

# Travelling Intention at the time of COVID-19: an extension of the Theory of Planned Behavior

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# **Travelling Intention at the time of COVID-19: an extension of the Theory of Planned Behavior**

## **Abstract**

The present study aims at providing a prompt and deep understanding of people's intention to travel for leisure in the COVID-19 pandemic time. Extending the Theory of Planned Behavior, we predict that also perceived fears, health status and stress overload can affect the travelling intention.

Literature review of past research was performed in order to develop a theoretical framework made of 10 hypotheses. Data was collected through a survey and tested using Structural Equation Model Analysis.

Findings indicate that subjective norms and perceived behavioral control are no more predictors of traveling intention, instead the new variables Stress Overload and Perceived Fears affect it. Thus, our results suggest that in the period of Covid 19 behaviours are driven by personal factors while others' opinion do not play a significant role. These results can assist the tourism industry to build new effective marketing strategies that can encourage people in travelling in the best possible way in line with what makes them feel safe.

**Keywords:** *intention to travel for leisure, Covid-19, Theory of Planned Behavior*

**Track:** *Tourism Marketing*

## **1. Introduction**

COVID-19 has changed the world forever and has impacted heavily on individuals and industries, including the tourism and the travel one. As explained by Rivera (2020), examining the hospitality and tourism industries in the pandemic context is of paramount importance in order to be able to address the recovery process even in the continued presence of limitations to travel activities (Assaf & Scuderi, 2020). Due to the global pandemic of COVID-19, several prevention measures were taken, travellers face various constraints and people change their normal behaviors both in their everyday life and during holidays.

This research suggests to extend the Theory of Planned Behavior (TPB) (Ajzen, 1991) in order to develop a theoretical framework that fits people's intention to travel for leisure in Italy in autumn-winter 2021 Covid-19 pandemic period. This study contributes to existing knowledge since: (1) it adds three further variables to the Theory of Planned Behavior to better examine the specific and actual COVID-19 context: perceived fears, health status and stress overload; (2) it looks at individual's travelling intention today in order to detect the evolving situation in which, on one side we register an increase in vaccination rates, on the other cold weather has consequences in the possibility of sharing social activities outdoor.

The findings of this study can assist the tourism industry to build effective marketing strategies in order to encourage people in travelling in the best possible way in line with the demand of feeling secure.

## **2. Literature Review and Hypotheses Development**

### *2.1 Theory of planned behavior*

The Theory of Planned Behavior (TPB) is used to understand the process by which an individual engages in a behavior focusing on attitudes, subjective norms and perceived behavioral control as predictors of behavioral intention (Ajzen, 1991). There is a growing body of tourism and leisure research that has applied TPB in both its original or extended form. For example, behavioral intentions in a certain context could be well predicted with TPB constructs and additional variables, such as "visa exemption" (Han, Lee et al. 2011), "environment related variables" (Han 2015), "motivation" (Hsu and Huang 2012), "perceived risk and uncertainty" (Quintal et al., 2010), "winescape" (Quintal, Thomas et al. 2015), "desires" and "anticipated emotions" (Perugini and Bagozzi 2001).

In this research, starting from the original TPB, the following first three hypotheses were formulated then other three new variables will be added and explained:

*HP1: There is a direct positive relationship between attitude and intention to travel for leisure.*

*HP 2: There is a direct positive relationship between subjective norms and intention to travel for leisure.*

*HP 3: There is a direct positive relationship between perceived behavioral control and intention to travel for leisure.*

## *2.2 Perceived fears*

Literature explores both risk factors (Druică, Musso, & Ianole-Călin, 2020) linked to the specific COVID-19 pandemic as of being infected, of being old, of being fragile (Amirkhan, 2021) and the consequent personal fears linked to different situations that can be experienced by people (Rather, 2021) such as general insecurity, fear of remaining stuck in a destination, fear of the quarantine once at home (ENIT, 2021) and so on. At the same time, there are many possible solutions to be implemented in order to improve the travel planning and experience (Assaf & Scuderi, 2020). Thus, the following hypothesis has been formulated:

*HP 4: There is a direct negative relationship between perceived fears and intention to travel for leisure*

## *2.3 Stress overload*

Due to coronavirus pandemic some people are experiencing job loss, perilous living conditions, or the death of a family member (Amirkhan, 2021). The term “stress overload” was coined to describe the persistent state of being overwhelmed by demands (Lunney, 2006).

Assessment of stress overload is proposed as essential to understanding the current pandemic (Amirkhan, 2021). Therefore, it becomes also crucial to understand peoples’ behaviors and reactions in this Coronavirus era according to their stress levels. The following hypotheses were formulated:

*HP5: There is a direct negative relationship between stress overload and intention to travel for leisure*

*HP6: There is a direct positive relationship between stress overload and perceived fears*

## *2.4 Health status*

Understanding if people are feeling completely well, if they have some symptoms or if they require continuous medical care (World Health Organization, 2015) is relevant in order to see how

someone's health status limits the intention to travel for leisure. Especially considering that the risk of infection and severe COVID-19 illness increases sharply in case of weak health conditions. The following hypotheses are then formulated:

*HP7: There is a direct positive relationship between health status and intention to travel for leisure*

*HP8: There is a direct positive relationship between health status and perceived fears*

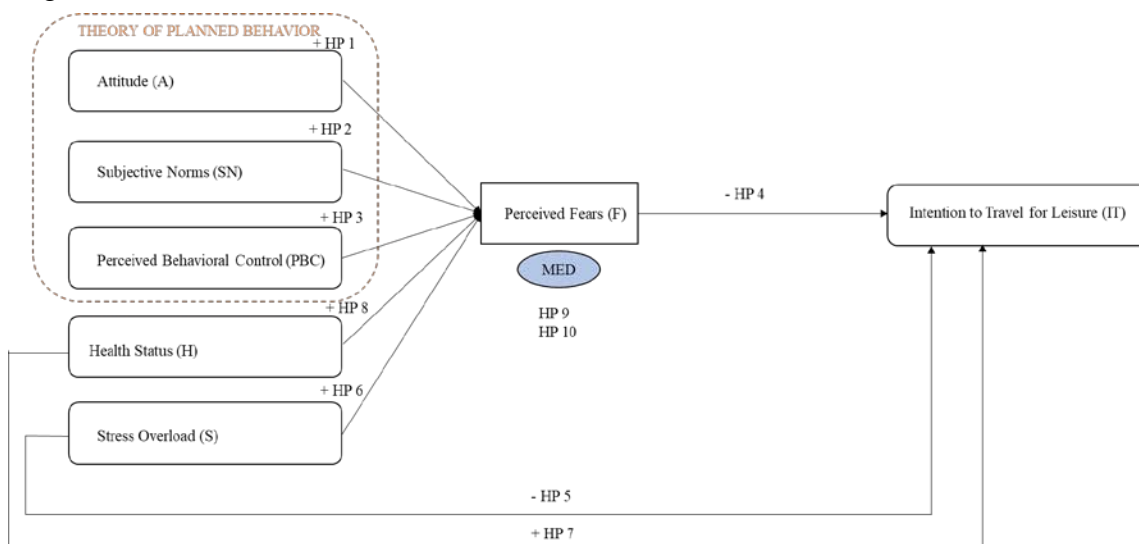
One further assumption is that health status and stress overload not only directly affect the intention to travel for leisure but that these relationships become stronger according to the perceived fears:

*HP9: The positive relationship between health status and the intention to travel for leisure is mediated by perceived fears.*

*HP10: The negative relationship between stress overload and the intention to travel for leisure is mediated by perceived fears.*

Through these Hypotheses, the research model shown in Figure 1 is designed.

Figure 1: Research model



### 3. Research Methodology

Literature review of past research was performed in order to develop the theoretical framework that has been shown in Figure 1. A survey was created and distributed online since September 2021. People eligible to be surveyed have to be: (a) aged 18 years or older; (b) living in Italy. The questionnaire is made of 37 questions, including multiple choice questions and Likert scale questions (scale 1-7). The questionnaires are divided into six sections.

The references to the scales employed for the variables are the following:

- Theory of Planned Behavior (Jordan, Bynum Boley, Knollenberg, & Kline, 2018; Park, Hsieh, & Lee, 2017) – 17 items;
- Stress Overload: (Amirkhan, 2021) – 10 items;
- Health Status (Group, 1990; Hurst, et al., 1994) – 2 items;
- Perceived Fears (Amirkhan, 2021; Genç & Arslan, 2021) – 9 items;
- Intention to Travel for Leisure (Amirkhan, 2021; Das & Tiwari, 2021; Jordan, et al., 2018; Park, et al., 2017) – 1 item.

## 4. Major Results

### 4.1 Descriptive statistics: the sample

The final sample is made of 160 completed questionnaires. Females represent 68.12% of the sample; males represent 31.87%. Average age of the sample is 44.29 years (youngest respondent 18 y.o.; oldest 89 y.o.). The nationality is Italian except for 3 cases which are excluded from the analysis. Around half of the sample (54.72%) stays in cities between 5,000 and 250,000 inhabitants, 18.87% in small towns (less than 5,000 inhabitants) and 26.42% in big cities with over 250,000 inhabitants.

Most of respondents live in families made of 2 to 4 people (respectively 26.88% live in 2, 25.62% live in 3, 25% live in 4), 8.75 has families with over 4 components, while the 13.75% of the sample lives alone.

### 4.2 Descriptive statistics: health and Covid-19 topic

Health was assessed investigating the health status in the last 30 days: 89.91% declared of having felt well or very well, while only a small percentage of people expressed the opposite feeling.

91.88% of respondents did not have Covid-19 infection while only the remaining 8.12% did. Furthermore, most of the sample is vaccinated (only the 13.47% of the sample is not).

Discussing about the Green Pass obligation, mean value of agreement is 5.99 while mean value for vaccine obligation agreement is 5.79.

### 4.3 Descriptive statistics: travelling at the time of Covid-19

To assess people's attitudes and behaviours about travelling for leisure at the time of Covid-19 and specifically (1) travelling experiences during summer 2021 and (2) travelling in autumn/winter 2021, the travelling frequency before the pandemic was considered. 40% of the sample used to

travel 3 or more times per year for leisure, 38.75% twice in a year, 18.12% once a year and only 3.12% wasn't used to travel.

Only 27 people of the sample did not travel last summer. Of those who have travelled, 10.69% has been both in Italy and abroad, 77.86% only in Italy and 11.45% only abroad.

In 57.58% of cases the travelling decision was taken in advance while 42.42% of cases made a last minute choice evaluating the pandemic general situation. Furthermore, 61.36% decided if to travel or not once they were vaccinated.

Moving to the travelling intention for the autumn-winter season, 11.25% already declared they will not travel, 28.75% will behave in the decision taking process as they did before the Covid-19 pandemic while 60% of the sample will wait to take the decision for a last minute evaluation of the health situation. About the intention to go abroad or in Italy, data shows a bigger propensity for Italy (mean 4.56) than for a different country (mean 2.53).

#### *4.4 Descriptive statistics: fears, safety and protection measures at the time of Covid-19*

To understand the main fears that people have linked to the virus while travelling two kinds of questions were administered. First it was asked to declare on a scale 1-7 how different items worry when thinking at travelling for leisure. The need of lock down results to be the biggest worry of our list (mean value 5.11) followed by the introduction of limitations in moving around (mean 5.03) while the idea of not enjoying enough due to restriction is the least in terms of relevance (mean 3.54). Then a list of solutions to the different fears, was presented asking people if there were elements which would have discouraged them to travel.

The hypothesis is that people want to feel safe but that there is a level over which limitations and protection measures instead of enhancing positive feelings just reduce the intention to visit a place. Results show that for over 68% of people the most worrying items for a positive travelling experience are: shops closed, food and beverages only for take away and curfew. Furthermore, people would not appreciate very much: tablets and totems to substitute interactions with employees (25%), a mandatory health assurance (24.38%), and plexy-glass barriers (18.75%). At the opposite, the solutions we have now got used to as temperature measurement, sanitizing activities and distancing do not seem to disturb much.

#### *4.5 Findings*

A structural equation model (SEM), which analyzes the relationship between variables based on their covariance matrix (MacCallum & Austin, 2000), was adopted to assess the causal assumption of the model shown in Figure 1. In fact, SEM is useful for determining the hierarchy, path, and

causal relationship through path analysis, multiple linear regression analysis, and confirmatory factor analysis.

Data was analyzed using the statistical software R ([www.r-project.org](http://www.r-project.org)). Confirmatory Factor Analyses (CFAs) was performed in order to get evidence of convergent and discriminant validity of the measurement scales. Final number of included items are as follows:

- Theory of Planned Behavior: 12 items;
- Stress Overload: 9 items;
- Health Status: 1 item;
- Perceived Fears: 6 items;
- Intention to Travel for Leisure: 1 item.

According to Hu and Bentler (1999) and McDonald (2002), absolute fit indices were calculated in order to determine how well the model fits the sample data and to demonstrates that the proposed model has a good fit.

The metrics used for goodness-of-fit were Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR) and Test statistics, degrees of freedom and P-values.

The robust version of the indexes is shown in table 1.

	CFI	TLI	RMSEA	SRMR	TEST STATISTICS	Degrees of freedom	P-value (Chi-square)
Model Fit adopted measures	0.879	0.863	0.077	0.070	872.072	361	0.000

Table 1: Model Fit adopted measures

Furthermore, alpha values were estimated for reliability. As Table 2 shows, obtained values were highly reliable.

	Stress Overload	Perceived Fears	Attitude	Subjective Norms
Alpha	0.923	0.858	0.943	0.921

Table 2: Variables alpha values

After the measurement model was assessed, the structural model was tested and the resulting parameter estimates for the standardized solution were obtained. Table 3 shows the significant relationships obtained.



	Estimates	p-value
Perceived Fears → Intention to Travel	0.373	0.000
Attitude → Intention to Travel	0.568	0.000
Stress Overload → Perceived Fears	0.372	0.001

Table 3: Significant Relationships

The mediation role of Perceived Fears in the relationship between Health Status and Stress Overload on Intention to Travel was also tested. Results demonstrate that the mediation role is verified only in the case of Stress Overload as shown in Table 4.

Significant Regressions	Estimates	p-value
Mediation of Perceived Fears in the relationship between Stress Overload and Intention to Travel	0.139	0.014

Table 4: Mediation values

## 5. Discussion and Conclusion

This paper contributes to the literature about travel behaviour providing a specific overview of the actual situation in terms of intention to travel for leisure.

(1) Though the designed model we are able to show that both Attitude and Stress Overload have a positive significant impact on the Intention to Travel at the time of COVID-19. Through these results we only partially confirm the role of the Theory of Planned Behavior in evaluating people's intention to travel in the COVID-19 context in fact Subjective Norms and Perceived Behavioral Control do not impact on the intention. This could show how people's decision at the time of the pandemic is becoming highly personal and does not depend on others' opinion as friends and relatives (subjective norm) or from factor as the personal financial availability (Perceived Behavioral Control). (2) A mediating role of Perceived Fears is also found in the positive and significant relationship between Stress Overload and Intention to Travel. (3) The found relationship between Stress Overload and Intention to Travel results positive. This can be explained by the fact that travelling can be perceived as a relief, as a solution to reassure and relax ourselves to try to distress. It means that this "relief role" that travelling for leisure in general has is maintained even during this pandemic phase. (4) A positive relationship was also found when considering Perceived Fears and Intention to Travel. At a first look this could seem hard to be explained but we believe it is linked to the fact that there is a difference in the intention to travel in Italy or abroad. If fears

reach a relevant level there still is an intention to travel but in the sense of travelling in Italy (and not abroad). This finding needs to be further assessed. (5) The study, through a descriptive part, also provides a general idea of the travelling activities performed during summer 2021 and the travelling intention in this autumn-winter season linking them to previous travelling habits. It then includes a deep understanding of the way people react to COVID-19, investigating how travelling choices are made and the attitudes towards vaccines and green pass obligation introduction.

Future analysis will be performed not just in the above described direction but also: (1) to investigate if there are differences between groups of respondents according to their previous travelling habits, to the immunization situation and on the inclination to travel in Italy and/or abroad; (2) to understand if Perceived Fears and Intention to Travel change if someone is living alone or with others. If one is responsible for someone else - as old parents and/or small children – it's supposed to be more worried and reluctant to travel; (3) to compare different scenarios of minimum, medium and maximum level of “safety and protection measures to avoid COVID-19”. It is highly possible that over a certain level, protection measures become perceived as constraints which do not stimulate people to travel any more.

By the obtained results, destination management organizations can receive useful insights on how to better answer to tourists' needs and preferences in order to build effective marketing strategies in the cold seasons. They can properly encourage people in travelling in the best possible way in line with what makes individuals feel secure. Fear perception is affecting and will affect the speed of the tourism industry's recovery but in the long term we expect tourism will most likely return to pre-crisis patterns.

## 6. Key References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior human decision processes*, 50(2), 179-211.
- Amirkhan, J. H. (2021). Stress overload in the spread of coronavirus. *Anxiety, Stress, & Coping*, 34(2), 121-129.
- Assaf, A., & Scuderi, R. (2020). COVID-19 and the recovery of the tourism industry. In: SAGE Publications Sage UK: London, England.
- Das, S. S., & Tiwari, A. K. (2021). Understanding international and domestic travel intention of Indian travellers during COVID-19 using a Bayesian approach. *Journal of Tourism Recreation Research*, 46(2), 228-244.
- Druică, E., Musso, F., & Ianole-Călin, R. (2020). Optimism bias during the COVID-19 pandemic: Empirical evidence from Romania and Italy. *Games MDPI*, 11(3), 39.
- ENIT, A. N. d. T. (2021). Survey on 2020 data. In R. o. Fur (Ed.).
- Genç, E., & Arslan, G. (2021). Optimism and dispositional hope to promote college students' subjective well-being in the context of the COVID-19 pandemic. *Journal of Positive School Psychology*, 5(2), 87-96.
- Group, T. E. (1990). EuroQol-a new facility for the measurement of health-related quality of life. *Health policy*, 16(3), 199-208.

- Hu, L. T., & Bentler, P. M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Structural Equation Modeling*, 6(1), 1-55.
- Hurst, N., Jobanputra, P., Hunter, M., Lambert, M., Lochhead, A., & Brown, H. (1994). Validity of Euroqol—A generic health status instrument—in patients with rheumatoid arthritis: Economic and Health Outcomes Research Group.
- Jordan, E. J., Bynum Boley, B., Knollenberg, W., & Kline, C. (2018). Predictors of intention to travel to Cuba across three time horizons: An application of the theory of planned behavior. *Journal of Travel Research*, 57(7), 981-993.
- Lunney, M. (2006). Stress overload: A new diagnosis. *International Journal of Nursing Terminologies Classifications*, 17(4), 165-175.
- MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology*, 51, 201-226.
- McDonald, R. P., & Ho, M.-H. R. (2002). Principles and Practice in Reporting Statistical Equation Analyses. *Psychological Methods*, 7(1), 64-82.
- Park, S. H., Hsieh, C.-M., & Lee, C.-K. (2017). Examining Chinese college students' intention to travel to Japan using the extended theory of planned behavior: Testing destination image and the mediating role of travel constraints. *Journal of Travel Tourism Marketing*, 34(1), 113-131.
- Rather, R. A. J. J. o. D. M. (2021). Demystifying the effects of perceived risk and fear on customer engagement, co-creation and revisit intention during COVID-19: A protection motivation theory approach. *Journal of Destination Marketing Management*, 20, 100564.
- Rivera, M. A. (2020). Hitting the reset button for hospitality research in times of crisis: Covid19 and beyond. *International journal of hospitality management*, 87, 102528.
- World Health Organization. (2015). World report on ageing and health. In.