

# **Analysis of the factors influencing the tourism experience value co-creation under the COVID-19**

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## **Introduction**

COVID-19 brought many potential risks to the tourism industry. The serious consequences of these objective risks will directly affect tourists' travel decisions (Sanchez et al., 2021). The impact of these risks on tourists' decision-making is multi-level and comprehensive. Many previous studies have shown the impact of risk perception related to COVID-19 on the tourism economy (Godovykh & Pizam, 2021; Agyeiwaah, 2021; Sigala, 2020), tourists' travel demand (Madani et al., 2020), and travel behavior intentions (Neuburger & Egger, 2020; Chua et al., 2021; Peluso and Pichierri, 2020). The past literature on value co-creation has focused on studying the mechanisms and influencing factors of value co-creation (Cabiddu et al., 2013; Rihova et al., 2014; Morosan & DeFranco, 2016; Dobrzykowski, 2010). However, few studies on value co-creation under COVID-19 have been retrieved (Ratten, 2020; Arslan, 2021). Moreover, there is no prior research on the impact of COVID-19 on value co-creation in the tourism industry.

## **Model**

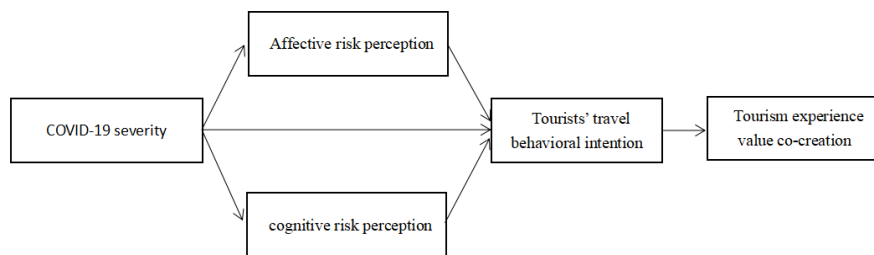
This study constructs a research model of the value co-creation mechanism of tourists' participation in the tourism experience during the COVID-19 epidemic. As shown in Figure 1, this study explores how tourism experience value co-creation changes under the epidemic and examines the correlation among tourists' risk perception, travel behavioral intention, and travel experience value co-creation combined with the existing theoretical basis. The specific purposes of this study are to (1) clarify the impact of COVID-19 severity on risk perception and travel behavioral intention of tourists, (2) identify the relationship between risk perception and travel behavioral intention, and (3) study the relationship between travel behavioral intention and tourism experience value co-creation, and (4) test the mediating role of travel behavioral intention in the relationship between risk perception and tourism experience value co-creation.

## **Methodology**

The research object of this study is tourists in China. The questionnaire was issued from April 25, 2021, to May 30, 2021. A total of 319 questionnaires were distributed, and all questionnaires were valid because all questions were set in the online questionnaire program in the form of compulsory answers. In this study, 20 senior tourism enthusiasts were selected to conduct a pre-survey by email before the questionnaire was officially

issued, and the items of the questionnaire that were not clear enough were modified to form the final questionnaire according to the interview results. The software SPSS 26.0 was used for exploratory factor analysis of all the measurement variables in this study.

Figure 1. Research model



## Results

The study evaluates the values of path coefficients (estimate) and significance levels (CR) of each latent variable in the results of structural equation modeling analysis. Based on these values, it is possible to determine the causal relationship and influence strength between various factors and test the overall path hypothesis proposed above (see Table 1). Among the six hypothesized paths, the standardized path coefficients of four paths (including SC-->ARP; SC-->CRP; CRP-->TBI; TBI-->TVCC) passed the significance test of 0.001 level. The standardized path coefficient of one path (ARP-->TBI) passed the significance test of 0.01 level. The standardized path coefficient of one path (SC-->TBI) passed the significance test of 0.05 level.

Table 1. Results of the structural equation modeling test.

Path	Estimate	S.E.	C.R.	P	Conclusion
SC-->ARP	0.359	0.084	4.288	0.000***	H1 Supported
SC-->CRP	0.343	0.068	5.066	0.000***	H2 Supported
ARP-->TBI	0.155	0.057	2.704	0.007**	H3 Supported
CRP-->TBI	0.296	0.082	3.610	0.000***	H4 Supported
SC-->TBI	0.173	0.087	2.000	0.045*	H5 Supported
TBI-->TVCC	0.363	0.052	6.918	0.000***	H7 Supported

Note. CRP= Cognitive Risk Perception; ARP=Affective Risk Reception; SC=COVID-19 severity; TBI=Tourists' Behavioral Intention; TVCC=Tourism Experience Value Co-creation. \*= $p < 0.05$ , \*\*= $p < 0.01$ , \*\*\*= $p < 0.001$ .

The analysis (Table 2) showed that cognitive risk perception and affective risk perception played an overall mediating role in the impact of the COVID-19 severity on tourists' behavior intention with 95% confidence intervals of (0.041; 0.155) and (0.020, 0.110), respectively, excluding 0. The mediating effect of cognitive risk perception (indirect effect  $b=0.092$ ,  $p < 0.01$ ) was higher than that of affective risk perception (indirect effect  $b=0.061$ ,  $p < 0.01$ ). The overall mediating role of tourists' behavior intention in the effect of the COVID-19 severity on the tourism experience value co-creation was significant, with 95% confidence intervals of (0.077, 0.259), excluding 0. In addition, the overall mediating effect played by tourists' behavioral intention in COVID-19 in the influence of cognitive risk perception and affective risk perception on tourism experience value co-creation also showed significance with 95% confidence

intervals of (0.115, 0.316) and (0.086, 0.289), respectively. Among them, the overall mediating effect of tourists' behavior intention in the impact of cognitive risk perception on the tourism experience value co-creation is the largest, with an indirect effect of 0.206. It is significantly higher than the mediating effects of the other two paths, with indirect effects of 0.165 and 0.180, respectively.

Table 2. Bootstrapping effects and 95% confidence intervals (CI) for the mediation model

	Effect	P-value	95% confidence interval		Conclusion
			Lower bound	Upper bound	
SC-->CRP-->TBI	0.092	0.000***	0.041	0.155	H6a Supported
SC-->ARP-->TBI	0.061	0.000***	0.020	0.110	H6b Supported
SC-->TBI-->TVCC	0.165	0.000***	0.077	0.259	H8 Supported
CRP-->TBI-->TVCC	0.206	0.000***	0.115	0.316	H9a Supported
ARP-->TBI-->TVCC	0.180	0.000***	0.086	0.289	H9b Supported

*Note.* CRP= Cognitive Risk Perception; ARP=Affective Risk Reception; SC=COVID-19 severity; TBI=Tourists' Behavioral Intention; TVCC=Tourism Experience Value Co-creation. \*\*\* =p<0.001.

## Conclusion

This study constructed the influence mechanism model of COVID-19 severity, risk perception, tourists' travel behavioral intention, tourism experience value co-creation and verified each hypothesis through path analysis. The results show that COVID-19 severity significantly affects cognitive risk perception and affective risk perception. In turn, cognitive risk perception and affective risk perception significantly impact tourists' travel behavioral intention. Tourists' travel behavioral intention has a significant positive effect on tourism experience value co-creation. At the same time, risk perception (including cognitive risk perception and affective risk perception) and tourists' travel behavioral intention play a mediating role in the impact of tourism experience value co-creation.

The findings of this study have both theoretical and managerial implications. In the theoretical sense, they contribute to the still scarce literature on tourism value co-creation during the epidemics and reshape the influencing mechanisms of tourism value co-creation. Since COVID-19 continues to ferment in the world and its harm will bring a long time to the destruction of the tourism industry, this study provides a reliable theoretical reference for the follow-up longitudinal research. This study also provides managerial implications for the study of value co-creation in the field of tourism. While this study maps value co-creation behavior during the COVID-19 from tourists' perspective, conversely, tourism agencies can also get a great degree of enlightenment from the feedback of tourists.

**References** can be provided upon demand.

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