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Centre for Mountain Tourism and Hospitality Studies (CMTHS)

Hemvati Nandan Bahuguna Garhwal University

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Srinagar Garhwal - 246174, Uttarakhand

From the Desk of Editors

Dear Readers and Contributors,

It gives us immense pleasure to place the December 2021 issue of the Journal of Tourism - An International Research Journal on Travel and Tourism. Keeping with the tradition of the Journal of Tourism in taking up themes of contemporary relevance, this issue solicited research papers on the theme “Reviving the Tourism Industry”. COVID pandemic is a unique and unprecedented situation, which caused massive and disastrous effects on the global economy and human civilization. While all segments of the economy suffered from the lockdown, isolation, trade and travel restrictions ; Travel, Tourism, and Hospitality sectors experienced an even more significant impact from the pandemic. The crisis is an opportunity to rethink tourism for the future. Tourism is at a crossroads and the measures put in place today will shape the tourism of tomorrow. Keeping this in mind, the journal decided to deliberate upon tourism recovery, revival, and reshaping strategies. The journal received an overwhelming response from researchers on various dimensions of travel and tourism revival strategies and relevant issues. After careful review and observations, the editorial team has found the following seven papers suitable for publication.

The first paper titled “GIS as a student recruitment tool for building hospitality and tourism programs” authored by Jeffery C. Kreeger and H.G. Parsa investigates the demographics of current students and location (target markets) of prospective students with similar attributes using Geographic Information Systems (GIS). A customized heat map helps in identifying the demographics and psychographic attributes of prospective students. The authors propose some meaningful implications for tourism and hospitality institutions.

The second paper titled “Influence of theory of planned behavior and perceived risk on tourist behavioral intention post-COVID-19” by Sheeba Hamid and Mohd Azhar examines tourists’ behavioral intention to travel post-COVID-19 by applying the theory of planned behavior with an additional construct - perceived risk. Results of the study show that attitude towards behavior, subjective norms, and perceived behavioral control significantly and positively influence the behavioral intention of tourists to travel post-COVID-19, while perceived risk negatively influences tourist behavioral intention.

The third paper titled “Examining antecedents of tourism students’ behaviour intention towards using e-learning during COVID-19 pandemic in Oman” authored by Mohit Kukreti and Amitabh Mishra assesses the impact of the COVID-19 pandemic on tourism students of the Public Sector Higher Education Institutions in shifting classroom education to the online and e-Learning mode of teaching and learning. The authors found that perceived usefulness, perceived ease of use, environment readiness, and perceived self-efficacy positively correlate with the behavioural intention of using e-learning. For effective e-learning, they recommend that institutions must focus on students’

preparedness to accept technology, better infrastructure and internet accessibility, and capacity building of instructors.

The fourth Paper titled “COVID-19 and global pandemic recovery strategies: A bibliometric analysis through contemporary literature” by Rhulia Nukhu explores the important element for tourism recovery and sustainability addressed from the recent literature. Text analysis using Voyant tools, the author emphasizes emerging text for crisis recoveries such as sustainability, resilience, emotion, experience, proactive, preserving, well-being, ethics, equity, and technology.

The fifth paper titled “An assessment of coping strategies adopted by the Indian tour operators during COVID-19 pandemic” authored by Syed Wali Khaled and Vijay Kumar investigates the impact and the various coping strategies concomitantly adopted by the Indian tour operators during the COVID-19 pandemic. Using an exploratory sequential mix method approach, the authors propose relevant coping strategies to the policymakers and industry associations to make appropriate and effective decisions.

The sixth paper titled “Exploring behavioural intentions of tourists towards the online mode of payments before and after COVID-19 pandemic: An investigation from Garhwal region of Uttarakhand” by S.K. Gupta, Sunil Tiwari, and Arif Hassan investigate the behavioural intentions of tourists towards various online modes of payment before and after the COVID-19 pandemic. The authors found that the COVID-19 pandemic has changed the technological behaviour and intention of tourists. Further, the authors recommend some relevant strategies and suggestions for tourism stakeholders in the post-pandemic scenario.

The seventh paper titled “Travel behaviour post COVID-19: An empirical study with reference to Indian tourists” authored by Lakhvinder Singh and Dinesh Dhankhar examines the travel behaviour of Indian tourists after the outbreak of the COVID-19 pandemic. The authors report that enthusiasm and optimism along with new travel preferences among potential tourists are the majorly influence domestic travelers’ behavior to travel after the COVID-19 pandemic. Further, they provide implications for tourism stakeholders in incorporating revival and resilience strategies for the travel and tourism business.

We would like to gratefully acknowledge time and support of the contributors, reviewers, and editorial board members in all the endeavors, which inspired to bring out this issue of the Journal of Tourism.

With best regards

S.K. Gupta, Ph.D. (Editor in Chief)
Devkant Kala, Ph.D. (Guest Editor)

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KEYWORDS

**GIS Analysis,
Cluster Analysis,
Student Recruitment,
Demographics,
Psychographics.**

GIS as a Student Recruitment Tool for Building Hospitality and Tourism Programs

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Abstract

Student enrollments in the Hospitality & Tourism Management (HTM) major have declined at most universities. The purpose of this paper is to identify the demographics of current students and in order to market to similar potential students. Geographic Information Systems (GIS) analyses were employed to identify existing student characteristics. The GIS systems help identify demographics and psychographics of potential students. GIS also aids in learning the location (target markets) of prospective students with similar attributes. A customized *heat map* illustrates where clusters of existing students live, and a GIS technique called *Anselin Local Morans I* was employed to show statistically significant clusters of Census Block Groups. Psychographics was utilized to identify neighborhoods of each student's home. Results indicated that, surprisingly, over 59% of recent HTM students came from affluent households. Very little has been published about how to recruit HTM students. This study seeks to begin this discussion around attracting HTM students into a university.

Article History

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INTRODUCTION

The past several years have produced lower-than-expected enrollment figures for many colleges and universities (Newton, 2019) which have included a reduction in Hospitality and Tourism Management (HTM) majors. This downward trend was exacerbated by the recent pandemic, which resulted in a 10% decrease in enrollments from 2020 over the previous year (Sutton, 2021). These disruptive actions have prompted more aggressive recruitment efforts to maintain current levels of HTM majors, without which, many HTM programs may not survive. Currently, there are approximately 200 undergraduate 4-year Hospitality & Tourism programs in the United States, which produce approximately 5,000 HTM graduates each year (Barrows & Bosselman, 1999); therefore, successful HTM programs must actively recruit students to survive. Universities can no longer assume students will keep flooding into their schools, operating under the assumption that if they “build it and they will come” (Pretlow III, 2014, p. 479). Recruitment strategies of all kinds, both old and new, should be implemented in order to preserve current HTM programs. This paper illustrates techniques using Geographic Information Systems (GIS), which assist in target marketing to potential HTM majors for a college program.

While there are many articles that address companies recruiting HTM graduates and universities recruiting minorities and retaining their faculty (Smith & Green, 2021; Choi, Ruetzler, & Wang, 2019; Lin, Chiang, & Wu, 2018), an exhaustive literature search did not uncover a substantial number of papers that addressed HTM college processes for recruiting students into a four-year HTM academic program in the United States of America (Lee, Olds, & Lee, 2010). In fact, there are few papers that address recruiting college students into an HTM program such as Pretlow III (2014), who suggests specific measures to attract HTM students such as personal contact and “multiple exposures” to the recruitment materials. There are studies about majors other than Hospitality and Tourism recruiting college students for their academic major such as Carothers, Aydin, & Houdyshell (2019), who discuss methods they use in recruiting students to become teachers through collaborating with nearby school districts and enticing high school students to pursue teaching as a career. Álvarez (2017) uses summer camp programs involving robotics as a recruiting tool to encourage high school students to pursue a degree at the

robot sponsor's university. Further, Cernauskas, Kelsey, & Houlihan (2018) discuss using more traditional means such as open houses and visiting the college campus during normal class times as a means to increase college enrollments. Alternatively, Reding (2018) presents methods to recruit college majors from local community college students.

While there is limited research about how to attract students to a given university, the topic definitely has not been explored using Geographic Information Systems (GIS) techniques to perform recruiting tasks. Dodds and Muchnick (2008) mention the top three reasons students chose the HTM major was, "the [program's] reputation, teaching, and career prospects" (p. 19). Chen and Hsiao (2009) find their students seeking a good school reputation as well as a convenient location, among other factors (p. 41). Lee, et al., explored Career Development Theory to identify the impact family, friends, and community have on university selection for an HTM program. Surprisingly, they determined that the impact from teachers, family and friends had a greater impact on students' decisions than did the influence of social media. A decade later, Lee, Lee, and Dopson (2019) further verified how important to school choice was the influence of "traditional factors" such as "faculty, advisors, and parents" (p. 75) and how these persons were more influential than social media. However, there are not studies that share recruiting methods for college level HTM programs. While these studies give insight, they leave a void in recruiting methods used to attract future students. This study helps to fill this gap of how to find and recruit prospective HTM students.

Hossler (1999) discussed recruiting practices and mentioned with regard to attracting college students, "Recruiters in the future will place more emphasis on electronic media, student information systems, statistical technologies, and increased use of geodemographic tools" (p. 15). This study utilized target marketing segmentation analysis that identifies and categorizes current students [customers] in order to market to similar potential students [customers], a method mentioned by Vieveen (2018) as well as Kara and Mkwizu (2020). The research question addressed which characteristics were common among current HTM students in an effort to recruit prospective students whose home location (e.g., where a student's parents live) either shared a similar geographic proximity or similar demographic and psychographic characteristics. Specifically, the research question for this study is:

What are the shared characteristics and attributes of university students and how can these characteristics and attributes be used to recruit others just like them? A pilot study was undertaken using Geographic Information System (GIS) analyses to explore this research question using methods suggested by Hossler (1999) including techniques to identify patterns in the students' address locations as well as demographics and psychographics. Many of these methods were included in the current study, including cluster analysis, demographics, psychographics, and spatial statistics utilizing home addresses of HTM students in the fall of 2017 from a state school in Connecticut, USA. These same methods were used to study the most recent seven (7) years of HTM student enrollment data for this university.

LITERATURE REVIEW

History of Hospitality & Tourism Management Programs

Historically, hospitality and tourism education grew out of apprenticeships and informal training as business owners shared their methods and techniques through on-the-job training. This method was adopted in the U.S. based on European practices, where apprenticeships build a pathway to a career (Barrows & Bosselman, 1999). In the past 50 years, formal education has emerged to better prepare students to fulfill needs of hospitality and tourism employers – even though there is controversy as to the effectiveness of graduates' preparation (Barrows & Bosselman, 1999; Airey & Tribe, 2006). The growth in HTM education now mirrors the growth in the industry (Barrows & Bosselman, 1999) and this growth has allowed programs to develop very specific types of training such as specific Food and Beverage, Gaming, and Club Management specializations.

There are educational programs that prepare graduates for specialization in fields as mentioned in Barrows and Bosselman (1999) where "a student can graduate with a specialization in Baking and Pastry Arts at the Culinary Institute of America; Housekeeping Management at Cuyahoga Community College; Gaming Management at the University of Nevada-Las Vegas; and Club Management at the University of New Orleans" (p. 4). Sigala and Baum (2003) mention trends in education including online education as well as an emphasis on lifetime learning so that graduates will continue to learn more about their industry and keep current on the latest trends as well as an emphasis on low-cost tuition.

Student Recruitment

Although Duffin (2020) forecasts a constant quantity of overall college enrollments for both public and private colleges, the past few years have shown a decline in college-level enrollments, especially for for-profit four-year colleges and community colleges (Newton, 2019). This suggests the need to actively recruit HTM students to prevent declining enrollments. Rudd, Budziszewski, and Litzinger (2014) stress the importance of recruitment as well as retention and “the support of successful alumni, viable internship opportunities, and a knowledgeable faculty and staff” (p. 120). One ongoing strategy, which has also been embraced at this university, is the practice of teaching an introduction to HTM course to attract majors from within the current university student body (Crawford, Hubbard, Gaillard, & Waln, 2009).

While these additional efforts have a direct impact on recruitment, this current study focused solely on the recruitment aspect for enrollment growth. Much of the research on recruitment and retention is either not current such as Digh and James (1994) – who discuss the importance of response times to prospective students – or research relates to areas outside of the United States (Kim, Guo, Wang, & Agrusa, 2007; Kusumawati, 2019; Chen & Hsiao, 2009). While not targeting HTM majors specifically, Hossler (1999) describes some college recruitment issues—specifically how important timing is to the college recruitment process. If materials are sent to prospective students too early, they may be disregarded but if they are sent too late, then the student may no longer be open to considering the given university. This current study is based on student location and income level of students’ parents as illustrated by the figures below.

Location

Conventional wisdom would expect to see Lower income students attend a campus located near to their parent’s home (H1). Alternatively, students from a wealthier family would most likely choose a college irrespective of the distance from their home of origin (H2). While many students may want to attend a

college far away from home, the financial status of their family of origin presumably has an impact on this as indicated in Table 1. Specifically, students from a high-income family are not constrained by the financial implications of attending a school that is far away – they could choose a university that is located close or far away from their family home. Dodds and Muchnick (2008) found that 72% of HTM students they polled identified the university’s location to be an important factor in their college decision. Tobler (1970) defines the ‘First Law of Geography’ as “everything is usually related to all else but those which are near to each other are more related when compared to those that are further away” (p. 236). This suggests that there may be potential students located near existing HTM students. Further, there may also be potential students located near the campus. Therefore, if current clusters of existing HTM students are identified, their neighborhoods (e.g., zip code sub-groupings such as nearby ZIP-Plus4 addresses) can receive marketing materials as demonstrated by Tang and McDonald (2002) in order to market to other students with similar proximity to the university. To determine student family locations, GIS software could be (and was) employed to calculate each student’s home’s distance from campus as mentioned in Hossler (1999).

GIS is a tool that has been used for a plethora of analyses including target marketing, restaurant clustering, and store site selection (Reilly, 1931; Prayag, Landré, & Ryan, 2012; Muller & Inman, 1994). Further, Tang and McDonald (2002) utilized GIS to identify where university students lived to predict where to recruit students with similar backgrounds and/or comparable demographics. Their study involved quantifying and mapping the total number of students within a given postcode (like USA’s five-digit ZIP Code). Additionally, Tang, et al., used these data to forecast from which ZIP codes future students would attend.

Reilly (1931) introduced the concept of retail gravity. Similar to how a planet’s gravity pulls objects toward it, a retail store has a certain level of pull to attract customers based on a customer’s distance from the

Table 1: Distance from Campus

Near	Far
H1: Students from lower income households are more likely to attend a college that is located closer to their home.	H2: Students from higher income households are more likely to attend a college of their choice irrespective of the distance from home.

Table 2: Student's Family Income Level

Lower-income	Higher-income
H3: Students from lower income households are more likely to attend a college that has a lower tuition cost structure.	H4: Students from higher income households are more likely to attend a college of their choice irrespective the college's tuition cost structure.

store and the size and popularity of the store. This can also apply to the gravitational pull universities have for attracting students as suggested by Tang and McDonald (2002). Presumably, students seeking an economically less expensive degree will choose a school that is located closer to their home of origin to minimize travel costs and perhaps living expenses (e.g., students live at home with their parents).

GIS Heat maps are one way to visually illustrate a concentration of Teruel-Gutierrez and Maté-Sánchez-Val (2021) utilize heat maps to display concentrations of Airbnb listings and prices in Barcelona Spain; however, the same methodology can be used in other industries including the purpose of this current paper to identify existing students. Many studies, including Mahdi and Esztergár-Kiss (2021), utilize simplified distance analyses to categorize geographic data points into manageable areas. Additionally, Zhai, Xu, Yang, Zhou, Zhang, & Qiu (2015) used heat maps to demonstrate the popularity of restaurants according to social media posts. Similarly, Magige, Jepkosgei, and Onywere (2020) utilized heat maps to show proximity of hotels to the near Mara Game Reserve, which demonstrates the importance of place and distance on certain analyses indicating that distance plays a large role in the choice of where a student attends college. Based on this, the following hypotheses are offered:

H1: *Students from lower income households are more likely to attend a college that is located closer to their home.*

H2: *Students from higher income households are more likely to attend a college of their choice irrespective of the distance from home.*

Tuition Costs

The study university is a state university with approximately 12,000 students as of 2020 and is arguably one of the two least expensive four-year degree options in the state of Connecticut for studying HTM ("Connecticut Costs," 2019). Connecticut students have other HTM academic options, but many of these private colleges cost significantly more to attend than in-state Connecticut State school tuition. In fact, the University of New

Haven and Sacred Heart Universities are both more than six times as expensive as the study school used for this paper ("Connecticut Colleges," 2019). Mitchell College is another private college that offers an HTM major – at more than five and one-half times the price tag of the study school. While there are many private colleges that offer a hospitality major in Connecticut, there are only two public university options (reasonably priced for Connecticut residents) which offer a four-year HTM degree within Connecticut.

Tuition costs are listed in "Connecticut Colleges" (2019) and identify Connecticut's state universities

Table 3: Connecticut Colleges, Cost and Affordability for 2019

School	Tuition
United States Coast Guard Academy	\$0
All CT Community Colleges [12 campuses]	\$3,816
All CT State Universities [4 campuses]	\$5,424
Holy Apostles College and Seminary	\$7,680
University of Phoenix Fairfield County Campus	\$9,480
University of Connecticut [4 campuses]	\$11,998
St Vincent's College	\$14,520
Post University	\$15,310
Paier College of Art Inc	\$16,600
Lincoln College of New England [3 campuses]	\$18,780
Goodwin College	\$19,998
Lyme Academy College of Fine Arts	\$28,824
University of Bridgeport	\$30,150
Mitchell College	\$30,448
Albertus Magnus College	\$30,650
University of Hartford	\$36,088
Saint Joseph College	\$36,273
University of New Haven	\$36,770
Sacred Heart University	\$39,570
Quinnipiac University	\$44,420
Fairfield University	\$46,490
Yale University Best Value	\$51,400
Wesleyan University	\$52,174
Trinity College	\$52,280
Connecticut College	\$52,530

as the least expensive four-year university options in Connecticut. The study school is one of the four state universities listed on Table 3 on the row entitled, “All CT State Universities [4 campuses].” Although families from all economic situations may choose the study university, lower income families are more likely to choose the study school (or one of the other three Connecticut State Universities) because of its comparatively low tuition. Sigala and Baum (2003) found low cost to be an attractive feature for many prospective HTM majors. Based on these tuition figures, presumably the four Connecticut State schools would be the most viable option for students who come from lower income families or those who seek a reasonably priced tuition.

Alternatively, students who come from a more affluent family would have more college choices because they would be able to afford more expensive schools. Based on this conventional logic, Hypothesis 4 is offered:

Therefore, Hypothesis 3 is presented as follows:

H3: *Students from lower income households are more likely to attend a college that has a lower tuition cost structure.*

H4: *Students from higher income households are more likely to attend a college of their choice irrespective the college's tuition cost structure.*

Demographics and Psychographics

González-benito and González-benito (2005) discuss how demographics and psychographics can be used as a tool to characterize a given geographic area such as a Census Block Group (CBG). A CBG is an artificially created area designated by the Census Bureau. CBGs typically contain about 1,000 people and are much smaller than a Census tract or zip code; therefore, CBGs are more precise in identifying resident attributes than Census tracts (Krieger, 1992). Although the idea of lifestyle segmentation was introduced in the 1950s, Bell (1958) is noted as making this original correlation between lifestyle and purchasing behaviors. Lazer (1963) and Moore (1963) further extended Bell's research to include the effect lifestyle had on Marketing efforts – specifically on what purchases were made by similar consumers. Plummer (1974) mentioned how in 1963 William Lazer incorporated lifestyle segmentation into marketing in order to measure “people's activities in terms of (1) how they spend their time; (2) their interests, what they place importance on in their immediate surroundings; (3) their opinions in terms of their view of themselves and the world around them; and (4) some basic characteristics such

as their stage in life cycle, income, education, and where they live” (p. 33).

These characteristics can then be used to analyze how a given CBG compares to a larger area within a town, city, or state. The GIS software company Environmental Systems Research Institute (ESRI) developed twelve *LifeMode* categories (psychographic groupings) and assigned each CBG an applicable category based on many lifestyle-type factors. ESRI further developed segmentation of each *LifeMode* to create 65 distinct segmented attributes for each block group based on similarities of neighbors including demographics (ESRI, 2014). For decades, psychographics, like ESRI's Tapestry data, have been used to target specific market segments for various purposes such as advertising, identifying potential customers, and pet adoption to name a few (Krishnan, 2011; Miller, 2008; & Patronek, 2010). Miller (2008) utilized psychographics in analyzing characteristics of visitors to the Pocono Mountains in Pennsylvania and found it to be an effective method to segment customers and target guests ‘like them’ for marketing efforts. He follows a traditional marketing process of profiling current customers and searching for more like them. Barber, Taylor, and Strick (2010) emphasize the importance of using not only demographics, but also using lifestyle segments which add a ‘richer’ view of groups of people. Kucukemiroglu (1999) also supports using lifestyle attributes to better characterize respondents to better understand and categorize them based on similar qualities. Beyond asking merely demographic questions, Kucukemiroglu posed lifestyle-type questions in order to add to the demographic profile of respondents. Raw demographics often don't tell the whole story and are bolstered with the use of psychographics. Krishnan (2011) adds further evidence to the correlation between purchase behavior and psychographic segments. The findings of Krishnan's study support previous research that correlates grouping of populations based on similar attributes and buying habits in order to predict specific purchasing behaviors. Further, Parsa, Kreeger, Van der Rest, Xie, & Lamb (2021) utilized psychographics to better explain restaurant failures in a US metropolitan city.

One characteristic of the ESRI Tapestry data that identifies overall CBG affluence within a given CBG is the *LifeMode* categories which indicate affluence within the *LifeMode* name by adding to the *LifeMode* name an ‘I’ for higher-income families and a ‘II’ – e.g., Metro Cities I versus Metro Cities II. In the Metro Cities example above, those CBDs labeled

with the 'I' have higher incomes than those CBDs with 'II' attached to the name. "The 'I' or 'II' appearing after each group name designates the relative affluence within the group, with I being more affluent than II." (ESRI, 2014, p. 12). Therefore, the II segments comprise the low-income students and I segments comprise the high-income students. Based on these segment types, Hypothesis 5 is presented as follows:

H5: *Students' choice of a college is affected by their demographic and psychographic attributes.*

METHODOLOGY

This first paragraph of the methodology section outlines the methods used to analyze and evaluate existing students in order to find others who live in close proximity to them. The rest of the methodology section looks at these techniques in further detail. These methods include geo-referencing (address matching) a student's home of origin in order to apply distance analysis to identify possible recruits from the same geographic locale as existing (or previous) students from this university. Once all students were plotted on the digital map, a heat map was generated to identify the 'hot spots,' which identify locations where a high concentration of students' home of origin exists. A statistically significant tool, Anselin Local Morans I, was employed to augment the visual heat map and utilize Census Block Groups (areas similar in size to zip codes) to statistically identify clustering of students' homes of origin. This paragraph serves as a 'big picture' summary of the remainder of this section.

This current study included students who belonged to either Generation Y or Z. Enrollment for HTM majors at the study school has declined during the timeframe represented in this study. The locations of student's homes were one part of this analysis; therefore, USPS addresses of students' homes of origin were identified to determine if there was a correlation between students' homes' and their proximity to campus. Spatial clustering was used to determine if there were groupings of student homes and specifically if there were groups of students' homes that could be used for marketing campaigns based on location of houses compared to the campus. Each current HTM student's address was collected and all personal information was deleted to protect students' privacy. Each address was then geo-referenced (e.g., 'address matched') to enable viewing each address as a dot on a map. Each of these dots were intersected with CBG areas to link the demographic and psychographic data associated

with each student's home of origin. A heat map was created to visualize the nearness of current students with their proximity to other existing students where darker shades of purple indicate a higher concentration of current students than lighter shades. Although the heat map visually illustrated clustering of students' homes, Moran's I was also computed in order to statistically quantify student clusters within Census Block Groups (CBGs) and verify statistically the visual implications of the heat map. Moran's I statistically confirm clustering as seen visually through the heat map.

A pilot study was conducted using fall 2017 student data from the study school's Registrar's Office for 67 HTM students' home addresses, which were address matched and spatially assigned psychographic classifications by Census Block Group (a U. S. Census Bureau boundary). Also, distances were assessed between students' homes and the study school campus. Additionally, students' home locations were analyzed to assess their proximity to each other in a cluster analysis. This pilot study explored various GIS techniques and analysis tools to determine the best combination of analysis methods to use for the final study. Based on this pilot study, a larger number of student addresses (representing seven years' worth of student data) were utilized for the full study. Including HTM students from the fall of 2013 through spring of 2020. Because students appeared in registration files during multiple semesters, duplicate records were deleted, which left 277 students whose homes were located within the state of Connecticut for this seven-year study period.

Geo-referencing – address matching

Current HTM student's permanent home addresses (e.g., a student's parent's address) for 277 unique student addresses for the seven-year period beginning the fall of 2013 were geo-referenced/ 'address matched' using street address, city, state, and ZIP code to assign a latitude/longitude coordinate on the face of the earth (e.g., a dot on a map). Four students' addresses located outside of Connecticut were not utilized in this study. The process of georeferencing created points for all students' permanent home addresses at the physical address location. 100% of the addresses were matched at an address level, which exceeded the requirements for this study. An address-level match is the most accurate geocoding result. An example of a lesser accurate level would be to locate the

address at the centroid (center) of a 5-digit ZIP code, which is not very accurate.

Distance Analysis

In order to test H1, multiple ring buffers were created to show the distance bands from campus and to capture distances from campus that are less than 10 miles, between 10 and 20 miles, between 20 and 30 miles, between 30 and 40 miles, and greater than 40 miles away. These distances were chosen as a means of segmenting distances away from the study school within the state of Connecticut. Students homes were then summed within the five distance buffers. See Figure 1.

Heat Map

A Heat Map was created to show the concentration of existing students' permanent homes with the long-term goal of trying to recruit other students who live near existing students. Heat maps were borrowed from weather maps to quickly illustrate temperatures across a landscape – specifically, they show hot values typically in red whereas cooler temperatures are typically represented in green shades. The heat map was created using ESRI's Point Density tool located in Spatial Analyst Tools from the GIS software, ArcGIS Pro version 2.5.0. The map symbology was then changed to indicate a white/transparent color where students are not in close proximity to each other. At the other end of the spectrum, purple coloring was designated to indicate a higher concentration of existing students' homes – locations where students' homes are close to one another or are geographically clustered. This analysis only showed where homes were located in proximity to each other and does not consider the location of the campus – how close each student's home is from campus. It merely shows students' proximity to each other.

Anselin Local Morans I

While the heat map indicates the locations of clustering of students' homes and gives a good visual of how closely clustered students' homes are to each other, it does not show statistical significance. To strengthen the statistical analysis, the Cluster and Outlier Analysis (*Anselin Local Morans I*) tool in ArcMap was utilized. This cluster and outlier analysis highlights CBGs that are either statistically more or less clustered than the landscape of the rest of the data set. Like a heat map, this analysis draws attention to those CBGs that are statistically different from the overall spatial pattern of the data set. The

first step was to sum together the number of students' homes by CBG using a spatial join process in ArcMap. Then, these weighted CBG areas or polygons were used to identify the locations of hot spots, cold spots, and areas containing outliers. Existing student family home locations were overlaid with ESRI *LifeMode* Summary Groups at the block group level to quantify and analyze which categories were most representative of the study school students.

RESULTS

A total of 281 student addresses were successfully geo-referenced (address matched); however, 4 were located outside of the Connecticut state boundary and therefore were excluded from this study. This left 277 student addresses for this study. Gender demographics for the study school students in the current study were 74.0% female and 26.0% male. These numbers reflected a gender bias experienced by many HTM programs, which enroll more female than male students. Lee, Olds, and Lee (2010) found the majority of the 1,315 HTM students they surveyed were female (58.5% female respondents). Multiple ring buffers were created in ESRI's ArcMap product to create the following buffers surrounding the campus: 1) under 10 miles; 2) between 10 and 20 miles, 3) between 20 and 30 miles, 4) between 30 and 40 miles, and 5) further than 40 miles. As indicated in Figure 1, the number of student homes in each category summed to 108, 86, 43, 22, and 18 students in each buffer ring, respectively. Thirty-nine percent (39.0%) of student's homes were located within 10 miles of campus. 70.0% were located within 20 miles and 85.6% were located within 30 miles of campus. This indicates that location to campus could be a determining factor for why students apply to the study school. This supports Hypothesis 1, which states that students whose families live closer to campus are more likely to attend the study school.

On the heat map in Figure 2, darker shades of purple indicate where student homes are close to each other or clustered together. The location of campus is not a part of this analysis but instead this map captures each homes proximity to each other – how much they are clustered together. An interesting observation based on the heat map is there appears to be a clustering of current students (as indicated by the darker purple color on the map) around the following locations: the study school campus; an area west of campus in the Bristol, CT area, as well as east of

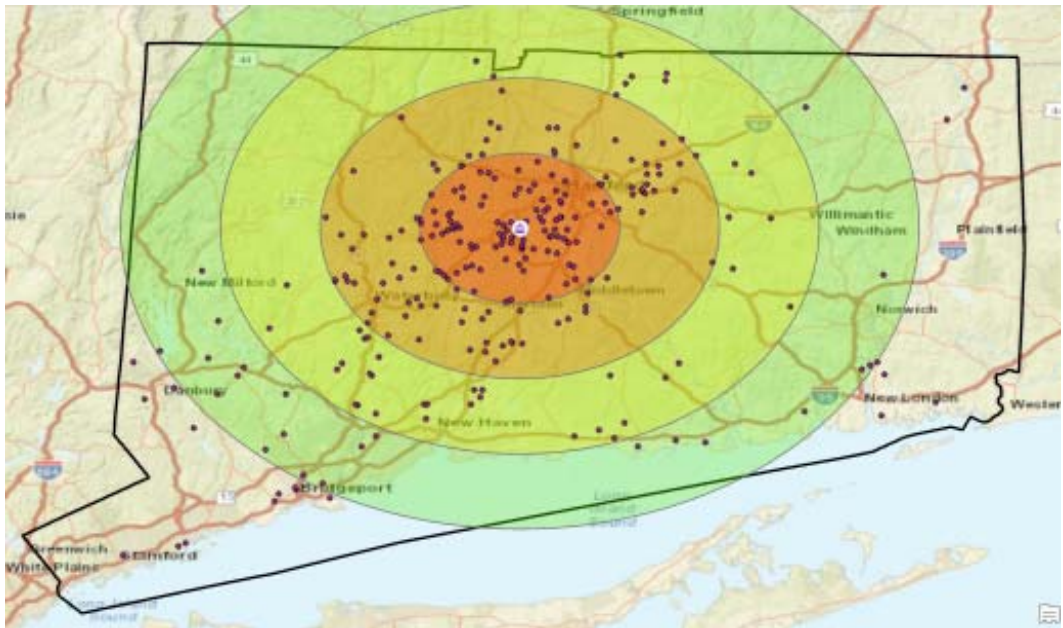


Figure 1: Ten (10) Mile Buffers from Campus

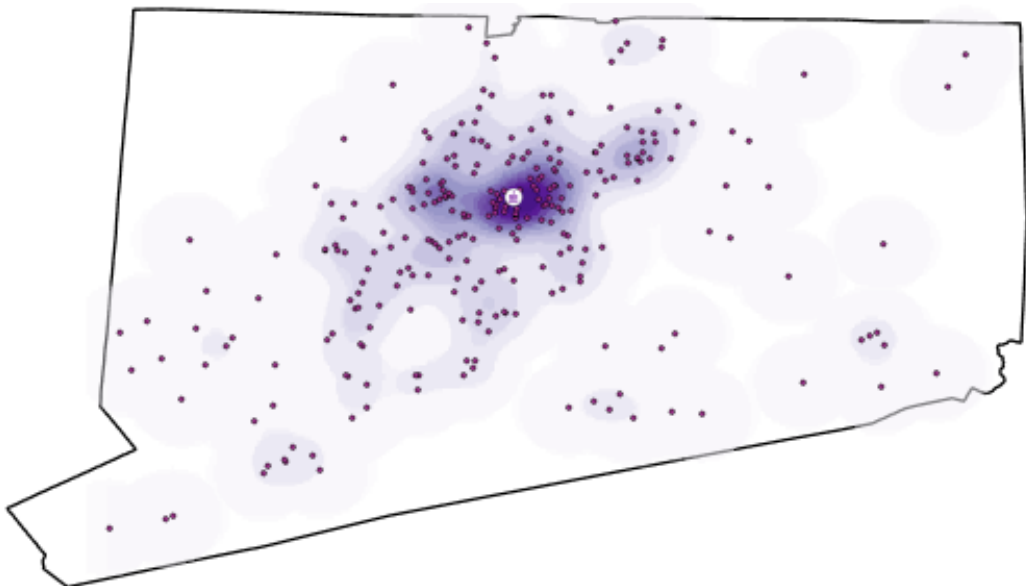


Figure 2: Heat Map of HTM Students' Family Homes

Hartford near the town of Manchester. This supports H1.

The Cluster and Outlier Analysis (*Anselin Local Morans I*) tool in ArcMap was utilized to show statistically significant groupings of weighted CBGs by number of current students within a given CBG. The tool identified dense clusters of student homes within CBGs and highlighted clustering within the CGB with a beige color. These are the CBGs where there are the greatest clustering of current students and represent a prime target for recruiting activities/ mailings. This also supports H1.

One fact that is important in the following analysis is that the study school is shown to be one of the four most economical options for any student in the state of Connecticut who pursues a four-year degree in Connecticut and is one of the most economical four-year degrees in the HTM major. Hypothesis 2 assesses that many students chose the study school because it was their most economical choice. There were five (5) ESRI *LifeMode* Summary Groups that dominated existing students' homes: High Society, 34.3%; Upscale Avenues, 24.9%; Traditional Living, 11.9%; Senior Styles, 12.6%; Global Roots, 9.0%, and other 7.2%. The large numbers of 'High Society' *LifeMode* students were not anticipated based on the study school's economic price point.

Table 4: HTM Student Count by ESRI Tapestry *LifeMode*

Life Mode	Count	Percentage
High Society	95	34.3%
Upscale Avenues	69	24.9%
Traditional Living	33	11.9%
Senior Styles	35	12.6%
Global Roots	25	9.0%
Other	20	7.2%
Total	277	100.0%

All five of the psychographic groupings were spread out across Connecticut; therefore, location is not evidently associated with the *LifeModes* themselves. The locations of student homes with the psychographic designation of High Society were not clustered in one location. In other words, not all 'High Society' students appeared to be in close to proximity to each other or even close to campus. Instead, their locations across the state indicate the demographics are more important than the location of the CBGs which were tagged with this lifestyle label. This pattern was duplicated with the locations of the other *LifeModes* as well.

All captured CBGs were assigned either a designation of I or II. The I designation was for an

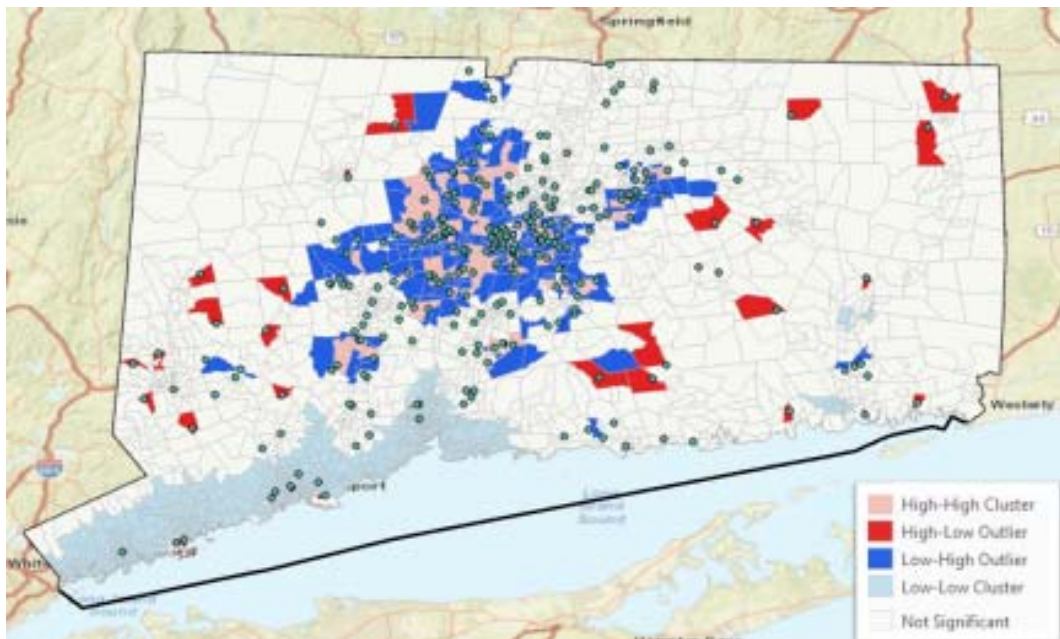


Figure 3: Cluster and Outlier Analysis (*Anselin Local Morans I*)

Table 5: Income Effect on Distance

Income Factor	<10 miles	Between 10 and 20 miles	>20 miles
I	64.81%	68.52%	67.59%
II	35.19%	11.11%	12.04%
	n=108	n=86	n=86

affluent CGB label and a II designation indicated a lack of affluence for the CBG. Thus, according to Table 5, there appears to be no substantial difference among the various distance buffers, which supports Hypothesis 2, which says, “*Students from higher income households are more likely to attend a college of their choice irrespective of the distance from home.*” Further, this same table also supports Hypothesis 1, which states that, “*Students from lower income households are more likely to attend a college that is located closer to their home.*” As can be seen from the table, the income factor II row indicates that lower-income students live within ten miles from the college. Further, please review the following table of hypotheses along with their each level of support for each hypothesis.

CONCLUSIONS

Home addresses from 277 HTM students between 2013 and 2020 were spatially analyzed to determine if there was clustering of students’ homes and to determine if the Retail Gravity Model implied that students typically attend a school located in close proximity to their home of origin. Based on student families’ proximity to the University of concern, this hypothesis was validated (H3) Specifically, distance buffers were applied around the campus into five distance bands based on ten-mile buffer zones. A heat map illustrated those areas with the greatest amount of clustering of homes and the Cluster and Outlier

Analysis (*Anselin Local Morans I*) tool in ArcGIS showed statistically significant groupings of weighted CBGs based on the number of current students within Census Block Group. Additionally, each student’s home address was identified within a CBG – each of which was assigned an ESRI Tapestry *LifeMode* (a psychographic categorization). These categories were tallied to determine the most prominent Tapestry segments among current students. One interesting finding was that almost 60% of all students came from wealthy families based on the two psychographic categories (*High Society* and *Upscale Avenues*).

Although the study school was shown to be one of the most economical choices for a HTM major in the state of Connecticut, almost sixty percent of students’ home locations indicate they came from wealthy families. Further, these wealthy homes were spread out through the state and were not concentrated near the campus. Although this type of GIS analysis requires a substantial amount of expertise with a GIS software, many larger universities have GIS expertise housed in their Geography department; therefore, collaboration could make this type of process feasible for any Tourism and/or Hospitality professor to perform a similar analysis.

Limitations

This study was limited to students attending one university in Connecticut and may not be generalizable to the rest of the United States. Also, this study did not capture an exhaustive list of possible reasons students chose to attend the study school. In fact, this state university may be somewhat unique in its local draw of students. Possible reasons could include choosing a given college where their friends or family attend/attended or that hold some

Table 6: Hypotheses Results

	Hypotheses	Results	Analysis
H1	Students are more likely to attend a college that is located closer to their family home.	Supported	Statistics & GIS
H2	Students are more likely to attend a college irrespective of the distance from their family home.	Supported	Statistics & GIS
H3	Students from lower income households are more likely to attend a college that has a lower tuition cost structure.	Not Supported	Statistics & GIS
H4	Students from higher income households are more likely to attend a college of their choice irrespective the college’s tuition cost structure.	Supported	Statistics & GIS
H5	Students’ choice of a college is affected by their demographic and psychographic attributes.	Supported	GIS

positive memory from a campus visit, etc. Additionally, the family home of origin may not be representative of each student's financial standing. For example, some students may be paying for their own college education regardless of their family's socioeconomic profile. Therefore, they may choose the most economical option because their family of origin was not paying their tuition.

These results may have been skewed since only two state schools offer an HTM-type of major in the state of Connecticut – although there are many private offerings for the HTM major, which offer more options for students who are financially more advantaged (or who may earn scholarships). Therefore, results may be different in other states where students have a larger number of cost-effective education options. Additionally, the granting of scholarships by other schools was not considered in this study's analysis. This study focused on GIS-based market segmentation approaches.

Future Studies

A similar analysis could be conducted in states outside of Connecticut to determine how generalizable the results may be related to the rest of the United States. To complete this recruitment exercise, recruitment materials would need to be sent to addresses near those 'hot spots' of current students' homes of origin. Additionally, materials could also be sent to CBGs characterized by the top two psychographic *LifeModes* (identified in this study — High Society and Upscale Avenues) that are located near the campus. This would combine two aspects of this analysis which would maximize the potential of attracting interested, prospective students. A full SWOT analysis would also be helpful to better identify why students choose to attend the study school. The buffers created in Figure 1 are based on Euclidian distances (e.g., as the crow flies) from the campus, but an even more precise method would be to use a street network to determine drive times from student's homes to campus using ESRI's Network Analysis tool.

Future surveys could query students about their decisions to attend based on Lee, Olds, and Lee's (2010) criteria of "'Self-actualization,' 'Job opportunity,' 'Field attractiveness,' 'Foreign experience,' 'External influence,' and 'Ease of Study.'" (p. 24). This could benefit further studies based on work initiated by Lee, et al. Instead of asking an open-ended question about why students chose a major of HTM, these six criteria could be specified to determine if there are more correlations

among these reasons. Further issues could be researched such as if specific learning outcomes are sought by students, as mentioned by Reich, Collins, DeFranco, and Pieper (2019) as well as the desire for human versus nonhuman school brands as described in ul Haq and Bonn (2018). Lastly, the suggestions from Pretlow III (2014) should be further explored and tested in order to explore the merits of personal contact and "multiple exposures" to potential students. These seem to be wise words to heed and further investigate.

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Influence of Theory of Planned Behavior and Perceived Risk on Tourist Behavioral Intention Post-COVID-19

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Abstract

This paper aims to examine tourists' behavioral intention to travel post-COVID-19 by applying the theory of planned behavior with an extension of perceived risk as one of the contributing variables. Data was collected via an online questionnaire, and the study used a total of 268 accurate and usable responses. The population of the survey includes Indian tourists. Data was analyzed using SPSS 20 and AMOS 22.0. Structural Equation Modeling (SEM), a multivariate technique, was employed to test the proposed hypotheses. The empirical results show that attitude towards behavior, subjective norms, perceived behavioral control are significantly related and positively influence behavioral intention of tourists to travel post-COVID-19 while perceived risk negatively influences tourist behavioral intention. This study reveals that the proposed model explained approximately 84% of the variance in the tourist behavioral intention. The findings of this study can be used to give recommendations for the travel and tourism industry and will help in predicting how tourists behave while travelling post-COVID-19. Since the research is primarily focused on India, it is difficult to extrapolate the findings to other countries.

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INTRODUCTION

Behavioral intention and motivation to travel are the two alluring themes that have been captivating the attention of tourism researchers. The key reason is that understanding tourist behavioral intention reduces unnecessary marketing and promotional cost and contributes significantly to the profitability of the tourism business (Wang, 2004; Alegre & Juaneda, 2006; Hsu et al., 2008; Kim et al., 2013). For making effective marketing plans and formulating adequate tourism policies in the post-COVID-19 world, it is essential to understand factors influencing tourist decisions, formation of attitude, and influence of different reference groups on tourist behavior (Moutinho, 1987). As a result, there are many studies on tourist behavior and travel intention in the literature. Tourist behavior has received a lot of attention from researchers (Crompton, 1979; Dann, 1981; Uysal & Hagan, 1993; Fodness, 1994). Numerous empirical studies have tested tourist behavioral intention and the influence of factors affecting it. Despite the availability of sufficient literature on the concerned subject, there are fewer empirical studies that have measured behavioral intention to travel after an emergency, health crisis, natural calamity, disaster, or the recent COVID-19. Therefore, the objective of the present study is to understand factors affecting tourists' behavioral intention post-COVID-19 and to examine the influence of the theory of planned behavior and perceived risk on intention to travel.

The tourism industry is one of the fastest-growing industries in India that contributes significantly to the economic growth and development of the country (Statista, 2021). It has been one of the most important drivers of growth in the Indian service sector. In terms of overall contribution to GDP from travel and tourism, India ranked 10th out of 185 countries in 2019 as per the Annual Research Report issued by World Travel and Tourism Council (WTTC). In 2019, the travel and tourism industry substantially contributed to the gross domestic product that was 6.8% of the total economy (WTTC, 2020). This report further states that over the last five years (prior to the pandemic), travel and tourism have generated one out of every four net new jobs. With the onset of COVID-19 in March 2020, travel and tourism came to a halt due to impositions of travel restrictions. While the pandemic had a negative effect on all the sectors

of the economy due to the lockdown, isolation, trade, and travel restrictions, the travel and tourism industry was one of the hardest hits around the globe (Kala, 2021), and India was no exception. It is estimated that it would take two years to return to pre-pandemic levels (Statista, 2021). The formulation and execution of plans and activities to restore the travel and tourism industry back to a normal (pre-pandemic) condition or a better one has been a subject of interest for many researchers (Su et al., 2021). Mair et al. (2016), in a narrative review of destination-focused research, noted that changes in tourists' behavior would represent a challenge to recovery efforts. Therefore, the present study is quite relevant in the current scenario as it provides an in-depth analysis of tourist behavioral intention to travel post-COVID-19, and the future policies and programs could be formulated on the basis of the findings of this study.

The most powerful factor or measure of potential tourism behavior is the behavior of visitors. The actions of a single visitor can be used to predict the actions of others. Tourists set the social standards of behavior in the tourism industry with their actions. Therefore, the theory of planned behavior (TPB), one of the most widely explored behavior formation models (Ajzen, 1988, 1991), is the best tool to measure tourist behavioral intention. This model is a development of the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975). These theories have often been used as behavioral theories in the study of tourist decision-making (Ryu & Jang, 2006; Ryu & Han, 2010; Choo et al., 2016; Verma & Chandra, 2018; Garay et al., 2019; Park et al., 2019). The theory of planned behavior was first conceived by Ajzen (1991) and is used to describe two factors that influence the probability of people doing a certain action (Anantamongkolkul & Kongma, 2020). Volitional and nonvolitional elements are used in these two factors. Attitudes towards behavior (ATT) and subjective norms (SNs) are volitional components, while perceived behavioral control (PBC) is a non-volitional factor. Since humans' actions and activities are not fully voluntary in most cases, incorporating non-volitional considerations into the theory is thought to greatly enhance the theory's ability to interpret individuals' intentions (Oh & Hsu, 2001; Perugini & Bagozzi, 2001; Han & Kim, 2010). These three factors altogether influence behavioral intentions (BI) (Anantamongkolkul & Kongma, 2020).

Numerous studies have been conducted to evaluate the applicability of TPB (Han et al., 2020; Jordan et al., 2018; Kaplan, 2015; Al Ziadat, 2015). In the

present study TPB model with the extension of perceived risk is applied to predict tourist behavioral intention post-COVID-19. The study explains and validates the model taking the perceived risk as one of the contributing variables in the Indian context. The relevance of taking the perceived risk as one of the additional constructs lies in the fact that after the outbreak of COVID-19, people are more cautious about their safety and security while travelling. They are restricting their travel practices to a certain limit (Sujoed et al., 2021). Travel is limited, and passengers perceive a greater risk for all types of travel, avoiding places where they perceive a medium to high risk of disease transmission (Hotle et al., 2020; Abdullah et al., 2020). Because the majority of visitors base their travel-related choices on their perception of risk, forecasting perceived risk is useful for studying tourist behavior and decision-making (Zhan et al., 2020). Therefore, in the present study, the researchers have incorporated perceived risk with the TPB model to get an in-depth and thorough understanding of tourists' behavioral intention in the post-COVID-19 period.

THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

Attitude

Owning to personal reflection on human emotion in the decision-making process, attitude has become a common subject of academic studies. In tourism studies, the attitude can be equated to assessment elements like interpreting physiological arousal, expression, and emotional responses resulting from tourist encounters (Patwary & Rashid, 2016). To what extent people have a favourable or unfavourable opinion of something while conducting a specific action has been described as attitude towards an activity (Ajzen, 1991; Tonglet et al., 2004; Han et al., 2009). The greater a person exerts a positive inclination towards action the more likely that person will engage in that behavior (Verma & Chandra, 2018). The causal relationship between attitude and behavioral intention has been supported by several studies within the TPB model (Lam & Hsu, 2004; Hsu & Huang, 2012; Han, 2015). Thus, on the basis of evidence found in previous studies, the following hypothesis is postulated for the present study:

H₁: *Attitude significantly and positively influences tourist behavioral intention to travel post-COVID-19.*

Subjective Norms

The subjective norm (SN), another important component in the TPB model, is characterized as

the viewpoints of the people that are essential to a person and have the potential to affect his or her decision-making. These influential people might be family members, close relatives, colleagues, friends, or business associates. Many previous studies confirm a significant relationship between subjective norms and behavioral intention (Han & Kim, 2010; Han et al., 2009; Han, 2015; Hsu & Huang, 2012; Teng et al., 2015; Lam & Hsu, 2004; Yadav & Pathak, 2016). Thus, on the basis of evidence found in previous studies, the following hypothesis is postulated for the present study:

H₂: *Subjective norm significantly and positively influences tourist behavioral intention to travel post-COVID-19.*

Perceived Behavioral Control

The third important component of the TPB model is perceived behavioral control (PBC). According to Ajzen (1991), it is defined as “the perceived ease or difficulty of doing the behavior.” PBC evaluates a person’s sense of regulating stimuli that permits or restrict the behavior needed to deal with a particular situation (Verma & Chandra, 2018). PBC is thought to be a result of accessible control beliefs about a person’s perceived demands for services and ability to carry out a specific activity and that these needs are prioritized (Chang, 1998). Many previous studies support a significant association between perceived behavior and behavioral intention (Lam & Hsu, 2004; Cheng et al., 2006; Baker et al., 2007; Hsu & Huang, 2012; Han, 2015). Thus, on the basis of evidence found in previous studies, the following hypothesis is postulated for the present study:

H₃: *Perceived behavioral control significantly and positively influences tourist behavioral intention to travel post-COVID-19.*

Perceived Risk

Along with the TPB constructs, another significant construct is included in this research, namely perceived risk. Bauer (1967) pioneered the idea of perceived risk. Since then, it has attracted a lot of attention from researchers (Dolnicar, 2005). Tourists are concerned about the various forms of risks that exist while travelling. Since risk is difficult to define objectively, researchers focus on perceived risk, which is described as tourist’s subjective expectation of losing something in order to achieve the desired result. Tourist risk is described by Sheng-Hsiung, Gwo-Hsiung, and Kuo-Ching (1997) as the probability of misfortune striking a group of tourists halfway through a trip or at a destination, and they

propose two types of risk: physical and equipment-related. The first risk concerns an individual’s health, while the second concerns the equipment involved in the trip. In the words of Chew and Jahari (2014), perceived risk in the traveler’s perspective is defined as “the probability that an action may expose them to the danger that can influence travel decisions if the perceived danger is deemed to be beyond an acceptable level” (Bae & Chang, 2020). TPB’s nomological framework includes perceived risk as a control belief that acts as an antecedent of behavioral control (Ajzen 1991), implicitly affecting behavioral intention. Many previous studies validate that perceived risk negatively influences behavioral intention (Lepp & Gibson, 2008; Fuchs & Reichel, 2011; Lepp et al., 2011). Thus, on the basis of evidence found in previous studies, the following hypothesis is postulated for the present study:

H₄: *Perceived risk negatively influences tourist behavioral intention to travel post-COVID-19.*

The hypotheses can be presented as shown in Figure 1.

RESEARCH METHODOLOGY

Data Collection and Measurement Items

Data was collected through an online questionnaire using google form through a purposive sampling technique. The link to the google form was posted on the Facebook pages of travel agencies. A cross-sectional study design was employed for the study. In this research design, either the whole population is surveyed, or a sample is chosen, and data is collected from individuals to assist answer research questions of interest. The information acquired is called cross-sectional since it only depicts what is happening at one point in time (Olsen & St. George,

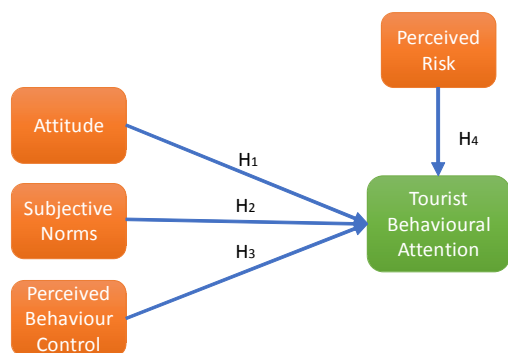


Figure 1: The Proposed Model (Source: The Authors).

Table 1: Items used in the questionnaire

Construct	No. of items	Source
Attitude	4	Ajzen & Fishbein, 1980; Lam & Hsu, 2004
Subjective Norms	4	Ajzen, 1991; Venkatesh & Davis, 2000; Lam & Hsu, 2004
Perceived Behavioral Control	3	Taylor & Todd, 1995; Lam & Hsu, 2004
Perceived Risk	4	Shim et al., 2001
Behavioral Intention	3	Venkatesh et al., 2003; Lam & Hsu, 2004

Source: The Authors

2006). The time range of the survey started from mid-May to end of the May, 2021. The target audience of this survey is Indians. A 7-point Likert-type scale was used (from strongly disagree to strongly agree). According to Symonds (1924), a 7-point scale provides the best reliability. Sources of all the measurement items are given in Table 1.

Data Analysis

In accordance with Anderson and Gerbing (1988), Confirmatory Factor Analysis (CFA) was used to construct a measurement model. After the measurement model was evaluated for adequacy, SEM was used to find the best-fitting model and test the hypotheses. Data was analyzed using SPSS 20 and AMOS 22.0. Prior to distributing the questionnaire, a pilot test of 50 responses was conducted to ensure that the questions were clear and easy to understand. There were 302 responses collected in total, but 34 responses were omitted due to missing values. Thus, a total of 268 accurate and usable responses were used for the final analysis.

RESULTS

Demographic Profile

The demographic data depict that as much as 73.1% of the survey respondents are male, and 26.9% are female. The majority of the tourists (51.9 %) come from the age group of 28-37, which is around half of the survey respondents. 54.9 percent of people are single, while 36.6 percent have acquired a doctorate degree. The majority of the respondents are students (46.3%), and 23.9% are employed. As much as 29.8 percent of people are earning up to INR 15000 per month. (Refer Table 2).

Descriptive Statistics

The mean values of all the variables range from 3.98 to 5.13, which are above the midpoint of 4.0 for Attitude (ATT), Subjective Norms (SN), Perceived Behavioral Control (PBC), and Behavioral Intention

(BI), while it is below the midpoint for Perceived Risk (PR). The standard deviations of all the variables fall between 1.41 to 2.08. Out of all the variables, behavioral intention (BI) has the highest mean value (5.13), and Perceived Risk (PR) has the lowest one (3.98). Perceived Risk (PR) induces the highest standard deviation (2.08), while Perceived Behavioral Control (PBC) shows the lowest one (1.41). The detailed information is given in Table 3.

Table 2: Demographic Profile of Respondents (n=268)

Demographic Variable	Sub-Variable	Frequency	Per cent
Gender	Male	196	73.1
	Female	72	26.9
Age	Below 18	8	3
	18-27	75	28
	28-37	139	51.9
	38-47	33	12.3
	48-57	7	2.6
	Above 57	6	2.2
Marital Status	Single	147	54.9
	Married	118	44
	Others	3	1.1
Education	Undergraduate	34	12.7
	Graduate	49	18.3
	Postgraduate	75	28
	PhD	98	36.6
	Others	12	4.4
Occupation	Student	124	46.3
	Employed	64	23.9
	Retired	4	1.4
	Business Person	38	14.2
	Others	38	14.2
Monthly Income	Upto 15,000	80	29.8
	15,001-30,000	76	28.3
	30,001-45,000	64	23.9
	45,001-60,000	24	9
	Above 60,000	24	9

Source: Primary Data.

Table 3: Descriptive Statistics

Construct	Mean	SD
ATT	4.64	1.51
SN	4.26	1.52
PBC	4.91	1.41
PR	3.98	2.08
BI	5.13	1.56

Source: Primary Data

Confirmatory factor analysis was performed using AMOS 22 to justify the factor structure and validation of scale (Brown, 2015). Conceptually CFA was performed to check two types of validity, convergent and discriminant validity. The construct's convergent validity establishes how closely several methods of measuring a construct yield the same results. Average Variance Extracted (AVE) was used to assess convergent validity, which is determined as the mean-variance extracted for the loading on

the construct. The value of AVE greater than 0.5 is acceptable. The composite reliability (CR) is another determinant, which is calculated using the square of each construct's total factor loading and total error variance terms (Fornell & Larcker, 1981; Hair et al., 1998). The threshold limit of the CR is more than 0.7 (Cronbach, 1951; Malhotra et al., 2004; Field, 2005; Hair, 2011). This study also reached those limits. Finally, the value of composite reliability (CR) should be more than the average variance extracted (AVE). Hence, all the aforementioned criteria of convergent validity were met (Refer Table 4).

The validity and reliability of the constructs employed in the study are evaluated using the measurement model (Henseler et al., 2009). The authors employed CFA to check if the stated sets of variables were associated in the hypothesised manner. Composite reliability (CR) was used to determine construct reliability. A score of 0.7 and higher is regarded satisfactory for composite reliability (Bagozzi & Yi, 1988). In the present study,

Table 4: Confirmatory Factor Analysis Statistics

Items	Factor Loading	CR	AVE	Cronbach's α
Attitude (ATT)		0.957	0.849	0.957
ATT1	0.941			
ATT2	0.920			
ATT3	0.953			
ATT4	0.947			
Subjective Norms(SN)		0.971	0.894	0.971
SN1	0.948			
SN2	0.945			
SN3	0.947			
SN4	0.924			
Perceived Behavioral Control (PBC)		0.950	0.864	0.950
PBC1	0.917			
PBC2	0.920			
PBC3	0.927			
Perceived Risk (PR)		0.952	0.831	0.951
PR1	0.929			
PR2	0.933			
PR3	0.916			
PR4	0.931			
Behavioral Intention (BI)		0.973	0.924	0.973
BI1	0.965			
BI2	0.968			
BI3	0.964			

Source: Primary Data

Table 5: Discriminant Validity

	ATT	SN	PBC	PR	BI
ATT	0.921				
SN	-0.077	0.945			
PBC	-0.098	0.437	0.929		
PR	0.009	0.004	0.136	0.912	
BI	-0.018	0.019	0.009	-0.254	0.961

Source: Primary Data

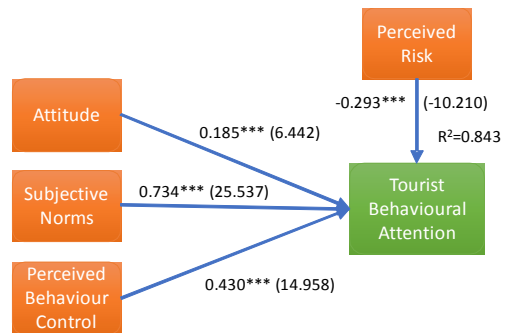
the CR value ranges from 0.950 to 0.973. Hence, all the constructs and their dimensions were all confirmed to be reliable. With a factor correlation of >0.6 , each construct was found to be more strongly and closely associated to its measurements than the other constructs in the study (Brown, 2015). Furthermore, for each construct, the square root of AVE was found to be higher than its co-relational value.

The degree to which measures of distinct constructs are unique is referred to as discriminant validity (Campbell & Fiske, 1959). Discriminant validity exists when the proportion of AVE in each dimension exceeds the square of the coefficient showing its relationship with other dimensions (Fornell & Larcker, 1981). According to the findings of this study, the AVEs of the correlated latent variables were all greater than the square of the correlation between the constructs. As a result, the constructs in this study were found to have discriminant validity (Table 5). The initial CFA findings suggested that the following indices indicated an adequate model fit: (χ^2 /df= 1.920, RFI = 0.951, NFI = 0.958, CFI =0.979, GFI=0.914, TLI = 0.976, IFI=0.979, RMSEA = 0.059). The value of RMSEA shows a mediocre fit but acceptable as per Browne and Cudeck (1993). Refer table 6 for additional information.

Table 6: SEM Fit Indices

Fit Indices	Cut off Values	Model Study	References
Absolute Fit Measure			Byrne (1994); Hair et al. (2006); Raykov & Marcoulides (2000);
CMIN/DF	1-3	1.920	Arbuckle (2008); Harrington (2009); Meldrum (2010)
RMSEA	<0.05 , <0.08	0.059	
Incremental Fit Measure			
CFI	>0.90	0.979	
TLI	>0.90	0.976	
GFI	>0.90	0.914	
NFI	>0.90	0.958	
IFI	>0.90	0.979	
RFI	>0.90	0.951	

Source: Primary data

**Figure 2: Structural model and hypotheses (Source: AMOS Output)**

HYPOTHESES TESTING

Before testing the proposed hypotheses of the study, the researchers conducted CFA to ensure the validity and reliability of the instrument adopted herein. The path coefficient has been presented in figure 2, in which each hypothesis is linked with the other. It was noticed that all four hypotheses were seen to be accepted. Attitude ($\beta = 0.185$, t -value= 6.442, $p < 0.001$) positively influences tourist behavioral intention to travel post COVID-19. Subjective Norms ($\beta = 0.734$, t -value=25.537, $p < 0.001$), perceived behavioral control ($\beta = 0.430$, t -value= 14.958) also positively related to behavioral intention. At last PR ($\beta = 0.293$, t -value= -10.210, $p < 0.001$) negatively influences the tourist behavioral intention. Hence, hypotheses H1, H2, H3, and H4 all are supported the evidence.

The results reveal that attitude towards behavior, subjective norms, perceived behavioral control and perceived risk are significant for predicting behavioral intention. These constructs explained

Table 7. Summarized hypotheses

Relationship	Std. β	t-value	Results
H1: ATT \rightarrow BI	0.185	6.442	Supported
H2: SN \rightarrow BI	0.734	25.537	Supported
H3: PBC \rightarrow BI	0.430	14.958	Supported
H4: PR \rightarrow BI	-0.293	-10.210	Supported

Source: AMOS Output

approx. 84 % ($R^2 = 0.843$) of the variance in the behavioral intention to travel post COVID-19.

DISCUSSION AND CONCLUSION

This study empirically attempts to develop a framework of tourist behavioral intention, primarily hypothesized on the TPB model proposed by Ajzen (1991) with an added construct viz. perceived risk. An integrated influence of the theory of planned behavior and perceived risk was assessed on tourist behavioral intention. The results significantly support the TPB model in the pretext of tourist behavioral intention to travel post-COVID-19. All the three components of the TPB model viz. attitude, subjective norms, and perceived behavioral control have a direct and positive influence on tourist behavioral intention, while perceived risk has a negative influence on tourist behavioral intention as revealed in the outcomes. The path among attitude, subjective norms, perceived behavioral control, perceived risk, and behavioral intention was significant. Subjective norms came out as the most significant factor in the TPB model to predict tourist behavioral intention ($\beta=0.734$), followed by perceived behavioral control ($\beta=0.430$). The results of this study are aligned with previous studies (Han and Kim, 2010; Han et al., 2009; Lee et al., 2010). The reason for subjective norms to be the strongest predictor of behavioral intention may be the collectivistic culture of the country where the research was carried out (Lam & Hsu, 2006). People from a collectivist cultural country, such as India, may be more influenced by social norms than those from a dominantly individualistic culture (Hsu & Huang, 2012). However, in the western context, some TPB application studies indicated that the association between subjective norms and behavioral intention was not well defined (Sparks, 2007).

This study makes a contribution to the extension of the TPB model by taking the perceived risk as an antecedent of behavioral intention (Ajzen, 1991). It is incorporated into TPB's nomological structure. The findings unveil that perceived risk negatively influences tourist behavioral intention to travel post-

COVID-19. Perceived risk came out as a significant and positive predictor of tourist behavioral intention ($\beta=-0.293$). The results of this study are in alignment with previous studies (Amaro & Duarte, 2016; Mohseni et al., 2018). However, little research has been conducted on why tourists choose not to travel during and after a crisis (Kim et al., 2020). In order to fill this gap, this study was aimed to analyze tourists' behavioral intention by extending the TPB model and including perceived risk as an antecedent. By adding a separate component in the form of perceived risk, this study proposes an alternate model that provides a more in-depth understanding of tourist behavior to travel post-COVID-19.

Theoretical & Practical Implications

The applicability of the extended TPB model was empirically validated in this study incorporating one additional construct (perceived risk). This additional construct enhanced the robustness and predictive ability of the proposed theoretical framework when measuring tourist behavioral intention to travel post-COVID-19. Some important implications can be deduced on the basis of the findings of this study. It is evident from the results that subjective norms are the strongest predictor of tourist behavioral intention in India. Travel decisions are influenced by referent groups. During the prevailing COVID-19 situation, people are extra cautious regarding the health, hygiene, and social distancing measures (Sujood et al., 2021; Hotle et al., 2020; Abdullah et al., 2020). They are more influenced by referent groups while making travel plans. Therefore, marketing and public relations initiatives should target not just potential tourists but also the broader public in order to create a positive image of the destination among all segments of society so that a positive impact on future tourists can be exerted through subjective norms. Travel and tour operators and other transport agencies must ensure tourists' health and safety while traveling post-COVID-19. Perceived behavior control was also discovered to be a significant predictor of behavioral intention. Marketing practitioners should focus on the fact that post-COVID-19 travel should be easy, hassle-free, and within the own control of tourists.

Limitations and Future Research Directions

Regardless of theoretical and practical ramifications for academicians and industry practitioners, there are certain limitations of the study that sets the ground for future research. First, this study was carried out

in India that is a developing country and has a strong influence of family, friends, relatives, colleagues, and peer groups on behavioral intention. Therefore, future studies could be carried out in other developed nations for more robust findings and generalization. Second, the TPB model was validated in this study, using perceived risk as one of the predictors of behavioral intention. Future studies could include more factors, and the compound effect could be assessed by combining TPB with other behavioral models. Third, the data was collected from 268 respondents due to time constraints. Future researchers could incorporate a large sample size. More data might produce different results. Fourth, the findings of this study were based on a survey. As a result, future researchers could use a qualitative approach to gain a more in-depth understanding of the elements analyzed in this study. Fifth, the present study is cross-sectional in nature. Future researchers could collect data on a longitudinal basis to get more improved and accurate responses. Furthermore, because risk perceptions might have a significant impact on anticipated emotions, future researchers can also explore the role emotion plays in the tourist decision-making process. Finally, the proposed framework in this study can be tested in different contexts other than tourism. This might produce different outcomes.

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KEYWORDS

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Examining Antecedents of Tourism Student's Behavioral Intention towards E-learning during COVID-19 Pandemic in Oman

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Abstract

The pandemic has drastically restructured the way education is delivered around the world. Institutions quickly turned to virtual/online due to the sudden shift away from classroom (face to face) teaching. This paper attempts to understand the impacts of the COVID 19 pandemic on tourism students of the Public Sector Higher Education Institutions (HEIs) in shifting classroom education to the online and e-Learning mode of teaching and learning. The Oman government has prioritized the tourism and education sector in its 10th Five Year plan; however, due to the COVID-19 pandemic, regular tourism classes, seminars, conferences, industrial visits, practical internships etc., were suspended in Oman. HEIs in Oman adopted many preventive measures to ensure that education quality and continuous teaching and learning as the government's priority sector should not suffer. Therefore, from regular teaching and learning mode, the HEIs in Oman shifted to the online and e-Learning mode of teaching and learning. The present study is empirical and utilizes primary research to gather statistical data of undergraduate tourism students from Oman's various public

INTRODUCTION

According to the World Health Organization, coronavirus has caused an infectious disease known as COVID-19 (World Health Organization, Coronavirus. 2021). The impact of the Corona Virus (Covid-19) pandemic has had a devastating effect on Oman's many sectors of the economy (Owtram, F., & Hayek, M. 2021). This includes important economic sectors such as tourism and education in Oman. Tourism is one of the largest non-oil industry contributors to Oman's GDP, providing income and job prospects for Omani nationals (Al Maamari, 2020). The Sultanate of Oman has identified tourism as one of the sectors that would benefit from the country's economic diversification policy (Al-Suwailem, 2007). Manufacturing & Industries, Transportation & Logistics, Tourism, Fisheries, Mining, and Education are the six critical sectors that will contribute progressively to the country's GDP growth and promote economic diversification over the course of the country's 10th Five-year plan, from 2021 to 2025 (Oman Observer, 2021). Therefore, the government of the Sultanate of Oman has accorded high priority to tourism and education sector development. However, research suggests that students do not accord high priority to tourism as a career option in Oman. (Atef and Al Balushi, 2017) The COVID-19 pandemic has put a halt to Oman's economic gains from tourism. Loss of jobs in the tourism industry has a detrimental effect on students specializing in tourism education's confidence. The coronavirus has impacted the education sector in Oman by restructuring the way education is delivered during the Higher Education Institutes (HEIs) closure period. This closure of HEIs due to Covid-19 has triggered the enormous use of online teaching technology and e-Learning in the tourism education programs at the public sector HEIs in Oman. The already less popular tourism education scenario marred by the pandemic has therefore made it essential to analyze the antecedents of tourism students' behavioral intention towards shifting from face-to-face learning to using e-learning during the COVID-19 pandemic in Oman.

As evident from many studies, the HEIs worldwide are inevitably using online teaching technology (Mailizar et al., 2020; Wang et al., 2020; Meet & Kala, 2021) to mitigate the impact of coronavirus on the education

sector HEIs. The present study investigates tourism students' perceptions and experience about the education shift from classroom to online and e-Learning mode in general and influence of IT tools anxiety (technology acceptance), enjoyment, subjective norms, emotional life, and personal circumstances in their learning experience in particular. An online survey was administered to conduct the research and collect data. The findings of this study show that all four variables under study, i.e., perceived usefulness, perceived ease of use, environment readiness, and perceived self-efficacy, positively correlate with the behavioural intention of using e-learning. Thus, for effective e-learning to happen, prepare tourism students to accept technology, provide better infrastructure and internet accessibility, and train tourism teachers as per the new paradigm. The findings of this study may serve as a base for further research on tourism students' e-learning experience models.

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sector. Online teaching technology uses technological tools to communicate and gather information through the World Wide Web (Wood and Smith, 2004). This online teaching has facilitated many private and public sector HEIs in Oman to shift from regular teaching and learning mode to the online mode of teaching and learning. Although these measures were undertaken to ensure that education quality and continuous teaching and learning should not suffer; however, these measures have impacted tourism students' perception and overall teaching and learning experience. Many studies have been conducted regarding the impacts of online teaching and e-Learning applications in education on students (Abbasi et al., 2020; Alamanthari et al., 2020). During COVID-19, the HEIs worry about adopting online and e-Learning teaching methods to provide quality education (Carey, 2020). In Turkey, few researchers had previously investigated Arab students' attitudes towards web-based online learning (Isik et al., 2010).

However, there is a dearth of similar research studies in Oman pertaining to the tourism students' perceptions and experience. To fill this research gap, this study, therefore, focusses on the investigation of public sector HEIs tourism students' perceptions and experience about the education shift from classroom to online and eLearning mode in general and influence of IT tools anxiety (technology acceptance), enjoyment, subjective norms, specific hygienic behaviors, emotional life and personal circumstances in their learning experience during this pandemic period. This study will shed light on public HEIs tourism students' behavioral attitudes and perception towards eLearning and thereby devising future educational improvement strategies in such a trying time of the pandemic. The purpose of this study was to forecast perceived ease of use and perceived usefulness of online eLearning.

An online survey was used to collect data as part of an empirical research study. The Partial Least Squares (PLS 3) tool was used to analyse the data. This research study adopted the Technology Acceptance Model (TAM) as a guiding academic framework to anticipate the perceived ease of use and utility of online eLearning in Oman's public sector institutions. This study is organized as follows: an introduction, a review of the literature and the creation of hypotheses, a conceptualized model, a methodology, data analysis and results, discussions, implications, and conclusion.

Research Gap

The previous research establishes the positive association between perceived usefulness and perceived ease of use in determining the behavior of students to use online learning (Shin, 2006; Chiu et al., 2005). Limited research is directed towards other determinants affecting tourism students' towards eLearning pertaining to public sector higher education institutions in Oman. This study addresses this gap by investigating the effect of environment readiness, perceived self-efficacy, perceived usefulness, and perceived ease of use of tourism students towards e-learning in public universities in Oman.

OBJECTIVES

The study's primary aims include the following:

- a. To investigate the link between the perceived usefulness of e-learning and the behavioral intention to utilize it.
- b. To examine the relationship between perceived self-efficacy and behavioral intention of using e-learning.
- c. To examine the relationship between perceived use of ease and behavioral intention of using e-learning.
- d. To examine the relationship between environmental readiness and behavioral intention of using e-learning.

REVIEW OF LITERATURE AND HYPOTHESES DEVELOPMENT

The Public Higher Educational Institutions in Oman were engaging both the traditional face-to-face lecture and blended learning methods to educate the tourism students. But the sudden outburst of the Covid-19 pandemic greatly impacted the Public HEIs to shift the classroom education solely to the online and eLearning mode of teaching and learning. The regular tourism classes, seminars, conferences, industrial visits, practical internships etc., were also initially suspended and subsequently conducted through the online and eLearning mode in Oman. Numerous classes, career engagement activities deemed important by students, and other academic activities such as academic advising and site tours were either temporarily discontinued or shifted to online or blended modes (Dopson et al., 2021). In Online learning, synchronous or asynchronous learning environment experience is provided to the students with the help of different devices such as mobile phones, tablets, laptops, etc., with internet access. This environment enables students to independently or interactively learn with others (Singh & Thurman, 2019). The blending of information technology and the internet has established a trend of an innovative education delivery method like eLearning.

COVID-19 and Online e-learning

Numerous health-related crises in the past, such as SARS, Zika Virus, and Ebola, have had a detrimental effect on the tourist business, but none have had as much of a severe effect as the COVID-19 pandemic (Kaushal & Srivastava, 2021). The COVID-19 has really interrupted tourism and allied industries (Jamal & Budke, 2020). A recent study by Seraphin & Yallop (2020) reported that whenever tourism is impacted by major external factors, research literature largely focuses on the tourism industry, ignoring that tourism

is also an academic discipline. Tourism & hospitality education and eLearning during the current pandemic is a popular research field and contributed by many researchers. (Edelheim, 2020; Griffin, 2021; Hayes, 2020; Qiu et al., 2020; Smith, 2021; Tavitiyaman et al., 2021; Tolkach & Pratt, 2021; Zopiatitis et al., 2021). Menon et al. (2021) recently performed bibliometric analysis and identified research themes pertaining to covid pandemic and tourism and hospitality education.

While emphasizing the influence of COVID-19 on tourism education, Tiwari et al. (2020) stated that large events in the areas of tourism have an effect on the educational system and vice versa. Digital technology integration into hospitality and tourism education is not a new trend (Goh & King, 2020). However, the current pandemic has exerted pressure on tourism students and left them with limited choices in continuing with their preferred mode of teaching and learning. (Ying et al., 2021) The online and e-learning modes emerged as a strong alternative to face-to-face education for tourism students during the pandemic but suffered from many limitations. Previous research studies have found that full-scale online learning has greater dropout rates than face-to-face or physical forms of learning (McArdle G, Bertolotto, 2012). Burgos et al. (2007) recommended that to minimize challenges, institutions should make necessary modifications prior to introducing online education. The online mode of education has been generally believed to be insufficient to replace face-to-face mode of education. This has been widely considered in the context of the COVID-19 pandemic (F. Farooq et al., 2020; Adnan, 2020). Considering poor learning conditions, educators must develop effective methods to address students' concerns.

According to Surjono (2013), there are many concepts on eLearning; however, its standard implementation has not been made. Sohn (2005) has explained eLearning as a short form for electronic learning. Schworm and Gruber (2012) demonstrated that eLearning is an internet-based learning process that makes students more independent and improves student-centered learning. The eLearning can be disseminated through various types of educational tools. According to Hanh et al. (2020), the other types of similar eLearning education tools or learning platform terms widely used globally are, for example such as Technology Enhanced Learning (TEL), Computer Based Instruction (CBI), Computer-based Training (CBT), Computer-assisted Instruction (CAI), Internet-based training (IBT), Web-based

Training (WBT), online education, virtual education, Virtual learning environment (VLE), and a learning and digital education collaboration.

In this research study, perceived usefulness (PU), perceived self-efficacy (PSE); perceived ease of use (PEOU); environment readiness (ER), and their relation to behavioral intention (BI) of using e-learning are hypothetically tested with the help of the TAM model. Since its commencement in 1989 (Davis, 1989), the TAM model has widely been used to determine users' prediction of attitude, willingness, and behavior in the acceptance of new technology. The success and failure in implementing e-learning can be linked with Behavioral Intention (BI) in using e-learning (Mohammadi, 2015). The Behavioral Intention (BI) is stimulated by the users' beliefs, namely perceived usefulness and perceived ease of use (Venkatesh and Davis, 2000). Although TAM has been applied to research eLearning in HEIs in normal non-crises conditions (Mohammadi, 2015; Ramírez-Correa et al., 2015), but, limited studies employed TAM to examine the use of e-learning during pandemics like Covid-19 in Oman. Therefore, the present research study will enrich the academic literature in understanding the perceived ease of use and perceived usefulness in relation to behavioral intentions of tourism students in using online eLearning in public sector institutions in Oman.

Perceived Usefulness and behavioral intention of using e-learning

'Perceived Usefulness' (PU) refers to the degree to which a system can be useful and improve the users' performance (Perman and Sentianto 2017). Sabherwal et al. (2006) considered perceived usefulness as an important word to describe an individual's willingness to increase a user's performance. Sukendro et al. (2020) used TAM to understand students' perceived usefulness of e-learning during Covid-19 in the Indonesian sports science education context. Few earlier researchers reflected that behavioral intentions were significantly correlated to the actual use of technology, especially e-learning (Ramírez-Correa et al., 2015; Teo, 2009). In the present study, the perceived usefulness is hypothesized to positively correlate with the behavioral intention of tourism students using e-learning in public HEIs in Oman during the Covid-19 pandemic. Hence the following hypothesis is put forward:

H₁: Perceived usefulness is positively related to the behavioral intention of using e-learning.

Perceived Self Efficacy and behavioral intention of using e-learning

Perceived Self Efficacy (PSE) is defined as "the degree to which an individual believes that he or she has the ability to perform a specific task/job using the computer". Thakur and Joshi (2018) studied the graduate students' self-efficacy and behavioral intention to use e-learning. Yilmaz, R. (2016) explored the knowledge sharing behaviors in the e-learning community by the structural relationships between knowledge sharing behaviors (KSB), academic self-efficacy (ASE), and sense of community (SoC). Latip et.al, (2020) studied the Malaysian students' acceptance of e-learning and the effects of self-efficacy. One study extended the Delone and McLean information system success model by incorporating a self-efficacy construct as an antecedent to user satisfaction and actual usage to predict student performance. (Aldholay et.al 2018) Many previous studies established a relationship between perceived self-efficacy (PSE) and behavioral intention (BI) of using eLearning by using the TAM model (Revathi and Tselios (2017). Perceived Self Efficacy (PSE) is a significant factor for students' intention to use e-Learning (Al-Rahmi et al., 2018). Since the TAM model was applied to study the self-efficacy and behavioral intention of tourism students towards e-learning in Oman during the Covid-19 pandemic; hence, the following hypothesis is suggested:

H₂: Perceived self-efficacy is positively related to the behavioral intention of using e-learning.

Perceived ease of use and behavioral intention of using e-learning

The Perceived Ease of Use (PEOU) is defined as how someone believes that information technology is easy to understand (Davis, 1989). The PEOU was also testified to be substantial in predicting attitudinal behavior (Buabeng-Andoh et al., 2019; Muhaimin et al., 2019). Previous researchers established a strong correlation between perceived ease of use and behavioral intention to use e-learning (Mohammadi, 2015); Ramírez-Correa et al., 2015). Many earlier studies also proved that perceived ease of use positively correlates with behavioral intention (BI) to directly or indirectly use technology (Cheng, Y. M., 2012). The perceived ease of use variable in the original TAM is defined as the degree to which public HEIs tourism students in Oman feel that online learning and e-learning would be simple to use

during the Covid-19 pandemic. As a result, it was projected that perceived usefulness correlates favourably with the behavioral intention to utilize e-learning.

H₃: Perceived ease of use of e-learning is positively related to the behavioral intention to utilize it.

Perceived Environmental readiness and behavioral intention of using e-learning

Environment factors refer to the user's external environment, which has an impact on their capacity to execute a task. The information system platform is used to distribute course materials to the user and serves as the user's learning environment in an e-learning scenario. A virtual learning environment's environmental dimensions include technology, content, a learning model, learner control, and interaction (Piccoli et al., 2001). Since e-learning is convenient to be implemented in any environment and at any time, this characteristic has been reported to be one of the most important motives for users to accept Internet-based environments for learning (Salehi et al., 2015). Zawaideh (2018) identified factors in interpreting the eLearning environment among students in higher education. Many earlier studies, such as Al-Rahmi et al. (2019), adopted the TAM model to study students' behavioral intention in using e-learning in a stable environment. An individual's technology readiness could reflect his intentions to adopt the new technologies (J.-S. Lin & Chang, 2011). Technology readiness is an

important factor in the effective implementation of online learning (Rasouli, Rahbani, & Attaran, 2016) and can be judged by assessing the user's knowledge (Rasouli et al., 2016), computer and internet efficiency, and attitude in eLearning (Kumar, 2017). Ayasrah, F. T. M. (2020) explored readiness of E-Learning environment as mediating between trust, hedonic motivation, students' expectation, and intention to use technology. By studying the literature, perceived environment readiness for eLearning in Oman is hypothesized to be positively related to the behavioral intention of using eLearning. Hence, the following hypothesis is put forward:

H₄: Environment readiness is positively related to the behavioral intention of using e-learning.

METHODOLOGY

Data were collected from undergraduate tourism major students studying in the public sector higher education institutions in Oman who were currently using the online and eLearning platform for education purposes amidst the covid situations. The data were collected from six cities: Sohar, Ibri, Rustaq, Nizwa, Salalah and Muscat. Due to online data collection, the tourism students were approached based on the availability and readiness of the respondents. Therefore, convenience sampling was adopted. Moreover, the female tourism major students who agreed to participate and fill the questionnaire were requested to share the google form among their tourism Major friends to enhance the sample size. Thus, convenience and snowball sampling techniques were used. The data were collected from February 2021 to April 2021. The convenience and snowball sampling technique was used. The tourism students were given the structured questionnaire via google form link on MS Teams and were asked to circulate the same among their friends. The questionnaire was divided into two parts: Section A included the information regarding the demographics of the students and section B was used to measure the environment readiness, perception, and behavioral intention towards e-learning. The objective of the study was well explained to the respondents. All ethical protocols were followed. Total 308 complete questionnaires were received via google form framing the final sample for the study. According to (Hair, et al., 1998), the sample size should be at least ten times the number of items in the questionnaire, thus justifying the sample size of the current study. The pilot study was conducted to validate the questionnaire and make sure that the

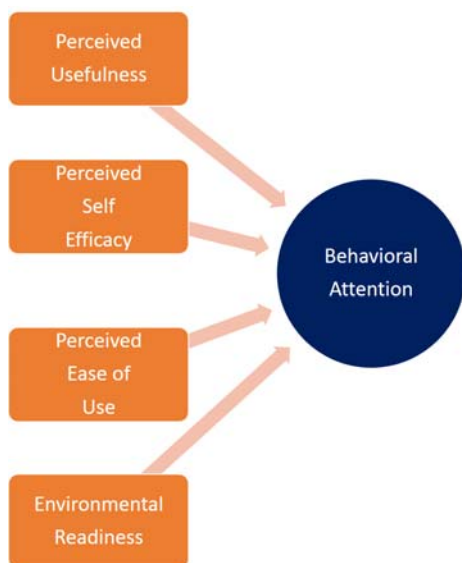


Figure 1: Conceptualized model for the study

respondents are able to interpret the true meaning of the statements. The pilot study included a questionnaire being distributed to 40 students (Sheatsley, 1983). The experts and academicians examined the questionnaire to make sure that the statements were clear and readable.

For measuring the constructs, well-established scales were used. Perceived usefulness, perceived self-efficacy, perceived ease of use and behavioral intention scales were adopted from (Khan, Vivek, Nabi, Khojah & Tahir, 2020). The perceived usefulness of e-learning (PU) was measured with four items. Sample item includes “Electronic tools available to enable interactive communication between instructor and student without meeting face to face”. Perceived Self-efficacy (PSE) was measured using three items. Sample item includes “I feel confident while using e-learning system.” Perceived ease of use (PEOU) was measured using four items. Sample item includes “I believe e-learning platforms are user friendly.” Behavioral intention (BI) was measured using three items. Sample item includes “I intend to use e-learning to assist my learning.” Environment readiness (ER) of the students was measured with the optimism dimension of the well-developed technology readiness index developed by (Parasuraman 2000). The scale consists of ten items. Sample item includes “Technology gives people more control over their daily lives.” All construct items were gathered on a five-point Likert scale ranging from 1 to 5 (1= “strongly disagree” to 5= “strongly agree”). As previously, the same scale has been used by the authors, and moreover, it is easy for tourism students to understand the five-point Likert scale. The data analysis was performed in two parts: descriptive statistics and structural modelling. IBM SPSS 21 software was used for reporting

descriptive statistics. The structural modelling was performed using SMART-PLS software.

RESULTS

Descriptive Analysis

The descriptive analysis of the sample data is given in table 1. The percentage analysis shows that around 45% of the students were male, and 54% were female. The students of class (20-21) constitutes nearly 49% and class (21-22) constitutes nearly 51%. Around 63.3% of the students were from the business program’s tourism major and 36.7% belong to IT/Others program studying elective tourism courses. For the place, 10% belong to Ibri, 16% to Rustaq and Nizwa each, 22% from Sohar, and nearly 18% from Muscat and Salalah each.

Model analysis

Measurement Model Analysis

The measurement model provides procedures for determining the reliability and validity of each of the model’s components. The reliability of the construct is calculated by using factor loadings, composite reliability, and Cronbach alpha. The convergent validity is calculated by using the average variance extracted. All the values obtained by running the PLS-Algorithm are given in table 2. The reliability of all constructs was above 0.7, and the value of the average variance extracted was above 0.5. All the constructs met the threshold of reliability and validity, thus validating the measurement model (Hair et al., 2017).

For discriminant validity, Fornell- Larcker criterion was used (Fornell & Larcker, 1981). The value of the discriminant validity is given in table 3. Since all the values of inter-correlation among the

Table 1: Descriptive statistics of Students (N = 308)

Demographic	Category	Frequency	Percent
Gender	Male	140	45.5
	Female	168	54.5
Class	20-21 year	152	49.4
	21-22 year	156	50.6
Program	Business Tourism Major	195	63.3
	IT/Others studying Tourism electives	113	36.7
Place	Ibri	32	10.4
	Rustaq	48	15.6
	Nizwa	48	15.6
	Sohar	69	22.4
	Muscat	55	17.9
	Salalah	56	18.2

Table 2: Reliability and validity of the constructs

Construct	Items	Outer Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Behavioural Intention	BI1	0.856	0.824	0.895	0.74
	BI2	0.859			
	BI3	0.866			
Environment Readiness	ER1	0.77	0.912	0.927	0.559
	ER10	0.71			
	ER2	0.792			
	ER3	0.751			
	ER4	0.742			
	ER5	0.766			
	ER6	0.713			
	ER7	0.757			
	ER8	0.702			
	ER9	0.771			
Perceived ease of use	PEOU1	0.847	0.844	0.896	0.682
	PEOU2	0.831			
	PEOU3	0.814			
	PEOU4	0.823			
Perceived self-efficacy	PSE1	0.847	0.848	0.898	0.687
	PSE2	0.866			
	PSE3	0.813			
Perceived usefulness	PU1	0.817	0.795	0.88	0.71
	PU2	0.858			
	PU3	0.852			
	PU4	0.775			

constructs are less than the square roots of the Average Variance Extracted (AVE) values of each construct, thus discriminant validity is established.

Structural Model Analysis

The structural model analysis was initiated by performing collinearity analysis among the independent variables. The Variance Inflation Factor (VIF) was used to check the collinearity among the independent variables. The values are given in table 3, All the values are less than 5 (Hair et.al. 2017), thus conforming that there is no problem of collinearity among the variables. The causal

relationship between environment readiness and behavioral intention perceived ease of use and behavioral intention, perceived usefulness, and behavioral intention and perceived self-efficacy and behavioral intention is depicted in figure 2. The PLS-Algorithm was run to evaluate the model. The value of $r=0.519$ suggests that the variables ER, PU, PSE, and PEOU explains around 52% of the variance of the dependent variable, which is substantial (Cohen, 1988).

To assess the significance and test the developed hypotheses, bootstrapping of 5000 subsamples was performed. The results are given in table 4.

Table 3: Discriminant Validity of constructs

	Behavioural Intention	Environment Readiness	Perceived Usefulness	Perceived ease of use	Perceived self-efficacy	VIF
Behavioural Intention	0.86					
Environment Readiness	0.672	0.848				1.17
Perceived Usefulness	0.678	0.803	0.826			2.511
Perceived ease of use	0.606	0.782	0.702	0.829		2.619
Perceived self-efficacy	0.62	0.741	0.757	0.702	0.842	3.017

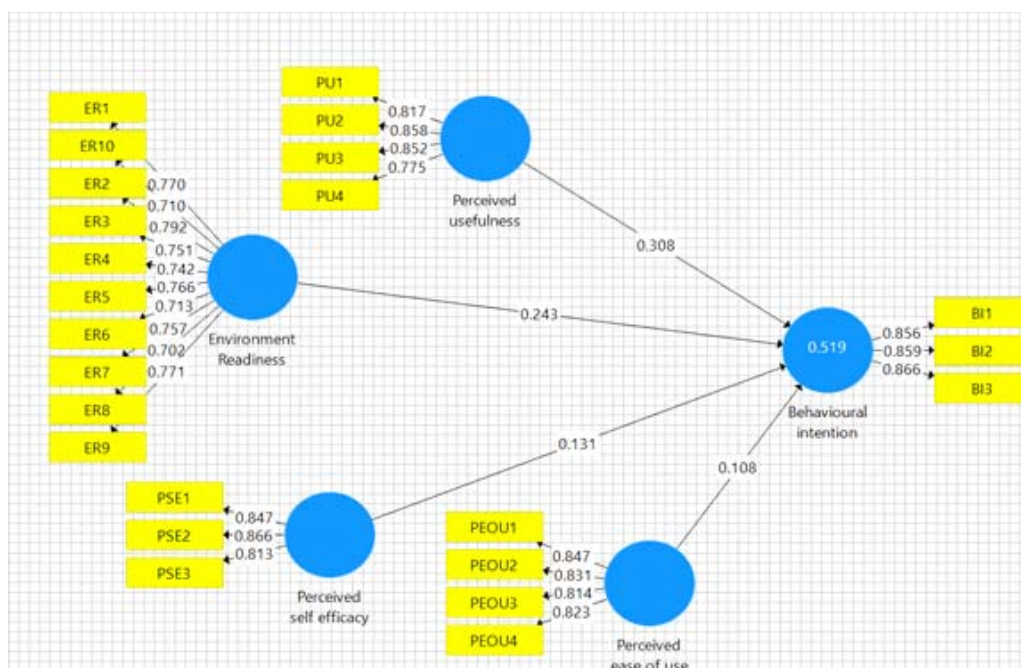


Figure 2: Structural model of conceptualized model

The results show that all the paths are significant as the value of the p is less than 0.05. The first hypothesis stating the position relationship between perceived usefulness of e-learning and behavioral intention ($PU \rightarrow BI$) is supported ($t = 5.142$, $p < 0.05$). The second hypothesis of a positive relationship between perceived self-efficacy ($PSE \rightarrow BI$) is also supported by the results ($t = 2.649$, $p < 0.05$). The third hypothesis with respect to perceived ease of use and behavioral intention shows a significant relationship ($t = 2.009$, $p < 0.05$) and the last hypothesis of a positive relationship between environment readiness and behavioral intention ($ER \rightarrow BI$) is also supported by the data ($t = 3.837$, $p < 0.05$).

DISCUSSIONS

The online pandemic has brought a paradigm shift in tourism teaching pedagogy. The shift from traditional teaching method: physical (face to face)

to the digital world: online is new for the tourism students as well as for the tourism faculty. The current study shows how different variables are associated with the behavioral intention of tourism students to use e-learning platforms. The objectives of the research were well hypothesized and tested using the appropriate tool. The results indicated that the perceived usefulness is the most prominent factor ($\beta = 0.308$) impacting the behavioral intention of tourism students in using e-learning platforms. The usefulness of e-learning in terms of flexibility of time and location is considered to be most favourable by tourism students. The hypothesis for the same is supported by the results and shows a significant relationship between PU and BI . The second most prominent factor is environment readiness, i.e. readiness to accept the technology as part of the education system ($\beta = 0.243$). The readiness of tourism students to accept the technology is

Table 4: Structural model results

	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Decision
$PU \rightarrow BI$	0.06	5.142	0.000	H_1 supported
$PSE \rightarrow BI$	0.05	2.649	0.008	H_2 supported
$PEOU \rightarrow BI$	0.054	2.009	0.045	H_3 supported
$ER \rightarrow BI$	0.063	3.837	0.000	H_4 supported

beneficial in making online learning smooth and productive. This comes when tourism students see online learning to be efficient and cost-effective. The results show a significant positive relationship between ER and BI of using e-learning. Perceived self-efficacy determines the level of confidence among tourism students to use the technology. The positive relationship between PSE and BI shows that as tourism students become more confident in using the technology, they show repeated behavior in using the same. Last, the significant positive relationship between PEOU and BI is also well supported, indicating that when tourism students believe that online learning is user-friendly, they tend to use it more. All the hypotheses are well supported by the results and align with the previous research (Ching-Ter, Su & Hajiye, 2017; Abdullah, Ward, & Ahmed, 2016; Aguda-Peregrina, Hernandez-Garcia, & Pascual-Miguel, 2014).

Managerial Implications

The current study possesses some serious implications on the part of education management. First, the public universities need to make their tourism students aware of the use and benefits of e-learning to facilitate better adaptability. Benefits of the e-learning will help the tourism students to get more aware of its usage. The adaptability to e-learning will enhance gradually. Second, it also calls for better training for tourism teachers to teach online and make the sessions interactive. This will ensure that when tourism teachers are well prepared and have a better understanding then they can act as facilitators in supporting e-learning. Third, better infrastructure facilities to support online education should be provided. This will reduce physical barriers and provide smooth functioning. Fourth, regular feedback from the tourism students will help in enhancing the online education experience. This will help in enhancing the e-learning policies for the public HEIs in the field of tourism education and further facilitate in establishing the popularity of otherwise less popular tourism education among the students in Oman.

CONCLUSIONS

The study shows the relationship of different variables with the behavioral intention of using e-learning among tourism students in public sector institutions in Oman. The study points out that all four variables under study, i.e. perceived usefulness, perceived ease of use, environment readiness, and perceived self-efficacy, positively correlate with the

behavioral intention of using e-learning. Thus, in order to implement and have effective e-learning for tourism students in higher education of public universities, it is important to prepare tourism students to accept technology and be prepared for it. This can be achieved by making the better infrastructure, providing internet access to all, training the tourism teachers as per the new paradigm. To make this change easily adaptable, it is essential to create an inclusive environment for all the tourism students by making them more technology-ready. The findings of this study may be of interest to educators, including tourism teachers, and serve as a base for further research on online and eLearning experience models, especially in terms of understanding tourism students' perceptions and expectations about online and eLearning during COVID-19 pandemic. These findings could further facilitate the public universities administration to understand the eLearning behavior of their tourism major students.

Limitation and future research

The study possesses some limitations and suggests some future research areas. First, the study was a cross-sectional database, and prospective studies should include longitudinal data. Second, the data were collected from the tourism students of the public institutions only. A comparison between public and private universities tourism major students could draw better impressions. Finally, the data of tourism students from other countries could help in providing a cultural context perspective.

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KEYWORDS

**Tourism,
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COVID-19 and Global Pandemic Recovery Strategies: A Bibliometric Analysis through Contemporary Literature

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Abstract

Tourism is one of the industries that is heavily affected by the COVID 19 with about 80 percent fall in tourists' arrival. The travel restrictions and regulations for the safety of the people have impacted many industries. It is estimated that COVID-induced global crises may take a long time for the industry to fully recover. This phenomenon has captured the interest of many researchers and academicians with several publications relating to the COVID 19 pandemic, crises recovery, strategies, sustainability, etc. However, there is a lack of concrete solutions to the ongoing problems relating to tourism. The objective of the study is to find out the important element for tourism recovery and sustainability addressed from the recent literature. The study is exploratory as it delves into an avenue of emerging literature on global crises. Text analysis was done on 30 papers relating to the COVID impact on tourism with the keywords: sustainability, COVID, tourism, strategies, and recovery. For the analysis, tools like cirrus and collocate analysis were used. They are used for identifying repeated words associated with COVID and tourism, further analysis such as context, trends, topic, and word tree were used. The text analysis was done using

INTRODUCTION

The tourism industry has been greatly affected by the COVID-19 crises posing a long-term challenge across the service industry. The implementation of travel/movement restrictions for the safety of the people has led many service industries to close down. Such travel restrictions and regulations for the safety of the people have impacted many industries. For example, tourism saw about an 80 percent fall in tourists' arrival. This phenomenon has captured the interest of many researchers and academicians on the topic relating to the COVID 19 pandemic, crises recovery, strategies, sustainability, etc. there are many descriptive single case studies done for research gap-spotting. Other studies like forecasting for decision-making have been hugely explored. However, these case studies are not generalizable (Pennington-Gray, 2018; Ritchie & Jiang, 2019), they provide ample highlights to the solution to the current problems. Since a crisis like COVID-19 Pandemic is a global phenomenon for the first time in history, most of the researches done are exploratory. The COVID-19 is unique and very relevant for research. The previous crisis that happened before COVID are geographically confined and did pose limited global threats. Therefore the literature relating to previous crisis recovery and strategies cannot be generalized with the current COVID crisis. However, they show some similar patterns in terms of theories used and managerial decision-making. Many of the tourism research that appears in mid-2020 and early 2021 are related to tourism recovery, pandemics, crisis, policymaking, strategies, and sustainability. However, the lack of concrete solutions in the literature to the ongoing problems relating to tourism and global crises has led to confusion as to what decision-making would best solve the problems.

Therefore, the study aims to find out the important element for tourism recovery and sustainability addressed from the recent literature. The study is exploratory as it delves into an avenue of emerging literature on global crises. For identifying the growing use of words and elements of tourism recovery, content analysis is done on 30 papers published between mid-2020 and early 2021. The selection of the papers is based on journal credibility and through a panel of experts. Voyant tools were used for content analysis, this analysis help to identify important collocates of word strategies, recovery, COVID, pandemic, and sustainability.

Voyant tools - an open-source web-based tool. The findings from the analysis indicate a concern on the tourism industry post-pandemic, with strategies to tackle the situations and revive the industry back to how it was. One of the important components of forward driving is sustainable development with recent research emphasizing recovery and tourism sustainability. The findings also show emerging text for crisis recoveries such as sustainability, resilience, emotion, experience, proactive, preserving, well-being, ethics, equity, and technology.

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LITERATURE REVIEW

Crisis and Disaster

The phenomena such as disaster and crisis are well-researched. There have been several kinds of literature covered on crises such as 9/11, Katrina, Tsunami, volcano, financial crisis, etc., every crisis has one common thing that is its impact on the economy and its recovery. The literature covered on crisis and disaster can be divided into two parts i.e. natural disaster and man-made or socio-political disaster. Natural disaster includes earthquakes, flooding, volcanos, cyclones, etc., man-made/socio-political disaster comprises events such as war, financial crisis, political-economic crisis, terrorist attack, etc. (Zenker & Kock, 2020). Furthermore, there is a difference between Crisis and disaster. A crisis is anything that physically disrupts and affects the system threatening its sense of self, basic assumption, and its existential core (Pauchant & Mitroff, 1992, p. 15) whereas disaster is a situation where there is a sudden unanticipated catastrophe that is not fully under our control (Scott & Laws, 2005, p. 151). The event that happened in late-2019 is regarded as a crisis as it represents an event where there is a failure of the organization to contaminate the given situation. One of the reasons why the coronavirus pandemic is new to its kind is because it is a natural as well as man-made and socio-political disaster. Thus it is a mix of the given underlying two types of disasters. Crisis and disaster affect the economy of a given place, negatively impacting every industry. Of all industries, tourism is one of the industries that may take a long time to fully recover.

Crisis and Tourism

Related tourism studies on crisis include 9/11 (Avraham, 2021), SARS (Zeng, Carter, & De Lacy, 2005), Cyclone, (Prideaux, Coghlan, & Falco-Mammone, 2008), the bird-flu (Rittichainuwat & Chakraborty, 2009), volcano (Rindrasih, 2018), earthquake (Huang & Min, 2002) Ebola (Cahyanto, Wiblishauser, Pennington-Gray, & Schroeder, 2016; Novelli, Burgess, Jones, & Ritchie, 2018), influenza pandemics (Page, Yeoman, Munro, Connell, & Walker, 2006), etc. all these studies have contributed to the literature on tourism during crisis and disaster, however, every crisis is different geographically and socio-politically and thus the recovery strategies may vary according to the nature of the crisis. Tourism researcher has tried to compile the recovery strategies implemented in past crisis to the present crisis, however, one should remember that the COVID crisis is new to its kind and is not constraint by politico-geography. Every country is affected and there is no one solution to recovery. Tourism studies on the impact of the COVID pandemic show similarity with the SARS crisis and the global economic crisis in terms of crisis-induced economic crisis. For instance, Cooper, (2006) and Zeng, Carter, & De Lacy, (2005) show tourists' behavior during the crisis, and also studies by Papatheodorou, Rosselló, & Xiao, (2010) on the 2008 economic crisis shows the consequences and perspective on global economic crisis and tourism. The crisis affects the country or place image which hampers the place brand and thus consequently affects the tourism in the given place.

Dark Tourism

Dark tourism is vastly explored in tourism literature. It covers the place or destination affected by war or crisis/disaster, for example, politico-crisis such as the refugee crisis (Zenker, von Wallpach, Braun, & Vallaster,

2019). Dark tourism also highlight why people travel even during time of crisis, it is important to understand the tourist behavior for conceptual development. In such a situation it is vital to consider the safety perception of the tourist. To undermine the safety protocol, there need proper crisis management, policies, and strategies. Also a proactive initiation on tourism recovery.

Crisis Prior COVID

There are numerous tourism studies done on crises prior to COVID-19. These studies include both natural disasters and socio-political crises. Some prominent studies on disaster-induced tourism recovery include Hurricane Katrina (Miller, D. S. (2008) Chacko, H. E., & Marcell, M. H. (2008), tsunami (Robinson & Jarvie, 2008; Rittichainuwat, 2006), earthquake (Huang, & Min, 2002), volcano (Jolly, Keys, Procter, & Deligne, 2014). And also some tourism recovery studies on man-made or socio-political crises include terrorism (Steiner, 2007), economic crisis (Smeral, 2010), and political conflict (Amiry & Bshara, 2007). Some other studies on unpredictable circumstances such as health crisis include SARS (Wall, 2006; Mao, Ding, & Lee, 2010), Ebola (Novelli, Burgess, Jones, & Ritchie, 2018), flu (Page, Song, & Wu. (2012) and many more. All of these crisis carries one common recovery strategy i.e. communicating positively about the affected destinations. This led to destination image repair and thus effectively helps tourism recovery. Other recovery strategies include policy-making and marketing efforts. However prior crises cannot be compared with COVID crises though all the crises have similar patterns such as economic loss, panic, disruption in the system, etc. one of the reasons why the COVID crisis is unique is that it is a global crisis affecting every country, especially the travel industries. Though prior crisis similar strategies have been applied to the COVID crisis, it is not sufficient. This is because the COVID crisis shows a mix of natural crisis and socio-political. Therefore, the development of literature on COVID crisis-induced tourism recovery is very important.

Paradigm Shift

Past studies on crisis indicate that tourist behavior change when exposed to the crisis. As a result, travel behavior changes. For instance, tourists may avoid crowded destinations and favor remote places with less population (Zenker et. al. 2020). The crisis also changes the behavior of residents of a destination, where residents may repel tourism and become

unwelcoming with xenophobic tendencies. Subsequently, the global COVID crisis may reshape every country in terms of travel and tourism policies to tackle the crisis. This may change the behavior of both the tourists and residents thus proving ample scope for future studies. Thus, there may be a paradigm shift in the way tourism operates post-COVID.

The existing literature on COVID-induced tourism crises has been mainly on conceptual development and exploratory studies. Since the COVID-19 crisis is a combination of socio-political crisis, natural disaster, economic crisis, and tourism demand crisis, future research on COVID-19 can acknowledge both the complexity and chaos of the system, (Zenker, & Kock, 2020). Also, it is important to take the stakeholders in the study as the COVID crisis has affected the connectedness of the whole system. This kind of situation gives an avenue for researchers to study deeper into the underlying relationship between crisis and its impact. This also gives immediate urgency for tourism researchers and policymakers to focus on strategies for short-term and long-term recovery. There is a need for research that for on the management of the pandemic. Such research would contribute to the economic development Also research on categorizing crises and disasters and their underlying causes and impact would contribute to future literature

METHODOLOGY

The study is exploratory as it delves into an avenue of emerging literature on global crises. The objective of the study is to find out the important element for tourism recovery and sustainability addressed from the recent literature. For this purpose, papers relating to the impact of COVID on tourism are taken for analysis. About 100 papers relating to COVID and tourism that were published from March 2020 to June 2021 were taken from google scholar. For the selection of papers, keywords were used. The keywords were 'pandemic, COVID, tourism, recovery, strategies, crisis, and sustainability. These keywords were used for identifying the recent papers. A total of 100 papers relating to crisis and COVID were downloaded from google scholar. Out of 100 papers with the keywords, 30 papers were selected for further analysis. The selection criteria of the 30 papers were based on journal credibility and also through a panel of experts' opinions. The text of selected 30 papers was merged in a single MS word after removing the reference section of each paper. The reference section was removed because they

Table 1: Recent literature on COVID induced tourism crisis

Authors	Paper type	Keywords	Recovery
Avraham, (2020)	Conceptual	Crisis recovery, strategies, COVID-19	There are three image repair strategies i.e. source, message, and audience
Shao, Hu, Luo, Huo, & Zhao, (2020).	Exploratory	Policies, tourism recovery, COVID-19	To support policymaking, Four core themes are identified i.e. (a) prophylactic measures, (b) tourism recovery and development, (c) policy support, and (d) departmental management.
Thirumaran, Mohammadi, Pourabedin, Azzali, & Sim, (2021).	Conceptual	Crisis management, newspaper portrayal, COVID-19	There is a relationship between crisis management and the news portrayed in the media. Media play a significant role in crises recovery
Gallego, I., & Font, X. (2020).	Exploratory/ empirical	Tourism policy, passenger, COVID-19	Forecasting using big data for policymaking
Rastegar, Higgins-Desbiolles, & Ruhanen, (2021)	Conceptual	Tourism recovery, justice, COVID-19	Sustainable tourism through promoting justice and equity
Li, Zhao, Huo, Shao, & Hu, (2020).	Exploratory	Management, reopened tourism, COVID-19	Reopening tourism destinations is one of the major recovery strategies. There are four key themes for reopening the tourism industry (a) prevention measures, (b) business scopes, (c) rules for tourists and, (d) preferential measures.
Zhang, Song, Wen, & Liu, (2021).	Exploratory	Forecasting, tourism recovery, COVID-19	The importance of the use of econometric and judgmental methods to forecast the paths to tourism recovery.
Prideaux, Thompson, & Pabel, (2020)	Conceptual	Economic transformation, climate change, COVID-19	The opportunity for the tourism industry to transform its model from high resource consumption to resource neutral and environmentally friendly. There is a need for strategies that will combat the climate change
Payne, Gil-Alana, & Mervar, (2021)	Exploratory/ empirical	Persistence, policy, COVID-19	Policymakers for tourism restoration should consider the past traditional promotion with a more sustainable tourism model.
Sharma, Thomas, & Paul, (2021).	Conceptual	Reviving, resilience, COVID-19	There are four prominent factors for resilience namely (a) government response, (b) technology innovation, (c) local belongingness, and (d) consumer and employee confidence.
Qiu, Park, Li, & Song, (2020)	Exploratory/ empirical	Social cost, health. COVID-19	The risk perceived by residents impacts their behavior. People are willing to pay for the reduction of health risks of the public..
Do, Nguyen, D'Souza, Bui, & Nguyen, (2021)	Exploratory	Strategic responses, tour operators, COVID-19	There is a need to focus on long-term strategies such as innovation. In the current scenario, the tour operators have focused on short and medium-term strategies .
Pasquinelli, Trunfio, Bellini, & Rossi, (2021)	Exploratory	Sustainability, branding responses, COVID -19	Sustainable tourism needs better attention especially in overtourisified cities due to the pandemic threats
Zenker, & Kock, (2020).	Conceptual	Agenda, paradigm shift, behavior COVID-19	There is a need for change in the destination image, tourism industry, tourist behavior, resident behavior
Ioannides, & Gyimothy, (2020)	Conceptual	Sustainability, global tourism, COVID-19	The crisis has brought an opportunity for tourism to move towards a new direction of the sustainable path.
Fotiadis, Polyzos, & Huan, (2021)	Empirical	Tourism recovery, forecast, COVID-19	The tourism industry needs to train and equip with machine learning and modeling. This can give different results and conclusions, which can be useful for decision-making.
Higgins-Desbiolles, (2020)	Conceptual	Challenges, sustainability, COVID-19	The COVID-19 crisis is a game-changer for the tourism and travel industry. The rapid recovery hurdles the efforts to more responsible, ethical, and sustainable tourism reforms
Chemli, Toanoglou, & Valeri, (2020)	Exploratory	Media, coverage, tourist's awareness, COVID-19	The media act as a primary source of information and thus influences people's awareness and behavior
Raki, Nayer, Nazifi, Alexander, & Seyfi, (2020)	Conceptual	Tourism recovery strategies, proactive, COVID-19	Proactive recovery is needed and it can impact financial wellbeing, physical wellbeing, and emotional wellbeing.

Yeh, S. S. (2020).	Qualitative	Tourism recovery, strategies, COVID-19	Open communication and government inference is the key to combating the crisis
Li, Zhang, Yang, Singer, & Cui, (2021).	Qualitative	Recovery measures, tourism development, COVID-19	The government's role in pandemic prevention, resumption of work, differentiating urban and rural tourism.
Marek, (2021)	Conceptual	Transport, sustainable tourism, COVID-19	Transportation plays an important role in tourism and sustainable development. The three aspects of travel-tourism i.e. slower and less energy-intensive travel, proximity, and green transport are vital for sustainable utilization
Romagosa, (2020)	Conceptual	Opportunities	Due to the travel restriction, there are opportunities for the growth and promotion of sustainable tourism for example reduction of overall emissions
Choe, Wang, & Song, (2020)	Qualitative	Inbound tourism, sustainable tourism, COVID-19	There is an impact of the crisis on inbound tourist arrival therefore policy-makers should focus on policies that ensure tourist safety..
Wassler & Fan, (2021)	Conceptual	Future, tourism academia, COVID-19	There is a need for tourism to focus on industry collaboration, education, research, and discipline identity. If the COVID impact is long term, there need to be "adaptancy" to bridge the gap for tourism academia and if it is short term, there is a need for recovery through "new sustainability".
Assaf & Scuderi, (2020)	Conceptual	Recovery, government, COVID-19	For successful tourism recovery, there is a need for the interference of all the stakeholders such as financial institutions, government, hotel managers, tour operators, residents, tourists, etc.
Pardo & Ladeiras, (2020)	Qualitative	Sustainable, inclusive society, COVID-19	Post COVID-10 era will need the following tourism planning (a) smart specialization, (b) digital skill, (c) new governance, (d) cooperation, and (e) smart destination vs tourism intelligence
Dobrescu & Mazilu, (2020)	Exploratory	Sustainable, post-pandemic, COVID-19	The key objective of sustainable tourism in the time of pandemics is the restoration of safe movement and transport, minimizing health risks while resuming tourism, engaging technology, and protecting the rights of the people.
Jones & Comfort, (2020)	Conceptual	Sustainability, service industry, COVID-19	As a result of COVID-19, there has been a sign of environmental improvement. Though there is environmental improvement the damage to the economy and social life is devastating.
Gonzalez-Perez, Mohieldin, Hult, & Velez-Ocampo, (2021)	Conceptual	Sustainable development, challenges, COVID-19	Destinations need to increase their recovery and resilience towards sustainable development through themes indicating sustainability for investment, regional value chain, and structuring development
Qi & Li, (2021).	Qualitative	Emotional experiences, conceptual model, COVID-19	The emotional experiences of travelers during the outbreak of COVID-19 can be useful in determining the attitude and behavioral intentions..

were repeated and thus can misrepresent the analysis. Next, the cleaning of the text is done, such as removing the endnotes and journal detail. The clean merge text was then inserted into an online web-based application for text analysis i.e. the Voyant tools. Voyant Tools is an open-source web-based tool used for text analysis. The tools like cirrus and collocata analysis were used for identifying repeated

words associated with COVID and tourism, further analysis such as context, trends, topic, and word tree were used.

Analysis

The selected 30 papers were combined as a document and the test was run in Voyant Tools. The vocabulary density of the document is 0.070, and the most

Table 2: The elements of the keyword “recovery”

Recovery	Contents	Implication
Strategies	<ul style="list-style-type: none"> - Media and Communication - Resilience - Tourism planning - Smart specialization - Minimizing health risk while resuming tourism - Long term strategies such as innovation - Image repair strategies i.e. source, message, and audience 	Tourism recovery
Forecasting	<ul style="list-style-type: none"> - Investment - Regional value chain - Structuring development 	Tourism recovery
Polymaking	<ul style="list-style-type: none"> - New governance - Government interference - Safe movement and transport - Policies that ensure tourist safety - Resumption of work - Differentiating urban and rural tourism. - Policy support 	Tourism recovery
Management	<ul style="list-style-type: none"> - Smart destination - Cooperation - Financial institutions - Stakeholders interference such as hotel managers, tour operators, residents, tourists - Departmental management 	Managerial decision making and tourism recovery
Technological adaptation	<ul style="list-style-type: none"> - Digital skill - Engaging technology - Machine learning and modeling - Tourism intelligence and Artificial Intelligence (AI) 	Decision making and tourism recovery
Emerging direction		
Emotions and behavior	<ul style="list-style-type: none"> - Behavioral Intention - Emotional experience - Emotional wellbeing - Physical wellbeing, - People’s awareness and behavior 	Managerial decision making and tourism recovery
Sustainability	<ul style="list-style-type: none"> - Justice and Equity - Protecting the rights of the people - Environmental improvement - Reduction of overall emissions - More responsible, ethical, and sustainable tourism reforms 	Polymaking and tourism recovery

frequent word in the document was Tourism (2496), COVID (816), crisis (743), pandemic (638), and industry (550). Table 2 below indicates the crisis recovery compiled from past literature. They are classified as strategies, forecasting, polymaking, management, technological adaptation, emotion and behavior, and sustainability. It was identified that the strategies for crisis recovery were media and communication, resilience, planning, smart specialization, healthcare, and image repair.

It was also evident that forecasting studies were prevalent in the mid-2020. Forecasting is a decisional making strategy that enables managers and polymakers to make decisions, such as where to make an investment, managing regional value chain, and structural development. And forecasting studies help polymakers in framing the right strategies. One of the important means of crisis recovery is the implementation and framing of policy. Polymaking during crises involves the framing and

implementation of new governance, government interference, policy for the safety of movement and transport, resuming work. At the same time, policymakers need to differentiate urban and rural tourism during the crisis so that separate policy framing is done according to the need of the place. For this, case study becomes important for marketers and decision-makers to understand the nature of place and the phenomenon in the time of crisis. For example, the culture and lifestyle in a rural area, and urban space and lifestyle in urban.

Tourism recovery depends on proper management of the phenomenon, this involves the cooperation of all the stakeholders such as managers, tour operators, residents, tourists, etc. for crisis-induced tourism recovery, there needs to be the active involvement of financial institutions to avail the need of the hour, and also the management department or administration to take quick decision and action.

Another recovery strategy is the use of technology. The tourism industry needs to equip with technological innovation and adaptation. This requires the managers/employees to have digital skills, engaging technology, machine learning and modeling, tourism intelligence, and artificial intelligence (AI).

Some other strategies include identifying the emotions and behaviors of tourists and residents.

This includes behavioral intention, emotional experience, and wellbeing, physical wellbeing, awareness, and behavior. Identifying these emotions and behavior can help marketers to improve the experience, safety, and wellbeing of tourists. And thus, increase the satisfaction level and win loyalty, and spread positive word-of-mouth. One of the important and complex strategies of crises recovery is sustainable development. Sustainability as a strategy is complex because it needs the participation and cooperation of many stakeholders such as policymakers, managers, residents, bureaucrats, tour operators, and the whole system. Some of the sustainable strategies are reduction of overall emissions, ethical and sustainable tourism reforms, justice and equity, human rights, and environmental protections.

Collocate Analysis

Collocate analysis was done on the document. The selected keyword for collocate analysis was tourism, COVID, pandemic, crisis, strategies, recovery, and sustainability. Table 3 given below is the collocates of the key terms i.e. the row representing the words closely associated with the key terms. It is found that the literature relating to the keyword “tourism” is closely associated with the words COVID, pandemic, development, sustainability, urban, economy,

Table 3: Word collocates of the keywords tourism, COVID, pandemic, crisis, strategies, recovery, and sustainability

Collocates						
Tourism	COVID	Pandemic	Crisis	Strategies	Recovery	Sustainability
Industry	Pandemic	Tourism	Management	Crisis	Tourism	Tourism
COVID	Crisis	Crisis	COVID	Tourism	COVID	Crisis
Pandemic	Outbreak	Industry	Tourism	Recovery	Strategies	Transport
Development	Recovery	Economics	Response	Destination	Efforts	Recovery
Crisis	Global	Threats	Strategies	Response	Measures	Growth
Recovery	Response	Sustainable	Recovery	Media	Sustainability	Development
Sustainable	Economics	Strategies	Communication	Proactive	Support	Social
Transport	Coronavirus	Spread	Emotion	Management	Marketing	Programmes
Urban	Traveler	Shock	Global	Image	Strategy	Initiative
Economy	Affected	Social	Information	Audience	Initiatives	Environmental
Management	Sustainable	Security	Strategy	Message	Regions	Economy
Social	Opportunity	Response	Impact	Wellbeing	Policies	Value
Government	Cost	Resilience	Experiences	Retrenchment	Government	Strategies
Hospitality	Cases	Reaction	Emotional	Programmes	Forecasting	Practices
Firm	Strategies	Propensity	Destinations	Planning	Wellbeing	Future
Growth	Government	Preventing	Media	Financial	Response	Service
Future	Consequences	Prevalence	Responses	Event	Media	Population
Strategies	Health	Prepared	Economic	Sustainable	Campaigns	Overtouristified
Forecasting	Destination	Precedent	Health	Reusing	Actions	Investment
Transformation	Resilience	Opportunities	Disaster	Policy	Responses	Ethics
Policies	Insurance	Mitigating	Government	Persevering	Preparing	Equity
Stakeholders	challenge	Measures	Sustainability	Mitigating	Future	Technological

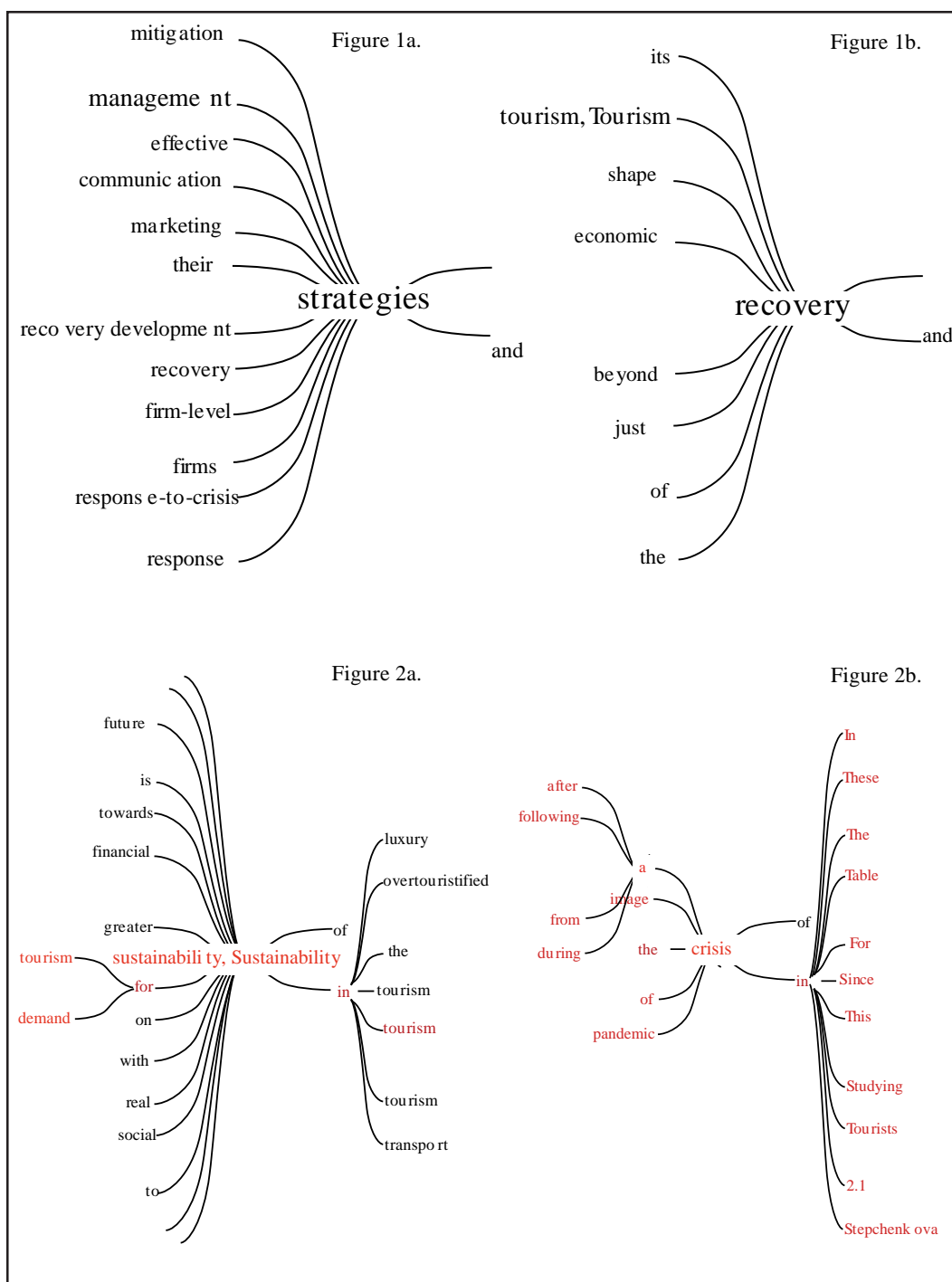


Figure 1a and 1b. Word tree of strategies, recovery.
Figure 2a, and 2b. Word tree of sustainability and crisis.

Topic
research based economic future recovery related new impacts long likely
tourism transport development rural tourist sustainable urban industry travel means
crisis emotions lac individuals travelers countries different e.g experiences sensemaking
crisis destinations management destination analysis measures travel health crises study
media crisis image new negative efforts place recovery example countries
tourism industry sector travel current field order people total human
information need way term political communication needs economic environment provide
social outbreak sustainability crises literature value example specific people global
tourism data areas scenic forecasts hong used tourists including effects
data crisis destination international city events effects sars coronavirus approach
tourism model mers academia impact korea tourists inbound models industry
pandemic study activities negative impact tourist findings strategic place reduce
covid region emotional development process framework influence production effects financial
work mentioned sustainability countries focus academia potential world responsible scenario
brand training set disasters research epidemic businesses urban models different
tourists time covid impact sustainable important e.g business changes cultural
tourist demand recovery travel keywords year flight shows searches big
tourism firms crisis residents covid response costs risk tour cities

Figure 3. Topic analysis of the document. Each column representing 10 topics

management, government, etc. The words closely associated with the keyword “COVID” are outbreak, recovery, global, response, economics, sustainability, traveler, strategies, etc. Therefore, it can be inferred that the two words tourism and COVID, one tourism as an industry, two COVID as a crisis coincide with each other but in a different way. The words associated with tourism are related to industry phenomenon whereas the word associated with COVID are strategy and response related.

The words closely associated with the keyword “pandemic” are tourism, economics, threat, strategies, sustainability, spread, social, response, resilience, etc. The words closely associated with the keyword “crisis” are management, tourism, response, strategies, recovery, communication, global, information, strategy, emotion, media, economics, etc. The words associated with the keyword

“strategies” are recovery, response, proactive, media, management, image, audience, message, wellbeing, sustainability, etc. The words associated with the keyword “recovery” are tourism, strategy, effort, measures, support, marketing, initiative, policy, government, forecasting, initiatives, media, campaigns, etc. And finally, the words associated with the keyword “sustainability” are tourism, transport, recovery, growth, development, social, environment, economy, strategy, population, etc. From the analysis, it can be inferred that most of the words coincide with each other. And there are some new words or terms used which were not given much attention in the previous literature relating to the crisis. Some of such words are sustainability, resilience, emotion, experience, proactive, preserving, wellbeing, ethics, equity, and technology.

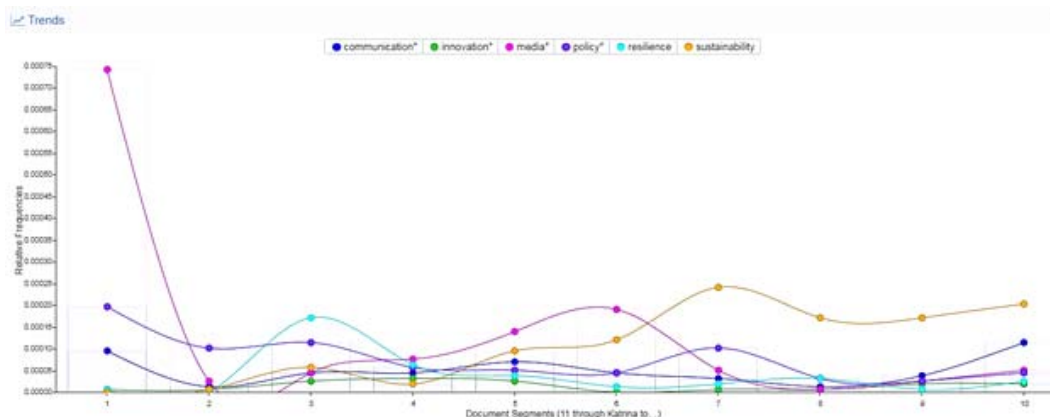


Figure 3: Trend analysis of the element of strategies through the document segment "through Katrina"

Word tree Analysis

The word tree analysis indicates how the keywords are used in different phrases. This analysis shows different branches of the keyword. From figures 1a, 1b, 2a, and 2b below, the keyword strategies are connected with mitigation, management, effectiveness, communication, recovery, development, response to the crisis. This indicates that the literature on recovery strategies of tourism crisis induced by COVID 19, has focused on the aspect of marketing and mitigation. The result shows that the strategies implemented for crisis recovery are almost the same as the strategies applied for the previous crisis. In the word tree of the keyword recovery, the emphasis is on the tourism and economy. This implies the interconnectedness of tourism and the economy concerning crisis recovery. The keyword sustainability in COVID induced tourism crisis is connected with future, financial, tourism, and transport whereas the keyword "crisis" is connected with the word pandemic and image. The literature on the word "crisis" is also followed by words like after, during, following indicating an optimistic view on recovery.

Topic Analysis

Topics tool in the Voyant tools was used for identifying the emerging topics relating to COVID induced tourism crisis. Figure 3 shows the topics in the document, each column shows ten topics, in the first column, the topics were research, economy, future, recovery, impact, etc. The second column has topics like tourism, transport, development, sustainability, urban, etc.. and so on. Also, there are topics on environment, health, academia, cost, response, economy, crisis, etc. but surprisingly the

topic keyword "strategy or strategies" didn't appear as a topic. Since the term strategies didn't appear in the analysis of the topic, further analysis was done taking the element of strategies such as communication, innovation, media, policy, resilience, and sustainability. the analysis was done from the document segment, "through Katrina", the analysis indicates that these words are closely correlated as indicated in graph 1.

This indicates that the recent literature has focused on the phenomena but there are limited new strategies. Most of the strategies are adapted from literature thus lacking the development of new concepts and theories.

DISCUSSION

There is an increase in conceptual paper and exploratory research in recent literature on COVID impact on tourism. With more study emphasizing tourism recovery rather than the constraint to recovery. There is a need to over these constraints. This requires an emphasis on strategies and management. The COVID 19 has posed several challenges for the tourism industry such as the need for renewal of short-term and long-term strategies that can change the face of the industry post-COVID. This challenge has been extensively explored but no concrete solution.

From the collocate analysis, the words closely associated with the keyword "crisis" are management, tourism, response, strategies, recovery, communication, global, information, strategy, emotion, media, economics, etc. This indicates the relatedness of recovery, management, and strategies. The word tree analysis indicates that the literature on recovery strategies of tourism crises has focused

on marketing and mitigation. And, also the emphasis is on the tourism and economy. This implies the interconnectedness of tourism and the economy concerning crisis recovery.

In the topic analysis, the topics covered were - research, economy, future, recovery, impact, tourism, transport, development, sustainability, urban, etc., and so on. In addition, there are topics on environment, health, academia, cost, response, economy, crisis, etc. The result shows that the strategies implemented for crisis recovery are almost the same as the strategies applied for the previous crisis. The recovery is likely to take time and expense, for instance, Jones & Comfort, (2020), state the COVID crisis may cause an extensive costly marketing campaign to increase customer re-engagement. There will likely be a shift of focus to provide a high-quality experience by conducting events and attractions, promoting facilities, increasing investment focusing on environmental and social agendas.

However, since many countries are still fighting the pandemic, there is limited literature on the result or impact of the current strategies implemented. However, there is a shift in the direction of the literature, i.e. from recovery strategy to sustainability. This is so because one of the challenges that arise in tourism is the reduction of pollution, use of renewable energy, clean tourism, waste recycling, etc. This has pushed tourism to change its existing conventional business model to a more sustainable development model. Surprisingly the pressure of COVID impact can help the industry to focus on sustainable development. Due to the COVID-19 and the lockdown, there is a sign of environmental improvement. This is so because of restrictions on movement, the shutdown of factories, reduced volume of air travel (Jones & Comfort, 2020).

Amekudzi-Kennedy, Labi, Woodall, Chester, and Singh (2020) state that the takeaway lesson from the impact of COVID-19 is that sustainable development planning should be of long-term sustainability. Thus marking the reevaluation and transition for the industry. Some emerging studies on COVID-induced tourism crisis are sustainability, resilience, emotion, experience, proactive, preserving, wellbeing, ethics, equity, and technology. Apart from the keywords used in the study, there are also other studies focused on culture and beliefs. For example, a study by Kala (2021) focused on the spiritual wellbeing during COVID and the need to focus on the development of safety protocols at various religious establishments.

Another emerging literature on crisis recovery elements for tourism is innovation. Innovation and digital skills for automation, big data, artificial intelligence, etc. have been emphasized especially during crises. Digital skills and innovation can enable better forecasting which enables key policymakers in decision making. Technology and media have become primary sources of information. The dependency on media shaped our knowledge and understanding of the global crisis. Therefore, media exposure will affect consumer behavior. Due to the importance of media exposure, Seyfi, Rastegar, Rasoolimanesh, & Hall, (2021) developed a framework linking crisis management, solidarity, healthcare system, and destination marketing.

Emerging Direction

The past literature has primarily focused on tourism recovery strategies, such as image repair, media, communication, policy-making, etc. However, the tourism crisis induced by COVID indicates an emerging direction on emotions and behavior, and sustainability. The implication of emotion and behavior studies is inclined towards managerial decision-making for tourism crisis recovery. This includes behavioral intention, awareness, emotional experience, and wellbeing. Another emerging direction in the literature is sustainability, with studies claiming that the COVID crisis and subsequent restriction of travel have improved the environment. Studies on sustainability also cover justice and equity relating to travel and vaccinations, protecting the right of humans, and more responsible, ethical, and sustainable tourism.

CONCLUSION

COVID 19 has a devastating impact on countries that depend on tourism, there is an increase in unemployment and a sharp decrease in the economy. For instance, in countries that rely heavily on tourism such as Italy, Caribbean countries, Thailand, etc. the COVID-induced tourism crisis has also changed our world-view due to a paradigm shift in the system. This has led to the development of new concepts and theories to understand the phenomenon. The emerging literature opens the doors for more exploration that will enable place marketers and policymakers in their decision making. The COVID pandemic opened an avenue for tourism to understand the phenomenon from political context and global economy which will define what lies ahead. The recent literature on COVID-induced tourism crisis has brought out many variables that

are impacted or influence the phenomenon or interact with the phenomenon. These variables have influenced and changed our understanding of the underlying theories and provide future scope for study. The literature relating to scenario forecasting of crisis or after crisis indicates the use of various parameters and methodology that are capable of influencing decision-making. Though it is a complex method with various parameters to predict several outcomes, it has enabled pave a direction for proactive research that has practical implication rather than conceptual and theoretical development. The study has limitations; one of the limitations is the selection bias of the papers and journals. The text analysis cannot detect the synonyms and thus the findings may not accurately represent the exact contents.

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KEYWORDS

**COVID-19,
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An Assessment of Coping Strategies Adopted by the Indian Tour Operators during COVID-19 Pandemic

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Abstract

The tourism sector in India was severely affected by the official mobility restrictions in the wake of the COVID-19 pandemic and came to a standstill, affecting the entire spectrum of tourism service providers. The majority of the tour operators in India fall under the category of micro, small and medium-sized enterprises (MSMEs) that lack initiatives and have no support in formulating strategic plans or activities for dealing with crisis events. The study aims to know the impact and the various coping strategies concomitantly adopted by the Indian Tour Operators during the COVID-19 Pandemic. The study employed an exploratory sequential mix method approach, in-forming a two-phase design wherein the results of the first phase, in-depth interviews (qualitative) of tour operators aid in developing themes for the second phase of questionnaire survey administered to a larger sample of Indian tour operators. The initial findings of the phase-I study identified various coping strategies categorized as problem-focused and emotion-focused mechanisms adopted by Indian tour operators. Phase-II of the study statistically validates the findings of phase-I based on t-test and mean values. The coping strategies proposed will be helpful to the policymakers and industry associations to make an appropriate and effective decision based on the coping measures presented in the study.

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INTRODUCTION

A COVID-19 pandemic is an unprecedented event that has severely affected the travel and tourism industry (Gossling et al., 2020). However, the tourism industry had suffered in the past too, due to various crises such as wars, natural disasters, pandemics, terrorist attacks threatening the security of tourists (Adongo et al., 2021). Yet, these adversities were limited to certain regions or countries thus showed up as epidemics. Whereas, COVID-19 is different from the earlier outbreaks such as Ebola, SARS as the Coronavirus had spread to the entire world causing trepidations almost at all places simultaneously, resulting in a healthcare crisis, curbing of international and national borders, unprecedented financial crisis, and economic losses in almost all businesses (Corlett et al., 2020; Shretta, 2020; Fotiadis, Polyzos, & Huan, 2021; Kala, 2021). The World Health Organization (WHO, 2020) declared coronavirus as a global pandemic on the 12th of March, 2020. In response to the resulting health crises, countries had to put restrictions on travel and impose nationwide lockdown (Hakavirta & Denuwara, 2020). The United Nations World Tourism Organization (UNWTO) advised the imposition of comprehensive travel restrictions at all the global destinations in 2020. This led to the cancellation of travel bookings around the world and led to the “complete paralysis” of international and domestic tourism. This, severely affected the tour operators and travel enterprises leading to unprecedented business shutdowns and loss of revenue for them.

Travel and Tourism is one of the most critical sectors in the world economy and in the crises became one of the worst impacted sectors, by the COVID-19 outbreak. The tourism industry makes one of the highest economic contributions in developing countries (Gamage et al., 2018). Owing to its forward and backward linkages with various other sectors like retail, catering, hospitality, lodging, entertainment, it is extremely dynamic in nature (Liu et al., 2019). The World Tourism Organisation estimated that the COVID-19 pandemic could have put millions of jobs at risk and could have led to a decrease of 58% to 78% in international tourist arrivals (UNWTO, 2020). Therefore, there is an urgent need to identify the business strategies and provide guiding frameworks for the tourism

industry to help the businesses and the government during and after the pandemic to sustain the economic development.

In the past also, the tourism industry has seen turbulence when it was impacted by different health crises, such as SARS and Avian Flu (Kuo et al., 2008), swine flu pandemic (Page et al., 2012). During the COVID-19 pandemic, Maldives- a small developing island state took a proactive approach by studying the change in the tourist behaviour to support local tourism recovery and grabbed it as an opportunity to repair the natural beauty of the island and ecosystem with few tourists (Gu et al., 2021). The Chinese government took proactive measures by not only releasing the immediate health guidelines to all the travel agencies, restaurants, tourism vehicle operators, and other tourism corporations but actively developed various activities that included (Gu & Wall, 2006): 1) The government favoured the tourism industry by eliminating taxes and offering discounted interest on short term loans to tourism organizations; 2) For in-bound market, tour operators used travel intermediaries as brokerage points and developed customer markets which improved the communication within the business; 3) Strengthening of promotional activities; 4) Development of tourism activities at regional sites. Previous research on response to such health crises has primarily focused on efforts from different sectors and the regional and national governments (Ritchie and Jiang, 2019). However, there is still a need to address the uncertainties related to pandemics (Hall et al., 2020). In India too, the tourism sector was severely affected by the COVID-19 pandemic and came to a standstill, affecting the entire spectrum of travel agents and tour operators. It is worth mentioning that exceeding majority of the tour operators in India fall under the category of micro, small and medium-sized enterprises (MSMEs) (OECD, 2008) that lack initiatives and have no support in formulating strategic plans or activities for dealing with crisis events.

According to the Annual report 2018-19 of the Department of MSME, the tour operators form a part of the 6.34 crore MSMEs functioning and employ almost 110 million of the workforce. Out of this, with the onslaught of the pandemic, a whopping 43% of MSMEs were expected to collapse (Dubey & Sahu, 2020). The International Tourists' Arrivals (ITA) registered a 66.4% decrease in India in 2020 as compared to 2019 (TAN, 2020). It is also estimated that 50 million jobs could have been lost in 2020, with an annual revenue loss of approximately USD

17 billion in the Indian tourism industry (FICCI, 2020; Scroll, 2020). Thus, the impact of the COVID-19 has been stark as is evident in the functioning and struggle of the tour operators. It is therefore extremely paramount to alleviate the effects of the COVID-19 outbreak and boost the tourism sector's recovery. For this, it is incumbent to study and highlight how tour operators should strategically respond to the pandemic that transforms the tourism sector by developing resistance to future crises and any rerun of such kinds of pandemics.

A look at the literature reveals that the tourism researchers in the past have mostly studied disaster management strategies used by bigger organizations – ignoring small-scale ones in developing countries like India. This skewness is obvious as recovery strategies and guidelines for disaster management are available mostly for large organizations (Mitroff, 2005; Ritchie, 2004). Moreover, the current studies available have largely missed the focus on tour operators that represent the MSME sector. Therefore, to mitigate the effects of the COVID-19 pandemic, it is important to understand the coping strategies adopted by (Indian) tour operators and travel agents, which are mostly small and micro in their constitution. Filling up this gap, the study aims to examine the various coping strategies adopted by the Indian tour operators to overcome the impact of the COVID-19 pandemic.

Previous research also suggests that the relationship between different coping strategies is age-specific too (Yeung & Fung, 2007). Based on this, the study also examines if there is any significant variation between different age categories for developing effective coping strategies. It is believed that the understanding so arrived upon examining the coping strategies specific to the travel industry, will provide the necessary insights to the different stakeholders on how to build and implement new frameworks. This can ensure quick responses to the unforeseen events that threaten the financial growth of the tour operators' businesses.

In order to achieve the aforementioned objective, the study draws upon the work of Faulkner (2001) that suggests using a disaster management framework during an actual tourism crisis. This study will contribute to the literature by addressing the challenges faced by the tour operators and suggesting coping strategies for managing the overall well-being of the tourism sector. The study is expected to help inform the policymakers about the nature of assistance required by tour operators and travel agents in tourism businesses in managing the

economy and health in such a crisis and thus the support to MSME towards recovery. In doing so, the study adopts a mixed-method research design in two phases to understand and examine the coping strategies adopted by Indian tour operators by conducting qualitative research in the first phase and ascertain the results obtained in the first phase by conducting the quantitative survey in the second phase.

LITERATURE REVIEW

Coping strategies adopted by the tour operators in times of distress involve a complex interplay of various factors. These are related to the inherent structure of the organization, viz. management support, financial resources, structural operations, and area of operation to name the most important factors (Prabawa, 2010). Till, 2020, the common adverse external situations for tourism business included earthquakes, terrorism, extreme weather conditions such as heatwaves, floods, storms, and health disasters such as SARS and Ebola. To such crises, the tour operators and marketers applied general coping strategies with slight modifications (Novelli et al., 2020; Rodríguez-Antón & Alonso-Almeida, 2020). However, COVID-19 is not just like any other business crisis. Its impact on every industry is beyond imagination. COVID-19 pandemic is multidimensional and interconnected wherein its effects are uneven in terms of location and time (Sigala, 2020). Hence, generic coping strategies adopted by tour and travel operators during previous crisis situations might not yield the desired outcome. Researchers have studied the pandemic situation like SARS previously, especially in the Asian context, and offered certain recovery strategies also. Chien and Law (2003) while discussing the impact of the SARS pandemic in Hong Kong commented that the pandemic resulted in the cancellation of international flights, lower occupancy in hotels, and job cuts in the hospitality industry. Main recovery strategies adopted by tourism players included temporary closures, reduction in salaries, suspension of support services, adoption of preventive health practices, and usage of exigency plans. Henderson and Ng (2004) suggested similar measures while analyzing the impact of SARS in Singapore. Tew, Lu, Tolomiczenko, and Gellatly (2008) offered a few alternative response strategies while dealing with the SARS crisis in Toronto including offering huge discounts to the customers, working with industry and government associations, and determining the alternate use of hotel rooms.

Prabawa (2010), while discussing the crisis handling of small tourist organizations, stresses that such organizations survive the socio-economic crises primarily by changing their operations. The author asserts that under such circumstances they identify new markets to serve, focus more on the domestic market, work upon their operational expenses, concentrate on core business activities, offer lower-priced services, diversify in the related area and utilize their personal savings. Hall, Prayag, and Amore (2017) cite the role of technology as a resilient enabler in crisis situations. Sigala (2020) asserts that technology has always played a transformational role in tourism, but this pandemic has put technological innovations such as tracing apps, AI-backed contactless delivery, digital identity control, social media channels offering virtual travel experience, etc.; to the forefront. Marketers might deploy various technological advances to collect the relevant customer data in order to know and predict customer behaviour (Zuboff, 2015). However, it is not only the application of technology to collect the customer data, but also winning over their fears and anxiety to actually motivate them for availing the tour package (Rodríguez-Antón & Alonso-Almeida, 2020).

Sharma (2021) while citing the agony of tour operators of Himachal Pradesh states that tourism, which is considered the primary growth engine for the state contributes towards 33% of its GDP on account of its associated businesses like bars, adventurous sports, transport, etc. has been on the verge of bankruptcy due to the impact of the pandemic. The author further asserts that the situation is likely to be grim in near future as well because of fear of the anticipated third COVID wave. Tour operators had made significant investments in luxury transportation which due to COVID is under survival threat. The most common coping mechanism adopted by the local hoteliers and tour operators is the closure of hotels, suspension of supplementary activities like paragliding, rafting, and other adventure games, deferment of luxury travel transportation, sale of property, and assets, huge discounts, and laying off the staff. The author claims that the majority of the tour operators expected government support, however to their disappointment, government efforts were considered totally inadequate. Vasudeva (2020) while discussing the plight of tour operators in Manali and Kasauli, the two most popular travel attractions of Himachal Pradesh states that apart from a low turnout of

tourists, they are also facing a lack of staff as the majority of the staff haven't returned to work after the first COVID wave.

Kale (2020) purports that story of Uttarakhand tourism is no different from Himachal Pradesh wherein hotels, tour operators, taxis, adventurous sports businesses were the worst hit due to the pandemic. Pandemic resulted in a loss of 90% of the tourism business in the state. The most common consequences of the pandemic outbreak were seen in form of salary cuts, laying off staff, and restrictions on the number of visitors to religious places. Government support was not received by the tour operators in the state. Sikkim, another beautiful travel destination of India was badly hit by the pandemic. However, due to the dependency of about 15% of the population of the state on tourism sector, the state government opened the former in a phased manner. The state government played an active role by laying down the standard operating procedure for the safe travel and stay of the tourists and applying various digital interventions for tourism management (Dhawan, 2020). A report by Grant Thornton (2020) states that overall, the tour and travel sector suffered losses of 50 million jobs and around 17 billion US \$ business loss.

Ritchie, and Jiang (2019) state that pandemic-like situations demand a swift change in the operational strategies given the uncertainty surrounding the former. However, previous research indicates that the tourism sector has always been ill-prepared for a crisis like these primarily due to lack of knowledge, experience, and resources (Bremser, del Mar Alonso-Almeida & Llach, 2018; Ritchie, 2008). Understanding these recovery strategies from crisis management approaches a point of view reveals that usually, marketers adopt either the reactive or responsive crisis management strategies wherein they apply changes in their business operations only after the initial warning signs or after getting a knee-jerk reaction (Marker, 2020; Rodríguez-Antón & Alonso-Almeida, 2020).

Kalra (2021) while discussing the coping strategies of tour operators in India stressed that tour operators successfully promoted sustainable tourism during the pandemic wherein, they persuaded customers to visit less crowded places and enjoy rural tourism and homestays. Big tour operators were motivated to build and promote tourism-related infrastructure in villages. Apart from rural tourism, big brands have started exploring options such as religious tourism, eco-tourism, and cultural tourism. Various state governments like Sikkim and Goa have promoted

the local destination by launching campaigns such as "Dekho Desh Apna" and "Visit Sikkim". Tour operators also put in their trust in offering a diversified travel portfolios at affordable prices.

Researchers have preferred to study the impact of a crisis situation on key parameters of the hospitality industry such as a number of tourists, revenue per room, occupancy ratio and overall profitability, etc. wherein little or no difference is being observed in impacts for different types of crisis situations (Kubickova & Kirimhan, 2008). Marker (2020) asserts that such scenario-based measurements have limited value in dealing with the pandemic. Marker (2020) proposes a capacity-based model for situations like this wherein he advocates for adopting measures such as communication capabilities, backup planning, and agility in adapting work from home working style.

Nicola et al. (2020) while commenting upon the recent COVID-19 impact stress that economic impacts of COVID-19 are far deeper and more severe than the previous similar situations. Rodríguez-Antón, and Alonso-Almeida (2020), and Alonso et al. (2020) state that for COVID-19, the most important concerns that require necessary resolution for tourism sectors are financial resources, post-lockdown planning, adoption of preventive health measures, and gaining tourists' trust. In order to deal with these concerns, World Travel and Tourism Council (2020) underscored the need for action on two major aspects 1) to offer economic and financial support to the tourism sector and 2) developing sanitary protection protocols; in order to revive the tourism industry especially in European countries. Pathak and Joshi (2020) contend that although revival packages and protocols have been overtly communicated as the most viable options dealing with this crisis; it is the physiological resilience of the small business owners that actually help them navigate through the various phases of COVID-19. During this pandemic, each country's government had also played a pivotal role in handling this unprecedented crisis in the tourism industry which is unlike the previous crisis such as SARS and Ebola (Hall, Scott & Gössling, 2020). For example, the Indian government has intervened significantly by providing relief packages, tax reliefs, and policy interventions related to travel and movement restrictions and the closure of businesses (Singh, 2021). However, fairness and justifications of such interventions must also be seen from a viability point of view. One must question whether such interventions would equally affect the small and large

players in the Indian tourism sectors equally or not. The applicability of such interventions must be seen from the lenses of system and crisis theory management ensuring the collective viability of all the players (Sigala, 2020). The review of available literature revealed that the tourism sector adopted the generic coping strategies in COVID-19 wherein the main focus had been on deploying responsive crisis management strategies, focussing upon sustaining and reviving financial aspects. There has been restricted research about the role of psychological resilience, deployment of new-age technologies, government interventions, etc.

RESEARCH DESIGN

The current study is conducted in India to understand the coping strategies of tour operators and travel agents towards COVID-19. This rests in the ambit of behavioural science in which human action is accorded precedence for uncovering underlying phenomena through experiences, attitudes, intentions, and culture, from the perspective of the participant (Titchen & Hobson, 2005). This line of thought was extended to the objectives framed that demanded an in-depth understanding of the phenomenon at hand, by using the inclusive and inductive methods in combination with deductive methodology, known as mixed-method research design.

Singh et al. (2012) emphasized the essentiality of using mixed method design in exploring and understanding the complex issues related to sustainable tourism development that systematically integrates qualitative and quantitative methods (Creswell and Plano Clark 2007). The mixed-method applied in this study was the sequential exploratory design, which primarily is employed to explore the hidden phenomenon (Burton & Obel, 2011) and is characterized by an initial qualitative phase of data collection and analysis followed by a quantitative phase (Cameron, 2009), thus ascribing importance to both in equal measure. Extant literature indicates that the findings from mixed-method research “enhance our beliefs that the results are valid and not a methodological artifact” (Bouchard, 1976, p. 268).

Phase-I: Qualitative Phase

With an interpretivist paradigm in the first phase, purposive sampling was used to conduct interviews of the potential tour operators (N=10). Since the aim was to study the phenomenon, open-ended and semi-structured free-flowing qualitative interviews were

considered appropriate in collecting the data given its importance in disaster management research in the tourism context (Orchiston & Higham, 2016). These questions were designed to elicit interviewees’ responses with respect to: 1) impact of COVID-19, 2) strategic responses to COVID-19 and support from the Government, and 3) need for restructuring. The interviewees were representatives of India’s tour operators, operating in Delhi (NCR) and Jaipur. They specifically catered to the North Indian region.

Requests for interview sessions for the research were sent to the members of professional tourism groups active on social media, namely (Travel agents of India, Travel Associates, ADTOI Rajasthan, Apno Rajasthan, Global Tourism Linkedin group, Travel Trade Group, and Jaipur Tour & Travel Group). Invitations were also sent over email to the officials of the various chapters and headquarters of the Association of Domestic Tour Operators of India. Thus the authors sent requests to at least 220 tour operators. Out of these 21 responded in time with express willingness to participate in the interview sessions for the research. These tour operators who were positively inclined were further contacted on phone to coordinate the time and date of the forthcoming interview sessions as per their convenience. With 10 sessions of the interview with the participants, the study data had shown saturation. Therefore, no more interviews sessions were conducted further. The interview sessions were held between the 17th of May, 2021, and the 3rd of June, 2021. Geographically, the data represented 5 operators each from Delhi (NCR) and Jaipur, respectively.

This interview phase helped in capturing the personal and professional experiences amongst the tour operators with respect to the managing of the impacts of the emergent conditions resultant of the travel bans and mobility restrictions placed by the government to combat COVID-19. Commensurate and in response to the impacts, the study also tried to enlist the coping strategies adopted by these Indian tour operators. Broadly encompassing the recovery and revival efforts, this phase tried to record, “what” could have been the impacts and “how” they survived during the pandemic (Creswell, 2007). Data collection consisted of (1) broad questions, which asked about the business parameters that were impacted due to COVID-19; (2) how the small tourism firms that continued to operate even during COVID-19 and adopted some strategies for survival. The data obtained was transcribed and analyzed using grounded theory (Glaser & Strauss, 1967) of

Table 1: Frequency chart

Word	Length	Count	Weighted Percentage (%)
business	8	156	1.81
people	6	137	1.59
travel	6	88	1.02
tourism	7	68	0.79
lockdown	8	64	0.74
office	6	56	0.65
pandemic	8	52	0.60
domestic	8	50	0.58
employees	9	45	0.52
clients	7	42	0.49
government	10	40	0.46
industry	8	40	0.46
support	7	30	0.35
travelling	10	29	0.34
interview	9	28	0.32
queries	7	28	0.32
normal	6	27	0.31
company	7	26	0.30
packages	8	26	0.30
safety	6	25	0.29
working	7	25	0.29
inbound	7	24	0.28
situation	9	24	0.28
operators	9	23	0.27
started	7	23	0.27
destinations	12	22	0.26
social	6	22	0.26
reduced	7	21	0.24
experience	10	20	0.23
hygiene	7	20	0.23
margins	7	20	0.23
questions	9	20	0.23
received	8	20	0.23
second	6	20	0.23
thought	7	20	0.23
travelers	9	20	0.23
destination	11	19	0.22
coming	6	18	0.21
compare	7	18	0.21
hotels	6	18	0.21
information	11	18	0.21
location	8	18	0.21
things	6	18	0.21
tourist	7	18	0.21
tourists	8	18	0.21
unlock	6	18	0.21
wanted	6	18	0.21
outbound	8	17	0.20
course	6	16	0.19
market	6	16	0.19

Source: Authors' Own

RESULTS

Phase I: Qualitative Phase

Data was collected from 10 tour operators through online interviews carried out over the Zoom app. Throughout, in almost all the interviews, a sense of grievance was reflected as indicated in this comment from an interviewee that “there is no work, no business, no invoicing, did not receive a single call or mail or WhatsApp message, there is no leisure tourist”.

When the tour operators were asked a question to compare the impacts on the businesses of the first wave with that of the second wave, their responses majorly indicated the severity of the subsequent wave as it not only robbed them of their business opportunities but it instilled fear or psychosis in them. This can be seen in one of the comments being reproduced as “Getting tougher than 1st, people are scared and prefer staying at home, curtailed social contacts completely, we have faced lots of cancellations, We cannot predict the business”.

Another manager emphasized the role of new product development by giving more value to consumers by collaborating with other firms as a response to COVID, however, due to the second wave it was also stalled. These statements highlight the agony of the tour operators due to which 3 out of the 10 tour operators decided to take the exit route. Interview transcripts were analyzed for better visualization of the results, a word cloud and a frequency table was generated, based on frequency and percentage of words. Figure 1 presents a word cloud where the significant keywords are captured according to their frequency in the interview data (Sinclair & Cardew-Hall, 2008).

Further, interviews were transcribed and analyzed using thematic analysis. This was done by coding the data, putting them in categories and broad themes (Saunders et al., 2016). This resulted in the construction of the themes as shown in table 1 in the form of coping strategies that were used in Phase-II for further analysis. Table 2 presents the impact of the pandemic on tour operators and subsequent coping strategies adopted to mitigate the impact.

Coping Responses

Coping is any “cognitive and behavioural strategy used to manage stressful situations” (Shaw, Brown, & Dunn 2013, p. 243). Scholars generally agree that coping is a cognitive process in which individuals appraise stressors as they experience them and decide how to respond (Folkman & Moskowitz, 2004). The above ten coping strategies identified in Table - 2

Table 2: Coping strategies adopted used as themes emerging from phase-I

S. No.	Impact of Pandemic	Coping Strategy Adopted	Coping Mechanism	Codes
1	Business Performance in terms of sales	Change of Business type	Problem Focussed	<ul style="list-style-type: none"> • Focus shifted from outbound to domestic tourism • Exit from business • Some customer segments opened up • Business opened in staggered form
2	Customer Reach	Adoption of Social-Media	Problem Focussed	<ul style="list-style-type: none"> • Connect with the clients • Increased followers • Reconnect with Clients • Increase Client Base • Social Media Live Events • PR Exercises with Vendors, clients through regular live events
3	Manging Work place	Work from home	Problem Focussed	<ul style="list-style-type: none"> • Following COVID protocols • Social distancing • Virtual meetings • Vendors engaged through email, phone calls and virtual meetings
4	Human Resource	Laying off and Salary reduction	Problem Focussed	<ul style="list-style-type: none"> • 40-60% salary cut • Working on skeletal staff • Loyal staff was retained
5	Financial Status	Cost Cutting	Problem Focussed	<ul style="list-style-type: none"> • Discontinued phone lines • Rent agreements called off • Paid loans to lessen interests • Tried alternative business to supplement income
6	Operations	Adoption of Technology	Problem Focussed	<ul style="list-style-type: none"> • Virtual meetings with employees and clients • Increased use of Messaging systems • Virtual Tours to engage clients • Use of Artificial Intelligence on Website for direct booking of Tours and customise itineraries • Use of Mobile Apps
7	Processes	Use of Customer Relationship Management	Problem Focussed	<ul style="list-style-type: none"> • to turn around time for itinerary proposals • to oversee work progress of employees • to collect data of clients • to send proposals directly to clients • to send tour information and details to travellers • to wish clients on their special days
8	Marketing	Destination Strategizing	Problem Focussed	<ul style="list-style-type: none"> • Branding and Repositioning • New destinations
9	Employee	Developing Emotional Resilience	Emotion focussed	<ul style="list-style-type: none"> • The laid off employees had to fend for themselves • skill sets not being valued
10	Overall Business	Government Schemes Support	Problem Focussed	<ul style="list-style-type: none"> • Government schemes • Reduced Taxes

Source: Authors' Own

are further categorized into problem and emotion focussed strategies and are perhaps the most popular dichotomous distinction found in the literature (Folkman & Lazarus 1980).

Problem-focused coping involves using action to manage the relationship between the person and the stressor, while emotion-focused coping involves the regulation of emotions that result from being under stress (Folkman & Lazarus 1980). These findings highlight how coping strategies are adopted by tour operators to boost recovery from the pandemic. Using a combination of problem or emotion-focused coping mechanisms tour operators may develop a resilient organization (Lee et al., 2013; McManus et al., 2007; Stephenson, 2010). It was also explicit that the tour operators used more than one coping mechanism to mitigate the effects of the pandemic on their businesses. These findings are consistent with Hong et al.'s (2012) study, which found that small businesses focus on cost reduction and switching the business type to contain the impact of a pandemic.

Phase II: Quantitative Phase

A structured questionnaire was developed on the basis of the emergent themes using both the lower order and higher-order scale and was distributed through email and over the social media groups on WhatsApp and Telegram. Questionnaires were sent to almost 4300 tour operators and to their responses 258 duly filled forms were received. Out of these 23 forms had missing values and seemed to have biased responses. These were excluded and eliminated from the analysis. The questionnaire primarily made use of close-ended questions and used 5 points rating scale. The data thus was collected from 235 tour operators using convenience sampling and was analyzed using SPSS version 26.0. The reliability of the questionnaire was checked with the help of Cronbach's Alpha. The questionnaire was administered in the online mode. Further, the exploratory factor analysis was conducted for all the constructs, and the KMO value (> 0.7) was tested in the pre-test stage of the research.

Sampling Details

Sampling details of the study have been given in Table – 3, wherein it can be seen that 56% of the sample was represented by the directors followed by 22% of the top-level management personnel and 21% of the founders/CEOs. Middle-level and others personnel constituted less than 2% of the sample as mid-level employees are seldom used in strategy

formulation. 92% of the sample was dominated by male respondents whereas females only represented 8% of the sample. The low representation of females in the sample highlights the prevalent gender differences in business ownership in India. 42% of the sample respondents belonged to the 36-45 years age group whereas 39% of the respondents fell in the 46-55 years age category. 47% of respondents claimed to possess a post-graduate degree whereas 14% acknowledged having a professional degree. 30% of the respondents accepted possessing only the graduation educational qualifications. 56% of the respondents possessed more than 15 years of experience in the business whereas 34% of respondents had 11-15 years of experience in the tour and travel business. Demographic details of the sample indicated that respondents for the study were primarily males; more than 36 years of age, possessed post-graduate degrees, and had sufficient experience in the tour and travel business.

37% of the sample was constituted by Inbound Tour operators, followed by 31% domestic tour operators. 26% of the sample was composed of outbound tour operators. Almost all the operators (98%) worked in the urban area. A little more than half i.e., 58% of tour operators' business was recognized by the Ministry of Tourism either state or center. However, almost all the tour operators (97%) were a member of any Indian Travel Association such as the Indian Association of Tour Operators (23%), the Association of Domestic Tour Operators of India (26%), and the Travel Agents Association of India (16%). 32% of the tour operators had a membership of more than one association. 55% of the tour operators were occasionally working from home whereas 45% of the operators were working from home full time.

Status of Key Business Parameters

Data was collected from the respondents to know the status of key business parameters namely the turnover, number of clients served, margin, profits, tourist segments, destination markets etc. in times of COVID-19 vis-à-vis pre-COVID times. The results have been displayed in table 4.

As can be seen from table 4 that, almost all the vital parameter of tour and travel business were severely hit by the COVID-19 pandemic wherein turnover and destination markets served were the worst hit as 57% respondents acknowledged a decrease in the two. Margin per file remained unchanged by majority of the respondents during COVID-19.

Table 3: Demographic profile

Variable	Categories	Frequency	Percentage
Designation	Founder/CEO	49	20.9
	Top Level Management	51	21.7
	Director	131	55.7
	Middle Level Management	2	.9
	Others	2	.9
Gender	Male	215	91.5
	Female	20	8.5
Age	Less than 25 Years	10	4.1
	25-35 Years	19	7.8
	36-45 Years	98	40.3
	46-55 Years	91	37.4
	Above 55 Years	16	6.5
Education	10+2 pass	2	.9
	Graduation	71	30.2
	Post-Graduation	110	46.8
	Professional Degree	32	13.6
Experience	Professional Diploma/Certificate	19	8.1
	1-5 Years	1	.4
	6-10 Years	22	9.4
	11-15 Years	81	34.5
	More than 15 years	131	55.7
Type of Operator	Domestic Tour Operator	73	31.1
	Inbound Tour Operator	88	37.4
	Outbound Tour Operator	60	25.5
	More than one type	14	6
Location	Urban	231	98.3
	Semi-urban	2	.9
	Rural	2	.9
Recognised by MOT	Yes	135	57.4
	No	95	40.4
	Applied for	5	2.1
Member of Travel Association	Indian Association of Tour Operators	53	22.6
	Association of Domestic Tour Operators of India	61	26.0
	Travel Agents Association of India	37	15.7
	Member of More than 1 Association	76	32.3
	Not a member of any association	8	3.4
Work from Home (during the pandemic)	Never	1	.4
	Occasionally	129	54.9
	Always	105	44.7

Source: Authors' Own

Table 4: Status of key business parameters

Particular	Increased	No Change	Decreased
Turn over	0 (0%)	102 (43%)	133 (57%)
Number of Clients Served	2 (0.9%)	106 (45%)	127 (54%)
Margins per file	0 (0%)	145 (62%)	90 (38%)
Gross Operating Profits	2 (0.9%)	107 (45%)	126 (54%)
Tourist Segments Catered	1(0.4%)	103 (44%)	128 (55%)
Destination Markets Served	1(0.4%)	98 (42%)	135 (57%)

Source: Authors' own

Table 5: Descriptive and hypothesis test summary of coping strategies

Coping Strategy	Cronbach's Alpha	Sample Size	Mean Value	t value	Sig. Value
Resilient Mindset	.619	235	3.2468	6.252	.001
Change of Business Methods	.745	235	3.2681	7.206	.001
Adoption of Social- Media	.680	235	3.1319	3.397	.001
Work from Home	.770	235	4.1149	23.118	.001
Laying off and Salary Reduction	.814	235	4.2000	22.855	.001
Adoption of Technology	.777	235	3.2468	5.477	.001
Cost Cutting	.764	235	3.3745	7.730	.001
Use of Customer Relationship Management	.834	235	4.3277	27.985	.001
Destination Strategizing	.909	235	4.5404	33.486	.001
Government Schemes Support	.647	235	2.2340	-19.354	.001

Source: Authors' own

Assessment of Coping Strategies

In order to assess the coping strategies adopted by tour and travel operators in India, several statements were framed related to each coping strategy identified during qualitative analysis. Respondents were asked to rate the individual statement on a five-point scale showing their level of adoption for the said strategy. Table 5 represents the descriptive and hypothesis test summary of coping strategies adopted by tour operators.

As can be seen from table 5, the value of Cronbach's Alpha was found more than 0.6 for each coping strategy indicating a reliable scale. Table 4 also displays the mean value of each statement wherein it can be seen that apart from government support schemes, all other coping strategies were rated more than three, meaning that all coping strategies were adopted to a moderate extent by all the tour operators in India. The most important coping strategy adopted by Indian tour operators was destination strategizing with the highest mean value of 4.54 wherein locations were shortlisted as per clients' specific demands, ease of access was given priority while suggesting a destination, and local places were promoted amongst consumers. Consumers were recommended the shorter and less crowded places to visit. The use of customer relationship management emerged as the second most used strategy by the Indian tour operators with a mean score of 4.33. Tour operators focussed more upon knowing their customers during this pandemic. They analyzed their entire customer database to identify relevant customer segments and worked with our customers for identifying newer travel destinations. Loyal customers were given due attention during the

pandemic and tour operators maintained a regular connection with the loyal customer segment.

Tour operators also resorted to some negative practices such as laying off staff and salary reduction as this particular coping strategy was found associated with a mean value of 4.13. Tour operators in the study also acknowledged that they adopted work from home practice during this pandemic. The lowest mean score i.e., 2.23 was assigned to government scheme support; highlighting the fact that enough guidance, grants, and financial support were not received from the government side. The statistical significance of the descriptive statistics was checked with the help of one sample t-test at a 5% level of significance. This can be seen from table 5 that for all the coping strategies, the t-statistic was found significant.

Age and Coping Strategies

The study also aimed to evaluate whether adoption of coping strategies varied among different age groups of the tour operators. The anticipated mean difference was analyzed with the help of one of the most popular research techniques namely ANOVA. The results have been depicted in table 6.

As can be seen from the table 6 that statistic was found significant for three coping strategies namely the resilient mindset ($F = 2.694$, $P = .032$), adoption of social media ($F = 3.024$ with $P = .019$) and government scheme support ($F = 3.271$, $P = .012$). The descriptive statistics showed that young respondents belonging to less than 25 years of age were more likely to adopt these coping strategies.

Table 6: ANOVA

Coping Strategy		Sum of Squares	df	Mean Square	F	Sig.
Resilient Mindset	Between Groups	3.835	4	.959	2.694	.032
	Within Groups	81.850	230	.356		
	Total	85.685	234			
Change of Business Methods	Between Groups	1.108	4	.277	.849	.495
	Within Groups	75.003	230	.326		
	Total	76.111	234			
Adoption of Social-Media	Between Groups	4.143	4	1.036	3.024	.019
	Within Groups	78.768	230	.342		
	Total	82.911	234			
Work from home	Between Groups	1.571	4	.393	.715	.582
	Within Groups	126.327	230	.549		
	Total	127.898	234			
Laying off and Salary reduction	Between Groups	1.261	4	.315	.482	.749
	Within Groups	150.339	230	.654		
	Total	151.600	234			
Usage of Technology	Between Groups	1.802	4	.451	.943	.440
	Within Groups	109.883	230	.478		
	Total	111.685	234			
Cost Cutting	Between Groups	4.030	4	1.008	1.854	.119
	Within Groups	125.017	230	.544		
	Total	129.047	234			
CRM	Between Groups	3.358	4	.839	1.603	.174
	Within Groups	120.412	230	.524		
	Total	123.770	234			
Destination Strategizing	Between Groups	1.682	4	.420	.843	.499
	Within Groups	114.684	230	.499		
	Total	116.366	234			
Government Schemes Support	Between Groups	4.636	4	1.159	3.271	.012
	Within Groups	81.491	230	.354		
	Total	86.128	234			

Source: Authors' own

DISCUSSION

The results of the study determined that COVID-19 has severely hit the Indian tour operators despite their location, the scale of operation, and years of existence in business. Given the nature of the pandemic, wherein the Governments restricted the mobility of the people in order to check the spread, the results can be easily understood. The most important benefit of basic coping strategies adopted by the tour operators in India is the renewed focus on customer needs and the promotion of domestic tourism. Moreover, new-age technologies came in handy at the disposal of tour operators. Similar findings were also reported by a recent study conducted by Sigala (2020) wherein the author concluded that destination strategizing and use of customer relationship management are the most

important coping strategies adopted by Indian tour operators. Prabawa (2010) and Hall, Prayag & Amore (2017) assert that in order to deal with a situation like this tour operators usually resort to promoting domestic tourist destinations and make ample use of new-age technology to connect with their loyal customer base. Researchers like Zuboff (2015) and Sigala (2020) also advocate the usage of new-age technology in order to combat pandemic-like situations. Coping strategies like these are aimed at problem-solving which facilitates fast recovery from the crisis situation and fosters the creation of a resilient business organization (Lee et al., 2013). Rural tourism, homestays could be the potential gainers in near future. One can also expect increased consumer engagement in destination strategizing.

The study also highlighted the adoption of emotional coping strategies adopted by the tour operators wherein they laid off staff and resorted to salary deduction as one of the coping strategies. The adopted strategy has negative consequences for the employees and their families wherein not only affects the latter emotionally but also tests their psychological integrity and survival instincts. Although the adopted coping strategy has negative socio-economic consequences; still it has been widely practiced by the tourism sector at the time of crisis (Chien & Law, 2003). Such strategy might be the only viable option for the small-scale tour operators in the short run, marketers are likely to be affected negatively due to lack of staff and decreased employee loyalty in the long run.

The coping strategy also altered the way of working, wherein the tour operators adopted the work from home strategy during this crisis. Henderson and Ng (2004) also mention the use of a similar strategy adopted by tourism sector players at the time of SARS. However, whether the strategy would be temporary or permanent, can't be really ascertained really quickly. The tour operators also exhibited a positive emotional coping strategy i.e. emotional resilience, which becomes necessary for handling a crisis-like situation. The results are in line with the findings of Pathak and Joshi (2020). The study also affirmed the difference in coping strategies on the basis of age wherein young tour operators adopted coping strategies such as resilient mindset, adoption of social media, and government scheme support. Such findings were not seen in previous studies and hereby add significantly to the existing literature. The results highlighted the absolute miser role of the government's support towards the tour and travel sector apart from framing guidelines. Government support in terms of funding, grants, waiving off taxes, fees, etc. could have given the necessary impetus to deal with the situation. Researchers like Hall, Scott & Gössling (2020), and Singh (2021) also advocate the importance of the government's support in handling the pandemic situation.

CONCLUSION

The study concluded that the Indian tourism sector was negatively hit by the pandemic. Key business parameters namely the turnover, number of clients served, margin, profits, tourist segments, destination markets have been negatively impacted by the pandemic. The pandemic highlighted the importance of customer relationship management, local tourism, and the deployment of new-age technologies for

effective customer management. Pandemic also induced a shift towards work from home culture. Tour operators resorted to the mixed emotional coping strategies wherein on one hand they applied negative emotional coping strategies such as laying off the staff and salary deduction, whereas, on the other, they also practice emotional resilience. The study concluded the tourism sector players in India didn't receive adequate government support in terms of guidance, grants, and financial aids.

Implications and Future Research Agenda

The current study inimitably highlighted ten coping strategies for crisis management for tour operators working at medium and small business scales. The findings offer more specific themes related to the COVID-19 pandemic that should make policymakers build a framework for supporting small and medium-size tour operators. This indicates that frameworks available are generic and may need improvement based on the nature of the pandemic. The study highlights the extremely important role of government support in handling crisis situations. Tour operators are recommended to work in close association with their customers so that they can become a part of everyday customers' interactions that would eventually help them negotiate the crisis in a more efficient way. Although cost-cutting measures are seemingly most commonly used, they might not be the most ideal ones. Tour operators can look for alternative forms of tourism like sustainable tourism, rural tourism, eco-tourism, etc. In a crisis situation like COVID, contactless services become more essential than ever and digital interventions can play an absolutely important role in such cases. Tour operators can design the completely digital consumer journey and can motivate their customers to embark upon the same.

The tour operators in the tourism sector are the worst hit segment and several areas of research are still unidentified. First, coping responses for tourists also need to be examined parallelly so as to understand the consumer shift during pandemic crises. Second, coping strategies in a post-pandemic context also need to be examined in future researches to boost the tourism industry. Future studies can also conduct a comparative analysis of the coping responses of small-scale tourism businesses with large-scale tourism businesses during the pandemic.

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KEYWORDS

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Exploring Behavioural Intentions of Tourists towards the Online Mode of Payments before and after COVID-19 Pandemic: An Investigation from Garhwal Region of Uttarakhand

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Abstract

Appropriate understanding of the behavioural intentions of tourists is a critical and most fundamental determinant for tourism development and consumers' satisfaction (Severson & Yaffe-Bellany, 2020). However, the COVID-19 pandemic has impacted every intention of tourists in relation to travel significantly over the past two years. When considering the mode of payment used by tourists while traveling depends on multiple factors such as the nature of the destination, availability of e-resources, technology, accessibility of banking system to residents and service providers, information, security, and regulatory framework, etc. The present study aims to investigate the behavioural intentions of tourists about the different online modes of payments before and after the COVID-19 pandemic. The findings of the study show the impact of COVID-19 on the technological behaviour of

INTRODUCTION

These days online payment applications are par excellence for the tourists while traveling, visiting destinations, and making payments (Rodríguez-Torrico et al., 2019). When tourists purchase any tourism product they depend on the available mode of payments and sources of information, where the online modes of payments have a privileged role (Coromina & Camprubí, 2016; Sirakaya & Woodside, 2005). A greater degree of uncertainty in the minds of tourists towards makings payments for tourism products and services is there when tourists intend to make and use an unfamiliar mode of payments (García-Milon et al., 2019). Smartphones facilitate the use of online modes of payments and changes tourists' behavioural intentions and decision-making processes towards online and offline modes (García-Milon et al., 2020). Tourists gather information about different modes of payments from various e-sources, compare products and prices (Fuentes & Svingstedt, 2017). However, something unimaginable happened in the year 2020. COVID-19 emerged and caused a worldwide syndemic and destruction (Horton, 2020). This dramatically affected entire tourism and its associated sectors and left the global tourism industry helpless and hopeless. More reformulations and innovative solutions are needed to ensure its survival and the encouragement of tourists about online modes of payments is one most important among them.

The highly contagious and communicable nature of COVID-19 did not allow performing events where social human interaction is more such as tourism, transportation, and hospitality, etc. (Wen et al., 2020). Measures that facilitate limited interpersonal contact are to be promoted like responsible and sustainable tourism (Fong et al., 2020). In this context, uses of contactless systems i.e. modern technologies (e-booking and

tourists and suggest that behavioural intentions of tourists have changed significantly towards the mode of payments after the pandemic. Nowadays after the pandemic online mode of payment is preferred to offline mode of payment. Based on results appropriate suggestions and recommendations are also made to tourists, service providers, and tourism stakeholders.

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payments) have been seen as one of the best solutions to overcome and revive the tourism industry across the World (Nanni & Ulqinaku, 2020; Zeng et al., 2020). After COVID-19 pandemic technologies are more used in education, official work, buying, selling, and conducting several other activities of our daily lives. Therefore, it is important and foreseeable that tourism planners, destinations operators, local vendors, tourists, and other associated tourism stakeholders will increase the use of technological devices, applications, and systems in relation to conducting safe and sustainable tourism. Indeed, before the COVID-19 pandemic, people were not much aware and used to digital modes of payments as they feel more comfortable and secure with offline modes. The shutdown and contactless guidelines of WHO and Governments have made people more accustomed to using information and communication technologies (ICTs) for conducting their businesses and performing routine affairs and digitalization of payment systems is most prominent among them. Although many destination management organizations and companies were already using and promoting an online mode of payments, it was most challenging for remote and offbeat tourism destinations (Choi et al., 2016; Law et al., 2018). Poor internet connectivity, insufficient banking services, and lack of awareness are some of the most prominent setbacks while promoting online payments and digitalization in such tourism destinations. Although there have been several studies conducted on the impact of COVID-19 on tourism from a different dimension (Zenker & Kock, 2020; Kala, 2021), tourists' behavioural intentions towards online payments due to a pandemic is still unexplored that needs to be studied and addressed. To minimize this gap, the present study has been conducted with an aim to investigate behavioural intentions of tourists towards online payments modes before and after COVID-19.

LITERATURE REVIEW

Tourist behavioural intentions about tourism products, resources, activities, and amenities act as a guiding force for designing and packaging of travel packages and accordingly tourism stakeholders target the customers (Jin et al., 2017; Rabbiosi, 2011; Timothy, 2005). Previous studies have also suggested that tourists' perception, satisfaction, and experience while visiting destinations have been greatly affected by behavioural intentions (Chen, 2013; Law & Au, 2000; Lloyd et al., 2011; Yüksel, 2007). It ensures positive perception and a high level of satisfaction for tourists and allows them to participate in different and distinct tourism activities according to their needs and wants (Hsieh & Chang, 2006; Way & Robertson, 2013). In addition, online modes of payments benefit tourism destinations and tourists both by saving time, energy, and money (Heung & Cheng, 2000; Jin et al., 2017) and is a safe and secure mode of income and payment (Chang et al., 2006; Jin et al., 2017). Online payment modes are highly preferred and valued by tourists, and are also quite useful to tourism service providers (Choi et al., 2016; Jin et al., 2017). In addition, e-payment applications involve very simple steps to make the payments and get unique experiences (García-Milon et al., 2020).

New technologies have completely modified e-payment systems and, in particular, mobile applications such as phone pay, Google pay, Paytm, and mobile wallets, etc. have been adopted by tourists as an indispensable tool while traveling (Ripp'e et al., 2017; Wang et al., 2016). On the other

hand, smartphones are also reconfigured and upgraded online payment systems by creating hyper-connected frameworks through which tourists can make payments anywhere and at any time (Fuentes & Svingstedt, 2017). Android smartphones help in satisfying tourists' multiple needs and desires related to mobility, purchasing, information, payment, and interaction, etc. (Wang et al., 2014), and are considered as "ideal travel companions" for tourists (Rodríguez-Torrico et al., 2019). Therefore, tourists use modern technologies and applications with the help of mobile phones and conduct their travels effectively and hassle-free.

Acceptance and use of online payments through mobile phones in tourism have been undertaken in the last decade, which demonstrates a significant benefit to both tourists and service providers (Kim & Law, 2015; Law et al., 2018). The most widely accepted and used model is the 'Technology Acceptance Model (TAM), which was introduced by Davis (1989) and furthermore 'Unified Theory of Acceptance and Use of Technology' (UTAUT) by Venkatesh et al. (2003). TAM is an important theoretical model for studying human technological behaviour (Ajzen, 1991; Davis et al., 1989; Moore & Benbasat, 1991; Thompson et al., 1991). With the help of TAM (Technological Acceptance Model) and UTAUT (Unified Theory of Acceptance and Use of Technology) models, key variables and frameworks for the tourists' technological behaviours have been identified and those variables help the tourism suppliers to understand the technological behaviours of visitors (Venkatesh & Davis, 2000; Venkatesh et al., 2003). Furthermore, behavioural intention of tourists related to technology acceptance is affected by factors like facilitating conditions, social influence, performance expectancy, and effort expectancy (Venkatesh et al., 2003). These factors have been used to understand and investigate varied technological behaviours of tourists' at tourism destinations (Escobar-Rodríguez & Carvajal-Trujillo, 2014; San Martín & Herrero, 2012). More recently, the technological behaviour of tourists is focused on digital modes of payments through multiple mobile applications (Bakar et al., 2020; Gupta et al., 2018). UTAUT is allowing some additional variables for a more comprehensive study of this even without making the model unwieldy and overly complex. In order to enhance the acceptability and applicability of the UTAUT, future researches may also identify additional relevant factors related to behavioural intentions of tourists towards travel technology (Venkatesh et al., 2012).

The emotional effect is also another important factor of tourists' technological behaviour, and is helpful in the adoption of new technological applications. Previous studies suggested that emotions affect the behavioral intentions of tourists in acceptance and use of travel technology (Beaudry & Pinsonneault, 2010; Lu et al., 2019; Partala & Saari, 2015). Emotions of tourists about mobile technologies can be studied from several perspectives such as pleasure-arousal emotions (Mehrabian & Russell, 1974) and this has been shown as a good predictor of tourist behaviour (Bigné & Andreu, 2004; Kulviwat et al., 2007; Yüksel, 2007). Some other studies incorporated pleasure-arousal emotions into UTAUT and TAM. Kourouthanassis et al. (2015) is an exception who argued emotion as an antecedent variable and incorporated with arousal and pleasure factors towards acceptance of travel technologies while conducting tourism. However, pleasure-arousal emotions along with TAM and UTAUT models have not been completely used to investigate tourists' behavioral intention to use different mobile technologies including online payments. A further addition to pleasure-arousal emotions combining cognitive dimensions of tourists with TAM and UTAUT models could better explain behavioural intentions of tourists towards mobile and travel technologies (Tamilmani et al., 2019). In addition, the growth and development of modern technologies and contact-free digital solutions such as mobile payments will be essential and important for the recovery and revival of tourism from COVID-19. The tourism and hospitality industry is characterized by a high level of social human interaction, was entirely paralyzed during the COVID-19 pandemic. It is, indeed, one of the sectors which have suffered the most from this pandemic. Almost all kinds of travel have been restricted across the world, almost all hotels were closed, and planes were parked on the ground and the travel business was completely shut down for an uncertain period (UNWTO, 2020b). This has severely affected service providers, stakeholders, tourists, and more important the local residents who are purely dependent on tourism for their livelihood. Tourists have a negative attitude and high-risk perceptions towards travel and tourism due to the health alerts and frequent occurrence of COVID-19 cases (Neuburger & Egger, 2020). This all leads to focus on alternative travels such as responsible and sustainable and encourage to go with contactless travel amenities and activities (Huang & Min, 2002) such as online booking and payments (Fall & Massey, 2005), use of fewer travel

intermediaries (Hystad & Keller, 2008), a reduction of high human contact in tourism activities, a preference for safe and trained outdoor activities (Wen et al., 2005), and greater attention being paid to cleanliness and hygiene (Higgins-Desbiolles, 2020). Since COVID-19 is an unprecedented global crisis that has devastated the tourism and hospitality industry completely, there is a need to make immediate behavioral changes among tourism professionals towards revival, recovery, and re-visiting the tourism destinations (Chebli & Said, 2020). Shaw et al. (2020) pointed out that there is a need to change and adopt a lifestyle that must have long-term and permanent behavioural changes and implications. According to Ivanov et al., (2020), the COVID-19 pandemic not only impacted but also imprinted upon daily lives, habits, perceptions, satisfaction, behaviours, and attitude of tourism personnel towards the tourism and associated sectors and segments. If we really wish and want to revive and rewrite tourism a lot of efforts are needed which is a challenge (UNWTO, 2020a).

Research Gap

Since the outbreak of the COVID-19 pandemic, uncountable researches have been conducted on the impact of the COVID-19 pandemic on different areas of tourism. But a very few studies have been carried out on travel technologies in view of the pandemic. Furthermore, none of the studies has been conducted on behavioral intentions of tourists towards travel technologies and online modes of payments before and after the COVID-19 pandemic in the study area, which makes the present work more notable and applicable to the tourism planners, policies makers, tourists, and service providers to understand the importance of travel technologies and online modes of payments at the tourism destinations.

RESEARCH OBJECTIVE AND HYPOTHESIS

Based on an extensive review of literature following research objective and hypothesis have been formulated in order to conduct the present work and to minimize the existing research gap. The objective of the study is to investigate the behavioural intentions of tourists towards the online mode of payments before and after the COVID-19 pandemic and the corresponding Hypothesis (H1) states that tourists have similar behavioural intentions about the online mode of payments before and after the COVID-19 pandemic.

STUDY AREA

Uttarakhand is one the Himalayan states of India, located between 28°43' N to 31°27' N 77°34' E to 81°02' E and share international borders with China and Nepal and inter-state boarder with Uttar Pradesh and Himachal Pradesh. Garhwal region of Uttarakhand is known for Char Dhams (Gangotri, Yamunotri, Kedarnath and Badrinath) and adventure tourism destinations such as Auli, Rishikesh, Hemkund sahib, Chopta, Tugnath, Nanda Devi and Valley flowers National park, Chakrata, Dayara Bugyal and many more. Majority of the destinations are located in remote and offbeat areas where accessibility, internet and banking connectivity is a concern in term of tourism and tourists.

METHODS AND MATERIALS

Tool construction and Sampling

Two sample sets have been collected with the help of a self-constructed questionnaire via multistage sampling technique over two different periods of time, first, one during the onset of COVID-19 in 2019, followed by the second post after COVID-19 in 2021. Trained and skilled interviewers were selected for the non-COVID-19 sample, and for the COVID-19 sample digital means such as Google forms, emails were used to disseminate and collect data. The size of both samples was (N=1000) which includes 500 each pre and post COVID-19. Initially, a large number of samples; 600 each pre and post was decided but while editing and compiling data it has been found that around 200 respondents have not filled up the entire questionnaire therefore they all been bootied out from the study and the final 1000 samples have been selected for the analysis. The choice of selecting destinations for the study from the Garhwal region of Uttarakhand was based on the following criterion; frequently visited tourism destinations, remote areas, and offbeat destinations as these three criteria are most useful for conducting any comprehensive study in view of tourism destinations (Statista, 2020). COVID-19 has had a strong impact in India and Uttarakhand where Kumbh Mela (The largest religious gathering in the World) was celebrated and also acted as a spreader of COVID-19 infection. A self-constructed questionnaire was based on studies variables, objective and hypothesis of the present study and also validated through previous models UTAUT, TAM, and PAD and studies (Mehrabian & Russell, 1974; Venkatesh et al., 2003, and Mehrabian & Russell, 1974).

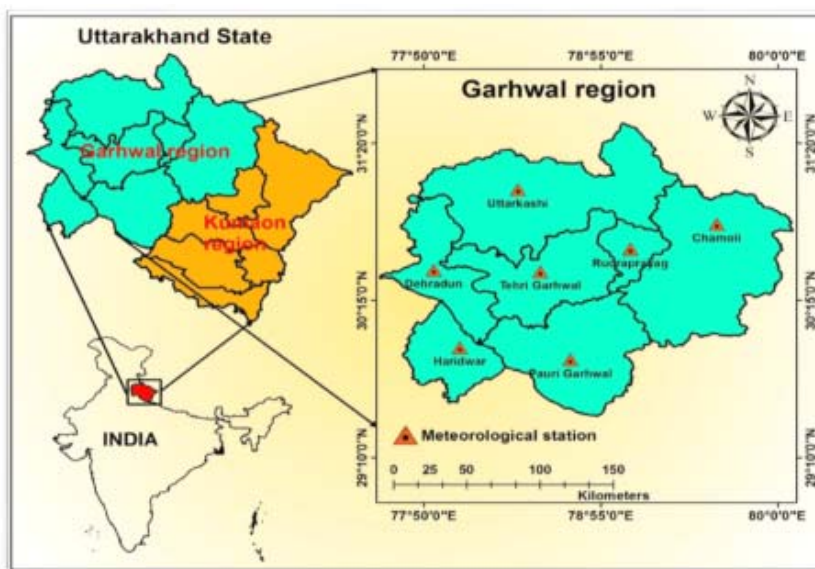


Figure 1 Map of study area

Source; (<https://www.researchgate.net/publication/348947424>)

Data Analysis

The SPSS 26 was used to analyze the data. Both descriptive and inferential statistics were used for the analysis of the data and for achieving and testing the proposed objective and hypothesis. Under inferential statistics paired sample t-test was used as this is the most reliable test for investigating the pre and post-test situations (Dijkstra & Henseler, 2015) and also fulfill the data normality assumptions (Chin, 1998; Ram et al., 2014, Hair et al., 2013; Sarstedt et al., 2011). Moreover, demographic profiles and online payment awareness of respondents have been analyzed through descriptive statistics and computed in Tables 1 and 2.

Table 1 shows the demographic profile of the tourists (N=1000) which included 837 (83.7%) males and 163 (16.3%) females belong to the different age groups which included below 20 years 48 (4.8%), between 21-30 years 421 (42.1%), between 31-40 years 310 (31%) and above 40 years 221 (22.1 %). Out of 1000 tourists, 787 (78.7%) were married followed by 200 (20%) unmarried and 13 (1.3%) in other categories, and all of them belong to India. In terms of educational qualifications, the highest number of tourists 403 (40.3%) were graduates followed by 305 (30.5%) post-graduate, 167 (16.7%) higher secondary, 63 (6.3%) up to secondary and 62 (6.2%). In terms of occupation, 24 (2.4%) were students, 128 (12.8%) were government employees, 471 (47.1%) were private employees, 103 (10.3%)

Table 1: Demographic Profile (N = 1000)

Demographic variables		Frequency	%
Age	Below 20 year	48	4.8%
	21-30 year	421	42.1%
	31-40 year	310	31%
	Above 40 year	221	22.1%
Gender	Male	837	83.7%
	Female	163	16.3%
Marital Status	Married	787	78.7%
	Unmarried	200	20%
	Any other	13	1.3%
Nationality	Indian	1000	100%
	Foreigners	0	0%
Educational Qualification	Up to Secondary	63	6.3%
	Higher Secondary	167	16.7%
	Graduate	403	40.3%
	Post Graduate	305	30.5%
	Any other	62	6.2%
Occupation	Student	24	2.4%
	Govt. Employees	128	12.8%
	Private Employees	471	47.1%
	Business	103	10.3%
	Any other	174	17.4%
Income (Monthly)	Below 25000	123	12.3%
	25001-50000	472	47.2%
	50001- 75000	282	28.2%
	75001-100000	85	8.5%
	More than 100001	38	3.8%

Source: Primary Data

Table 2: Travel Related details

Variable	Frequency	Percentage
Have you ever heard/ used M-wallet for digital transaction in the past		
Yes	829	82.9%
No	171	17.1%
Which of the following m-wallet do you use often for digital transaction		
Airtel Money	36	3.6%
My M-Pesa	14	1.4%
JioMoney	33	3.3%
PhonePe	173	17.3%
GooglePay	218	21.8%
BHIM	234	23.4%
Paytm	210	21%
SBIPay	65	6.5%
HDFC PayZapp	17	1.7%
Do you think that demonetization encourage you towards digital transaction system		
Yes	787	78.7%
No	213	21.3%
What mode of payment you prefer during your visit to tourists places		
Net banking	5	0.5%
Credit/Debit card	49	4.9%
Cash	793	79.3%
M-wallet/app	153	15.3%
Cheque	0	0%
How often do you use mobile wallet services		
Everyday	304	30.4%
Several times in a day	267	26.7%
Several times in a week	401	40.1%
Several times in a Month	7	0.7%
Never	21	2.1%
What motivates you to visit these places		
Temples/ Monasteries /		
Pilgrimage	282	28.2%
Water rafting	76	7.6%
Tracking	273	27.3%
Other Adventures	111	11.1%
Leisure	39	3.9%
Spirituality	128	12.8%
Yoga	64	6.4%
Health and wellness	27	2.7%
Have you visited		
Popular Mass Tourist Destination	361	36.1%
Satellite nearby destination		
to popular destination	272	27.2%
Offbeat /Remote destinations	367	36.7%
Are you satisfied with M-wallet payment availability and facility at		
Popular Mass Tourist Destination	728	72.8%
Satellite nearby destination		
to popular destination	224	22.4%
Offbeat /Remote destinations	48	4.8%

Source: Primary Data

were having business, and 174 (17.4%) belong to other professions. The different income groups were below Rs.25000 monthly income included 123 (12.3%), income from Rs.25001 to 50000 included 472 (47.2%), income from Rs 50001 to 75000 included 282 (28.2%), between Rs 75001 to 100000 included 85 (8.5%), and income above 100001 included 38 (3.8%) respondents. Overall respondents belong to young male tourists, having moderate to high disposable income. Further, information related to their travel and modes of payments is also being investigated and presented in table 2.

Table 2 depicts the travel-related information of tourists (N=1000). Out of total respondents, 829 (82.9%) tourists were aware, and 171(17.1%) were unaware about available digital modes of payments. Airtel Money 36 (3.6%), My M-Pesa 14 (1.4%), JioMoney 33 (3.3%), PhonePe 173 (17.3%), GooglePay 218 (21.8%), BHIM 234 (23.4%), Paytm 210 (21%) SBIPay 65 (6.5%), and HDFC PayZapp 17 (1.7%) were majorly used by respondents. On enquiring about use frequency, 302 (30.2%) used everyday, 267 (26.7%) used several times in a day, 401(40.1%) used several times in a week and 7 (0.7%) used several times in a month. Interestingly 21 (2.1%) never used online payments. 787 (78.7%) tourists believe that demonetization leads to increased uses of digital modes of payments, whereas 213 (21.3%) do not think so. Regarding the use of different modes of payment majority of respondents, 793 (79.3%) have made payment by Cash 793 (79.3%), followed by M-wallet/app 153 (15.3%), Credit/Debit card 49 (4.9%), and net-banking 5 (0.5%). The highest number 282 (28.2%) of respondents/tourists have visited the study area because of temples/ monasteries/ pilgrimage.

It was followed by tracking (27.3%), spirituality (12.8%), adventures activities (11.1%), water rafting (7.6%), Yoga (6.4%), leisure (3.9%) and Health & wellness (2.7%). However, the majority of the tourists were visiting the offbeat /remote tourism destinations 367 (36.7%) along with Popular Mass Tourist Destination 361(36.1%) and Satellite nearby destination to popular destination 272 (27.2%). In view of M-wallet payment availability and facility at these destinations, tourists are more satisfied with Popular Mass Tourist Destination 728 (72.8%) as compared to satellite nearby destination to popular destinations 224 (22.4%) and offbeat /remote destinations Destination 48 (4.8%).

Moreover, behavioural intentions of tourists towards different online modes of payment as discussed above are also been measured before and after the

Table 3: Paired sample t-test results for behavioural intentions of tourists towards online mode of payments before and after COVID-19 pandemic (N = 1000)

Variable	Mean	S.D.	MeanDifference	t- ratio	p-value
Pre-COVID	12.54	05.021	19.73	14.341	0.000**
Post -COVID	32.27	11.219			
Pre-COVID-item-1	02.05	03.712	02.19	12.012	0.000**
Post –COVID- item-1	04.24	05.621			
Pre-COVID- item-2	02.11	05.871	01.67	15.621	0.000**
Post –COVID- item-2	03.78	07.358			
Pre-COVID- item-3	01.49	06.932	03.03	12.911	0.000**
Post –COVID- item-3	04.79	08.712			
Pre-COVID- item-4	03.22	05.781	01.69	11.870	0.000**
Post –COVID- item-4	04.91	06.281			
Pre-COVID- item-5	02.71	05.921	02.16	11.320	0.000**
Post –COVID- item-5	04.87	07.301			
Pre-COVID- item-6	01.32	06.812	02.58	15.939	0.000**
Post –COVID- item-6	03.90	05.601			
Pre-COVID- item-7	02.32	06.491	02.34	13.262	0.000**
Post –COVID- item-7	04.66	05.821			
Pre-COVID- item-8	01.43	06.528	03.11	14.391	0.000**
Post –COVID- item-8	04.54	03.321			

** Significant at 0.01 level (Source: Primary Data)

COVID-19 pandemic. Awareness of tourists' intentions is important to develop and redesign the tourism destinations and available facilities and amenities (Bavel et al., 2020; Fong et al., 2020).

Table 3 shows the mean scores of tourists' (N=1000) behavioural intentions about online modes of payments before and after COVID-19 pandemic towards overall and each item are 12.54, 32.27, 02.05, 04.24, 02.11, 03.78, 01.49, 04.79, 03.22, 04.91, 02.71, 04.87, 01.32, 03.90, 02.32, 04.66 and 01.43, 04.54 respectively and mean difference of 19.73, 02.19, 01.67, 03.03, 01.69, 02.16, 02.58, 02.34 and 03.11 exists between pre and post COVID-19 respectively, Value of S.D. 05.021, 11.219, 03.712, 05.621, 05.871, 07.358, 06.932, 08.712, 05.781, 06.281, 05.921, 07.301, 06.812, 05.601, 06.491, 05.821 and 06.528 03.321 for overall and each item respectively. Further, value of t- ratio for respective groups are 14.341, 12.012, 15.621, 12.911, 11.870, 11.320, 15.939, 13.262 and 14.391. Here p value is 0.000 ($p=0.000<0.01$) for each group and variable which is less than 0.01 shows that there is a significant mean difference between behavioural intentions of tourists towards online modes of payments before and after COVID-19 pandemic at 0.01 level of significance. Thus, the proposed alternative hypothesis " H_1 " Tourists have similar

behavioural intentions of about online mode of payments before and after the COVID-19 pandemic" has been rejected and its corresponding objective "Study the behavioural intentions of tourists' towards online mode of payments before and after the COVID-19 pandemic" is also being achieved towards overall behavioural intentions and each item; item-1 (Received benefits & utilities while using M-wallet for financial transactions), item-2 (M-wallets are difficult to use/ inferior than convention payment modes), item-3 (Using M-wallet shows joy and happiness among users), item-4 (Opinions of families, relatives & friends matters while using m-wallet), item-5 (M-wallet is safe while using electronic payment system), item-6 (Feeling satisfied from M-wallet services), item-7 Low (visiting frequency at the bank teller/ATM) and item-8 (Payment through M-wallet is prestigious and shows status too).

Figure 2 shows that there is a significant gap between pre and post COVID-19 behavioural intentions of tourists towards using online modes of payments and likewise to other aspects of tourism. COVID-19 pandemic plays an important role in the digitalization of travel technologies and changing behavioral intentions of tourists towards online modes of

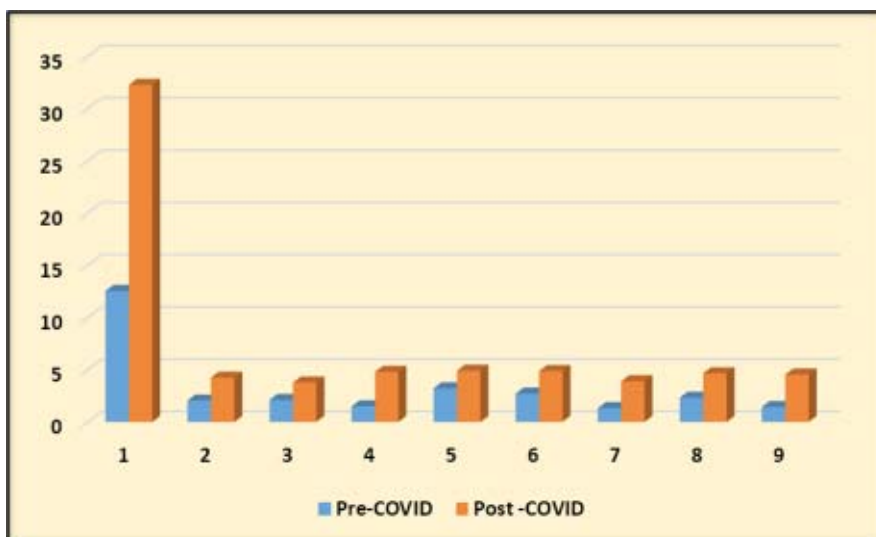


Figure 2: Behavioural intentions of tourists towards online modes of payments before and after COVID-19 pandemic

payments and contactless travels (Johns Hopkins University, 2020).

CONCLUSION

The COVID-19 pandemic had severely impacted and affected almost all industries across the world. Tourism and hospitality is the most affected among them, which has seen the cancellation and cessation of all kind of tourism businesses and activities for an uncertain period of time. Revival and recovery seem to be slow and complex (UNWTO, 2020b). None of the crises so far has affected the tourism sector as COVID-19 did, but at the same time, we have modern and advanced technologies that never had in the past (Gössling et al., 2020). Over the period of time, digital development and modern technologies have changed the behavioural intention of tourists towards tourism and its various components, activities, and amenities (Zenker & Kock, 2020). Due to the COVID-19 pandemic entire way of thinking and behavioural intentions of tourists have completely changed not only online modes of payment, travel technologies but about whole tourism and its associated activities. There is a need for revival and recovery of tourism from its beginning after COVID-19 and all of us have to play a very crucial role towards this through modern innovative, technologies, contactless travels, revival strategies, and more. Encouragement of modern travel technologies including digitalization in the payment

system is one of the important milestones in way of revival of tourism post-COVID-19. Tourism destinations like the Garhwal region of Uttarakhand where residents of offbeat destinations are not more comfortable with travel technologies and online modes of payments, need to be educated, connected with the banking system, and make them understand the benefits of online payments work.

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KEYWORDS

**COVID-19,
Pandemic,
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Travel Behaviour Post COVID-19: An Empirical Study with Reference to Indian Tourists

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Abstract

Tourist behaviour is extremely susceptible to disruption by crisis and pandemics. Currently, tourism is rigorously encountering novel coronavirus (COVID-19) and it became crucial to understand the behaviour of tourists in such a pandemic situation to comprehend the survival of the industry. The present research investigates the travel behaviour of Indian tourists following the outbreak of the COVID-19 pandemic. The study used 236 responses of Indian tourists collected from a web-based survey using the snowball sampling technique. The study reported enthusiasm and optimism among potential tourists to travel immediately after the COVID-19 pandemic with new travel preferences. The study also discovered a significant difference in tourist behaviour as per the demographic features of respondents. The study provides implications for industry players that help in search of revival and resilience strategies for the comeback of the tourism business of the country.

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INTRODUCTION

Novel coronavirus (COVID-19) was first identified in December 2019 in the Wuhan city of China, has diseased over 180 million people and triggered over 4 million deaths worldwide by June 2021 (World Health Organization, 2021). The pandemic has had an unprecedented effect on peoples' movements across the globe along with the closure of certain types of businesses including travel (UNWTO, 2020). This situation has restricted the entry of tourists and negatively hit the tourist destinations across the globe that force tourists to change their travel plans demonstrating cancellation of different travel services including airline flight, accommodation and boarding & lodging services. This situation's trajectory cinched tourist activities and reported a downward shift in tourist behaviour (Awasthi, Soyav, & Shiwani, 2021). For instance, a recent study (Wachyuni & Kusumaningrum, 2020), reported a perception of decreasing interest in travelling after this pandemic that due to a sense of fear rise among travellers. However, an intention to travel in a normal situation after the COVID-19 pandemic is also noticed. On a similar notion, Wen et al. (2020) also revealed negative responses among potential tourists due to health risks that damagingly affect tourists' behaviour at a destination in different countries.

As far as India is concerned, the COVID-19 spread, the initial case was noticed during early 2020 (World Health Organization, 2021) reported more than 30 million infected people and over 4 lakhs deaths in the country by the end of June 2021. International travel ban due to COVID-19 has already shut down the international tourist arrivals across the globe including India (Das & Tiwari, 2021). But the domestic tourism of the country is the largest segment of the Indian tourism market and registered millions of tourist visits on every basis. The extensions of lockdown and travel restrictions in the country resulted in to decline in domestic and local tourist visits in the country (FICCI, 2020; Dandapat, et al., 2020; Kaushal & Srivastava, 2021). The effect of COVID-19 on the Indian tourism market is recognized in the literature, for instance, Kumar (2020) in his study noticed a decline in the number of travellers to different tourist destinations of the country depicted from cancellation of air travel bookings, accommodation booking cancellation and postponement of travel plans. Masih, Sharma and Rajasekaran (2020) in another study reported a decline in the business of hotels, restaurants and other hospitality organizations. Jaipuria, Parida and Ray (2021) in a recent study

noticed the negative consequence of the COVID-19 pandemic on-demand and preferences of travellers. A report of the Federation of Indian Chamber of Commerce and Industry (FICCI, 2020) highlighted the destructive effect of the COVID-19 pandemic on the behaviour of Indian tourists discovered from the reported cancellation of travel products and services.

From the analysis of the above studies, it has been cited that though some studies (Kumar, 2020; Jaipuria, Parida & Ray, 2021; Masih, Sharma & Rajasekaran, 2020; Kaushal & Srivastava, 2021) have examined the impact of the COVID-19 pandemic on Indian tourism, studies focus on the behaviour of tourists towards travelling in the post-COVID-19 environment found missing from an Indian perspective. However, the few authors from other countries (such as Peters, Peters & Peters, 2020; Brouder, 2020) in the field of tourism, predominantly focus on this situation and notice changes in tourist behaviour including perception, preferences, attitude, willingness to travel and destination preferences considering risk and danger associated with COVID-19 pandemic (Peters, Peters & Peters, 2020; Brouder, 2020; Yanga, Zhang & Chen, 2020). But, the implications for tourist travel behaviour remains by Indian scholars remain both unknown and possibly cataclysmic that reported a gap in the literature that logically however required to be acknowledged. Moreover, the appreciation of tourist behaviour also backs policy makers, destination planners and tourism practitioners to succeed efficiently in post-crisis situations (Lee et al., 2012). Hence, to cover the existing research gap and provide ground to focus on the development of tourism, the current research (a) investigates behaviour of Indian tourists in a post-COVID-19 pandemic, and compare the tourist behaviour in a post-COVID-19 pandemic as per demographic features.

LITERATURE REVIEW

Tourist Behaviour Concept

Tourist behaviour is important to know for the development of tourism businesses that discuss the choice of tourist destinations, evaluation of tourist destinations, and intentions of future tourist behaviour (Zhang, Fu, Cai & Lu, 2014). The concept of tourist behaviour has been widely discussed in literature and theories of behaviour were designed to predict human decisions and behaviours (Guerin & Toland, 2020; Guggenheim, Taubman-Ben-Ari & Ben-Artzi, 2020; McEachan, Conner, Taylor & Lawton, 2011). Undeniably, the consumer behaviour

philosophy is commonly applied in the tourism domain to explicate travellers' behaviours (Kim & Hwang, 2020; Wu, Tsai & Lee, 2017; Song, Lee, Reisinger & Xu, 2017). Many researchers in tourism and consumer behaviour agree that investigating the underlying factors that lead to travellers' intentions/behaviours including different constituents, provides clear insights into travellers' decision-making process for a destination (Ajzen, 2001; Han, 2015; Hwang, Kim & Gulzar, 2020).

Accordingly, the constituents derived from the theory of consumer behaviour (Eom & Han, 2019) have a strong prediction power to better understand tourist behaviour (Ahmad, Kim, Anwer & Zhuang, 2020; Ulker-Demirel, & Ciftci, 2020). The attitude toward the behaviour and the perception in specific circumstances are the constituents of the behavioural process (Perugini & Bagozzi, 2001). This framework posits that the behavioural intention is also a proximal determinant of the actual behaviour (Eom & Han, 2019; Guerin, & Toland, 2020) and that this intention is built based on the attitude toward the behaviour, the perception and the perceived behavioural control (Guggenheim, Taubman-Ben-Ari & Ben-Artzi, 2020). The understanding and concerns of explicating individuals' purchase decision-making processes, especially for safe/risky products (Kim & Hwang, 2020; Vesci & Botti, 2019). The phenomena of psychological risk are yet another crucial element of the behaviour of tourists in certain travel conditions (Olya & Han, 2020; Xie, Huang, Lin & Chen, 2020). The aspect of the psychological risks in tourism embracing this concern includes fear, unnecessary tension, anxiety, and discomfort, which are related to travelling among tourists as its constituents (Al-Ansi, Olya & Han, 2019; Reisinger & Mavondo, 2005). When individuals feel concerned about the possibility of the adverse occurrence while travelling, they often avoid tourism activity or postpone their tourism plans (Olya & Han, 2020; Law, 2006), which means that individuals' tourism decision formations and behaviours are related to their psychological risks (Law, 2006; Simpson & Siguaw, 2008).

The integration of these essential constituents, enhance the theory's ability to predict the customers' general assessments towards different situations (Ajzen, 2001; Perugini & Bagozzi, 2001). But, unfortunately, the above-discussed constituents (i.e. attitude, perception, intention and psychological risk) have been not much discussed in terms of travelling in a post-COVID-19 pandemic. Thus, the individuals' general assessments regarding whether a particular behaviour is either positively or

negatively influenced by COVID-19 have undoubtedly been very important for the survival of tourism in the new normal.

Tourist Behaviour during Crisis

Tourist behaviour in determining tourist destinations is affected by certain situational and circumstantial factors associated with selecting a tourist destination (Wu, Zhang & Fujiwara, 2011). It is also evident from literature reported that consumer behaviour changed in response to disastrous happenings such as terrorism (Wilks & Moore, 2003), diseases (Pine & McKercher, 2004), natural disasters (Park & Reisinger, 2010), and pandemics for instance the 2009 H1N1 influenza (Leggat et al., 2010).

The dilemma of the pandemic of COVID-19 comprehensively generates negative consequences through a feeling of risk and vulnerability among tourists that modify the assessment of a destination by a tourist and their intention to travel (Zhu & Deng, 2020; Neuburger & Egger, 2021; Chebli & Said, 2020). For instance, Han et al. (2020) in a recent study examined the tourists' post-pandemic travel behaviours following the COVID-19 pandemic in the United States. By applying a mixed-method approach, the study incorporated that travellers' risk perception associated with COVID-19, has been deepened the less travel intention. Irawan, Belgiawan and Joewono (2021) in their study on Indonesia reported reduced travel intentions and changes in travel activities during the COVID-19 pandemic. Golets, Farias, Pilati and Costa (2021) in a recent study on Brazil, highlighted a shift in travel intention and behaviour due to health risk and uncertainty associated with the disaster caused by COVID-19. Zheng, Luo and Ritchie (2021) in Hong Kong determined that spread of coronavirus is strongly affected by the local travel behaviour and a decline in travel frequency up to 50 percent among domestic travellers. In the case of India, Islam (2020) in case of probable travel behaviour of the residence of the state of Punjab after the pandemic identified decreased travelling frequency in comparison and thus indicated the direct effect of COVID-19 on tourist behaviour.

Looking at the different side effects of the COVID-19 pandemic on tourist behaviour, Neuburger and Egger (2021) in an empirical assessment of the DACH region (Germany, Austria, and Switzerland) revealed that the increase in risk perception of COVID-19 is only for a short period. Similar to this, Ivanova, Ivanov and Ivanov (2020) in a study also explored the intention to cancel the trips in the post-

pandemic situation of COVID-19, for a shorter period and thus, indicating some insights seem optimistic and eager to resume regular travelling habits in the new normal situation. The study of Wachyuni and Kusumaningrum (2020) in a study on tourist behaviour in Jakarta in the post-COVID-19 era still indicated a positive response to interest in travelling after the pandemic is over.

The above discussion cited from the recently published studies of the post-pandemic travel behaviour summarized different evaluations by literature. For example, on one side negative impact on behaviour considered reported (Ivanova et al., 2020; Islam, 2020; Neuburger & Egger, 2021; Anwari et al., 2021; Chebli & Said, 2020), while on the other side (Kourgiantakis, Apostolakis, & Dimou, 2020; Wachyuni & Kusumaningrum, 2020) reported an optimistic opportunity with reduced cost of travel services. This creates a paradoxical situation to understand tourist behaviour in a post-COVID-19 pandemic. Therefore, it is imperative to predict the trajectory of change in tourist behaviour to help tourism managers identify the basis of a resilience strategy to ideally respond to the situation.

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Tourist behaviour is discovered as a vulnerable aspect by literature to certain disastrous happenings (Karl & Schmude, 2017) that influence change in travel habits of tourists. For instance, the distress of the COVID-19 pandemic, recent literature (Enger, et al., 2020; Wen et al., 2020; Collins, 2020) anticipated preference to choose an adjacent and domestic tourist place to travel concerning health and safety. To this end, the Indian government also recognized the importance of domestic tourism and put several digital marketing initiatives in a post-pandemic situation such as, '*Dekho Apna Desh*', '*Aerial Photography*' of iconic tourist destinations and handling protocols of safety to rebuild the trust of the travellers in post-COVID-19 scenario (Kale, 2020; Ray, Subramanian & Vandewalle, 2020; Gupta et al., 2021; Ministry of Tourism, Government of India, 2020). This may include the emergence to investigate the change in behaviour of tourists in a post-COVID-19 pandemic.

Studies exploring the change of activity and travel behaviour during the pandemic also consider socio-demography as a determinant variable. More comprehensively, it has been detected by current literature (Pullano et al., 2020; Brati  et al., 2021) that the effect of the COVID-19 pandemic on tourist

behaviour also reported variation based on certain socio-economic and demographic factors. For instance, Ivanova et al. (2020) explored the income level of people as a predictor of variation in tourist behaviour in the post-COVID-19 scenario. Neuburger and Egger (2021) found significant differences in tourist behaviour for age and travel frequency. According to Parady, Taniguchi and Takami (2020), there was a significant correlation between a factor of gender and behaviour for eating out, and leisure activities during the COVID-19 pandemic in Japan. A similar finding was also found by Hotle, Murray-Tuite and Singh (2020) showing that females in the United States were more likely to avoid travelling during the pandemic than males. Females also revealed that workers, people with high income, and those who had at least a bachelor's degree were less likely to reduce their travel frequency.

The above discussion reports tourist behaviour is influenced by demographic characteristics. But, the existing literature (such as Ivanova et al, 2020; Neuburger & Egger, 2021) deliberately covered the influence on tourist behaviour from the perspective of different countries and reports ignorance from the Indian viewpoint. So, a gap in research exists and provides room to use multiple demographic factors for investigating by proposing the hypotheses:

H1: There is a significant variation in tourist behaviour in the post-COVID-19 pandemic as per demographic factors of tourists.

METHODOLOGY

The study was conducted using a quantitative research design. It specifically describes the effect of the COVID-19 pandemic on the change in behaviour of Indian tourists. The data for the study were collected through snowball sampling technique using a self-administered questionnaire. The study population was the Indian citizens and the sample for the study was selected by a researcher from close contacts and further based on using the snowball sampling method get the references and source for a selection of sample for the study. The survey questionnaire for the study was designed in two sections; demographic information in the first section, various items of tourist behaviour construct in the second section. The items of behaviour construct were designed by using a five-point Likert scale and all items of the construct ranked from 1 (strongly disagree) to strongly agree (5). The items of tourist behaviour construct were finalized after consulting existing literature (Chebli & Said, 2020;

Ivanova et al., 2020; Sigala, 2020; Wachyuni & Ksusemaningrum, 2020; Wen et al., 2020). The study used a web survey through platforms such as Google form, e-mail and social media to collect data. The use of web bases surveys is justified by the existing literature (Wood et al., 2013; Luo & Zhong, 2015) as it helps to capture various areas of India in the situation of a pandemic caused by COVID-19. The collected data was analyzed with the help of a statistical package for social science (SPSS) through different statistical tools such as descriptive (frequency, mean, standard deviation) and inferential statistics (one-way ANOVA). Factor analysis technique was also used to generate the factor solution for different variables of tourist behaviour construct of the questionnaire and presented in the result section of the study. The result of the study was presented with the help of a tabular arrangement to make it more meaningful and easy to understand.

RESULTS AND DISCUSSION

Profile of survey respondents

Based on the tabular analysis, the study highlighted that respondents were dominated by men (61.8%) in contrast to their female counterparts. The age range of respondents at most was 21-30 years at (25.4%), followed by 31-40 years (36.1%). In response to marital status, most of the respondents were belongs to the married group (58.5%) followed by unmarried respondents (29.6%). The latest education for a bachelor degree (63.6%), postgraduate (23.7%), and high school equivalent is (12.7%). The respondents' occupations were mostly employees (57.6%), followed by students (22.1%) and others including freelancers & entrepreneurs (20.3%). Regarding the income level of the respondents, the study discovered that half of them (50.8%) belonged to a middle-income group of 3-6 lakhs per annum followed by an almost similar number of high-income groups (25.0%) of above 6 lakhs and low-income group (24.2%) as can be seen in Table 1.

Factors of domestic tourist behaviour for travelling in a post-COVID-19 pandemic in India

For identification of underlying factors of tourist behaviour, principal component analysis was carried out and resulted in 3 factors explaining 66.07% of the total variance. The factors with eigenvalues e'' 1.0 and variable items with e'' 0.30 loading were reported. The items reporting poor loadings less than 0.30 were dropped due to poor scores as suggested by existing literature (Hair et al., 2010) that such

Table 1: Demographic profile of respondents

Demographic feature	Option	Percentage (%)
Gender	Male	61.8
	Female	38.2
Age	Up to 20 years	14.8
	21-30 years	25.4
	31-40 years	36.1
	> 40 years	23.7
Marital Status	Unmarried	29.6
	Married	58.5
	Other	11.9
Education	High School	12.7
Background	Graduate	63.6
	Postgraduate	23.7
Occupation	Students	22.1
	Employee	57.6
	Others	20.3
Annual Income	Below 3 Lakhs	24.2
	3-6 Lakhs	50.8
	>6 Lakhs	25

items are not suitable for factor analysis. Out of a total of nineteen items, three were dropped and therefore, the remaining sixteen variable items were considered for further analysis. The application of

factor analysis supported by the sampling adequacy, and results generated a Kaiser-Meyer-Olkin (KMO) that is greater than the recommended value 0.60 (Hair et al., 2010) at 0.87 and Bartlett's test of sphericity reached statistical significance ($p=.000$) that indicated a correlation between items were satisfactory to apply factor analysis technique. The acceptability of the principal component method of factor analysis was in line with existing literature (Tabachnick and Field, 2007). The analysis identified three factors of tourist behaviour were travel attitude, travel intention, and travel risk descriptively explained in table 2. To test the reliability and internal consistency of the survey instrument, Cronbach's alpha value for three factors (factor 1=0.87, factor 2=0.89, factor 3=0.85) reported an acceptable value. The alpha value for each underlying factor is also greater than the minimum acceptable value as suggested by existing studies (such as Sekaran, 2000) that Cronbach's alpha more than 0.60 considered good with the internal consistency of the scale as adequate.

Tourist behaviour of travel in post-COVID-19

The pandemic undeniably has an impact on tourist behaviour and the choice of a destination. Findings

Table 2: Factor Analysis

Rotated Component Matrix	Component		
	1	2	3
Factor 1: Travel attitude ($\alpha = 0.87$)			
I will visit a tourist destination that has lesser COVID-19 patients	.528		
My peers' advice to select a destination that is safe from COVID-19	.505		
I consider health & safety standards of the destination while travelling	.502		
I will take extra hygiene precautions in my future trips	.487		
I will avoid crowded places and events due to COVID-19	.483		
Factor 2: Travel intention ($\alpha = 0.89$)			
Visit a destination after COVID-19 will be more worrying than before		.563	
Seeing people go on a tour again, I became more excited to travel		.557	
I will travel more than in the period before the pandemic		.512	
Once the situation is normal, I will travel extensively		.465	
I will travel after the COVID-19 to relax my body and mind		.462	
I will look for holiday possibilities within my own country only		.452	
Factor 3: Travel risk ($\alpha = 0.85$)			
I am afraid to go on a tour after this pandemic			.525
I will have nervousness in case I travel after the COVID-19			.519
I feel irregular heartbeat from thinking about travel during COVID-19			.482
I think afraid of losing my life because of travelling during COVID-19			.478
The news and stories about COVID-19 make me nervous and anxious			.400
Eigenvalues	4.15	3.53	2.43
Percent Variance	32.78	21.53	11.76
Cumulative Variance	32.78	54.31	66.07

Table 3: Factor of domestic tourist behaviour after COVID-19 pandemic in India

Tourist behaviour constructs and elements	Mean	Std. dev.
Factor 1: Travel attitude ($\alpha = 0.87$)		
I will visit a tourist destination that has lesser COVID-19 patients	3.43	0.56
My peers' advice to select a destination that is safe from COVID-19	3.57	0.68
I consider health & safety standards of the destination while travelling	4.46	0.67
I will take extra hygiene precautions in my future trips	4.51	0.71
I will avoid crowded places and events due to COVID-19	4.6	0.78
Factor 2: Travel intention ($\alpha = 0.89$)		
Visit a destination after COVID-19 will be more worrying than before	4.47	0.65
Seeing people go on a tour again, I became more excited to travel	2.92	0.63
I will travel more than in the period before the pandemic	3.34	0.62
Once the situation is normal, I will travel extensively	3.34	0.66
I will travel after the COVID-19 to relax my body and mind	4.65	0.91
I will look for holiday possibilities within my own country only	3.82	0.92
Factor 3: Travel risk ($\alpha = 0.85$)		
I am afraid to go on a tour after this pandemic	3.9	0.70
I will have nervousness in case I travel after the COVID-19	3.45	0.62
I feel irregular heartbeat from thinking about travel during COVID-19	3.5	0.59
I think afraid of losing my life because of travelling during COVID-19	2.8	0.60
The news and stories about COVID-19 make me nervous and anxious	3.11	0.69

from Table 3 indicate that in the case of travel attitude factor, respondents will visit a tourist destination that has fewer COVID-19 patients during the pandemic ($m=3.43$). Respondents will take extra hygiene precautions in their future trips ($m=4.51$), will avoid crowds whenever possible ($m=4.60$), and will consider the health/safety of the destination when choosing a trip ($m=4.46$) so; safety and cleanliness seem to be the most significant “new” characteristics of the behaviour of tourist.

Based on tabular data, it can be seen that the travel intention factor, respondents towards travel after the pandemic ended was varied and diverse; the majority of respondents strongly disagree that the tour after the pandemic ends will be more troublesome than usual ($m=4.47$). The average respondent states fair that recognizing that seeing people go back on a tour when the pandemic ends also fosters the spirit of the respondent ($m=2.92$). Also, the average respondent states agree that they will look for holiday possibilities within their own country ($m=3.82$). The highest average answer was ($m= 4.65$), where the majority of respondents strongly agreed that their travelling activity was to relax their body and mind or was called physical or physiological motivation. Looking at the frequency of travel after the pandemic, The average respondent states fair that will travel more after the pandemic, and they will travel extensively to make up for a lost time ($m = 3.34$).

Travel risk factor measures the respondents' worry and concern in going on a tour during and after the pandemic. Based on findings, the average respondent stated disagreement about discomfort and negative effects on the body after thinking of going on a tour after the COVID-19 pandemic ($m=3.90$). The average respondent also disagrees with going on a tour after this pandemic ends; they become panicked and scared ($m= 3.45$). Likewise, with the physical aspect, the average respondent also disagrees that their anxiety affects the body response, such as dryness and irregular heartbeat ($m= 3.50$). But the average respondent fair with watching news and stories about novel coronavirus on social media or any other media (i.e., TV, Radio), they become nervous ($m= 3.11$), and sometimes they feel they will lose their life because of COVID-19 if they were going on a tour ($m=2.80$).

Variation in tourist behaviour as per demographic features of domestic tourists in India

The result regarding variation in tourist behaviour according to their demographic features was presented with the help of one-way ANOVA.

The ANOVA table indicated significant variation in the case of gender in terms of travel risk factors only. The age of the respondents reported significant variation only in the case of travel attitude factor of

tourist behaviour construct. From, the above analysis, the study also found that the age variable is important to predict any variation in tourist behaviour at destination in the case of domestic tourism in the current study and these findings is in line with earlier studies (Woyo & Slabbert, 2019). Similar to this, the marital status of respondents is also portraying a significant difference in travel attitude factor whereas travel intention and travel risk reported no variation as per marital status of respondents. Excitingly, education-wise comparison brings to notice a significant variation for travel intention and travel risk as to the 'p' value for both the factor found significant as reported by ANOVA table. The relationships between education variables and tourist behaviour are also perceived as a predictor of difference. Respondents in this study in terms of this vary based on education are critical in explaining tourist behaviour and findings of the current study

are consistent with the previous literature (Mohsin, 2008). Surprisingly, the table did not report any significant variation in none of the factors of tourist behaviour construct as per occupational status and income level of the respondents.

From the results, different factors of tourist behaviour (travel attitude, travel intention and travel risk) towards travelling in post-COVID-19 pandemic to tourist place in India reported significant variation in terms of different demographic factors (age, gender, marital position and education). Though, few demographic variables (occupation and income) of respondents fail to report any significant variation in tourist behaviour in the current study. Therefore, from this result, the H1 which postulate that a significant variation in tourist behaviour as per their demographic features is stand supported and summarized that a significant difference exists in tourist behaviour in post-COVID-19 pandemic demographic features in the case of Indian tourist.

Table 4: Result of one-way ANOVA

Demographic features	Travel attitude	Travel intention	Travel risk
Gender	F=2.126	F=0.009	F=8.934**
Male	3.84	2.74	4.11
Female	3.73	2.76	3.90
Age	F=2.712*	8.012**	F=0.911
Up to 20 years	3.82	3.87	4.02
21-40 years	3.90	3.60	4.11
11-60 years	3.67	2.70	4.03
Above 60 years	3.86	2.92	4.08
Marital Status	4.885**	2.168	0.850
Married	3.89	2.81	4.06
Unmarried	3.81	2.72	4.10
Domicile	F=0.0111	F=5.154*	F=0.318
Indian	3.82	2.70	4.07
Foreigner	3.83	2.92	4.03
Education Level	F=0.650	F=4.388**	F=2.777*
Hr. Secondary	3.80	2.82	2.99
Sr. Secondary	3.81	2.62	3.56
Graduation	3.96	3.12	3.01
P. graduation	3.73	2.85	4.11
Occupation	F=1.241	F=0.556	F=1.401
Student	3.69	2.64	3.95
Serviceperson	3.84	2.75	4.03
Businessperson	3.95	2.87	4.08
Others	3.85	2.72	4.21
Income Level	F=0.810	F=0.169	F=0.140
Up to 2 lacs	3.77	2.79	4.05
2-4 lacs	3.87	2.79	4.09
4-6 lacs	3.78	2.56	4.08
Above 6 lacs	3.91	2.72	4.05

Mean Perception: 5- Strongly Agree, 1= Strongly Disagree*= P is less than 0.05, **= P is less than 0.01

DISCUSSION

From the descriptive analysis, the study noticed that travelling preference in post-COVID-19 situations among respondents indicated that travelling has gradually become the necessity of society in the contemporary period. Although COVID-19 affected and barred any type of movement and travelling for a certain period with a lot of danger and risk associated with health and bring a decline in travelling frequency along with a change in travel habits of respondents, people still intend to visit immediately after the situation gets normal as when it gets permitted. However, a very less number of respondents preferred not to travel for a longer period considering the health hazards associated with this pandemic. One more crucial observation came to notice that most people intend to travel to local tourist sites, thus, domestic tourism becomes a kickback for the Indian tourism sector. Therefore, concerned stakeholders including practitioners, government and travel planners need to focus on the development of domestic tourism along with infrastructure supported with health & safety measures (Kala, 2021). Another observation made by a study is that a larger number of tourists prefer to visit solo or for a shorter duration, thus, travel planners need to focus on promoting weekend and nearby tourism packages to ripe the more benefits from forthcoming travel trends.

Practical Implications

The results of this study indicate several practical implications for tourism professionals and practitioners for managing destinations in post-pandemic situations. The understanding of swing in tourist behaviour in the post-COVID-19 setting is imperative for the development of both short-term and long-marketing efforts of India as a travel destination faced with pandemic challenges. Marketing strategies can be formulated according to shifting travel attitude, travel intention, and travel risk among tourists while travelling in a post-pandemic atmosphere that helps to get a kickback to the tourism business. Deliberate efforts should be made to use health & safety measures at the destination so that potential tourists can feel safe from the risk of encountering any viruses. Moreover, the understanding of tourist behaviour on demographic segmentation identified in the study help tourism marketer formulate segmented marketing strategies to design travel products and services that match the expectations of the potential tourists.

Limitation and Future Research Direction

The current research came across some limitations such as that the present study only focuses on the Indian tourism market and did not consider intentional tourists for investigation. Hence, this limitation provides ground for future researchers to cover this gap by focusing on international tourists. Secondly, the study only used a quantitative descriptive study; the research results will be more comprehensive if equipped with qualitative data, such as in-depth interviews with respondents that can be expected to be able to dig up more information related to changes in tourist behaviour after pandemic situation.

CONCLUSION

This research provides empirical predictions of Indian tourists' behaviour after the end of the COVID-19 pandemic. Based on the findings of this research, while the study at this outset notice a negative effect on tourist behaviour from intention to cancel or postpone trip plans, but to some extent, it also noticed enthusiasm and optimism among tourists that resurrected more rapidly as and when COVID-19 pandemic ends. Safety and cleanliness seem to be the most significant "new" characteristics of travel behaviour. The next phenomena among tourists showed a positive response to interest in travelling after a pandemic and showed a negative response to travel risk perception. Therefore, after the pandemic ends, health issues to be considered as a factor that influences destination choice. Therefore, the strategy needs to be built to enhance the tourists' trust in the security and health of the destination.

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