

Journal of Tourism&Management Research

ISSN: 2149-6528

2021 Vol. 6, Issue.3

<http://ottomanjournal.com/index.html>

Facility Preferences for New Normal Tourism: An Empirical Study Using Conjoint Analysis

Abstract

The tourism and hospitality industry has badly infected by the spread of the corona virus. Such a slowdown for this industry has put millions of jobs at risk, thereby threatening the generation of GDP share through tourism activity. Tourists' preferences have changed with giving priority to safety measures in this 'new normal' era. To regain the prosperity, it is essential to understand this changing perspective of tourists. A conjoint analysis is carried out in this paper to know the combination of preference factors of different attributes related with domestic tourism among the Indians during COVID-19 pandemic. Attributes and their different levels related to tourism were prepared according to experts' suggestion. Logistic regression has been performed to find out the demographic and socio-economic factors that influence the preferred level of the selected attributes. The idle combination for tour is found as short duration tour, train as transport vehicle, online booking, at least twice room cleanness, remote area, small group of accompany, hotel with medical facility, money spent towards health and hygiene, food service at hotel and mask carries by himself/herself. Order of the selected attributes has been assigned based on their importance. This study would help the tourism industry to think over the new preferences and provide better service to satisfy the tourist. This study may highlight a few policy recommendations so that tourism authority can design customized tourism packages.

Keywords: *Tourism, Conjoint Analysis, Logistic regression, COVID-19, New normal.*

JEL Classification Number: Z32, C10, C38, C50.

Submitted:22/10/2021; **Accepted:**27/12/2021

Rituparna Hajra. Assistant Professor. Department of Geography, Polba Mahavidyalaya, India, 712154. Contact No. 9830081890

Email: rituparnahajra2502@gmail.com

Sanjib Kumar Gupta. Assistant Professor (Communicating Author). Department of Statistics, Sarsuna College, India, 700061. Contact No. 9830016587

Email: gsanjib.stat@gmail.com

ORIGINAL SCIENTIFIC PAPER

Hajra, R. and Gupta, S.K.

2021, Vol.6, No.3, pp. 926-938. DOI:10.5281/zenodo.6505438

1. Introduction

Tourism is an important and integral part of global economy. COVID-19 pandemic is one of the most highly contagious outbreaks in recent human history, with more than 26 crore cases and 52 lakh deaths (as on 1st December 2021) (Worldometer, 2021). In order to protect people from this virus, social distancing and travel restrictions have been imposed (Davahli et al., 2020). The transmission speed of the corona virus was so first at the initial period; many countries have also forced to impose lockdown. The hospitality industry was the first industry to be affected facing millions of jobs lost, uncertainty of recovery and it would be the last industry to recover (Tappe and Luhby, 2020). Still in some countries including India have restrictions with reopening of tourist spots. The United Nations World Tourism Organisation (UNWTO) estimated a significant drop in international arrivals in 2020 (Chebli and Foued, 2020). Kumar (2020) has shown how the tourism industry of India is facing loss after January 2020. The second wave of COVID-19 has strike harder on the tourism industry as the rate of spreading infection and death increases rapidly. Many states of India are again enforcing full or partial lockdown. Dash (2020) has pointed out how this pandemic will significantly influence in different tourism sectors.

After the first wave again the strike of second wave and prediction of the third wave to come (Iftimie et al., 2021) would create an insecurity in the future tourism. Psychological factors related to the fear of contamination till proper vaccination and economic factor due to reduction of employment or working hour will impact on the eagerness to travel and preferences for holiday destination (Santos et al., 2020). Now, when the transmission of corona virus will be slowed down a bit people would be interested to go vacation after long captive life but they might not feel comfortable as before in travelling with old normal pattern or any regular tourist destination (Gursoy and Chi, 2020). This reflects that return to old normal is difficult as that normal have been perceived now as the problem (Benjamin et al., 2020). If tourism industry tries to go back to the old system that would be precisely worrying as one should not ignore the massacre happened from this COVID-19 pandemic (Khan and Hashim, 2020). With the changing preferences the hospitality industry need to adopt the 'new normal' practice post-pandemic. It can be predicted that post-pandemic tourism will emerge in a more justifiable manner in terms of mode of operation and its impact on environment and people (Cheer, 2020; Khan and Hashim, 2020). There is change in view related with tourist destination, travel mode and duration after COVID-19. With a changing adaptation nature in this new normal world, it's easier to predict that tourists will give hygiene and cleaning protocols more priority. Locations with remote serenity; pick and drop facility; details online information and booking availability are predicted to be in demand while choosing next tourism destination (Wyman, 2020). All of these points will now be key to change tourism landscape to move forward towards more global sustainability. So, it is required to take many new actions to secure tourists and give oxygen to the tourism industry.

Tourists' preferences and perception in choosing tourist destination, accommodation may vary based on different significant factors. Roman et al. (2020) worked with the perception of people regarding involvement in the tourist activities at the time of COVID-19 pandemic. The impact of Covid-19 on tourists' consumption behaviors has been discussed by Chebli and Foued (2020). Hong et al. (2020) conducted a performance analysis in the 'bed and breakfast tourism' based on tourists' opinion in the COVID period. Nair and Sinha (2020) performed factor analysis based on survey to identify three important factors, namely accessibility and discounting, health-hygiene-referencing, history of low-covid incidence that associate with tourism. There are limited studies on tourists' preferences of choice in the new normal period in the eastern part of India. In this paper an attempt has been made to reduce the research gap. For this it is required to study the preference of tourists in the new normal situation. Two basic objectives of this paper are:

- (i) To find out the combination of different levels of attributes under study that Indian people prefer while choosing a tourist destination and accommodations. A conjoint analysis has been done in this direction.
- (ii) To find out the demographic and socio-economic factors that affect the different levels of the attributes related to the preference of Indian people for different aspect of tourism. For this purpose, logistic regression is performed.

2. Literature Review

2.1. Consumer Behaviour and Tourism Patterns during COVID-19

The COVID-19 outbreak had significant impact on consumer behaviours (Baba et al., 2020; Chebli and Said, 2020; Toubes et al, 2021). There were many problems earlier that affected tourism industry badly. But no one had such major crisis like the COVID-19 (Chakraborty and Maity, 2020; Sigala, 2020). Hall et al. (2020) made a comparison between the impact of COVID-19 pandemic and some previous pandemics on economy, tourism and consumer response. Mirzaei et al. (2021) investigated the change in travel patterns and tourist behaviour at the time of outbreak of COVID-19. They observed the consumers given much more importance to health and safety issues. The consumers preferred domestic travels during the pandemic COVID-19 (Han et al, 2020). Online spot booking has been increased largely (Nunes and Cooke, 2020). Kock et al. (2020) examined the relationship between the pandemic and the psyche of tourists. According to Kourgiantakis et al. (2020) and Wen (2020), tourists considered the hygiene standards while choosing tour destination. Zhu and Deng (2020) suggested a model to compare different aspects of consumers' preference.

2.2. Conjoint Attributes and Attribute Levels for Preference-Based Study

Conjoint Analysis is a multivariate technique used specifically to understand how respondent develop preferences for products or services (Krantz et al., 1971; Nuraeni et al., 2015). It is based on the simple premise that respondent evaluate the value of a product/ service/ idea (real or hypothetical) by combining the separate amounts of value provided by each attribute (Hair et al., 1999). According to Korti (2006) "conjoint analysis allows defining customer needs more accurately than it is possible with using simple questionnaires". Literature shows that among the customers' needs or customers' preference based research method the conjoint analysis is more detailed and accurate (Anderson, 1993; Pullman and Moore, 1999 etc.). Sometimes the term 'Factor' is used as notation to describe a specific attribute or characteristics of the product or service and the possible values for each factor are called levels (Green and Srinivasan, 1978). In conjoint analysis, a product or service is described by its level on the set of factors characterizing it and the combination of 'factors' and 'levels' is known as a treatment or stimulus (Hair et al., 1999; Nuraeni et al., 2015). Since cost affordability and availability of desired facilities are tough to maintain, conjoint analysis is useful for this kind of preference-based study (Pullman et al., 2002). In this analysis instead of queering about the importance of attribute individually, the customers are asked to rank the different combinations of levels of the attributes which are offered to him/her or available for him/her and pick out the combinations one by one according to how much valuable or profitable or suitable for him/her. The impact (utility) of each attribute level on overall preferences could be then estimated by analysing these responses. Identification of respondents' preferences for the various attribute level would help to predict the potential most preferable combination of attribute levels (Ome, 2002). This analysis helps us to find the utility of the attributes levels to a particular individual and hence to estimate the relative importance of the attributes (Green and Krieger, 1991). A conjoint analysis is carried out in this paper to know the combination of preference factors of different attributes related with tourism. These preferred combinations of attribute levels may help the people of tourism sector to determine the components or modify the existing components on tour package for

tourists in the new normal period. The conjoint model can be written as (Carroll and Green, 1995);

$$Q(y) = \sum_{i=1}^k \sum_{j=1}^{l_i} \alpha_{ij} y_{ij} \tag{1}$$

Where, $Q(y)$ = Overall utility of an attribute,
 α_{ij} = utility corresponding to the j^{th} level of the i^{th} attribute, $i=1,2,\dots,k$; $j=1,2,\dots,l_i$,
 and y_{ij} is an indicator binary variable which takes 1 and 0 value according to the present or absent of the j^{th} level of the i^{th} attribute.

The ordinary least square method is applied to estimate the regression parameter α_{ij} (Fox, 1997; Smith, 2005). Here the preference ratings and dummy variables representing the levels of the attributes are dependent and independent variables respectively. The utility value that associated with the each individual attribute level is also used to determine the relative importance (compared to other) of the attributes. Following Smith (2005), the importance of the attributes for each respondent is calculated as follow:

- (i) Based on the utility value of levels of an attribute utility range is determined.
 Utility range of an attribute = Highest utility value - Lowest utility value.
 Utility range is calculated for all the attributes.
- (ii) Total attribute utility range is calculated by adding all the individual attribute utility ranges.
 Total utility range= Σ Individual utility range
- (iii) Then the relative importance (RI) of an attribute is determined by the ratio of the utility range of that attribute (AUR) to the total attribute utility range (TAUR).
 RI (in %) = $(AUR/TAUR) \times 100$. The average importance value is determined by averaging the individual importance values.

3. Research Methods

Before conducting the conjoint analysis, to select some relevant choice of preference attributes along with suitable levels for tourism, Focus Group Discussion method has been used here (Krueger, 2014; Wong, 2008 etc.). This is a research technique to form a small group of experts with homogeneous background of expertise to focus and discuss a specific topic or issue to generate data (Wong, 2008). Members of the focus group of this study have been selected based on a convenience sampling procedure (Cooksey and McDonald, 2011). This group consists of 8 experts (6 males, 2 females) from different management institutions with at least 3 years’ experience. Through an online meeting with the experts the attributes and corresponding levels were selected for our conjoint analysis.

On the based on the discussion with the members of the focused group ten attributes, namely duration of stay, transportation, booking mode, room cleanliness, tour destination, travel group, accommodation with medical facility, extra money spending for the service, food service and mask supply have been selected. Each attribute has two or more levels according to the requirement. For example, duration of stay is either short or long and hence the two levels of this factor are short and long. Similarly, suitable levels are incorporated with the other attributes. Table 1 illustrates the details of the attributes and the attribute levels used in this study based on focus group discussion.

Table 1: Attributes and corresponding levels under study.

Attributes	Levels	Attributes	Levels
Duration of stay	(i) Short (ii) Long	Travel group	(i) Large (ii) Small

Transportation	(i) Rail (ii) Plane (iii) Car	Accommodation with medical facility	(i) Must (ii) Optional
Booking mode	(i) Online (ii) Tour-operator (iii) Onsite	Extra money spending	(i) Sight seen (ii) Accommodation (iii) Health & Hygiene
Room cleanliness	(i) Once per day (ii) Minimum twice per day (iii) Initially at the time of entrance	Food service	(i) Hotel (ii) Self
Tour destination	(i) Crowded (ii) Remote	Mask supply	(i) Hotel (ii) Self

The conceptual framework of the conjoint analysis is given below (Figure 1);

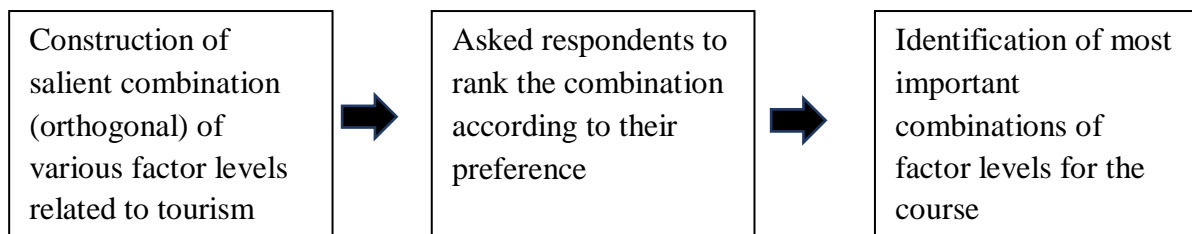


Figure 1: Conceptual framework for conjoint analysis.

The conceptual framework in this study is based and modified on the previous literature (Green and Krieger, 1997; Tripathi and Siddiqui, 2010) where conjoint analysis used to help design new product feature sets. A multi-factor evaluation conjoint analysis methodology has been adopted after selecting the attributes and their levels (Green and Srinivasan,1990; Tripathi and Siddiqui, 2010). If the all-possible combinations of the levels are considered, then there will be a large possible combination (stimuli) for this study (Table 1) and it will be 5184. But the number of stimuli profile can be reduced using fractional factorial design. For this purpose orthogonal stimuli sets (arrays) can be used (Green and Srinivasan,1990; Tripathi and Siddiqui, 2010) based on the assumption that the interaction effects are negligible among the sets. So, based on this assumption, 32 orthogonal combinations of stimuli have been generated including of 5 hold out cases using SPSS (version-25). Hold out cases are not used to estimate utilities. Thus, two sets of data have been obtained;

- (i) Estimation set: This set consists of 27 combinations. These combinations were used for evaluating part-worth or utility functions for the attribute levels.
- (ii) Holdout set: This set consists of 5 combinations. These combinations were used to assess reliability and validity of the conjoint model.

4. Results

The survey questionnaire has two sections. Based on 32 cards of combinations the second section of the questionnaire has been prepared. A Google form with relevant questions was prepared and it was shared for collecting data for our study through mail and various social networking sites and respondents were asked to rank the stimuli according to ascending order of preference. They were further requested to share this questionnaire among their known from mainly the eastern part of India. A total of 772 individuals sent their response which is quite sufficient at the 99% confidence level and at the 5% margin of error (Cochran, 1963).

The other section (section 1) of the questionnaire consists demographic and socio-economic conditions related questions. Table 2 represents the distribution of respondents corresponding to the selected profiles.

Table 2: Demographic and socio-economic profile of respondents.

Demographic Profile		Dummy	Percentage of Frequency
Age (year)	<20	1	22
	20-50	2	46
	>50	3	32
Gender	Male	1	66
	Female	0	34
Area/Locality	Rural	0	41
	Urban	1	59
Marital Status	Married	1	68
	Unmarried	0	32
Income per month (Rs)	0-25000	1	57
	25000-50000	2	31
	>50000	3	12
Profession	Government Job	1	29
	Others	0	71
Pre-covid travel frequency	Maximum 1 per year	1	36
	1-2 per year	2	41
	More than 2 per year	3	23

Descriptive statistics of the demographic and socio-economic profile of the respondents (Table 2), obtained by analysing the first part of the questionnaire, shows that most of the respondents are male with age group 20-50 yrs. They are mainly from urban area and married. 71% of respondents are engaged in non-Govt. services having monthly income within Rs. 25,000. Respondent are used to travel once/twice per year before the covid situation. This study tries to identify the combination of preferred choices made by the respondents during this ‘new normal’ condition from the second part of the questionnaire. Here, utility refers to the degree of preference of choices, which means tourists’ preferences to the specific attributes (Li and Hudson, 2016). The higher is the value, the more obvious is the preference. Utilities of each attribute levels for each individual are determined using SPSS software (version-25) and using those values mean utility values are also computed. Table 3 highlights the mean utility scores.

Table 3: Mean utility score for each level of the attributes.

Attributes	Levels	Utility estimate	Attributes	Levels	Utility estimate
Duration of stay	(i) Short	(i) 0.130	Travel group	(i) Large group	(i)-1.037
	(ii) Long	(ii)-0.130		(ii) Small group	(ii) 1.037
Transport	(i) Rail	(i)1.198	Accommodation with medical facility	(i) Must	(i) 1.130
	(ii) Plane	(ii)0.222		(ii) Optional	(ii)-1.130
	(iii) Car	(iii)-1.420			

Booking mode	(i) Online (ii) Tour-operator (iii) Onsite	(i) 0.568 (ii) 0.247 (iii)-0.815	Extra money spending	(i) Sight seen (ii) Accommodation (iii) Health and Hygiene	(i) -1.198 (ii) 0.037 (iii) 1.161
Room Cleanliness	(i) Once per day (ii) Minimum 2/ day (iii) At the time of entrance only	(i) 0.259 (ii) 0.889 (iii)-1.148	Food Service	(i) Hotel (ii) Self	(i)0.426 (ii)-0.426
Tour destination	(i) Crowded (ii) Remote	(i) -0.426 (ii) 0.426	Mask supply	(i) Hotel (ii) Self	(i)-1.139 (ii) 1.139
Constant	-	14.651	-	-	-

Table 3 indicates that the people prefer short tours rather than long tour having utility value 0.130. They want to travel by train (utility value 1.198) rather than car and plane. Online booking is preferable nowadays. This fact is also reflected here with utility score 0.568. Giving hygiene the most priority cleanliness has been most preferred with more at least two times cleaning per day and this level has utility value 0.889. Tourists want to carry their own masks. Remote serenity is given priority over crowded place. Accommodation with own canteen and basic medical facilities are top in demand having utility score 1.130. In the new normal condition respondents want to travel in small group (utility value 1.037) and they are ready to spend extra money on health and hygiene (utility value 1.161). Most preferable combination of choices for tourists in ‘new normal’ conditions are as follows:

“Short duration tour- rail transportation- online booking facilities- at least twice cleaning of room per day- remote places- small travel group- hotel with own canteen and medical facility- own mask- extra money spend on health and hygiene”.

Total utility score for this preferable choice is obtained as 22.755 (using equation 1). If any preferable level is replaced with less preferable one then another total utility score is obtained. For example, if short duration to stay is replaced with long duration then the total utility score will be 22.515. In this way the total utility score can be evaluated for every orthogonal combination.

Table 4: Average importance value of the attributes.

Attributes	Importance scores	Attributes	Importance scores
Duration of stay	4.300	Travel group	9.377
Transportation	13.295	Accommodation with medical facility	9.738
Booking mode	8.164	Extra money spending	11.084
Room Cleanliness	14.932	Food service	14.788
Tour destination	4.414	Mask supply	10.400

The attribute average importance values have been estimated using SPSS (version 25) and highlighted in the table 4. In line with current pandemic condition, frequency of cleaning has been given most priority by the respondents having importance score 14.932. Similarly, food and transportation are being other main sources of spreading infections have been prioritized by the tourists during this new normal condition. Importance score of food and transportation are 14.788 and 13.295 respectively.

The value of the adjusted R^2 for fitting the conjoint model is obtained as 0.73. So, the model fitting is satisfactory. The value of the Durbin Watson statistic (1950) is 1.92 and it indicates the non-existing of autocorrelation in the model. Three correlations have been computed between observed and estimated preferences (Table 5). The p-values corresponding to the correlation statistics show that the correlations are highly significant and thus this conjoint model has the ability to predict with higher accuracy and it has internal validity.

Table 5: Correlation between observed and estimated preference.

Correlation	Value	Significance
Pearson’s R	0.871	0.000
Kendall’s tau	0.713	0.000
Kendall’s tau for Holdouts	0.643	0.002

After identifying the preferable combination of choices with conjoint analysis, this study also tries to find out the relationship between the preferences under study with some demographic and socio-economic profiles of the respondents. Logistic regression analyses have been performed using the data based on both the parts of the questionnaire. Here the preferences are the dependent variable and demographic and socio- economic profiles are the independent variable. Since ten attributes have been studied here, ten regression models are considered. For each attribute 1 is assigned for the level which has maximum utility and 0 for the other levels. The results of the logistic regressions are given in Table 6.

Table 6: Logistic regression model results for attribute levels.

Dependent variable	Constant	Age	Gender	Locality	Marital Status	Monthly Income	Profession	Frequency of tour before Covid
Short Duration	10.52 (0.32)	-5.72 (0.27)	15.72 (0.07*)	9.36 (0.41)	-12.61 (0.17)	-14.55 (0.09*)	14.72 (0.38)	17.21 (0.04**)
Rail Transport	8.77 (0.87)	-4.37 (0.46)	-6.78 (0.29)	7.23 (0.31)	-11.21 (0.19)	-15.43 (0.06*)	11.35 (0.31)	10.72 (0.09*)
Online Booking	7.61 (0.81)	-16.25 (0.08*)	-7.92 (0.34)	16.45 (0.04**)	-10.11 (0.26)	-17.37 (0.05**)	17.83 (0.43)	21.72 (0.03**)
At least two times room cleanliness	12.75 (0.53)	7.97 (0.41)	-22.42 (0.03**)	2.75 (0.91)	10.55 (0.23)	17.39 (0.09*)	2.86 (0.76)	17.42 (0.05**)
Remote spot	6.94 (0.64)	9.16 (0.43)	13.71 (0.26)	-6.77 (0.61)	14.36 (0.19)	12.82 (0.30)	10.42 (0.47)	11.32 (0.21)
Small travel group	7.86 (0.57)	16.78 (0.08*)	12.70 (0.48)	-21.07 (0.03)	-8.61 (0.61)	9.78 (0.53)	-11.61 (0.31)	10.24 (0.28)
Compulsory	10.27	19.74	7.86	6.55	7.91	8.21	10.49	11.54

medical facility	(0.51)	(0.04**)	(0.67)	(0.71)	(0.58)	(0.47)	(0.40)	(0.27)
Money spending for health and hygiene	-6.72 (0.39)	-12.65 (0.29)	-19.53 (0.07*)	7.81 (0.53)	9.19 (0.35)	-7.62 (0.41)	6.22 (0.73)	8.71 (0.46)
Food service by the hotel	7.65 (0.31)	19.86 (0.05**)	26.32 (0.03**)	9.72 (0.51)	11.65 (0.28)	-10.85 (0.31)	14.66 (0.16)	-9.63 (0.42)
Own mask carry	12.92 (0.24)	16.87 (0.09*)	-21.99 (0.04**)	11.94 (0.21)	17.09 (0.09*)	7.36 (0.41)	11.83 (0.37)	8.74 (0.31)

‘*’ significant, ‘**’ Moderately significant, ‘***’ Very high significant.

Short duration tour preference is slightly significantly dependent on the gender (p-value =0.07), monthly income (p-value =0.09) and pre-covid tour frequency (p-value =0.04). Monthly income (p-value =0.06) and pre-covid tour frequency (p-value =0.09) have slight significant influence on rail transportation. Online booking preference depends on age (p-value=0.08), locality (p-value =0.04), monthly income (p-value =0.05), pre-covid travel frequency (p-value =0.03). Preference for at least two times room cleaning is significantly associated with gender (p-value =0.03), monthly income (p-value =0.09) and pre-covid travel frequency (p-value =0.05). Small travel group, hotels with basic medical facility dependent only on age (p-value =0.08 and 0.04 respectively) and extra money spending on hygiene choice depends on gender (p-value =0.07). Accommodation with own canteen preference is significantly influenced by age (p-value =0.05) and gender (p-value =0.03). Own mask preference is associated with gender (p-value =0.04), age (p-value =0.09) and marital status (p-value =0.09). Monthly income, gender, pre-covid travel frequency have influence on most of the preferences during new normal condition.

5. Conclusion, Implications and Limitations

COVID-19 pandemic has strike the tourism industry all over the world. The priority and preferences for the future tourists would have been changed minding the new normal situation. Following the previous literature (Li and Hudson, 2016; Tripathi and Siddiqui, 2010) this study uses conjoint analysis to identify the most desirable combination of choices related to new normal tourism facilities. To minimize the social contact online booking has now preferred as found in the study of Tripathi and Siddiqui (2010). Similar in findings from OECD report (2020) this study also found that travel in small group and remote tourist destinations are major preferences after this pandemic. In line with Nazneen et al. (2020), this study shows that rail transportation is most preferable being spacious and airy since hygiene and safety perception will play a significant role in travel decisions in post-COVID-19 times. This pandemic has changed the lookout of the society towards safety protocol. Now not only material security but health safety would be taken as mainstream agenda. Similar in findings with previous literature (Bagnera et al., 2020; Jain, 2020a; Nazneen et al., 2020), this study has also identified hotel cleanliness protocols, hygiene maintenance, extra spending on hygiene are the major preferences. Room cleanliness has been estimated to score highest importance value. In house restaurant facility and basic medical assistance in hotel are welcomed by the respondents as found in the literature (Baber et al., 2016; Jain, 2020b).

Validity of the conjoint model has been checked. Logistic regression identified the factors that influence the preference attributes. Monthly income, gender, pre-covid travel frequency as predictors have influence on most of the preferences including choosing accommodation with cleanliness protocol; tour duration and transportation; own canteen facility; medical assistance during new normal condition which is similar in findings of Tripathi and Siddiqui (2010) and Qui et al. (2020). In line with Tripathi and Siddiqui (2010) this study found

younger generation being more technically savvy, are enjoying greater comfort level using online booking mode. The logistic regression indicates that there is a possibility that the utilities may sensitive to the socio- economic background of the respondents.

This study would help the tourism industry to think over the new preferences and provide better service to satisfy the tourist. This study may highlight a few policy recommendations so that tourism authority can design customized tourism packages. Firstly, all the destinations should ensure and enhance hygiene and physical distancing. Travellers will need to be reassured of the safety of travelling for which government need to look after issues terms of safety, hygiene, testing, and procedures. Second, keeping social distancing in mind, the restaurants have to maintain minimum distance between tables. Third accessibility, connectivity and transport should be high on the agenda just as accommodations, restaurants ensuring the safety of passengers and personnel. To recover the economic lag, air transportation should give more focus on making physical distancing, the use of masks and the respect of health indication mandatory. Fourth, with the strike of second wave and expecting the third to come, regaining the confidence of the tourists even after the end of this pandemic would be most challenging. Tourism authority of each state along with local community must have to be prepared with safety preferences and sustainable tourism strategy.

This work has few restrictions. The data have been collected using Google form and thereby the samples are not entirely random. Another drawback of this paper is that it did not cover all the parts of India. There may have some differences in opinions of the people of eastern part of India with the other parts. This paper has considered ten attributes of preference for new normal tourism. But there may have some more attributes that influence the preferences for tourism. Another limitation of this paper is that it is difficult to conduct conjoint analysis with more than three levels of any factor if the number of factor is large.

References

- Anderson, J.C., Jain, D.C and Chintagunta, P. (1993).Customer value assessment in business market. *Journal of Business-to-Business Marketing*, 1, 4-26.
- Baba, C.-A., Stăncioiu, A.-F., Gabor, M. R., Alexe, F.-A., Oltean, F. D. and Dinu, A. C. (2020). Considerations regarding the effects of COVID-19 on the tourism market. *Theoretical and Applied Economics*, 27(3), 271–284.
- Bagnera, S.M. and Stewart, E. (2020).Boston hospitality review. Available online: <https://www.bu.edu/bhr/2020/03/25/navigating-hotel-operations-in-times-of-covid-19>.
- Baber, R., Kaurav, R.P.S. and Williams Jr, R.L. (2015). How travellers differ in their preferences regarding hotel selection: Empirical evidence from travellers in India. *Asian Journal of Tourism and Hospitality Research*, 8 (1), 15-26.
- Benjamin, S., Dillette, A. and Alderman, D. H. (2020). We can't return to normal: committing to tourism equity in the post-pandemic age. *Tourism Geographies*, 22 (3), 476–483.
- Carroll, J. D. and Green, P. E. (1995). Psychometric methods in marketing Research: Part I, ConjointAnalysis. *Journal of Marketing Research*,32, 385-391.
- Chakraborty, I. and Maity, P. (2020). COVID-19 outbreak: migration, effects on society, global environment and prevention. *Science of The Total Environment*, 728 (138882).
- Chebli, A. and Foued, B.S. (2020). The Impact of Covid-19 on tourist consumption behaviour : A perspective article. *Journal of Tourism Management Research*, 7(2), 169-207.
- Chebli, A. and Said, F.B. (2020). The impact of covid-19 on tourist consumption behaviour: A perspective article. *Journal of Tourism Management Research*, 13.

- Cheer, J.M. (2020). Human flourishing, tourism transformation and covid-19: A conceptual touchstone. *Tourism Geographies*, 22 (3), 1-11.
- Cochran, W. G. (1963). *Sampling Techniques*, (2nd Ed.). New York: John Wiley and Sons, Inc.
- Cooksey, R. and McDonald, G. (2011). *Surviving and Thriving in Postgraduate Research*, Prahran, VIC, Tilde University Press.
- Davali, M.Z., Karwowski, W, Sonmez, S. and Apostolopoulos, Y. (2020). The hospitality industry in the face of the COVID-19 Pandemic: Current Topics and Research Methods. *International Journal of Environment Research and Public Health*, 17 (20), 1-20.
- Dash, J. (2020). Covid-19 impact: Tourism industry to incur Rs 1.25 trn revenue loss in 2020: https://www.business-standard.com/article/economy-policy/covid-19-impact-tourism-industry-to-incur-rs-1-25-trn-revenue-loss-in-2020-120042801287_1.html
- Durbin, J. and Watson, G. S. (1950). Testing for serial correlation in least squares regression. *Biometrika*, 37 (3–4), 409–428.
- Fox, J. (1997). *Applied regression analysis, linear models, and related methods*. Thousand Oaks,CA: Sage.
- Green, P. E. and Srinivasan, V. (1978). Conjoint analysis in consumer research: issues and outlook'. *Journal of consumer research*, 5 (2), 103-123.
- Green, P. E. and Srinivasan, V. (1990). Conjoint analysis in marketing: New development with implications of research and practice. *Journal of Marketing*, 54 (4), 3-19.
- Green, P.E. and Krieger, A.M. (1991).Segmenting markets with conjoint analysis.*Journal of Marketing*, Vol.55, 20–31.
- Green, P. E. and Krieger, A. M. (1997). Using conjoint analysis to view competitive interaction through the customer's eyes. In day, G. S.; Reibstein, D. J.; and Gunther, R. E. (eds), *Wharton dynamic competitive strategy*, pp. 343–66. New York, NY: John Wiley & Sons.
- Gursoy, D. and Chi, C.G. (2020). Effects of COVID-19 pandemic on hospitality industry: review of the current situations and a research agenda. *Journal of Hospitality Marketing and Management*, 29(5), 527-529.
- Hair, J., Anderson, R.E, Tatham, R.L and Black, W.C. (1999). *Multivariate data analysis*, (Fifth Ed.). Prentice-Hall International, Inc.
- Hall, C. M., Scott, D. and Gössling, S. (2020). Pandemics, transformations and tourism: Be careful what you wish for. *Tourism Geographies*, 22(3), 577–598.
- Han, H., Al-Ansi, A., Chua, B.-L., Tariq, B., Radic, A. and Park, S. (2020). The post-coronavirus world in the international tourism industry: Application of the theory of planned behaviour to safer destination choices in the case of US outbound tourism. *International Journal of Environmental Research and Public Health*, 17(18), 64-85.
- Hong, Y., Cai, G., Zhouijn, M., Weijun, G., Lei, X., Yuanxing, J. and Jinming, J. (2020). The impact of COVID-19 on tourist satisfaction with B&B in Zhejiang, China: An importance-performance analysis. *International Journal of Environmental Research and Public Health*, 17(3747), 1-20.
- Iftimie, S., López-Azcona, A. F., Vallverdú, I., Hernández-Flix, S., De Febrer, G., Parra, S. and Castro, A. (2021). First and second waves of coronavirus disease-19: A comparative study in hospitalized patients in Reus, Spain. *Plos one*, 16(3), e 0248029.
- Jain, S. (2020). Would hotel industry have to redo the rooms/housekeeping standards post covid? Instilling greater confidence to bring back the customers. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3587897 (accessed on 30 April 2021).
- Jain, S. (2020). Effect of COVID-19 on restaurant industry–How to Cope With Changing Demand. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3577764 (accessed on 21 April 2021).

ORIGINAL SCIENTIFIC PAPER

Hajra, R. and Gupta, S.K.

2021, Vol.6, No.3, pp. 926-938. DOI:10.5281/zenodo.6505438

- Khan, M. A. A. and Hashim, H. (2020). The effect of Covid-19 on tourism and hospitality industry in Malaysia, resurgence in the post-pandemic era: a conceptual criterion. *International Journal of Tourism and Hospitality Reviews*, 7(2), 54-62.
- Kock, F., Nørfelt, A., Josiassen, A., Assaf, A.G. and Tsonas, M.G. (2020). Understanding the COVID-19 tourist psyche: The evolutionary tourism paradigm. *Annals of Tourism Research*, 85, 103053.
- Kotri, A. (2006). Analyzing customer value using conjoint analysis: The example of a packaging company. Tartu University Press.
- Krantz, D. H., R. Luce, R.D., Suppes, P., and Tversky, A. (1971). Foundations of measurement. New York, NY: Academic Press.
- Krueger, R. A. (2014), Focus groups: A practical guide for applied research. *Sage publications*. DOI:10.2307/3172912.
- Kumar, V. (2020). Indian tourism Industry and COVID-19: Present scenario. *Journal of Tourism and Hospitality Education*, 10, 179-185.
- Kourgiantakis, M., Apostolakis, A., & Dimou, I. (2020). COVID-19 and holiday intentions: The case of Crete, Greece. *An International Journal of Tourism and Hospitality Research*, 1-4.
- Li, J. and Hudson, S. (2016). Conjoint analysis of consumer preferences to destination brand attributes. Travel and Tourism Research Association. *Advancing Tourism Research Globally*, 22, 1-9.
- Mirzaei, R., Sadin, M. And Pedram, M. (2021). Tourism and COVID-19: changes in travel patterns and tourists' behavior in Iran. *Journal of Tourism Futures*, 1-13.
- Nair, B.B. and Sinha, S. (2020). Covid-19 and future travel decisions: how do the destination-choice-based motivators redefine tourist's choices?. *Enlightening Tourism: a Pathmaking Journal* , 10(2), 306-322.
- Nazneen, S., Hong, X. and Ud Din, N. (2020). COVID-19 Crises and Tourist Travel Risk Perceptions: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3592321.
- Nunes, S., Cooke, P. (2020). New global tourism innovation in a post-coronavirus era. *European Planning Studie* , 29, 1-19.
- Nuraeni, S., Arru, A. P. and Novani, S. (2015). Understanding consumer decision-making in tourism sector: conjoint analysis. *Procedia-Social and behavioral sciences*, 169, 312-317.
- Ome, B (2002). Formulating attributes and levels in conjoint analysis. *Sawtooth Software Inc.*, 1-5.
- Pullman, M.E., Moore, W.L. (1999). Optimal service design: integrating marketing and operations perspective. *International Journal of Service Industrial Management*, 10(2), 239-260.
- Pullman, M.E., Moore, W.L., and Wardel, D.G. (2002). A comparison of quality function development and conjoint analysis in new product design. *The Journal of Product Innovation Management*, 19, 354-364.
- Roman, M, Niedziółka, A, and Krasnodebski, A (2020). Respondents' involvement in tourist activities at the time of the COVID-19 pandemic. *Sustainability*, 12, 1-21.
- Santos, G.F.D, Ribeiro, L.C.D.S. and Cerqueira, R.B.D. (2020). The informal sector and covid-19 economic impacts: the case of Bahia, Brazil. *RegSci Policy Pract*, 12, 1273-1285.
- Sigala, M. (2020). Tourism and COVID-19_ Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, 10.
- Smith, S.M. (2005). Conjoint analysis tutorial. Retrieved from <http://marketing.byu.edu/htmlpages/tutorials/conjoint.html>.
- Qiu, R.T., Park, J., Li, S. and Song, H. (2020). Social costs of tourism during the COVID-19 pandemic. *Annals of Tourism*, 84, 102994.

ORIGINAL SCIENTIFIC PAPER

Hajra, R. and Gupta, S.K.

2021, Vol.6, No.3, pp. 926-938. DOI:10.5281/zenodo.6505438

- Tappe, A. and Luhby, T. (2020). 22 million Americans have filed for unemployment benefits in the last four weeks. Available Online: <https://www.cnn.com/2020/04/16/economy/unemployment-benefits-coronavirus/index.html>
- The Organisation for Economic Co-operation and Development (2020). Rebuilding tourism for the future: COVID-19 policy responses and recovery. Retrieved from <https://www.oecd.org/coronavirus/policy-responses/rebuilding-tourism-for-the-future-covid-19-policy-responses-and-recovery-bced9859/>
- Toubes, D.R., Vila, N.A. and Brea, J.A.F. (2021). Consumption patterns and tourist promotion after the COVID-19 pandemic. *Journal of Theoretical and Applied Electronic Commerce Research*, 16, 1332-1352.
- Tripathi, S. N. and Siddiqui, M. H. (2010). An empirical study of tourist preferences using conjoint analysis. *International Journal of Business Science & Applied Management*, 5(2), 1-16.
- Wen, J., Wang, W., Kozak, M., Liu, X. And Hou, H. (2020). Many brains are better than one: The importance of interdisciplinary studies on COVID-19 in and beyond tourism. *Tourism Recreation Research*, 1–4.
- Wong, L. P. (2008). Focus group discussion: a tool for health and medical research. *Singapore Med Journal*, 49(3), 256-61.
- Worldometer (2021). <https://www.worldometers.info/coronavirus/>. Accessed on 7th July, 2021.
- Wyman, O. (2020). To recovery and beyond the future of travel and tourism in the wake of Covid-19. *World Traveller and Tourism Council*.
- Zhu, H. And Deng, F. (2020). How to Influence Rural Tourism Intention by Risk Knowledge during COVID-19 Containment in China: Mediating Role of Risk Perception and Attitude. *International Journal of Environmental Research and Public Health*, 17(10), 3514.

Author Biography



Rituparna Hajra is an assistant professor of Geography at Polba Mahavidyalaya, affiliated to the University of Burdwan. She received Ph. D degree from the Jadavpur University. She has published several papers related to tourism, migration, poverty, sustainability etc. She has participated in various national and international conferences.



Sanjib Kumar Gupta is presently working as assistant professor in Statistics at Sarsuna College, affiliated to the University of Calcutta. He completed master degree from the University of Calcutta. His various papers have been published on reputed journals like Elsevier, Springer etc. He is also a reviewer of Elsevier, Springer etc.

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