crisis 2008–09<sup>[6]</sup>, are some instances of people's attitude and practices being affected by these significant occurrences but they also show how the tourism market has been able to consistently return<sup>[2]</sup> and grow over time. COVID-19 was clearly an irregular tremor for tourism industry<sup>[7]</sup>.

#### **ARTICLE INFO**

Received: 14 August 2023 | Accepted: 23 October 2023 | Available online: 31 January 2024

#### CITATION

Roy B, Yaja M, Kuma A. Health safety measures of the host destination: A new perception of tourists in destination attractiveness. *Environment and Social Psychology* 2024; 9(5): 1976. doi: 10.54517/esp.v9i5.1976

#### COPYRIGHT

Copyright © 2024 by author(s). *Environment and Social Psychology* is published by Asia Pacific Academy of Science Pte. Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), permitting distribution and reproduction in any medium, provided the original work is cited.

Travel restrictions imposed by various countries harmed their economies which included inbound and outbound tourism, as well as a diverse range of tourism and hospitality service providers<sup>[8]</sup>. Countries increased restrictions on travel in 2020 to curb spread of COVID-19, and this led tourism industry a drastic fall in 2021. Many countries reported a significant decrease in travellers in the first quarter of 2021. UNWTO World Tourism Barometer<sup>[9]</sup> released a statement by its Secretary-General in relation to the tourism sector and its economic status as "2020 was the worst year for tourism on record". Due to health concerns, tourism services around the world have been temporarily halted due to COVID-19 virus and this created economic loss on the global tourism in a short period of time, resulting in an unprecedented global economic catastrophe<sup>[10–13]</sup>.

It's worth noting that tourism, as well as the wellness aspects of vacations, play a vital role in public health<sup>[14,15]</sup>. To promote a balanced recovery of tourism, governments must provide financial assistance to the tourist and health sectors. Although COVID-19 has not been entirely controlled, there is still a desire for visitors; the mode of travel will alter, and travel with a mask for COVID-19 will become the new normal. Entrepreneurs are seeking to revive the tourism industry and rebuild their tourism economies. It's initially very vital to know the scale and scope of the ups and downs that will arise in post-COVID tourists' consumption practices and primacies, but there will undoubtedly be a shift. The travel pattern has grown selective as COVID-19 has dramatically modified travelers' psychological perspectives<sup>[16]</sup>. Future tourism trends may be driven by autonomous tourism, luxurious outings, and wellbeing tourism<sup>[17]</sup>. Hence, new parameters may lead to future tourism that meets visitor demand while reducing negative impacts.

## 2. Literature review

The tourism industry is judged on its ability to attract visitors as well as its potential for long-term benefits to the economy. Since the outbreak of the SARS-CoV2 virus, all human activities have been impacted, but none more so than tourism<sup>[18]</sup>. The literature review is looked at from two angles: (i) it reflects the elements that influence destination attractiveness, and (ii) the literature focuses on tourists' perceptions, satisfaction, and expectations after the health crisis.

#### 2.1. Tourist destination attractiveness

The attraction of any tourist destination comprises many components, such as accommodation units, food and beverage outlets, and other commercial entities; these contribute to its attractiveness and encourage visitors to visit a destination and its multiple features define its attractiveness to a certain person in a specific context<sup>[19,20]</sup>. The attraction of a destination indicates travelers' ideas and demands<sup>[19,21,22]</sup>. The better a destination meets tourists' expectations, the more attractive it is and the greater the chance of being chosen as a destination<sup>[23]</sup>. Attractiveness is a perceived capability that is enhanced by a destination's qualities, or the elements that make up the destination<sup>[23–25]</sup>. The natural beauty and infrastructure of a tourist location entice visitors to visit and spend their leisure time at tourist attractions<sup>[24,25]</sup>. Tourism cannot thrive without attractions and demand for tourism amenities; nevertheless, services may be limited or non-existent<sup>[26]</sup>. Visitors will only flock to a destination if the infrastructure and amenities are adequate<sup>[27]</sup>.

#### 2.2. Attributes affecting tourist destination attractiveness

Tourist destinations (DT) are comprised of numerous characteristics that have a significant influence on travellers at various stages<sup>[28]</sup>. Define destination attributes as "a combination of distributed factors that stimulate visitors to a destination". The attractiveness of the destination creates some characteristics in visitors' minds that direct expectations from a tourist destination, and this contributes to better levels of satisfaction among tourists<sup>[29–31]</sup>. Choice of destination and subjective benefits are linked to destination attractiveness. The relative choice of individual benefits and the traveler's perception of what they expect to receive from the

destination combine to create this attractiveness<sup>[32]</sup>. The more tourists believe a destination can meet their needs, the more appealing it becomes, and the more likely it is that they will pick it as a promising tourist destination<sup>[33,34]</sup>. An optimistic appearance of a location created by a collaboration of destination qualities such as tourism infrastructure, tourist facilities, tourism attractions, etc., has an impact on destination selection decisions<sup>[18,25]</sup>.

#### 2.3. Tourist preferences regarding selection of destination

In terms of accommodation, transportation, hotel and shopping price sensitivity, duration of stay, and seasonality<sup>[35–39]</sup>, tourist preferences are connected to various travel attributes. Tourist behavior is heavily influenced by their vacation activity preferences. Vacation activities have an impact on travelers' experiences, satisfaction levels, and enjoyment with specific destinations<sup>[39]</sup>. People are gravitating toward novel immersive and participative activities that provide a break from their regular routines<sup>[40]</sup>. As a result, activities at the location are an important factor to consider when promoting and developing destination branding<sup>[40]</sup>. Tourists choose destinations depending on their personal judgments of destination qualities, including risk factors<sup>[41]</sup>. When choosing a destination, one's income level is also a deciding factor. As a result, it is vital to determine what tourism destination preferences are in demand following the health crisis<sup>[18]</sup>.

#### 2.4. Tourist satisfaction

The term 'Satisfaction' is explained as "the interaction between a tourism experience and expectation about the destination"<sup>[41]</sup>. Satisfaction is influenced by one's attitude<sup>[41]</sup>. In the present COVID-19 scenario, the client's attitude to the threat raised from the epidemic is a significant forecaster because the person understands that accessing a public area raises the chance of infection<sup>[42,43]</sup>. Previous economic research have demonstrated how the COVID-19 issue has changed dynamic client responses and purchasing habits<sup>[7]</sup>. According to Untaru and Han<sup>[42]</sup>, customer perceptions of precautionary measures have a strong mediation relationship with customer happiness and behavioral intentions in retail businesses, resulting in enhanced customer satisfaction and return visit rates.

#### 2.5. Virtual tourism

The Information and Communication Technology (ICT) gave scope to visit tourist destinations virtually. This paradigm gave a new edge to the tourism industry and brought Virtual Tourism (VT). In the 21st century, many companies have significantly enhanced the quality of their products and services, which has led their organisational structures to shift to a virtual model<sup>[44,45]</sup>. These changes added a drastic effect on the expansion of communication channels, especially in terms of providing worldwide internet services. Similar to other industries, the tourism industry has seen significant transformations in the past decade<sup>[46]</sup>.

VT is in high demand as a remarkable new form of tourism experience<sup>[47,48]</sup>. VT has benefited from the advent of ICT, which is constantly improving people's ability to access information and explore tourist sites online. VT is a nonphysical type of tourism product that exists in the three-dimensional world in order to merge human perceptions with the computer applications that include the virtual travel experience. The preceding study considered VT to tourism destination for persons who are physically unable to travel but wish to travel to new areas<sup>[49,50]</sup>; Paquet and Viktor<sup>[51]</sup> cite a number of advantages of VT, including cost reduction, accessibility, and knowledge enhancement for vacation planners, tourism and hospitality businesses, and other tourism management bodies<sup>[52]</sup>. These benefits of VT also apply to people who would be interested in visiting tourist destinations virtually due to time, money, and other personal reasons. However, the COVID-19 pandemic, made us compel to revisit the applicability of VT in the tourism industry.

#### 2.6. Tourists' perceptions and expectations towards smart or virtual tourism

The expectation theory is a set of characteristics designed to accomplish or lead to a particular outcome<sup>[53]</sup>. Expectations are benchmarks against which tourists evaluate a service provider's performance<sup>[54]</sup>. Discovered that travellers' cognitive/affective image forms<sup>[55]</sup>. Visitors participate in tourist activities because they expect a memorable experience<sup>[56]</sup>. As a result, tourist expectations may become the driving force behind the journey<sup>[57]</sup>. The tourist experience during the stages of the travel process is influenced by expectations about a destination<sup>[58]</sup>. In the post-COVID-19, individuals are adjusting their values and priorities<sup>[59–62]</sup>. As a result, determining tourists' expectations prior to the trip becomes critical.

The current study includes a thorough series of questions concerning people's travel impressions and expectations about elements impacting destination attractiveness, as well as smart tourism technologies and a new set of health safety standards in the reference of the COVID-19 pandemic's restricted conditions. The data obtained from visitors visiting Uttarkhand demonstrates considerable changes in different aspects of tourists' expectations, as well as their impact on Uttarkhand. As a result, in light of the new formula of safety protocols and virtual tourism, examine tourist opinions of destination attractiveness aspects.

## 3. Materials and methods

## 3.1. Research problem

The COVID-19 has a vast influence on the tourism business in Uttarakhand (India), which is a major employer and source of income for hundreds of thousands of people. The limitations are expected to result in a revenue loss of Rs 7000–8000 crores, according to the Uttarakhand Finance Department. An estimated 2.5 lakh people employed in the hotel industry lose their jobs by the end of June 2020. When compared to 2019, the number of tourists dropped by 90–95 percent in 2020<sup>[63]</sup>. Tourists began to return in August 2020, following the State government's gradual unlocking steps, and most tourist destinations reported a healthy flow of arrivals until March 2021. The State's spectacular rebound from October 2020 to February 2021 is an indication of the prospect of tourist resuscitation<sup>[35]</sup>, restoration, and resurgence once the second wave has passed. Once the pandemic passed, Uttarakhand must adopt revival and growth strategies, as well as plans backed by resources, to kick-start the sector in a systematic manner. People who are pent up in their homes will wish to travel with a passion; thus, it would be an opportune time to rekindle the tourism business with tempting products and deals. Reforms are the first step toward adjusting to the 'new normal', and recovery would follow reforms, as people are concerned about recent travel and place a premium on sanitation and hygiene in light of COVID-19. The use of technology will be beneficial to the state, and understanding changed travel behaviour and tourist motivation will aid Uttarakhand's tourism industry in resuming smoothly and becoming a leader in this renaissance. As a result, the researchers chose this topic for their study in order to evaluate tourist perceptions of destination attractiveness components while keeping in mind the new health safety protocol and virtual tourism formula. The current study will be useful in gathering input from tourists on technology developments as well as new safety regulations or measures in tourist destinations.

#### 3.2. Research objectives

This study aims to analyze the tourists' perceptions about the impact of factors affecting destination attractiveness on the tourists' satisfaction level after a major shift due to COVID-19 in the tourism industry. The second is to evaluate the tourists' perceptions of new health safety measures or the potential of virtual tourism in tourism destinations.

## 3.3. Research design and tools

The research design of this study is explorative. The data is collected through primary and secondary data. Tourism in Uttarakhand state has seen many faces in the past. Originally Uttarakhand state is famous for religious tourism from many years however, in recent years the tourists visited the state for other different reason also. In the study, 30 variables are comprised in the questionnaire (see Appendix) related to different attributes of destination attractiveness and competitiveness in Uttarakhand with the support of literature review. These 30 variables represent six different factors of destination attractiveness which affect the tourists' satisfaction level in Uttarakhand state. These factors are named as Tourism Infrastructure, Tourist Facilities, Attractiveness of Destination, Uniqueness of tourist destinations, Tourist Destination Competitiveness and Tourism Standard. The list of detailed literature review is shown in Table 1.

Т	ble 1. Literature review regarding factors of destination attractiveness.

S. No.	Factors	Variables	Literature review
1	Tourism infrastructure	Availability and Standards of accommodations' facilities	[21], [64], [65], [66]
	Tourism infrastructure encompasses the physical	Availability of transport	[27], [67], [68], [69]
	and organizational components that support and enhance the travel experience for tourists. It	Travel agencies and Tour operators	[64], [70], [71], [72]
	includes transportation networks,	Sources of entertainment	[21], [29], [70], [71]
	accommodation facilities, recreational amenities, information and communication centers, and other essential services that contribute to a destination's appeal and accessibility.	Tele Communication facilities	[20], [64], [71]
2	Tourist facilities	Accessibility of accommodation	[20], [29] [64], [71]
	Tourist facilities refer to the various amenities	Accessibility of transport	[25], [27], [28], [67], [68]
	and services designed to cater to the needs and comforts of travelers. These can include accommodations like hotels and hostels,	Availability and quality of cuisine and drinking water	[66], [73]
	restaurants, transportation services, basic requirements like food, water and cleanliness, visitor information centers, all of which are essential in ensuring a pleasant and convenient experience for tourists.	Cleanliness and hygienic environment	[20], [27], [74], [75], [76]
3	Attractiveness of tourist destination	Rich spiritual attractions	[12], [21], [29], [65], [70]
	The attractiveness of a destination is the sum of	Fairs and Festivals, Arts and exhibitions	[21], [29], [70]
	its unique and appealing features that draw visitors. This includes natural beauty, cultural richness, historical significance, recreational	Natural health resorts and therapy facilities	[25], [29], [39], [77]
	opportunities, and other factors that make a	Shopping Centers	[16], [29], [71]
	place desirable for tourism.	Adventurous and Sports Activities	[20], [27], [74]
		Good night life	[27], [66]
4	Uniqueness of tourist destination	Outstanding natural sites and sceneries/wonders	[27], [32], [74]
	The uniqueness of a tourist destination lies in its	Yoga and meditation facilities	[14], [23]
	distinctive characteristics and experiences that set it apart from other places. It could be defined	Multi-cultural heritage	[25], [67], [68]
	by its natural sceneries/wonders, multi-cultural heritage, local traditions, or specific activities like yoga and meditation that cannot be replicated elsewhere. Uniqueness of the destination plays a pivotal role in attracting travelers seeking novel and memorable tourism experience.	Rest and Relax environment/Undisturbed nature	[21], [29], [70]

#### Table 1. (Continued).

S. No.	Factors	Variables	Literature review
5	Tourist destination competitiveness	Hospitable and friendly people	[29], [64], [65], [66]
	Tourist destination competitiveness is a measure	Personal safety and security	[20], [64], [66], [71], [73]
	of a location's ability to attract and retain visitors in a competitive tourism market. It involves factors such as infrastructure,	Proper information and communication channels about tourist spots	[74], [75], [78]
	accessibility, marketing strategies, pricing, and the overall quality of the visitor experience.	Training of service providers at tourist spots.	[60], [78], [79]
	Destinations that effectively enhance their competitiveness can increase tourism revenue, stimulate economic growth, and sustain their appeal in a global tourism industry.	A place with good name and reputation	[66], [73]
6	Tourism standard	Travel and tour packages	[21], [27], [64], [70], [71], [78]
	Tourism standards refer to various	Government policies and strategies	[73], [79], [80]
	strategies/guidelines/benchmarks and the support system that defines the expected level of	Various forms of tourism	[16], [17], [27], [60]
	quality and service in the tourism industry.	NICHE products of tourism	[16], [17], [28], [49], [52]
	These standards help ensure consistency and excellence in areas such as accommodations, restaurants, tour operations, and transportation, thus enhancing the overall experience for travelers while promoting safety, sustainability, and customer satisfaction.	No fear of terrorism	[3], [5]

#### 3.4. Statistical tool and techniques

The SEM (Structural Equation Modelling) approach is used to examine the effect of factors of tourist destination attractiveness on the satisfaction level of the tourist after this pandemic period. Descriptive statistics technique is applied to measure the tourists' perceptions about the new concept of virtual tourism and a new factor affecting the destination attractiveness—safety measures with health protocols after COVID-19.

#### 3.5. Sampling design and sampling frame

The population of the current study includes the different types of tourists visiting five major tourist spots in Uttarakhand namely Almora, Nainital, Dehradun, Haridwar and Rishikesh. The judgmental sampling design is used in the study. The selected criteria are used in picking the sampling unit from the target population. Sample size is restricted to 417 tourists. The efforts are made to maintain the randomness of selecting the sample units in the peak seasons as well as in the peak day of the week. The sample size of 417 is considered as representative of the target population. According to Bartlett table of sample size calculation, the sample size of 384 is considered suitable for the population up to 30 billion.

#### 3.6. Theoretical model and hypothesis formulation

The following theoretical model (Figure 1) is tested in the study:

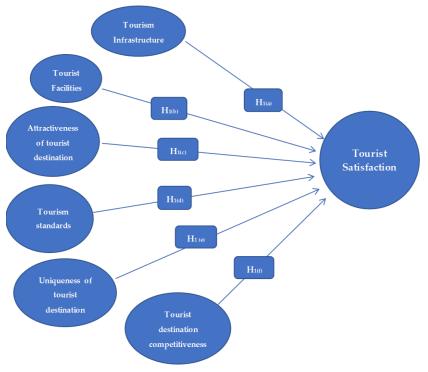


Figure 1. Theoretical model.

#### Hypotheses:

The hypotheses for the study are:

- $H_{1(a)}$ : Tourism infrastructure have a significant impact on tourist satisfaction.
- $H_{1(b)}$ : Tourist facilities have a significant impact on tourist satisfaction.
- H<sub>1(c)</sub>: Attractiveness of tourist destination has a significant impact on tourist satisfaction.
- $H_{1(d)}$ : Tourism standards have a significant impact on tourist satisfaction.
- H<sub>1(e)</sub>: Uniqueness of tourist destination have a significant impact on tourist satisfaction.
- H<sub>1(f)</sub>: Tourist destination competitiveness have a significant impact on tourist satisfaction.

#### 3.7. Limitations of the study

Over the past four years, there has been a notable disparity in the number of foreign and domestic tourists visiting Uttarakhand. Foreign tourist arrivals were consistently lower than domestic arrivals from 2018–19 to 2021–22. In 2018–19, foreign tourists accounted for 154,526 out of a total of 36,852,204 visitors, but due to the pandemic in 2020, this number dropped to just 38,763. In the following year, 2021–22, foreign tourists arrivals were only 15,410<sup>[64]</sup>. As a result, during our recent survey, the proportion of domestic to foreign tourists was approximately 83:17.

It's essential to acknowledge that domestic and foreign tourists often have distinct perceptions and expectations when exploring a destination, as they differ in their travel experiences. Consequently, when formulating hypotheses, it becomes crucial to consider the satisfaction levels of both these tourist groups.

However, the significant imbalance in the number of domestic and foreign tourists visiting Uttarakhand over the past four years has impacted our survey's representativeness. This limitation hinders our ability to effectively analyze and compare the perceptions of these different tourist groups regarding the impact of various destination attractiveness factors on their overall satisfaction levels.

S. No.	Demographic Profile	Category	Percentage (Total 417 Tourists)
1	Gender	Male	49%
		Female	51%
2	Age Group	Below 20 years	6%
		20–30	32%
		30-40	40%
		Above 40 years	22%
3	Type of tourists	Domestic tourists	83%
		Foreign tourists	17%

4. Data analysis and interpretation

#### Response for potential of virtual tourism

According to the analysis of the demographic profile of respondents (**Table 2**), 68.4% of the respondents heard about virtual tourism. 60.5% of the respondents confirm their view about destination attractiveness has changed after the pandemic (COVID-19). 71% of the respondents feel that health protocols in tourist destinations should be mandatory; this makes health protocols a significant element of the destination preferences. And it's interesting to note here that 65.8% of the tourists are also willing to experience their favourite tourist destinations virtually. This confirms that the market for virtual tourism is bright. These results are greatly influenced due to the health protocol which has been followed in the recent past and this change has become a key component that affects tourist destinations and choice of the destination.

**Table 3** highlights the respondents' views on health protocol in tourist destination. We can see that responses to the existence health protocols in relation to destination attractiveness were asked to which 40.99% of the respondents strongly agree and 35.87% agree to the statement, "Maintaining health protocols enhances destination attractiveness." And in similar passion, the statement, "Health protocols in a tourist destination can alter or impact overall tourist satisfaction." received 43.59% and 25.9% for strongly agree and agree respectively.

Tuble of Respondents	the tip on neural p		r tourist destind	1011.	
N-417	Strongly Agree	Agree	Can't say	Disagree	Strongly Disagree
"Maintaining health protocols enhances destination attractiveness."	40.99	35.87	12.88	7.68	2.58
"Health protocols in a tourist destination can alter or impact overall tourist satisfaction."	43.59	25.9	17.71	7.68	5.12

Table 3. Respondents' views on health protocols in tourist destination.

Table 4. Respondents' views on virtual tourism as an alternative way to experience any tourist destination.

N-417	Strongly Agree	Agree	Can't say	Disagree	Strongly Disagree
For those who do not have time to travel	7.24	41.4	25.76	15.36	10.24
For the person who does not have money to travel	15.12	51.52	12.88	15.36	5.12
For the person who cannot travel due to health issues	12.88	56.64	12.56	12.8	5.12
For a hodophobic individual	27.92	38.64	18	12.88	2.56
Pandemic situations	35.87	23.01	25.76	10.24	5.12

**Table 4** shows response to virtual tourism as an alternative means for tourists to experience any tourist destination comprises five statements, the statement, "For the person who cannot travel due to health issues" receives the highest percentage i.e. 56.64% for "agree" and 12.88% for strongly agree. 51.52% of the respondents agree with the statement "For the person who does not have money to travel" and 15.12% strongly agree with the statement. And 41.4% of the respondents are agreed with the statement, "For those who do not have time to travel" and only 7.24% strongly agreed with the same statement. For the statement, "For a homophobic individual" 38.64% of the respondents agree and 27.92% strongly agree with the same statement. 35.87% strongly agree with the statement "Pandemic situations" and 23.01% agree, and we can also see that 25.76% opted for neutral for the same statement. The results are skewed more toward agree side of the Likert items, these confirm that virtual tourism has a good potential in the tourism market.

To find out the relations of factors affecting the satisfaction level of domestic and foreign tourists, the SEM technique is applied. The structural model to be examined with the help of the SEM approach is shown below in **Figure 2**.

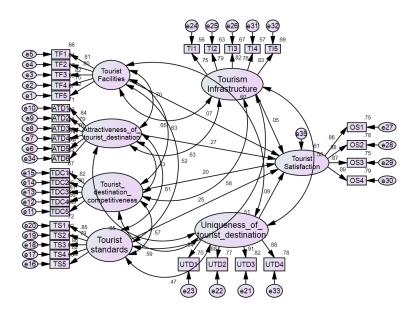


Figure 2. Structural model.

#### The results of SEM approach are shown and discussed in Tables 5 and 6.

Table 5. Standardized regression path coefficients.

Endogenous Construct	Exogenous Constructs (Factors of Tourism Attraction)	Standardized Regression Path Coefficients
Tourist	Tourism Infrastructure	0.052
Satisfaction	Tourist Facilities	0.073
	Attractiveness of tourist destination	0.272
	Tourism Standards	0.250
	Uniqueness of Tourism Destination	0.087
	Tourist Destination Competitiveness	0.201

Environment and Social Psychology | doi: 10.54517/esp.v9i5.1976

		Tuble 0. Regression paine	coefficients.				
			Estimate	S.E.	C.R.	Р	Label
Tourist_Satisfaction	←	Tourist_destination_competitiveness	0.248	0.074	3.340	***	par_31
Tourist_Satisfaction	←	Uniqueness_oftourist_destination	0.093	0.056	1.655	0.098	par_34
Tourist_Satisfaction	←	Tourism_Infrastructure	0.066	0.070	.938	0.348	par_35
Tourist_Satisfaction	←	Tourist_Facilities	0.082	0.069	1.190	0.234	par_37
Tourist_Satisfaction	←	Attractiveness_oftourist_destination	0.418	0.113	3.698	***	par_38
Tourist_Satisfaction	←	Tourism_standards	0.272	0.055	4.948	***	par_39

Table 6. Regression path coefficients.

**Table 7** Hypotheses indicate that the probability value of the critical ratio is found to be less than 0.05 in the case of each of the factors, namely attractiveness of a tourist destination, tourism standards, and tourist destination competitiveness. Hence, with a ninety five percent confidence level, it can be concluded that the factors, namely, the *attractiveness of a tourist destination, tourism standards, and tourist destination competitiveness*, have a significant impact on tourist satisfaction. It is also found that the standardised regression coefficient of these factors is positive. Hence, the presence of these factors has a significant positive impact on the satisfaction level of tourists.

Table 7. Hypothesis testing.							
Endogenous Construct	Exogenous Constructs (Factors of Tourism Attraction)	P Value	Significant/No significant Impact on tourists' satisfaction	R Square			
Tourist	Tourist Facilities	0.234	No Significant Impact	61%			
Satisfaction	Tourism Infrastructure	0.348	No Significant Impact				
	Attractiveness of tourist destination	0.000	Significant Impact				
	Tourism Standards	0.000	Significant Impact				
	Tourist Destination Competitiveness	0.000	Significant Impact				
	Uniqueness of Tourism Destination	0.098	No Significant Impact				

By comparing the magnitude of the standardised regression coefficient of these significant factors, it is found that the attractiveness of the destination plays the highest role in modulating tourist satisfaction. This is followed by tourism standards, which are found to have the second highest impact on tourists' satisfaction. After this, the next most significant factor affecting tourist satisfaction is the competitiveness of tourist destinations. However, in the case of the *uniqueness of tourist destinations, tourist facilities,* and *tourism infrastructure,* the probability value is found to be greater than the 5% level of significance. *The attractiveness of tourist destinations, tourist standards, and tourist destination competitiveness* affect tourists' satisfaction differently. Hence, results in the perception of virtual tourism as an alternative means to experience tourist destinations also vary differently, as we can see in **Table 4**.

The results for the statistical fitness indices of the structural model indicate the factors affecting tourism attractiveness and tourist satisfaction indicate the presence of good fit (**Table 8**). The CMIN/DF is found to be 1.516 < 3. GFI is 0.903 > 0.8, and AGFI is 0.886, which is more than 0.8. CFI is 0.976 > 0.9, TLI is found to be 0.973 > 0.9, NFI is 0.932 > 0.9, and RMSEA is found to be 0.035 < 0.08. So, it can be said that the SEM model is statistically acceptable as a whole.

Table 6. Statistica	Thirds malees.	
Statistical Fitness Index	<b>Estimated Value</b>	Required value
CMIN/DF	1.516	Less than 3
Goodness of fit index (GFI)	0.903	More than 0.8
Adjusted Goodness of fit index (AGFI)	0.886	More than 0.8
Comparative fit index (CFI)	0.976	More than 0.9
Tucker-Lewis coefficient (TLI)	0.973	More than 0.9
Normed fit index (NFI)	0.932	More than 0.9
Root mean square error of approximation (RMSEA)	0.035	Less than 0.08

Table 8. Statistical fitness indices

## 5. Research implications

Tourist satisfaction is depicted to be a crucial aspect of any destination's ability to become a leading attraction. For example, the quality of the visitors' experience and satisfaction level are important considerations when developing strategies for a tourist destination. Tourist satisfaction is more crucial in developing an articulate and long-lasting relationship with consumers than other factors in marketing strategy. The COVID-19 pandemic has made us more conscious while traveling, and therefore, hygiene and safety have become significant predictors of tourist satisfaction. Maintaining health protocols and safety measures in tourist destinations builds confidence and trust amongst tourists. And along with this, the quality of such service is also an important component in creating an attractive tourist destination. Hence, the study suggests that the host stakeholder prepares their tourist destination efficiently in terms of health safety and maintains protocol for any emergency cases.

The findings of the study indicate that the safety in a destination is an important factor for many tourists during destination selection. People who would like to visit tourist destinations digitally owing to time, money, or other personal reasons can also profit from virtual tourism, as we have clearly seen from the result of this study. Along with this, the COVID-19 outbreak compelled customers to reconsider their destination choices due to safety and health protocols, which are essential for destination choices and tourist satisfaction.

The findings of the study indicate that safety has become an important factor for many tourists when selecting destinations. The selection of tourist destinations is oriented toward safety measures that compel destination planners and host stakeholders to prepare tourist destinations. Emphasizing health-related safety measures should be a standard procedure in the host destination; guidelines for health protocols and frequent quality checks should also be practised during the operation. This shift in destination attractiveness directs destination marketing organisations to consider highlighting destination safety and security related to health in promotional messages. This can also act as a strategy to use such messages as there are clear signs of a connection between destination attractiveness and tourist perception that they conceive from promotional messages.

The state government of Uttrakhand should create regulations to monitor the quality of services provided at the destination and develop a strategy to tackle health and safety concerns. This concern is not limited to the outbreak of viruses but also general safety measures that should be taken for any natural calamity in the region. Uttrakhand has faced many natural disasters in the recent past. The state is prone to natural calamity due to its mountainous regions, and the rapid development of the state has only added to this cause. Uttrakhand attracts mass tourism and is quite a popular destination among different tourists from all around the globe. All these direct the state government of Uttrakhand to make the state a prerequisite to be prepared concerning safety measures in all aspects. Tourist satisfaction is also important for successful destination branding because it

affects where tourists go, what products and services they buy, and where the state should put its attention.

In the mid of all these crises virtual tourism steps in as an alternative way to experience and rekindle its potential in tourism and hospitality industry. The findings also point to virtual tourism's potential as a new market that has to be explored by host stakeholders. The prospects of virtual reality in tourism have sparked a lot of interest. Virtual tourism can definitely be opted by the person who is suffering from hodophobia and the person who does not have much money and time to travel physically but still wish to experience a tourist destination in virtual mode.

# 6. Conclusion

The attractiveness of a destination symbolises the tourists' thoughts and impressions of the destination's ability to meet their needs. The more a place meets the expectations of visitors, the more appealing it is and the more likely it is to be chosen as a destination. Attractiveness is a personal trait that can be improved by a destination's qualities, or the things that make it up.

Tourism cannot thrive without attractions and demand for tourist amenities. Nevertheless, services may be limited or non-existent. Six elements determining Uttarakhand's tourism attraction are highlighted in this study. These elements include tourist destination competitiveness, tourism infrastructure, tourist facilities, tourist destination attractiveness, tourism standards, and the uniqueness of a tourist destination. The attractiveness, tourism standards, and competitiveness of a tourist destination all influence tourist satisfaction. The findings of the study also indicate that destination safety has become an important selection criterion for many tourists. The selection of tourist destinations is slanted toward safety measures and tourist destination preparedness.

Various aspects explored under diverse perceptions of tourist destinations show that in order to create a long-term relationship with tourists, their satisfaction should be prioritised over any other marketing strategy. This shift in destination appeal prompts destination marketing organisations to highlight health-related safety measures and protocols at the host destination during promotion and marketing as a strategic tool. With the help of technology, virtual tourism is a prospective market among the younger generation that provides them with an envisioned tourist destination. However, some still argue about user-friendly virtual tourism tools for elderly people, which opens up further studies. The virtual reality in tourism does not appear to have the potential to replace genuine travel. However, there are numerous advantages to such technologies in trip planning. They use these technologies in cases like being unable to travel due to health conditions, pandemics, and bad weather, or for tourist places that remain inaccessible for most of the year.

## **Author contributions**

Conceptualization, BR and MY; methodology, BR; software, BR; validation, BR, MY and AK; formal analysis, BR; investigation, MY; resources, AK; data curation, BR and MY; writing—original draft preparation, BR; writing—review and editing, BR and MY; visualization, BR; supervision, BR and MY; project administration, BR. All authors have read and agreed to the published version of the manuscript.

## **Conflicts of interest**

The authors declare no conflict of interest.

# References

<sup>1.</sup> European Council of the European Union. COVID-19: the EU's public health response (Romanian). 2021. https://www.consilium.europa.eu/ro/policies/coronavirus/covid-19-public-health/

- 2. Walmsley T, Rose A, Wei D. The Impacts of the Coronavirus on the Economy of the United States. Economics of Disasters and Climate Change. 2020, 5(1): 1–52. doi: 10.1007/s41885-020-00080-1
- 3. Goodrich JN. September 11, 2001 Attack on America: Impact on Tourism Security. Journal of Travel & Tourism Marketing. 2002, 11(4): 1–12. doi: 10.1300/j073v11n04\_01
- 4. McKercher B, Chon K. The Over-Reaction to SARS and the Collapse of Asian Tourism. Annals of Tourism Research. 2004, 31(3): 716–719. doi: 10.1016/j.annals.2003.11.002
- Schmude J, Karl M, Weber F. Tourism and Terrorism: Economic impact of terrorist attacks on the tourism industry. The example of the destination of Paris. Zeitschrift f
  ür Wirtschaftsgeographie. 2019, 64(2): 88–102. doi: 10.1515/zfw-2019-0015
- 6. UNWTO. International Tourism Decline and Its Impact on the Poor. World Tourism Organization and International Labour Organization Economic Crisis. UNWTO. 2013.
- Ceylan RF, Ozkan B, Mulazimogullari E. Historical evidence for economic effects of COVID-19. Eur J Health Econ. 2020;21(6):817–823. doi:10.1007/s10198-020-01206-8
- 8. Acevedo-Duque Á, Prado-Sabido T, Gomes Ramires T, et al. New Year's Eve Show: An Opportunity to Further Develop Sustainable Local Tourism in Chile. Sustainability. 2022;14(7):3962. doi:10.3390/su14073962
- 9. UNWTO World Tourism Barometer. Available online: https://doi.org/10.18111/wtobarometereng (accessed on 1 December 2023).
- 10. Sigala M. Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. Journal of Business Research. 2020; 117:312–321. doi: 10.1016/j.jbusres.2020.06.015
- 11. Carlsson-Szlezak P, Reeves M, Swartz P. What coronavirus could mean for the global economy. Harv. Bus. Rev., 2020. 3: 1–10.
- 12. Fuchs C. Everyday Life and Everyday Communication in Coronavirus Capitalism. tripleC. 2020;18(1):375–398. doi:10.31269/triplec.v18i1.1167
- 13. Ötsch W. What Type of Crisis Is This? The Coronavirus Crisis as a Crisis of the Econom-icised Society. Working Paper Serie (No. 57). Available online: http://hdl.handle.net/10419/216728, 2022 (accessed on 1 December 2023).
- 14. Lehto XY, Lehto MR. Vacation as a Public Health Resource: Toward a Wellness-Centered Tourism Design Approach. Journal of Hospitality & Tourism Research. 2019;43(7):935–960. doi: 10.1177/1096348019849684
- 15. Nicola M, Alsafi Z, Sohrabi C, et al. The socio-economic implications of the coronavirus pandemic (COVID-19): A review. International Journal of Surgery. 2020; 78: 185–193. doi: 10.1016/j.ijsu.2020.04.018
- 16. Cretu CM, Turtureanu AG, Sirbu CG, et al. Tourists' Perceptions Regarding Traveling for Recreational or Leisure Purposes in Times of Health Crisis. Sustainability. 2021;13(15):8405. doi:10.3390/su13158405
- 17. Wang S, Lai IKW, Wong JWC. An Exploratory Study of Pandemic-Restricted Travel—A New Form of Travel Pattern on the during- and Post-COVID-19 Era. IJERPH. 2022;19(7):4149. doi:10.3390/ijerph19074149
- 18. Bratić M, Radivojević A, Stojiljković N, et al. Should I Stay or Should I Go? Tourists' COVID-19 Risk Perception and Vacation Behavior Shift. Sustainability. 2021;13(6):3573. doi:10.3390/su13063573
- 19. Hu Y, Ritchie JRB. Measuring Destination Attractiveness: A Contextual Approach. Journal of Travel Research. 1993;32(2):25–34. doi:10.1177/004728759303200204
- Klufová R. Destination attractiveness of the South Bohemian region from the viewpoint of spatial data analysis. The Central European Journal of Regional Development and Tourism. 2016;8(1):92–111. doi:10.32725/det.2016.007
- 21. Edward M, George PB. Destination attractiveness of Kerala as an International Tourist Destination: An Importance-Performance Analysis. In: Conference on Tourism in India-Challenges Ahead, IIMK, 2008.
- 22. Formica S. Measuring destination attractiveness: A proposed framework. Journal of American Academy of Business 2002; 1(2), 350–355.
- 23. Vengesayi S, Mavondo FT, Reisinger Y. Tourism Destination Attractiveness: Attractions, Facilities, and People as Predictors. Tourism Analysis. 2009;14(5):621–636. doi:10.3727/108354209x12597959359211
- Lee CF, Ou WM, Huang HI. A Study of Destination Attractiveness through Domestic Visitors' Perspectives: The Case of Taiwan's Hot Springs Tourism Sector. Asia Pacific Journal of Tourism Research. 2009;14(1):17–38. doi:10.1080/10941660902727991
- 25. Roy B, Saxena A. Destination competitiveness, tourism facilities and problems in promoting Uttarakhand as a tourism destination. Journal of Tourism, Hospitality & Culi-nary Arts (JTHCA) 2020. 12(2): 1–20.
- 26. Kim SS, Lee CK. Push and Pull Relationships. Annals of Tourism Research. 2002, 29(1): 257–260. doi: 10.1016/s0160-7383(01)00043-3
- Chuang YF, Hwang SN, Wong JY, Chen CD. The attractiveness of tourist night markets in Taiwan—a supply-side view. International Journal of Culture, Tourism and Hospitality Research. 2014;8(3):333–344. doi:10.1108/ijcthr-09-2013-0067
- Gannon MJ, Baxter IWF, Collinson E, et al. Travelling for Umrah: destination attributes, destination image, and post-travel intentions. The Service Industries Journal. 2017;37(7-8):448–465. doi:10.1080/02642069.2017.1333601

- 29. Kresic D, Darko Prebezac D. Index of destination attractiveness as a tool for destination attractiveness assessment. Original Scientific Papep, 2011. 59(4): 497–517.
- 30. Cracolici MF, Nijkamp P. The attractiveness and competitiveness of tourist destinations: A study of Southern Italian regions. Tourism Management. 2009; 30(3): 336–344. doi: 10.1016/j.tourman.2008.07.006
- Acevedo-Duque Á, Gonzalez-Diaz R, Vega-Muñoz A, Fernández Mantilla MM, Ovalles-Toledo LV, Cachicatari-Vargas E. The Role of B Companies in Tourism towards Recovery from the Crisis COVID-19 Inculcating Social Values and Responsible Entrepreneurship in Latin America. Sustainability. 2021; 13(14): 7763. doi:10.3390/su13147763
- Ariya G, Wishitemi B, Sitati N. Tourism Destination Attractiveness as Perceived by Tourists Visiting Lake Nakuru National Park, Kenya. International Journal of Research in Tourism and Hospitality. 2017; 3(4). doi:10.20431/2455-0043.0304001
- Amalia R, Pérez-Nebra, Cláudio VT. Measuring the tourism destination image: a survey based on the item response theory. RAC—Revista de Administração Contem-porânea Journal of Contemporary Administration, ANPAD—Associação Nacional de Pós-Graduação e Pesquisa em Administração. 2010; 14(1): 80–99.
- 34. Laws E. Tourism destination management: Issues, analysis and policies. Routledge; 1995.
- 35. Masiero L, Nicolau JL. Tourism Market Segmentation Based on Price Sensitivity. Journal of Travel Research. 2011;51(4):426–435. doi:10.1177/0047287511426339
- 36. Agrusa J, Kim SS, Wang KC. Mainland Chinese Tourists to Hawaii: Their Characteristics and Preferences. Journal of Travel & Comparison Marketing. 2011; 28(3): 261–278. doi:10.1080/10548408.2011.562853
- 37. Alegre J, Mateo S, Pou L. A latent class approach to tourists' length of stay. Tourism Management. 2011;32(3):555–563. doi:10.1016/j.tourman.2010.05.003
- Alegre J, Mateo S, Pou L. A latent class approach to tourists' length of stay. Tourism Management. 2011, 32(3): 555–563. doi: 10.1016/j.tourman.2010.05.003
- 39. Tkaczynski A, Rundle-Thiele SR, Prebensen NK. Segmenting Potential Nature-Based Tourists Based on Temporal Factors. Journal of Travel Research. 2013; 54(2): 251–265. doi: 10.1177/0047287513514296
- 40. Gertner RK, Freire J. The sun and beach myth: The impact of pull-based factors and'things-to-do'on tourists' motivations and place images. International Journal of Leisure and Tourism Marketing. 2019; 6(3/4): 194. doi: 10.1504/ijltm.2019.103547
- 41. Perpiña L, Prats L, Camprubí R. Image and risk perceptions: an integrated approach. Current Issues in Tourism. 2020, 24(3): 367–384. doi: 10.1080/13683500.2020.1715355
- 42. Untaru EN, Han H. Protective measures against COVID-19 and the business strategies of the retail enterprises: Differences in gender, age, education, and income among shoppers. Journal of Retailing and Consumer Services. 2021, 60: 102446. doi: 10.1016/j.jretconser.2021.102446
- 43. Cameron L, Shah M. Risk-Taking Behavior in the Wake of Natural Disasters. Journal of Human Resources. 2015, 50(2): 484–515. doi: 10.3368/jhr.50.2.484
- 44. Camarinha-Matos LM, Afsarmanesh H. Collaborative networks: Reference modeling. MA: Springer US; 2008.
- 45. Maymand MM. Investigation of the key success factors in Virtual Tourism. Indian Journal of Science and Technology. 2012, 5(7): 1–8. doi: 10.17485/ijst/2012/v5i7.26
- 46. Buhalis D, Law R. Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of eTourism research. Tourism Management. 2008, 29(4): 609–623. doi: 10.1016/j.tourman.2008.01.005
- 47. Papson S. Spuriousness and tourism. Annals of Tourism Research. 1981, 8(2): 220–235. doi: 10.1016/0160-7383(81)90083-9
- 48. Williams P, Hobson JP. Virtual reality and tourism: fact or fantasy? Tourism Management. 1995, 16(6): 423–427. doi: 10.1016/0261-5177(95)00050-x
- 49. Huh C, Singh AJ. Families Travelling with a Disabled Member: Analysing the Potential of an Emerging Niche Market Segment. Tourism and Hospitality Research. 2007, 7(3-4): 212–229. doi: 10.1057/palgrave.thr.6050044
- 50. Cheong R. The virtual threat to travel and tourism. Tourism Management. 1995, 16(6): 417–422. doi: 10.1016/0261-5177(95)00049-t
- 51. Paquet E, Viktor HL. Long-term preservation of 3-D cultural heritage data related to architectural sites. Proceedings of the ISPRS Working Group. 2005. 4: 1–8.
- 52. Guttentag DA. Virtual reality: Applications and implications for tourism. Tourism Management. 2010, 31(5): 637–651. doi: 10.1016/j.tourman.2009.07.003
- 53. Olson J, Dover P. Effects of expectation creation and disconfirmation on belief elements of cognitive structure. In ACR North American Advances; NA-Advances in Consumer Research. 1976. 3: 168–175.
- 54. Wang C, Qu H, Hsu MK. Toward an integrated model of tourist expectation formation and gender difference. Tourism Management. 2016, 54: 58–71. doi: 10.1016/j.tourman.2015.10.009
- 55. Kim K, Hallab Z, Kim JN. The Moderating Effect of Travel Experience in a Destination on the Relationship Between the Destination Image and the Intention to Revisit. Journal of Hospitality Marketing & Management.

2012, 21(5): 486–505. doi: 10.1080/19368623.2012.626745

- 56. Tsaur SH, Lin YC, Lin JH. Evaluating ecotourism sustainability from the integrated perspective of resource, community and tourism. Tourism Management. 2006, 27(4): 640–653. doi: 10.1016/j.tourman.2005.02.006
- Alahakoon T, Pike S, Beatson A. Transformative destination attractiveness: an exploration of salient attributes, consequences, and personal values. Journal of Travel & Tourism Marketing. 2021, 38(8): 845–866. doi: 10.1080/10548408.2021.1925616
- 58. Li X, Gong J, Gao B, et al. Impacts of COVID-19 on tourists' destination preferences: Evidence from China. Annals of Tourism Research. 2021, 90: 103258. doi: 10.1016/j.annals.2021.103258
- 59. Acevedo-Duque Á, Vega-Muñoz A, Salazar-Sepúlveda G. Analysis of Hospitality, Leisure, and Tourism Studies in Chile. Sustainability. 2020, 12(18): 7238. doi: 10.3390/su12187238
- 60. Bhatia A, Roy B, Kumar A. A review of tourism sustainability in the era of Covid-19. Journal of Statistics and Management Systems. 2022, 25(8): 1871–1888. doi: 10.1080/09720510.2021.1995196
- 61. Rasoolimanesh SM, Seyfi S, Rastegar R, et al. Destination image during the COVID-19 pandemic and future travel behavior: The moderating role of past experience. Journal of Destination Marketing & Management. 2021, 21: 100620. doi: 10.1016/j.jdmm.2021.100620
- 62. Haro R. Sustainable Trends: Key Factors for the Post-Pandemic Recovery of the Tourism Sector. Alandis Travel, Spain, 2022.
- 63. Directorate of Economics and Statistics, Government of Uttarakhand. Uttarakhand Economic Survey 2020–2021. Volume-II. Govt. of Uttarakhand, Dehradun, Uttarkhand, 2021.
- 64. Ministry of Tourism, Govt. of Uttarakhand. Market Research and Statistics. Tourism department, 2023. Available online: https://uttarakhandtourism.gov.in/document/type/market-research-and-statistics [accessed on 4 December 2023].
- 65. Formica S, Uysal M. Destination Attractiveness Based on Supply and Demand Evaluations: An Analytical Framework. Journal of Travel Research. 2006, 44(4): 418–430. doi: 10.1177/0047287506286714
- 66. Vinayek P, Bhatia ANM. Competitiveness of Indian tourism in global scenario. ACADEMICIA: An International Multidisciplinary Research Journal. 2013. 3(1): 168–179.
- 67. Pizam A, Neumann Y, Reichel A. Dimentions of tourist satisfaction with a destination area. Annals of Tourism Research. 1978, 5(3): 314–322. doi: 10.1016/0160-7383(78)90115-9
- 68. Jenkins OH. Understanding and measuring tourist destination images. International Journal of Tourism Research. 1999, 1(1): 1–15. doi: 10.1002/(sici)1522–1970(199901/02)1: 1<1: aid-jtr143>3.0.co, 2-1
- 69. Kansal P, Walia S. Marketing Woes of Foreign Tourist Segment in Goa: A Study into Satisfaction Discriminators. Scholarly Research Journal for Interdisciplinary Studies. 2017, 4(36). doi: 10.21922/srjis.v4i36.10029
- 70. Perry Hobson JS, Williams AP. Virtual reality: A new horizon for the tourism industry. Journal of Vacation Marketing. 1995, 1(2): 124–135. doi: 10.1177/135676679500100202
- 71. Singh R, Mehraj N. Destination brand experience and its relationship with tourists satisfaction and intention to recommend: A conceptual model. African Journal of Hospitality, Tourism and Leisure. 2018. 7(1): 1–13.
- Saha S, Joshi YC. Measuring Mobile Service Satisfaction: Factor Analysis Based Study on Mobile Users of Gujarat. International Journal of Basic Sciences and Applied Computing. 2019, 2(8): 10–16. doi: 10.35940/ijbsac.h0106.072819
- 73. Vince J. Introduction to Virtual Reality. Springer London, 2004. doi: 10.1007/978-0-85729-386-2
- Vinh TT, Phuong TTK. Examining the interrelationships among destination brand image, destination perceived quality, tourist satisfaction and tourist loyalty: evidence from Danang City, Vietnam. International Journal of Tourism Policy. 2017, 7(4): 352. doi: 10.1504/ijtp.2017.088299
- 75. Bagri S, Kala D. Tourists' satisfaction at Trijuginarayan: An emerging spiritual and adventure tourist destination in Garhwal Himalaya India. Turizam. 2015, 19(4): 165–182. doi: 10.5937/turizam1504165b
- Roy B, Bhatia A, Maitra R. Transformation in Destination Attractiveness Attributes after Covid 19 Pandemic: A Review. Atna Journal of Tourism Studies. 2023, 18(2). doi: 10.12727/ajts.30.5
- 77. Tam BT. Application of contextual approach for measuring tourism destination attractiveness. Journal of Science 2012. 70(1): 217–226.
- Cho V. Linking Location Attractiveness and Tourist Intention. Tourism and Hospitality Research. 2008, 8(3): 220–224. doi: 10.1057/thr.2008.20
- 79. Babić HV, Mehic E, Kramo A, Resic E. Tourist destination image and perception: The case of Bosnia and Herzegovina, An enterprise Odyssey. In: International Conference Proceedings; 11–14 June 2008; Zagreb.
- 80. Beerli A, Martín JD. Factors influencing destination image. Annals of Tourism Research. 2004, 31(3): 657–681. doi: 10.1016/j.annals.2004.01.010

# Appendix

## **Questionnaire for Tourist**

The attached questionnaire is an important survey designed to assess your satisfaction level related to the factors affecting tourist destination attractiveness in Uttarakhand. I seek your cooperation and request you to spare few minutes of your valuable time for filling up this questionnaire. The information provided by the respondents will be used for the academic purpose only and will be strictly kept confidential. Note: Non-residents of Uttarakhand are requested to perceive themselves as tourist. Thanks in Advance.

## **SECTION-A**

## **Demographic profile:**

- 1) Gender.....
  - (a) Male
  - (b) Female
- 2) Age (in years) .....
- 3) Nationality.....
  - (a) Indian (Specify the state.....)
  - (b) Foreigner (Specify the country.....)

## **SECTION-B**

How do you rate your satisfaction level with the factors affecting tourist destination attractiveness in Uttarakhand while visiting? Kindly rate those by using rating scale.

S. No.	Variables	1	2	3	4	5
1	Availability and Standards of accommodations' facilities					
2	Availability of transport					
3	Travel agencies and Tour operators					
4	Sources of entertainment					
5	Tele Communication facilities					
6	Accessibility of accommodation					
7	Accessibility of transport					
8	Availability and quality of cuisine and drinking water					
9	Cleanliness and hygienic environment					
10	Availability of competent tourist guide					
11	Rich spiritual attractions					
12	Fairs and Festivals, Arts and exhibitions					
13	Natural health resorts and therapy facilities					
14	Shopping Centers					
15	Adventurous and Sports Activities					
16	Good night life					
17	Outstanding natural sites and sceneries/wonders					
18	Yoga and meditation facilities					
19	Multicultural heritage					

Environment and Social Psychology | doi: 10.54517/esp.v9i5.1976

S. No.	Variables	1	2	3	4	5
20	Rest and Relax environment/Undisturbed nature					
21	Hospitable and friendly people					
22	Personal safety and security					
23	Proper information and communication channels about tourist spots					
24	Training of service providers at tourist spots.					
25	A place with good name and reputation					
26	Travel and tour packages					
27	Government policies and strategies					
28	Various forms of tourism					
29	NICHE products of tourism					
30	No fear of terrorism					

Very Bad (1), Bad (2), Neutral (3), Good (4), Very Good (5).

## **SECTION-C**

- 1) Have you heard about virtual tourism?
  - a) Yes.
  - b) No.
- 2) If yes, how would you rate Virtual Tourism as an alternative means for tourists to see any tourist destination?

Not important (1), less important (2), Can't say (3), Important (4), Most important (5)

- a) For the person who does not have money to travel
- b) For those who do not have time to travel
- c) For the person who cannot travel due to health issues
- d) For a hodophobic individual
- e) Pandemic like situations
- How would you rate the importance of health protocols in tourist destinations?
   Not important (1), Less important (2), Can't say (3), Important (4), Most important (5)
- 4) Has your opinion about destinations attractive changed after the pandemic?
  - a) Yes
  - b) No
- 5) How strongly do you agree with the following statements?
  - a) Strongly disagreed (1), Disagreed (2), Can't say (3), Agreed (4), Strongly Agreed (5)
  - b) Maintaining health protocols enhances destination attractiveness
  - c) Health protocols in a tourist destination can alter or impact overall tourist satisfaction.
- 6) According to you, what improvements need to be carried out to enhance your level of satisfaction with Uttarakhand as a tourist destination in National as well as International Level?