



Travel desire over intention in pandemic times

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1. Introduction

Travel intention refers to the likelihood and commitment towards the idea to travel, and it is influenced by attitudinal as well as practical factors (e.g., budget limits, time availability, etc.) (Sönmez & Graefe, 1998). Discerning motivation and intention is vital to understanding the consumer decisions in the context of tourism where emotions lie at the core of the consumer decision-making process (Walters & Li, 2018). Research into the motivations of travel decisions dates back several decades with Crompton (1979) emphasizing socio-psychological needs. However, in the specific context of the COVID-19 pandemic, structural constraints in the form of travel restrictions act as non-negotiable barriers to tourism that cannot be adjusted despite interest or commitment. Due to the nature of tourism, there are many inherent risks and uncertainties since experiences are intangible co-created outcomes with a number of tacit elements that can result in concerns about communication, accessibility and physical risks (Khan, Chelliah, Khan, & Amin, 2019). A subset of the latter, health risks has received significantly more attention in the current COVID-19 pandemic (Isaac & Keijzer, 2021). Following the outbreak of the pandemic, several studies have considered travel risk perception affecting intentions of travelers (e.g., Neuburger & Egger, 2021), highlighting not only differences and behavioural patterns across regions and at different points in time, but also suggesting ways to mitigate the effects of perceived risk (Matiza, 2020). (See Table 1.)

At the early stage of the pandemic in particular, potential travelers were not able to define travel goals due to, in addition to the health risks, travel disruption caused by the differing responses of countries to their levels of infections and mortality. As the pandemic continued, its severe toll at destinations worldwide may have shaped future behavioural intentions, with some tourists indefinitely postponing travel (Matiza & Kruger, 2021). For others, researchers have theorized that lockdown restrictions and travel constraints may result in compensatory consumption behaviour, including loss of autonomy and health risks that may encourage the willingness to engage in social and hedonic behaviour (Zhang, Lingyi, Peixue, Lu, & Zhang, 2021). This is in line with previous research suggesting that although epidemics tend to result in intense periods of privation that hinder many people from travelling, their impact is rather transitory as a strong, concomitant stimulus to travel is noted within the first two years since the end of the event (McKercher, 2021). However, COVID-19 represents quite a unique context given the scale of its aftermath.

For researchers seeking to examine travel behaviour in an evolving crisis scenario, these multiple perspectives pose a dilemma. Due to the unstable environment with new COVID-19 variants resulting in new structural constraints and misinformation threats posed by the blurring of a multitude of sources (Fedeli, 2020), individuals may not be able to clearly convey a definitive intention to undertake travelling. A study by Li, Nguyen, and Coca-Stefaniak (2021) revealed the gap between travel

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Table 1

The associations between Travel Intention, Travel Craving and Vaccine Confidence.

	Weights	T Statistics	95% BCa confidence intervals	VIF	f ²
Travel Intention- > Vaccine Confidence	0.002	0.096	-0.032-0.036	1.028	0.000
Travel Craving - > Vaccine Confidence	0.269	17.186	0.239-0.300	1.028	0.076

$$R^2 = 0.073 \quad Q^2 = 0.039.$$

intention and actual travel behaviour in the context of China, indicating intention may not lead to actual travel, especially in the uncertainty of the pandemic. Motivated by extant research introducing the concept of *travel craving* (Mitev & Irimiás, 2020) defined as "... a cognitive-emotional event with aversive or incentive properties" to engage in travelling activities in a context of suppressed desire for reasons beyond one's control, we argue that the traveler's craving may represent a valid theoretical construct as a critical component of the behavioural intention process in light of the current health crisis. Further, given the latent relevance of COVID-19 vaccination towards the intention to travel as highlighted in a number of studies (Ekinci, Gursoy, Can, & Williams, 2022; Williams, Nguyen, Del Chiappa, Fedeli, & Wassler, 2021) and the argument that travelers may have distinct attitudes towards vaccination from ordinary people (Adongo, Amenumey, Kumi-Kyereme, & Dubé, 2021), this research seeks to contribute to the rapidly growing body of knowledge on health and tourism by comparing the associations; travel intention and travel craving, with perceptions of COVID-19 vaccination.

2. Method and study results

In order to test the predictive power of Travel Intention and Travel Craving, the two constructs were included in a structural model to predict their degree of influence on individuals' confidence in the efficacy of the COVID-19 vaccine. We adopted this approach since vaccination adoption by potential travelers is an important tool to support the restarting of the tourism industry (Gursoy, Selcuk Can, Williams, & Ekinci, 2021). For tourists and travelers in general, the adoption of voluntary health behaviour (vaccination) can reduce COVID-19 health risks and enable travel. It has been advanced that individuals interested in travel have a positive perception of COVID-19 vaccination (Gursoy, Ekinci, Can, & Murray, 2022). We, therefore, theorized that there would be significant associations between Travel Intention and Vaccine Confidence, and Travel Craving and Vaccine Confidence. Travel Intention was measured by both intention to travel domestically and abroad. Accordingly, Travel Intention was considered as a formative higher-order construct, comprising of two reflective components of 'Travel Intention – Abroad' and 'Travel Intention – Domestic', each measured by 3 items. The scale of Travel Craving proposed by Mitev and Irimiás (2020) was adapted, including 5 measurement items. The measurement of COVID-19 Vaccine Confidence was adapted from Shapiro et al.'s (2018), comprising of 8 items. A survey containing these measurement scales was carried out in January and February 2021 in Italy, with convenience and snowball sampling techniques employed. A total of 3893 usable responses were obtained. The structural model suggests the associations between Travel Intention, Travel Craving and Vaccine Confidence were analysed using SmartPLS 3.0.

The measurements of all reflective constructs were first validated. One item of Vaccine Confidence was eliminated due to factor loading of less than 0.5. The results of the remained reflective measurement model, as presented in Appendices A and B, showed the satisfactory values of factor loadings, Cronbach's alpha, Composite Reliability, Average Variance Extracted, the Fornell-Larcker criterion, indicating the

achievement of validity and reliability (Hair, Hult, Ringle, & Sarstedt, 2017). The formative higher-order measurement model (see Appendix C) was also found to be valid with the significant weights of the two lower-order components, and VIF values of less than 3 (Hair et al., 2017). The structural model, presenting the associations between Travel Intention, Travel Craving and Vaccine Confidence, was then estimated. The results revealed a non-significant relationship between Travel Intention and Vaccine Confidence ($\beta = 0.002$, $t = 0.096$). Meanwhile, the relationship between Travel Craving and Vaccine Confidence was statistically significant ($\beta = 0.269$, $t = 17.186$). The construct cross-validated redundancy Q^2 value of 0.039 indicated the predictive relevance of this model (Hair et al., 2017). However, R^2 coefficient of determination value of 0.073 demonstrated that only 7.3% of the variability of Vaccine Confidence was explained by Travel Craving. Also, the effect size f^2 of 0.076 indicated a rather small effect of Travel Craving on Vaccine Confidence. This seems plausible as Vaccine Confidence is believed to be influenced by a variety of factors such as trust in a vaccine, vaccine concerns, vaccine history, etc.

3. Discussion

This research identifies an important theoretical contribution applicable in the context of the current health crisis, i.e., the limitations presented by the traditional theoretical construct of Travel Intention to explain attitude towards a health intervention (COVID-19 vaccination) that can enable future travel. The risk factors and structural constraints posed by the pandemic are assumed to lessen the influence of Travel Intention on Vaccine Confidence, while the cognitive-emotional construct of Travel Craving is likely to have stronger predictive power. The empirical results of our investigation support the argument that Travel Intention does not represent a valuable predictor of Vaccination Confidence in the COVID-19 health crisis. Our contribution is important as it extends the emerging academic discussion on travel and vaccination intentions and supports the introduction of the Travel Craving construct proposed by Mitev and Irimiás (2021). Previous factors deemed relevant for the understanding of travel decision making may therefore ascertain their limitations of predictability amidst the COVID-19 and future analogous scenarios. In particular, elements of the emotional sphere as well as safety perception may prove particularly relevant. The latter element, for instance, may be altered by further extrinsic forces like the promotion of specific destinations (eg. safe bubbles and *covid-free islands*), therefore presenting significant implications for travel and tourism organizations and their marketing activities.

Given the higher relevance of Travel Craving vs. Intention found in this study, further practical considerations are identified. For instance, impulsive buying type of behaviour may prove particularly relevant under certain circumstances (e.g., travelers with higher safety perception), while more practical constraints acting as barriers of intention may, on the other hand, also play a significant role. Conversely, some real life cases have also shown that not everyone who craves for travel or even needs to travel is willing to uptake vaccinations. Cases in which travel craving is not enough to stimulate vaccine uptake should thus be further investigated. Furthermore, other relationships could be tested, such as vaccine confidence inducing the desire or craving for travel through an inverse relationship and the relationship between Travel Craving and Intention.

This is deemed critical to better understand travel decision dynamics in challenging times such as those associated with the COVID-19 health crisis. Finally, our findings offer relevant implications for health regulators, policymakers and destination marketers that may consider marketing and communication strategies by embedding high-emotional elements that aim at shaping the desire/craving to travel, as a way to increase vaccine confidence.

Appendix A. The reflective measurement model analysis

	Mean	Factor loading	Cronbach's alpha	CR	AVE
Vaccine Confidence			0.858	0.892	0.551
CovVac1	4.531	0.880			
CovVac2	4.677	0.870			
CovVac3	3.584	0.640			
CovVac4_rev*	3.978	0.524			
CovVac5	3.354	0.669			
CovVac6	4.426	0.892			
CovVac8_rev*	3.719	0.632			
Travel craving			0.941	0.955	0.809
TraCrav1	3.086	0.839			
TraCrav2	3.174	0.917			
TraCrav3	3.116	0.929			
TraCrav4	3.084	0.893			
TraCrav5	3.216	0.918			
Travel Intention - Abroad			0.906	0.941	0.842
TraInt_ab1	3.386	0.922			
TraInt_ab2	3.307	0.943			
TraInt_ab3	2.884	0.887			
Travel Intention - Domestic			0.852	0.911	0.774
TraInt_it1	4.157	0.896			
TraInt_it2	4.108	0.916			
TraInt_it3	3.508	0.824			

* Reverse coded.

Appendix B. Discriminant validity - the Fornell-Larcker criterion

	Travel Intention - Domestic	Travel Intention - Abroad	Travel craving	Vaccine confidence
Travel Intention - Domestic	0.880			
Travel Intention - Abroad	0.456	0.918		
Travel Craving	0.175	0.111	0.9	
Vaccine Confidence	0.083	0.002	0.27	0.742

Appendix C. The formative higher-order measurement model analysis.

	Weights	T Statistics	95% BCa confidence intervals	VIF
Travel Intention - Domestic	0.547	130.799	0.539–0.556	1.262
Travel Intention - Abroad	0.624	114.596	0.613–0.635	1.262

Appendix D. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.annale.2022.100051>.

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