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Impact of Covid-19 and its Variant on the Air Travel Intention

Gaurav Negi[1], Danthuri Shiva Prasad Goud[2]

Xavier Institute of Management and Entrepreneurship, Bangalore, India

Abstract: This study investigated air travel intentions of 143 domestic travelers during COVID-19 pandemic using constructs based on theory of planned behavior and model of goal-directed behavior and additional constructs were also added based on our understanding. The impact of Individual Perception, Perception of others' attitudes, Perceived extent we can control our behavior, Readiness to adopt personal non-pharmaceutical interventions (PNPIs), Extend of seriousness of COVID-19 acknowledged, Frequency of past travel, Extent of Covid-19 awareness as predictor variables on the air travel intention of consumers was examined. It was revealed that Individual Perception and perceived extent of control of our behavior, have positive relationship with air travel intention of consumers. However, the readiness to adopt PNPI's, Extent of seriousness of COVID-19 acknowledged, and Frequency of past travel have no relationship with the air travel intention of consumers. But extent of awareness of covid-19 is found to have a negative relationship with air travel intention of consumers. Directions for future research are discussed.

Keywords: Impact of Coronaviruses, travel intention, air travel, consumer perception

I. INTRODUCTION

In December 2019, the world was surprised by the COVID-19 epidemic which soon became a pandemic (Guan et al., 2020, Zhu et al., 2019), The SARS-CoV-2 virus is the infectious agent behind it. China reported the first instance of COVID-19, which spread quickly around the world and became so dangerous that on January 30, 2021, the WHO declared a global emergency (WHO Report,2021).

The first cases of COVID-19 in India were reported on 30th January 2020 in three towns of Kerala, among three Indian medical students who had returned from Wuhan, the epicenter of the pandemic (Andrews, MA et al.,May 2020). People with COVID-19 were ill and became very ill, but most of them recovered, and a minority died at various stages. The virus can spread through the lips or nose in tiny liquid particles when an infected person talks, sneezes, sings, or coughs (WHO Report,2021).

Local and national authorities closed non-essential enterprises and implemented stringent foreign travel restrictions in order to preserve social distance (Kim, E. E. K et al., 2021). Despite the fact that it is largely focused on the physical health of people affected, the effect of this sickness on the economy and particularly vulnerable industries like tourism, entertainment, and hospitality cannot be ignored. The tourism industry regularly experiences severe and immediate impacts as a result of global crises (Calgaro et al., 2014). Airways are the quickest and most practical form of transportation; hence Covid-19 had a significant impact on them in 2020. Due to the COVID-19 epidemic, scheduled domestic flights in India were halted from March 25, 2020, to May 24, 2020. India's aviation industry has been impacted by the COVID-19 pandemic's significant interruption. Due to the extreme disruption brought on by the COVID-19 epidemic, it is anticipated that Indian airports and airlines lost Rs 5,116 crore and Rs 19,564 crore, respectively, in 2020–21. Due to the pandemic, domestic air passenger traffic decreased by 0.3 percent in 2019–20 and by 61.7 percent in 2021 (Business Today Desk, 2021).

We were inspired to look at the air travel intentions of individuals arriving from various cities in India in light of the longer-term study that was suggested in the article "Understanding international and domestic travel intentions of Indian passengers during COVID-19 using a Bayesian method." (Das & Tiwari, 2021) In the majority of the impacted cities, travelers' intentions to go may change due to their concern over contracting diseases.

Based on the aforementioned facts, we sought to determine if people's perceptions had changed since Covid-19's early days as well as their air travel plans during Covid-19 and its variants.

II. RESEARCH OBJECTIVES

To identify the factors that affect travel intention through the airline services during the Covid-19 and its variants

III. LITERATURE REVIEW

Extant literature on the impact of Coronaviruses on air travel reveals that it impacted many industries like manufacturing & logistics, tourism, entertainment & media, health care, commerce, government, finance, real estate, telecommunication & technology, education (Srivastava, 2022), which might be the butterfly effect on the transportation industry especially more in the air travel industry around the world. Many countries across the world had temporarily banned air travel to reduce the fast-rising COVID-19 cases (Srivastava, 2022), which had made it challenging for people to leave their cities.

There are various causes for the decline in the aviation industry, including the negative effects of COVID, unfounded fears about one's health, mental well-being, and avoidance of travel to international locations (Bhati et al., 2021). It is obvious that how tourists feel about their health and safety has a big impact on how they behave and how they view the place. Although views about traveling abroad and temporal avoidance are thought to be significantly influenced by mental health, perceived uncertainty is a key predictor of short-term avoidance (Chua et al., 2021).

As of now according to the Skyscanner data on air passengers, we can see that the people's desire to travel has reduced when compared to pre covid period (Gallego and Font, 2021), the people's intention to travel has also reduced but there is still hope that air travel will bounce back.

We can see that people's desire to travel has reduced when compared to pre covid period (Gallego and Font, 2021) the people's intention to travel has also reduced but there is still hope that air travel will bounce back. In this paper, we concentrated on the different variables such as Individual perception, Perception of others' attitudes, the Perceived extent we can control our behavior, Readiness to adopt PNPIs, the extent of the seriousness of covid-19 acknowledged, Frequency of past travel, the extent of covid-19 awareness which affects the travel intention of the Indians. Keeping all these constructs in mind we are interested to study how all the above-mentioned independent variables affect the air travel intention of Indians.

IV. METHODOLOGY AND HYPOTHESIS

A. Measures

Apart from Extent of Covid-19 awareness, all other constructs used in the study were referred from Lee et al. (2012). The frequency of past travel was captured with a single item question referred from Lee et al. (2012), 'Frequency of Air travel during Covid-19?'. The extent of seriousness of COVID-19 acknowledged was measured with three items (how severe the rate of infection, the negative impact on society and economy) referred from Li et al. (2020b) measured on a 5-point scale ranging from 1 (not severe at all) to (very severe). A high score indicated that participants perceived COVID-19 as more severe. The readiness to adopt PNPIs for COVID-19 was operationalized with three items referred from Lee et al. (2012). Individual Perception, Perception of others' attitudes, Perceived extent we can control our behavior, and Readiness to adopt PNPIs were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Respondents were also asked to report their gender, age, occupation, and purpose of travel. Items with standardized factor loadings <0.70 were dropped from the analysis (Kline, 2009). All the constructs had acceptable composite reliability and convergent validity.

B. Sampling and Data Collection Procedure

Indians were the target audience with plans to travel during COVID-19 once the travel restrictions are relaxed. With the use of the online survey tool Google Form, an open, self-selected survey was carried out. Online surveys make it easier to reach larger populations of interest (Han & Hyun, 2017) that are challenging to contact either because they are difficult to find, identify, or exist in low numbers (Fricker, 2008). Thus, the nationwide curfew also made online data collecting necessary.

The survey link was circulated to many students and working professionals through various social networking sites, inviting potential travelers across India during the second and third week of May 2022 to participate in the survey. This specific timeframe for data collection was intentional because around this time, the world had already experienced one of the deadliest variants of Covid-19 (Omicron) and had embraced Covid-19 as a part of their lives. A total of 143 travelers responded to the form. The sociodemographic characteristics of the homogeneous samples such as gender, and age can also differ (Jager et al., 2017).

C. Sample Profile

From the total observations, males were more than females in the sample. The majority of respondents were aged between 18 and 24 years. Personal and education were the major purposes of air travel among the respondents.

D. *Measurement Model*
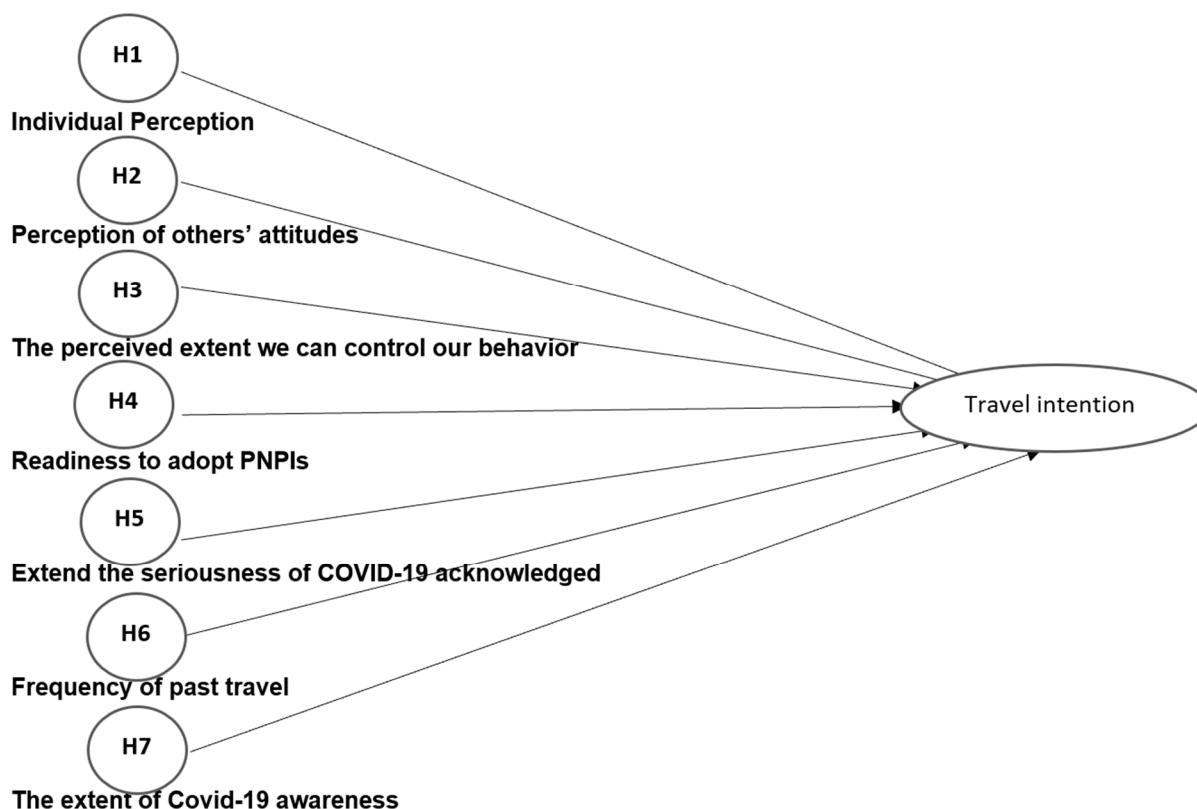
The research model includes Individual Perception, Perception of others' attitudes, Perceived extent we can control our behavior, Readiness to adopt personal non-pharmaceutical interventions (PNPIs), Extend of seriousness of COVID-19 acknowledged, Frequency of past travel, Extent of Covid-19 awareness as predictor variables and travel intention as the outcome variable. The construct "Individual perception (IP)" has been measured through indicators such as 1- Travelling during COVID-19 is positive 2 - Travelling during COVID-19 is useful 3- Travelling during COVID-19 is valuable). The construct "Perception of others' attitudes" has been measured using three indicators such as 1- People who are important to me think it is okay for me to travel during COVID-19 2- Most people who are important to me understand my travel during COVID-19 3- Most people who are important to me agree with me about traveling during COVID-19. The construct "Perceived extent we can control our behavior" has been measured using three indicators such as 1- I believe that I can travel during COVID-19 2 - Have resources (money) to travel during COVID-19 3 - Have enough time to travel during COVID-19. The construct "Readiness to adopt PNPIs" has been measured using three indicators such as 1 - Wear face mask while travelling during COVID-19 2 - Wash my hands frequently while travelling during COVID-19 3 - Maintain social distance while travelling during Covid-19. The construct "Travel intention" has been measured using three indicators such 1 - Planning to travel during COVID-19 in the near future 2 - Make an effort to travel during COVID-19 in the near future 3 - Invest time and money to travel during COVID-19 in the near future. The construct "extent of seriousness of COVID-19 acknowledged" has been measured using three indicators such as 1 - Infection rate of COVID-19 2 - Negative impact of COVID-19 on social order 3 - Negative impact of COVID-19 on Indian economy. The construct "Frequency of past travel" has been measured using one indicator such as Frequency of Travel. The construct "Extent of Covid-19 awareness" has been measured using one indicator such as To what extent, are you aware of Covid-19 and the other variants?

Against the backdrop, we hypothise our model within the context of India -

H1: Individual perception positively associated with the air travel intentions

H2: Perception of others' attitudes has an impact on the air travel intentions of the Indians

H3: The perceived extent we can control our behavior has an impact on the air travel intentions of the Indians

H4: Readiness to adopt PNPIs has an impact on the air travel intentions of the Indians

H5: The extent of the seriousness of covid-19 acknowledged has an impact on the air travel intentions of the Indians

H6: Frequency of past travel has an impact on the air travel intentions of the Indians

H7: The extent of covid-19 awareness has an impact on the air travel intentions of the Indians

V. DATA ANALYSIS

A. Reliability and Validity

The validity of the survey instrument is established using content validity and construct validity. The content validity was recognized by grounding the survey instrument within literature and theoretical studies. The survey instrument was developed based on earlier studies from extant literature. Then, the content validity was also confirmed by pre-testing the survey instrument with the help of personnel's from the target group and academia. The survey instrument was updated with minor changes according to the recommendations offered from these personnel's and the survey instrument concerning the impact of Covid-19 on the air traveling intention. Reliability was tested using Cronbach alpha (α) (Nunnally and Bernstein 1994). In most cases, the value of the reliability coefficient needs to be 0.70 or higher (Fornell and Larcker 1981; Nunnally and Bernstein 1994). The Cronbach's alpha values (α) of the factors were 0.819 which is greater than 0.80 and this result, in turn, conveys that the theoretical constructs were reliable.

B. Exploratory Factor Analysis

SPSS 24 software was used to analyze the hypothesized model and to test the proposed hypotheses. The questions in the survey questionnaire were related to the constructs which included Individual Perception, Perception of others' attitudes, Perceived extent we can control our behavior, Readiness to adopt PNPIs, Extend of seriousness of COVID-19 acknowledged, Frequency of past travel, Extent of Covid-19 awareness, and travel intention. However, the overall analysis incorporated responses from all the constructs except for, "Perception of others' attitudes,". As a first step, exploratory factor analysis was carried out in order to identify the relevant indicators for seven factors: Individual Perception, Perceived extent we can control our behavior, Readiness to adopt PNPIs, Extend of seriousness of COVID-19 acknowledged, Frequency of past travel, Extent of Covid-19 awareness, and Travel intention. The Bartlett test of Sphericity and Kaiser–Meyer–Olkin measure of sampling adequacy were used to validate the appropriateness of the indicators for factor analysis. A regression analysis was performed in order to test the proposed models. Since the independent and dependent variables were numerical, linear regression was performed in order to test hypotheses H1, H2, H3, H4, H5, H6, and H7. Hypothesis H1 was intended to test whether the independent/predictor variable (Individual Perception) is positively associated with the dependent/outcome variable (Travel Intention). Hypothesis H2 was intended to test whether the independent/predictor variable (Perception of others' attitudes) has an impact on the dependent/outcome variable (Travel Intention). Hypothesis H3 was intended to test whether the independent/predictor variable (perceived extent we can control our behavior) has an impact on the dependent/outcome variable (Travel Intention). Hypothesis H4 was intended to test whether the independent/predictor variable (Readiness to adopt PNPIs) has an impact on the dependent/outcome variable (Travel Intention). Hypothesis H5 was intended to test whether the independent/predictor variable (extent of the seriousness of covid-19 acknowledged) has an impact on the dependent/outcome variable (Travel Intention). Hypothesis H6 was intended to test whether the independent/predictor variable (Frequency of past travel) has an impact on the dependent/outcome variable (Travel Intention). Hypothesis H7 was intended to test whether the independent/predictor variable (extent of covid-19 awareness) has an impact on the dependent/outcome variable (Travel Intention).

C. Findings

The results of the factor analysis as well as the linear regression analyses are presented in this section. Firstly, the result of the exploratory factor analyses found the indicators as presented in Table 1. Though we considered several factors for the construct, based on the factor analysis, we have three factors such as 1- Travelling during COVID-19 is positive, 2 -Travelling during COVID-19 is useful 3- Travelling during COVID-19 is valuable, selected for the construct "individual perception", two factors such as 1 - Have resources (money) to travel during COVID-19 2 - Have enough time to travel during COVID-19, selected for the construct "Perceived extent we can control our behavior", three factors such as 1 - Wear face mask while travelling during COVID-19 2 - Wash my hands frequently while travelling during COVID-19 3 - Maintain social distance while travelling during Covid-19, selected for the construct "Readiness to adopt PNPIs", three factors such as 1 - Infection rate of COVID-19 2 - Negative impact of COVID-19 on social order 3 - Negative impact of COVID-19 on Indian economy, selected for the construct "extent of seriousness of COVID-19 acknowledged", one factor such as Frequency of Travel, selected for the construct "Frequency of past iravel", one factor like To what extent, are you aware of Covid-19 and the other variants, selected for the construct "Extent of Covid-19

awareness", and three factors such as 1 - Planning to travel during COVID-19 in the near future 2 - Make an effort to travel during COVID-19 in the near future 3 - Invest time and money to travel during COVID-19 in the near future, selected for the construct "Travel Intention". The selected indicators for the projected factors were included for regression analyses to test the proposed hypotheses and are presented in Appendix B.

Following Table 1, hypotheses H1, H3, H4, H5, H6, and H7 were tested. The result of the linear regression (see Table 2) indicates that the individual perception is positively correlated to the travel intention ($\boldsymbol{\beta}$ = 0.177) and it is statistically significant at 90% (p-value <0.10) significance level. Hence hypothesis H1 is marginally supported. and the significance level is 90%. On the other hand, the readiness to adopt PNPI's, Extent of seriousness of COVID-19 acknowledged, Frequency of past travel does not influence, the travel intention (p-value > 0.10). Hence, the hypothesis, H3, H4 and H6 are not supported as they are not statistically significant. Linear regression analysis now investigated the impact of perceived extent of control of our behavior on the travel intention, the results indicated that they have positive relationship and the perceived extent of control of our behavior has a greater impact on the travel intention (p-value<0.001) and it is statistically significant at 99% significance level. Therefore, H5 is supported. Finally, we tested the influence of the extent of awareness of covid-19 and its variant on the travel intention, the results revealed that there is a negative relationship between awareness of covid-19 and its variants and the travel intention ($\boldsymbol{\beta}$ = -0.219). We can also see that the relationship between them is statistically significant at 90% level. Hence H7 is supported.

VI.   DISCUSSION

Based on the findings, we understand that individual perception has a positive relationship with travel intention. In other words, individual perception influences the travel intention of consumers, however the extent of the influence is low. From the analysis performed, we have also found that the extent of seriousness of Covid-19 acknowledged has no influence on the travel intention which means while travelling via air, consumers do not take the extent of seriousness of Covid-19 into consideration. It could be because people have started taking Covid-19 for granted and accepted Covid-19 as a part of their lives, which would explain the reason for "extent of seriousness of Covid-19" not having an impact on the travel intention. We also studied the relationship between readiness to adopt PNPI's with travel intention, and we understand that the readiness to adopt PNPI's does not influence the travel intention of the consumers. Personal Non-Pharmaceutical Interventions (PNPI) were kept in place to reduce the risk of infection due to Covid-19. PNPI's include enhancing awareness of the pandemic: augmenting personal hygiene habits when travelling such as using masks, hand hygiene, practicing cough etiquette; adopting social distancing and avoiding contact touch (Benkouiten et al., 2014). However, we understand that the consumers are reluctant in adopting PNPI's and the decision to travel via air is not affected by their readiness to adopt PNPI's. As per the analysis conducted, we found no relationship between frequency of travel and travel intention in the consumers. In other words, the travel intention of the consumer is not affected by the number of times they travel via air. This could be because during Covid-19, the consumers would be travelling via air due to unavoidable commitments. Hence, consumers would travel, irrespective of their intention to travel. We found a positive correlation between the perceived extent of control of our behavior and the travel intention. In this regard, we understand that the consumers who can control their behavior, will be able to influence their travel intention. Lastly, we found a negative relationship between the Extent of Covid-19 awareness and Travel intention. In other words, it can be understood that the higher the awareness of covid 19 and its other variants, the lesser will be the intention of the consumers to travel via air.

VII.   CONCLUSION, IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH

As the world still battles through Covid-19, lives have come to normalcy and people are learning how to live with Covid-19. This study employed constructs to understand a relationship with the air travel intention of consumers.

Based on our research, we can conclude that constructs like Individual Perception and perceived extent of control of our behavior, impacts air travel intention of the consumers during Covid-19 and its variants positively but to a low extent and high extent respectively.

However, constructs like the readiness to adopt PNPI's, Extent of seriousness of COVID-19 acknowledged, and Frequency of past travel have no relationship with the air travel intention of consumers during Covid-19 and its variants. But construct-like extent of awareness of covid-19 is found to have a negative relationship with air travel intention of consumers during Covid-19 and its variants.

Research was carried out for Indian consumers irrespective factors like gender, geographical locations and ethnicities. Hence, there is a scope for conducting future research on the air travel intention taking these factors into consideration.

Table 1 - Exploratory factor analysis and indicators

Exploratory factor analysis	Indicators
Individual Perception	1 - Travelling during COVID-19 is positive 2 - Travelling during COVID-19 is useful 3 - Travelling during COVID-19 is valuable
Perceived extent we can control our behavior	1- I believe that I can travel during COVID-19 2 - Have resources (money) to travel during COVID-19 3 - Have enough time to travel during COVID-19
Readiness to adopt PNPIs	1 - Wear face mask while travelling during COVID-19 2 - Wash my hands frequently while travelling during COVID-19 3 - Maintain social distance while travelling during Covid-19
Travel intention	1 - Planning to travel during COVID-19 in the near future 2 - Make an effort to travel during COVID-19 in the near future 3 - Invest time and money to travel during COVID-19 in the near future
Extent of seriousness of COVID-19 acknowledged	1 - Infection rate of COVID-19 2 - Negative impact of COVID-19 on social order 3 - Negative impact of COVID-19 on Indian economy
Frequency of past travel	Frequency of Travel (1- Never, 2- Very Rare, 3- Rare, 4- Often, 5- Very Often
Extent of Covid-19 awareness	To what extent, are you aware of the Covid-19 and the other variants? (1 - Completely Unaware, 2 - Unaware, 3 - Neither/Nor, 4 - Aware, 5 - Completely Aware

Table 7. Linear regression

	Unstandardized Coefficients B	Standardized Coefficients Beta	t-value	Sig. (p-value)	
(Constant)	1.315		1.75	0.082	
H1: IndividualPerception	0.177	0.156	1.755	0.081	Supported
H3 : ReadinesstoadoptPNPIs	-0.062	-0.049	-0.616	0.539	
H4 : extendofseriousnessofCOVID19acknowledged	0.194	0.129	1.614	0.109	
H5 : Perceivedextentwecancontrolourbehavior	0.344	0.327	3.768	0.00	Supported
H6 : Frequency of Air travel during Covid-19	0.061	0.058	0.741	0.46	
H7 : To what extent, are you aware of Covid-19 and its other variants?	-0.219	-0.149	-1.913	0.058	Supported

Dependent Variable: Travel Intention

REFERENCES

[1] Andrews, M. A., Areekal, B., Rajesh, K. R., Krishnan, J., Suryakala, R., Krishnan, B., ... & Santhosh, P. V. (2020). First confirmed case of COVID-19 infection in India: A case report. The Indian journal of medical research, 151(5), 490.

[2] Benkouiten, S., Brouqui, P., & Gautret, P. (2014). Non-pharmaceutical interventions for the prevention of respiratory tract infections during Hajj pilgrimage. Travel Medicine and Infectious Disease, 12(5), 429–442. https://doi.org/10.1016/j. Tmaid.2014.06.005

[3] Bhati, A. S., Mohammadi, Z., Agarwal, M., Kamble, Z., & Donough-Tan, G. (2021). Motivating or manipulating: The influence of health-protective behavior and media engagement on post-COVID-19 travel. Current Issues in Tourism, 24(15), 2088-2092.

[4] Business Today Desk (2021) "COVID-19 impact: India's airlines suffered a loss of Rs 19,564 cr in 20-21" https://www.businesstoday.in/industry/aviation/story/covid-19-impact-indias-airlines-suffered-loss-of-rs-19564-cr-in-20-21-says-govt-314578-2021-12-06", Accessed on 25th December 2021)

[5] Calgaro, E., Lloyd, K., & Dominey-Howes, D. (2014). From vulnerability to transformation: A framework for assessing the vulnerability and resilience of tourism destinations. Journal of Sustainable Tourism, 22(3), 341-360.

[6] Chua, B. L., Al-Ansi, A., Lee, M. J., & Han, H. (2021). Impact of health risk perception on avoidance of international travel in the wake of a pandemic. Current Issues in Tourism, 24(7), 985-1002.

[7] Das, S. S., & Tiwari, A. K. (2021). Understanding international and domestic travel intentions of Indian travelers during COVID-19 using a Bayesian approach. Tourism Recreation Research, 46(2), 228-244.

[8] Fornell, C., and D. F. Larcker. 1981. "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error." Journal of Marketing Research 18 (1): 39–50.

[9] Fricker, R. D. (2008). Sampling methods for web and e-mail surveys. In N. Fielding, R. M. Lee, & G. Blank (Eds.), The SAGE handbook of online research methods (pp. 195–216). Sage.

[10] Gallego, I., & Font, X. (2021). Changes in air passenger demand as a result of the COVID-19 crisis: Using Big Data to inform tourism policy. Journal of Sustainable Tourism, 29(9), 1470-1489.

[11] Guan, W. J., Ni, Z. Y., Hu, Y., Liang, W. H., Ou, C. Q., He, J. X., ... & Zhong, N. S. (2020). Clinical characteristics of coronavirus disease 2019 in China. New England journal of medicine, 382(18), 1708-1720.

[12] Han, H., & Hyun, S. S. (2017). Impact of hotel-restaurant image and quality of physical-environment, service, and food on satisfaction and intention. International Journal of Hospitality Management, 63, 82–92. https://doi.org/10. 1016/j.ijhm.2017.03.006

[13] Jager, J.,Putnick,D.L.,&Bornstein,M.H.(2017).II.More thanjustconvenient: The scientific merits of homogeneous convenience samples. Monographs of the Society for Research in Child Development,82(2), 13–30.https://doi.org/10.1111/mono.12296

[14] Kim, E. E. K., Seo, K., & Choi, Y. (2021). Compensatory travel post COVID-19: Cognitive and emotional effects of risk perception. Journal of Travel Research, 00472875211048930.

[15] Kline, R. B. (2009). Principles and practice of structural equation modeling (3rd ed.). Guilford Press.

[16] Lee, C. K., Song, H. J., Bendle, L. J., Kim, M. J., & Han, H. (2012). The impact of non-pharmaceutical interventions for 2009 H1N1 influenza on travel intentions: A model of goal-directed behavior. Tourism management, 33(1), 89-99.

[17] Li, J., Nguyen, T., & Coca-Stefaniak, J. A. (2020a). Coronavirus impacts on post-pandemic planned travel behaviours. Annals of Tourism Research, 102964. Advance online publication. https://doi.org/10.1016/j.annals.2020.102964

[18] Li, J., Yang, A.,Dou, K.,Wang, L., Zhang,M., & Lin, X.(2020b). Chinese public's knowledge, perceived severity, and perceived controllability of the COVID-19 and their associations with emotional and behavioural reactions, social participation, and precautionary behaviour: A national survey. PsyArXiv. Advance online publication. https://doi.org/10.31234/osf.io/5tmsh

[19] NN Markedsdata. 2016. Welcome to Navne & Numre® Erhverv. Accessed October, 2015. http://erhverv.nnmarkedsdata.dk/#. Nunnally, J. C., and I. H. Bernstein. 1994. Psychological Theory. New York: McGraw-Hill.

[20] Srivastava, S. (July 2022), "An Analysis of Coronavirus impact on Industries (& Survival Measures)", Appinventiv, https://appinventiv.com/blog/coronavirus-impact-on-industries/, Accessed on 24th July 2022.

[21] WHO Report, 2021,"Coronavirus disease (COVID-19) pandemic", https://www.who.int/europe/emergencies/situations/covid-19, Accessed on 25th December 2021.

[22] Zhu, N., Zhang, D., Wang, W., Li, X., Yang, B., Song, J., ... & Tan, W. (2020). A novel coronavirus from patients with pneumonia in China, 2019. New England journal of medicine.

[23] https://www.tandfonline.com/doi/abs/10.1080/09669582.2013.826229

[24] https://wttc.org/News-Article/WTTC-now-estimates-over-100-million-jobs-losses-in-the-Travel-&-Tourism-sector-and-alerts-G20-countries-to-the-scale-of-the-crisis

APPENDICES

A. *Appendix 1. Questionnaire*

Construct	Questions
Individual Perception	1 = Strongly disagree, 5 = Strongly agree
	1 Travelling during COVID-19 is positive 2 Travelling during COVID-19 is useful 3 Travelling during COVID-19 is valuable
Perception of others' attitudes	1 = Strongly disagree, 5 = Strongly agree
	1 People who are important to me think it is okay for me to travel during COVID-19 2 Most people who are important to me understand my travel during COVID-19 3 Most people who are important to me agree with me about traveling during COVID-19
Perceived extent we can control our behavior	1 = Strongly disagree, 5 = Strongly agree
	1 I believe that I can travel during COVID-19 2 Have resources (money) to travel during COVID-19 3 Have enough time to travel during COVID-19
Readiness to adopt PNPIs	1 = Strongly disagree, 5 = Strongly agree
	1 Wear face mask while travelling during COVID-19 2 Wash my hands frequently while travelling during COVID-19 3 Maintain social distance while travelling during Covid-19
Travel intention	1 = Strongly disagree, 5 = Strongly agree
	1 Planning to travel during COVID-19 in the near future 2 Make an effort to travel during COVID-19 in the near future 3 Invest time and money to travel during COVID-19 in the near future
Extent of seriousness of COVID-19 acknowledged	1 = Not severe at all, 5 = Very severe
	1 Infection rate of COVID-19 2 Negative impact of COVID-19 on social order 3 Negative impact of COVID-19 on Indian economy
Frequency of past travel	Frequency of Travel
Extent of Covid-19 awareness	To what extent, are you aware of the Covid-19 and the other variants?

B. Appendix 2

Constructs and indicators	Variable name	Principal component factor loading
Construct 1 - Individual Perception 1 - Travelling during COVID-19 is positive 2 - Travelling during COVID-19 is useful 3 - Travelling during COVID-19 is valuable	IndividualPerception1 IndividualPerception2 IndividualPerception3	0.792 0.865 0.833
Construct 2- Perception of others' attitudes[a] 1 - People who are important to me think it is okay for me to travel during COVID-19 2 - Most people who are important to me understand my travel during COVID-19 3 - Most people who are important to me agree with me about traveling during COVID-19	Perceptionofothersattitudes1 Perceptionofothersattitudes2 Perceptionofothersattitudes3	- - -
Construct 3- Perceived extent we can control our behavior 1- I believe that I can travel during COVID-19[a] 2 - Have resources (money) to travel during COVID-19 3 - Have enough time to travel during COVID-19	Perceivedextentwecancontrolourbehavior1 Perceivedextentwecancontrolourbehavior2 Perceivedextentwecancontrolourbehavior3	- 0.836 0.805
Construct 4- Readiness to adopt PNPIs 1 - Wear face mask while travelling during COVID-19 2 - Wash my hands frequently while travelling during COVID-19 3 - Maintain social distance while travelling during Covid-19	ReadinesstoadoptPNPIs1 ReadinesstoadoptPNPIs2 ReadinesstoadoptPNPIs3	0.912 0.939 0.895
Construct 5 - Travel intention 1 - Planning to travel during COVID-19 in the near future 2 - Make an effort to travel during COVID-19 in the near future 3 - Invest time and money to travel during COVID-19 in the near future	Travelintention1 Travelintention2 Travelintention3	0.893 0.824 0.769
Construct 6 - Extent of seriousness of COVID-19 acknowledged 1 - Infection rate of COVID-19 2 - Negative impact of COVID-19 on social order 3 - Negative impact of COVID-19 on Indian economy	extendofseriousnessofCOVID19acknowledged1 extendofseriousnessofCOVID19acknowledged2 extendofseriousnessofCOVID19acknowledged3	0.704 0.838 0.794
Construct 7 - Frequency of past travel Frequency of Travel	Frequencyofpasttravel1	0.921
Construct 8 - Extent of Covid-19 awareness To what extent, are you aware of the Covid-19 and the other variants?	ExtentofCovid19awareness1	0.959

a - Items removed during EFA

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