

Understanding Travel Avoidance of Tourists to a Heritage Destination: Case of Puri Pilgrimage after COVID-19 pandemic

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Abstract

Puri has been serving as the most sought-after destination for the people of Odisha. It is not only known for the pilgrimage, but also for several other attractions that it offers. Travel to Puri has slumped owing to the chaotic situation triggered by covid-19 pandemic. Complexities related to travel has surged in the last couple of years. Hence, there is a resistance in tourism behavior among the travelers across the world. Tourism as a sector is extremely sensitive to crucial situations like these where travelers' safety becomes utmost important. When possible hazards outweigh the rewards, travelers become less inclined to travel-related routines.

In the backdrop of chaos and complexity theory, this study identified and assessed 7 different factors which associate to the likelihood of travel avoidance to local destination Puri during pandemic. Data was collected from 346 residents of Odisha and analyzed to build a model explaining the behavioral intention of travel avoidance. Perceived travel risk, safety concern, personal efficacy, perception and negative impact of COVID-19 are found to be significant contributors to travel avoidance tendencies. The findings also indicating significant contribution of age and family income. As most of the existing literature deals with international tourism, this study will help the research fraternity to explore the changing aspects of local tourism with respect to traveling behavior after multiple waves of COVID-19 pandemic. It will also assist stakeholders to remove the travel barriers and be resilient in preparation in these uncertain times.

Keywords: *Pandemic; Odisha; Travel; Puri; Travel avoidance; Chaos*

1. Introduction

Situated on the eastern coast of India, Puri is the most famous and most visited tourist destination in the state of Odisha (*Odisha Tourism: Puri*, n.d.). It is particularly famous as the abode of Lord Jagannath among its other plethora of attractions. In 2019, Puri witnessed a footfall of 15.3 million domestic travelers (*Department of Tourism | Government of Odisha*, 2020). Puri as a destination has seen many climatic changes, natural disasters and uninvited calamities. But the recent outbreak of COVID-19 pandemic shook the very foundation of tourism and pilgrimage in Puri. And every time it tries to revive, a new wave created by some novel variant of coronavirus disrupts the stability and balance of the place. Covid 19 has prompted in a historic reduction in visitor arrivals to Odisha. As a result, there was almost 84.19% decrease in the domestic tourism in the financial year of 2020-21 exposed by the report of State Tourism authorities and 58.48% decrease in the number of tourists in the calendar year 2020 (*Department of Tourism | Government of Odisha*, 2021)

The COVID-19 pandemic not only affected the global economy (Jiang and Wen, 2020), but also posed a serious threat and challenge to overcome for the hospitality sector (Alonso *et al.*, 2020). Due to the quick spread of COVID-19 in India and the ensuing unfavorable coverage in the worldwide media, it is possible that visitors' travel behavior would be influenced (Hindustan Times, 2020). Altinay and Arici (2021) states that this pandemic has put the hospitality sector in a position of high vulnerability. The catastrophic impact of COVID19 on the local tourism and hotel business, as well as multiple COVID-19 incidents in the nation led to travel evasion and avoidance among travelers. Owing to the inherent risk of contracting COVID-19 in the state, a large number of tourists have postponed or delayed respective travel arrangements. This research will look at the elements that have impacted people's travel evasion aspirations.

Pandemic increases the complexity of travel (Kuo *et al.*, 2008) and the related stakeholders with respect to the hospitality sector including customers need to change their activities and operational strategy (Altinay and Arici, 2021). Understanding visitors' behavior and its relationship to perceived risks is critical given the impact of the pandemic (Yang *et al.*, 2020) and this is required in order to acquire active control of the pandemic breakout (Lee *et al.*, 2012). Scarcity of literature on the relation between domestic travel and pandemic (Cahyanto *et al.*, 2016), encouraged the authors to study the topic.

The study is inspired by chaos theory with the basic assumption that little change in the condition of a deterministic circumstance or occasion can have genuine repercussions at a later stage (Speakman and Sharpley, 2012; Zahra and Ryan, 2007).

2. Review of literature

Millions of pilgrims and tourists visit Puri every year (Department of Tourism | Government of Odisha, 2020). Puri is one of the famous 4 sacred pilgrim places as per Hindu mythology (Gupta and Basak, 2017). It is considered as one of the most magnificent (Mohanty and Rout, 2016) and historically enriched (Mohanty and Chani, 2020) destinations in the state of Odisha. Tourists across the world come and visit the temples, beaches, heritage sites and other landmarks situated in and around Puri throughout the year (Mohanty *et al.*, 2019). But the recent events related to COVID-19 pandemic and its impact in 2020 and 2021 was witnessed

across the globe (Liu *et al.*, 2021) and Puri as a destination is no exception. The extended lockdowns and restrictions have unprecedented consequences on tourism (Wen *et al.*, 2020) as tourism as an industry is highly vulnerable in this pandemic (Gupta *et al.*, 2021).

2.1. Chaos and complexity theory

One of the most popular theories which explains a system which is in a state of complex non-deterministic progression is chaos theory (Gleick, 1987) and its compatriot, complexity theory (Lewin, 1993). Due to pandemic and restriction, the tourism system has gone into a state of unpredictability. It is because the framework is non-probabilistic and in light of the fact that the connections between components are so rich, vulnerable to external stimuli, it is difficult to foresee precisely the future place of the system over time (McKercher, 1999). The areas affected by pandemics generally witness unemployment, uncertainties, and economic recession. From a traveler's standpoint, individuals take safety measures to reduce the perceived risk during pandemic situations due to ambiguity and unpredictability (Brug *et al.*, 2009).

Many researchers previously have tried to build various models in tourism in relation to chaos and complexity theory (Boukas and Ziakas, 2014; Cole, 2009; Faulkner and Russell, 1997; McKercher, 1999; Ritchie, 2004). However, an element of 'non-tourism-related externalities' was first captured by McKercher (1999) in his model. As explained in his research, these are the external micro-environmental stimulants like natural disaster, calamities, war or change in socio-economic conditions which impact a person's ability to travel. The potentiality of such events to push tourism into a state of chaos is well covered in the extent literature. Pandemic outbreak of this magnitude is one such chaos creating event which has drastically reduced tourism destinations' footfall (Lee *et al.*, 2012). Thus, the tourist or traveler who is often considered in tourism literature as the starting point of any tourism model faced with a complex dilemma to travel or to avoid travel in context of the ongoing pandemic (Farzanegan *et al.*, 2021).

2.2. Study variables and research questions

Several studies earlier attempted to study travel avoidance behavior among tourists post global outbreaks and events like 9/11 (Floyd *et al.*, 2004), SARS (Kuo *et al.*, 2008), H1N1 influenza (Lee *et al.*, 2012), Ebola (Cahyanto *et al.*, 2016) and COVID-19 (Gupta *et al.*, 2021). Most of these studies were carried out in international travel context using various models i.e., social recognition theory (Bandura, 1986), health benefit model (HBM), theory of reasoned action (TRA), the theory of planned behavior (TPB) and model of goal-directed behavior (MGB). This study attempted to develop a new model which is more relevant in local travel context by adopting construct from the existing studies. The variables and the associated research questions are discussed below.

2.2.1. Perceived travel risk (PTR): The term "perceived risk" refers to instances in which it clearly forecasts the choice to avoid going to specific locations (Gupta and Sajnani, 2019). Because of the COVID-19's ever-changing terrain, it's crucial to know tourists' behavior and how it relates to their risk perceptions (Yang *et al.*, 2020). Risk perceptions related to tourism has been well investigated in literature (Hales and Shams, 1991; Roehl and Fesenmaier, 1992; Sheng-Hshung *et al.*, 1997). Studies conducted in this field of research linking risk to travel

decision making found a contraction in demand of tourism. For example, Sönmez and Graefe (1998b) in their study concluded that PTR plays a significant role in travel avoidance to a destination. More recent studies like Cahyanto *et al.* (2016) verified the relation in their research on travel during Ebola outbreak and the same has been concluded in the studies on COVID-19 (Binnicker, 2020; Gupta *et al.*, 2021). At the point when people see that potential dangers offset benefits, they are bound to change travel schedules and destinations (Sharifirad *et al.*, 2009). Thus, this adversely influences the travel industry related organizations and depictions related to the destination (Cahyanto *et al.*, 2016). Therefore, this study aims to establish relation between PTR and travel avoidance with the following research question (RQ):

RQ1. What is the relationship between perceived travel risk and the likelihood of travel avoidance to Puri due to COVID–19 pandemic?

2.2.2. Perception of COVID-19: Travelers' intentions to abandon or fear moving to areas with recorded instances were positively influenced by their impression of COVID-19 (Nueburger and Egger, 2021). Perception towards a disease is an important parameter for alterations in travel (Reisinger and Mavondo, 2005). Recent studies conducted in South Korea (Bae and Chang, 2021) and China (Abraham *et al.*, 2020) suggested that travel intentions are negatively impacted with higher perception of risk due to COVID-19. Lee *et al.* (2012) studied the relation between perception of 2009 H1N1 influenza and travel intention, but Liu *et al.* (2021) argues that perception of people towards COVID-19 is stronger due to increased severity and hence it is an important parameter to study travel avoidance behavior. Hence, the study proposes the following research question:

RQ2. What is the relationship between perception of covid-19 and the likelihood of travel avoidance to Puri due to COVID–19 pandemic?

2.2.3. Safety concern: Safety concerns are crucial in the decision-making phase of visitors because they might influence logical decision in terms of travel modes and destination selection (Sönmez and Graefe, 1998b). In his study on post 9/11 attack travel scenario in US, Floyd *et al.* (2004) found that travelers who were less concerned about safety were more prone to travel and vice versa. As one would expect, people less worried about security would show more prominent inclination to go than people who put more noteworthy importance on safety concerns (Poon and Adams, 2000). Hence, safety concern as a variable is important with respect to travel decision making. Following is the research question in this regard:

RQ3. What is the relationship between safety concern and the likelihood of travel avoidance to Puri due to COVID–19 pandemic?

2.2.4. Negative impact of COVID-19: Tourism environment consists of several parts of a tourism and destination infrastructure. The COVID-19 outbreak has impacted this infrastructural intricacies (Hao *et al.*, 2021). The tourist industry's transportation, service quality, as well as safety and health conditions, have all been hit, during Covid-19 (Wen *et al.*, 2020). The impression of the healthcare system, reliability, as well as other COVID-19 harm to the economic associations including booming tourism activities and a sensation of mass & crowd are among the characteristics of the destination image that may be altered (Zenker and Kock, 2020). As external stimuli, the equitable conditions affect the travel industry choices

(Hao *et al.*, 2021). In the recent ongoing COVID-19 episode, these conditions influence individuals' very own actions and eventually impact individuals' ability to travel. Hence, it is imperative to study the negative impact of COVID-19 on travel avoidance intentions. Therefore, the research question is as follows:

RQ4. What is the relationship between the negative impact of covid-19 and the likelihood of travel avoidance to Puri due to COVID–19 pandemic?

2.2.5. Personal efficacy: Personal efficacy is an individual's trust in their capacity to perform and stick to healthy practices. It refers to the capacity to control one's conduct and motivation (Bandura, 1977). Cahyanto *et al.* (2016) in his study on tourism during Ebola outbreak found that those with higher personal-related to maintaining preventive measures were less inclined to stay away from traveling to areas that are being affected by diseases. Individuals with strong perceived personal efficacy may be better able to respond to preventative behaviors, which may also help them avoid disastrous results during pandemics (Rosenstock *et al.*, 1988). As a result, while attempting to improve the usage of healthy preventive measures among individuals, personal efficacy views should be taken into account. Hence, this study proposes the following research question:

RQ5. What is the relationship between the personal efficacy and the likelihood of travel avoidance to Puri due to COVID–19 pandemic?

2.2.6. Subjective knowledge and socio-demographic variables: Subjective knowledge or acquaintance is the individual's perception of familiarity or awareness about an event, COVID-19 in this context. Cahyanto *et al.* (2016) and Gupta *et al.* (2021) found it to be positively associated with travel avoidance behavior. Thus, the study aims to investigate the relation between subjective knowledge and travel avoidance in context of Puri travel by the following research question:

RQ6. What is the relationship between the subjective knowledge and the likelihood of travel avoidance to Puri due to COVID–19 pandemic?

Additionally, select socio-demographic variables were taken into account (Floyd *et al.*, 2004; Lepp and Gibson, 2003) namely gender, age, educational qualification and annual family income (Cahyanto *et al.*, 2016) along with the above mentioned variables to study the travel avoidance intentions:

RQ7. What is the relationship between select socio-demographic variables and the likelihood of travel avoidance to Puri due to COVID–19 pandemic?

Fig. 1 outlines the proposed model.

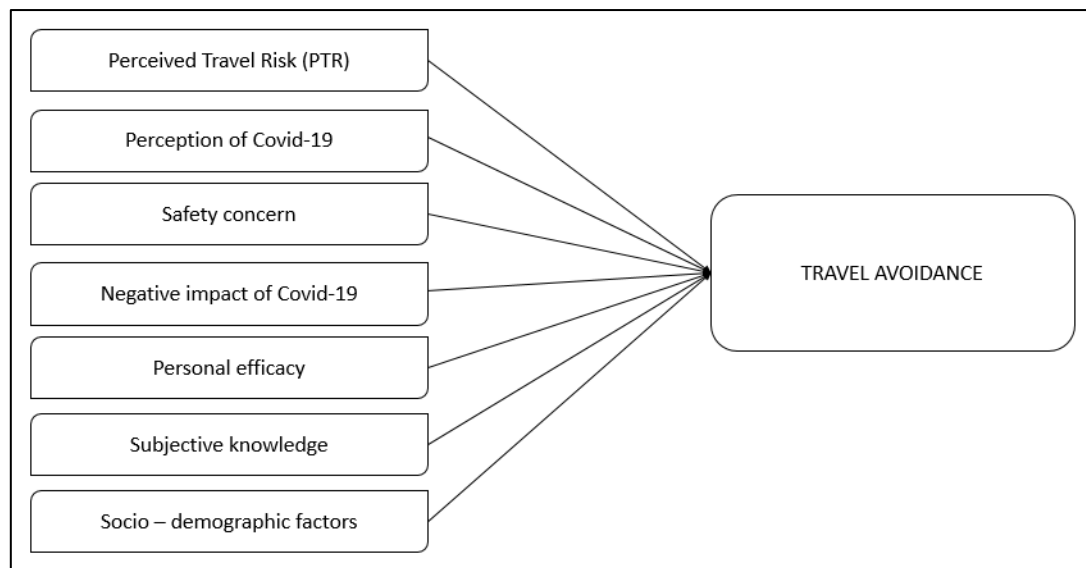


Figure 1. Proposed model by the study

3. Methodology

3.1. Operationalization of variables

The study variables were operationalized using instruments from existing tourism literature with few adjustments to make it pertinent to the study context. There were 7 independent variables for the study. Six items for PTR were adopted from the studies of Cahyanto *et al.* (2016) and Lee *et al.*, (2012). For the second variable i.e., perception of COVID-19, five statements were adopted from Lee *et al.*, (2012) and Liu *et al.*, (2021). Items pertaining to safety concern were taken from the study by Floyd *et al.* (2004). There were three statements under safety concern. The four items to study the negative impact of Covid-19 were referenced from Hao *et al.*, (2021). The five statements used for personal efficacy were adopted from Anagnostopoulos *et al.*, (2013), Cahyanto *et al.* (2016) and Lee *et al.*, (2012). All the above mentioned items for the respective variables were measured using a 5-point Likert scale ranging from strongly disagree = 1 to strongly agree = 5. The subjective knowledge of the respondents was measured using a 5-point Likert scale where 1 = Not at all knowledgeable and 5 = Very knowledgeable. The dependent variable i.e., likelihood of travel avoidance due to COVID-19 pandemic was measured by a 5-point Likert scale where 1 represented extremely unlikely and 5 represented extremely likely. Other items in the questionnaire were related to socio-demographic factors of the respondent like age, gender, educational qualification, annual household income, vaccination status and the name of the district they are currently residing in.

3.2. Data collection

The questionnaire was administered both online and offline for six weeks from the beginning of December, 2021 to mid-January, 2022. Due to emergence of 3rd wave of COVID-19 spread mainly because of popularly known Omicron variant and applied lockdowns majority of the responses were received via online medium. The target population for the study were the residents of Odisha who have visited Puri in 2018 or later. Non-probability sampling approach was adopted for data collection. Only people residing in Odisha were sampled as 60% of the

travelers visiting Puri are from Odisha (*Department of Tourism | Government of Odisha, n.d.*). The participation was made completely voluntary with anonymity and confidentiality assurance. A pilot survey was done with 30 responses before actual data collection.

A total of 358 responses were collected from 29 out of 30 districts of Odisha. Most of the responses were received from Khorda district (64) followed by Sundergarh (40), Cuttack (39) and Angul (39). Upon filtration, authors decided to exclude some responses (12) as the respondents had last visited Puri earlier than 2018. Final analysis of data was performed on remaining 346 responses. The data was subjected to SPSS 26 for statistical analysis.

4. Data analysis

4.1. Demographic profile of respondents

The demographics analysis shows a total of 346 responses were collected, out of which 43.35% are female and 56.65% are male. Most of the respondents are lying in the age bracket of 26-35 years i.e., 112(32.37%), next come the age category of 36-50 years i.e., 105(30.35%) followed by elderly respondents of more than 50 years of age i.e., 66(19.08%) and the last age category 14-25 years i.e., 63(18.21%). Most of the respondents were having the educational qualification of post-graduation i.e., 145(41.91%), followed by 112(32.37%) graduates, 29(8.38%) diploma, 29(8.38%) higher secondary, 12(3.47%) matriculation, 11(3.18%) doctorates and rest of them having a primary education i.e., 8(2.31%).

The participants' household income was analyzed and majority of them were found to be having an annual household income between INR 5lakhs- 10 lakhs 162(46.82%), followed by those having more than INR 10 lakhs 103(29.77%), INR 2lakhs – 5lakhs 65(18.79%), below INR 2lakhs 16(4.62%). So many of the responses were verified to be fully vaccinated 336 (97.11%). Out of those who were not fully vaccinated, 5(1.45%) respondents were partially vaccinated, and 5(1.45%) respondents hadn't taken any dosage of vaccine. Table 1 depicts the socio-demographic profile of the respondents.

Demographic items (for 346 respondents)	Frequency	(%)
Gender		
Female	150	43.35%
Male	196	56.65%
Age		
14-25	63	18.21%
26-35	112	32.37%
36-50	105	30.35%
>50	66	19.08%
Education		
Primary education	8	2.31%
Matriculation	12	3.47%
Higher secondary	29	8.38%
Diploma	29	8.38%
Graduate	112	32.37%
Post – Graduate	145	41.91%
Doctorate	11	3.18%

Annual Family Income		
< 2 Lakhs	16	4.62%
2- 5 Lakhs	65	18.79%
5 Lakhs - 10 Lakhs	162	46.82%
> 10 Lakhs	103	29.77%
Vaccination Status		
Not vaccinated	5	1.45%
Partially vaccinated	5	1.45%
Fully vaccinated	336	97.11%
<i>Source: Authors' estimation</i>		

Table 1. Socio-demographic profile of respondents.

4.2. Results of the reliability test

In order to check scale uni-dimensionality and internal consistency of the questionnaire items, test of reliability was performed. The corresponding values of Cronbach's alpha was found to be between 0.71 to 0.84 which is above the required cut-off level of 0.7 (Nunnally, 1978). Also, the sampling adequacy was tested by Kaiser-Meyer-Olkin (KMO) statistics and KMO value was found to be 0.84, which can be considered ideal as it is more than 0.6 (Kaiser and Rice, 1974). The result of Bartlett's test of sphericity was found to be significant i.e., $\chi^2(276) = 2716$, $p = 0.000$, which suggests that correlation among the variables can be linearly compressed for the study. The composite scores of each scale were further calculated along with their corresponding mean and standard deviation.

Item	Mean	SD	Cronbach's Alpha (α)
<i>Perceived Travel Risk (PTR)</i>			0.74
Traveling to Puri is risky right now	4.21	1.06	
COVID-19 is a very dangerous and infectious disease and a potential threat to human life	4.66	0.55	
I am concerned about COVID-19 during travelling to Puri right now	4.37	0.92	
I am not concerned about contracting COVID-19 during travel right now	3.93	0.84	
It is dangerous to travel right now because of COVID-19	4.37	0.89	
People around me seem to refrain from travelling to Puri right now because of COVID-19	3.91	0.97	
5-point Likert scale: 1 = Strongly disagree and 5 = Strongly agree (N = 346)			

Table 2. Composite scores for perceived travel risk (PTR)

The overall mean score for risk perception of travel was found to be high with an average score of 4.24, suggesting that respondents perceive travelling as risky given the scenario of pandemic. The composite and individual item scores for PTR are depicted in table 2.

A high average score (4.44) of different item under perception of COVID-19 signifies that it is considered frightening and respondents are afraid of contracting coronavirus if they travel. Table 3 depicts the composite item scores for perception of COVID-19.

Item	Mean	SD	Cronbach's Alpha (α)
<i>Perception of COVID-19</i>			0.71
The COVID-19 is a very frightening disease	4.68	0.63	
Compared to other viral diseases, the COVID-19 is more dangerous	4.58	0.66	
I am afraid of COVID-19	4.31	0.86	
I have much information about the COVID-19	4.36	0.73	
It is dangerous to make travel plans anywhere because of the COVID-19	4.29	0.78	
5-point Likert scale: 1 = Strongly disagree and 5 = Strongly agree (N = 346)			

Table 3. Composite scores for perception of COVID-19

The overall mean score of 4.55 for safety concern indicated that respondents' level of concern for their safety is extremely high in travel context. The composite result is depicted in table 4.

Item	Mean	SD	Cronbach's Alpha (α)
<i>Safety Concern</i>			0.71
Safety is the most important attribute while visiting Puri	4.68	0.56	
Safety is a serious consideration when deciding to travel to Puri	4.46	0.65	
Additional security measures should be taken at Puri to make it safe for the visitors	4.53	0.63	
5-point Likert scale: 1 = Strongly disagree and 5 = Strongly agree (N = 346)			

Table 4. Composite score for safety concern

For the negative impact of COVID-19, an overall mean score of 4.06 indicated that respondents' perception about the impact of the pandemic is highly negative. The composite scores for the items under the same are presented in table 5.

Item	Mean	SD	Cronbach's Alpha (α)
<i>The negative impact of COVID-19</i>			0.84
During this time in Puri, it is difficult for tourism to have good service quality	4.10	0.93	
During this time in Puri, it is difficult to have complete supporting facilities for tourism	4.10	0.97	
During this time in Puri, it is difficult for tourism to have safe and hygienic conditions	4.03	1.00	
During this Pandemic time, it is difficult for tourism in Puri to have convenient transportation and travel conditions	3.99	0.94	
5-point Likert scale: 1 = Strongly disagree and 5 = Strongly agree (N = 346)			

Table 5. Composite score for the negative impact of COVID-19

A high mean score of 4.05 for personal efficacy suggested a relatively high level of personal efficacy amongst the respondents after 2 waves of COVID-19. Similarly, the mean score of 4.3 (SD: 1.04) for subjective knowledge indicated relatively high level of subjective knowledge amongst the respondents related to COVID-19 pandemic. Table 6 depicts the composite scores for the items under personal efficacy.

Item	Mean	SD	Cronbach's Alpha (α)
<i>Personal Efficacy</i>			0.74
I am confident that I understand health instructions about COVID-19 prevention	4.02	0.97	
I knew what activities could prevent from contracting COVID-19	3.98	0.92	
I can identify the symptoms of COVID-19	4.00	0.96	
I knew what to do if I suspect I am exposed to COVID-19	4.13	0.88	
I am confident that I can take action to prevent contracting COVID-19	4.13	0.90	
5-point Likert scale: 1 = Strongly disagree and 5 = Strongly agree (N = 346)			

Table 6. Composite score for personal efficacy

4.3. Results of the ordered response model

Ordinal logit regression was performed on the study variables and the model obtained indicated a significant improvement over the base (null) model as -2 Log likelihood at convergence was found to be 575.817 ($\chi^2 = 203.493$, $df = 10$, $p = 0.000$). Pearson chi-square test [$\chi^2(1370) = 1173.964$, $p = 1.000$] and deviance test [$\chi^2(1370) = 575.817$, $p = 1.000$] were both non-significant indicating that the model is good fit to the data (Field, 2018; Petrucci, 2009). It was also found that with all the independent variables, the model could account for 50% of the variance with respect to likelihood of Puri travel avoidance. Also, the result for the test of parallel lines was non-significant ($p = 0.398$) indicating that the assumption of proportional odds is satisfied.

In the context of parameters estimates with respect to this ordered response model, a positive estimate suggests a higher likelihood of avoiding travel to Puri due to COVID-19 and a negative estimate indicates the opposite. Table 7 summarizes the results of ORM.

Study Variables	Parameter estimates (β)	Significance
Perceived travel risk	0.814	0.001*
Perception of COVID-19	0.873	0.003*
Safety concern	0.946	0.001*
Negative impact of COVID-19	0.878	0.000*
Personal efficacy	-0.832	0.000*
Subjective knowledge	-0.224	0.055
Gender: female (ref: male)	0.282	0.238
Age	0.279	0.023*
Educational qualification	-0.180	0.058
Annual income	0.312	0.036*
<i>Travel avoidance thresholds</i>		
Avoid Travel = 1	5.361	0.002*

Avoid Travel = 2	6.941	0.000*
Avoid Travel = 3	9.690	0.000*
Avoid Travel = 4	13.556	0.000*
-2 Log likelihood	575.817 (p<0.001)	
Cox & Snell R square	0.445	
Nagelkerke R square	0.497	
Note(s): *Significant at 0.05 level		

Table 7. Summary of Ordered Response Model

In consideration to RQ1, the model suggested a positive relationship between PTR and travel avoidance ($\beta = 0.814$, $p = 0.001$) i.e., those who have higher risk perception related to Puri travel showed higher inclination to avoid travelling to Puri. Similarly, for RQ2, the ORM showed a positive and statistically significant relation between perception of COVID-19 and travel avoidance ($\beta = 0.873$, $p = 0.003$). The higher the respondents perceived as risky and dangerous, the higher the propensity to avoid travelling to Puri. With regard to RQ3, the model revealed a significant positive relation between safety concern and travel avoidance intentions ($\beta = 0.946$, $p = 0.001$). The higher an individual is concerned about safety, the higher the likelihood to avoid travel to Puri.

Related to RQ4, the ORM reestablished a positive and statistically significant relation between the negative impact of COVID-19 on tourism and avoidance of travel ($\beta = 0.878$, $p < 0.001$). Thus, the negative impact of COVID-19 directly influences the travel avoidance behavior. For RQ5, the model suggested a negative relation between personal efficacy and travel avoidance ($\beta = -0.832$, $p < 0.001$), which means respondents who have higher personal efficacy are less likely to avoid travelling to Puri. With respect to RQ6, the ORM didn't indicate any statistically significant relationship between subjective knowledge and the likelihood to avoid travel ($\beta = -0.224$, $p = 0.055$).

Lastly, for RQ7, which relates the socio-demographic variables to the likelihood of travel avoidance to Puri, the model proposed compelling results. Age has a positive and significant association to likelihood to travel avoidance ($\beta = 0.279$, $p = 0.023$). This suggests that older travelers are more likely to avoid travelling to Puri due to pandemic. The model also revealed a positive relation between annual family income and travel avoidance behavior ($\beta = 0.312$, $p = 0.036$), indicating that respondents with higher family income are more likely to avoid travel as compared to lower income families. Gender ($\beta = 0.282$, $p = 0.238$) and educational qualification ($\beta = -0.180$, $p = 0.058$) had no statistically significant association to avoid travel to Puri.

Fig. 2 outlines the model findings.

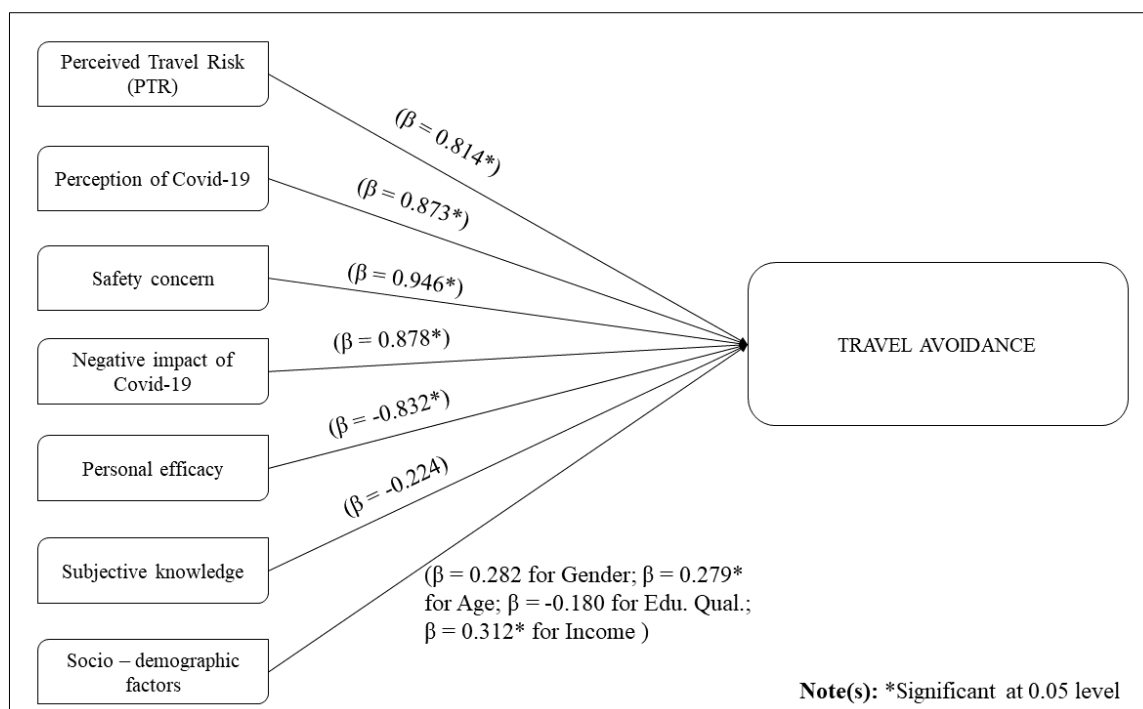


Figure 2. Conceptual model and findings of the study

5. Discussion and conclusion

This study attempted to identify and analyze the factors and their relation to travel evasion behavior in context of intra-state travel to Puri in the state of Odisha, India. The relevant variables were identified from the literature with regards to ongoing COVID-19 pandemic and the likelihood of travel avoidance was measured successfully. A model related to the same has been proposed and tested in an empirical way.

COVID-19 is led in travel evasion throughout the world, putting the tourist and hospitality industries at risk due to their reliance on travel (Bo *et al.*, 2021). The same can be well extended to domestic and local travel scenarios. The findings of this study, although consistent with most of the previous studies, but different from the findings of Cahyanto *et al.* (2016) on Ebola in USA and Maxouris (2020) on COVID-19 where both the studies implied that pandemic had minimal or no impact on travel avoidance.

With regards to PTR, a significant positive relation with travel avoidance was established which is consistent with the previous literature (Bish and Michie, 2010; Lau *et al.*, 2009; Gupta *et al.*, 2021). This indicates that individuals with higher risk perception are more likely to avoid travelling. The findings also showed a significant positive association between perception of COVID-19 and travel avoidance intention which is in line with the findings of earlier studies (Liu *et al.*, 2021; Wang *et al.*, 2020; Zhu and Deng, 2020). Safety concern which emerged as the strongest predictor in the study is found to be positively associated with travel avoidance intentions which agrees with the findings of the Brug *et al.* (2004), Floyd *et al.* (2004) & Poon and Adams (2000). People with higher concern for safety are more probable to avoid travelling during pandemic. The findings of the study relating to the negative impact of COVID-19 and travel avoiding tendency was consistent with the findings of Hao *et al.* (2021). Travelers look for safer avenues and facilities with respect to infrastructure at the destination.

The impact of the pandemic had adverse effect on transportation, accommodation facilities, hygiene condition and other services which are considered vital in the process of planning a trip. And this negatively affects travelers' intention to travel.

Personal efficacy was found to have a significant negative relation with travel avoidance intentions. The finding is consistent with the findings of earlier studies (Cahyanto *et al.*, 2016; Gupta *et al.*, 2021; Kelly *et al.*, 1991; Liao *et al.*, 2010; Lu *et al.*, 2020), suggesting that travelers with low personal efficacy are more prone to avoid travel. The study's finding with respect to socio-demographic factors brought out some interesting insights. Gender was found insignificant in relation to travel avoidance which is inconsistent with findings of Gupta *et al.* (2021). However, age and family income were found to be positively related to travel avoiding tendencies. The findings related to age are inconsistent with findings of Carpenter (2010), but are in line with the research of Gupta *et al.* (2021) which indicated that higher age group people have a higher propensity to avoid travel in pandemic situation. Result relating to family income is new and intriguing. Individuals with higher family income are more likely to avoid travel given the situation of COVID-19 pandemic.

Intention to travel and concern levels have been impacted by chaotic outbreaks (Cahyanto *et al.*, 2016). But, chaotic systems and structures possess different methodologies that can give fitting rules to reacting to emergencies by reconstructing prosperity and system stability (Doherty and Delener, 2001) in the tourism hospitality sector (Altinay and Arici, 2021). In terms of risk associative learning, the population eventually adjusts to the pandemic's existence and minimizes the hazards that it entails, both psychologically and physically. Initial reactions can sometimes take the shape of panic and chaos (Raude *et al.*, 2019). According to the findings of this study, participants' estimated risk of catching COVID-19 may reduce their chance of engaging in the intended trip behavior. As a result, destination owners should employ a strong strategy to lower travelers' perceived hazards (Gupta *et al.*, 2021). If individuals try to maintain risk when travelling, it may have serious consequences for a destination's environment, community, and economy. Hence, tourism should indeed be given great emphasis throughout COVID-19 (Melly and Hanrahan, 2020). Change, flexibility, transformation and building resilience have become the need of the hour (Huang and Farboudi Jahromi, 2021), especially after witnessing two waves of pandemic and the third one passing by.

6. Implications

The model derived from the study can be used to analyze how cognitive variables impact tourist behavior during the COVID-19 pandemic, as it suggests that preventive behavior may indeed be influenced by perceived risks and rewards. The impact of this pandemic is more farfetched than short term as it might be perceived. It can provoke a permanent change in the behavior of travelers (Gupta *et al.*, 2021). The intermittent restrictions and temporary closures imposed by state and central governments further challenge the motivation levels among the tourists. The stakeholders and practitioners related to the tourism sector may be persuaded to undertake new and innovative methods of services and operations (Altinay and Arici, 2021) which can be considered safe and risk free. As suggested by the study risk and safety concerns levels are very high among the travelers. Hence, in order to bounce back, the decision makers of tourism

sector need to strategize collectively and bring out balanced measures which ensure safety, hygiene and stability for tourism consumers. Safety assurance promotions, sanitized facilities, attractive price offers, social media marketing, influencer advertisements and special packages for elderly people traveling with family are some of the initiatives which may help regain the trust of tourists. In case of Puri, the apex tourism body of Odisha i.e., OTDC (Odisha Tourism Development Corporation) along with local destination marketing agencies can take key inputs from the study and implement safe tourism practices in Puri to attract more travelers.

7. Limitations

The purpose of this study was to investigate the factors that influence tourists' aspects of travelling to Puri, Odisha. We have selected the variables which we found the most relevant towards our main purpose. There might be other relevant factors which are yet to be explored. Another limitation of the study we investigated the changing aspects of travelling to Puri after 2 waves of COVID-19 pandemic from the standpoint of people's changing aspects to travel, which only addresses the demand side of the tourist sector and does not reflect the supply side of the tourism business. Thirdly, the data collection was conducted at a time when the COVID-19 cases were on a rise due to Omicron variant in India and the participants might be affected by the mass media. The following researches might look at both the demand and supply sides of the tourist business to provide a complete picture of how tourism must have shifted over COVID-19. The scope of the study was limited to one state of India, further exploration can be persuaded across different states, destinations and other forms of tourism spread over the world.

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