

The interplay of personality traits and motivation in leisure travel decision-making during the pandemic

Naman Sreen^a, Anushree Tandon^{b,g,h}, Fauzia Jabeen^c, Shalini Srivastava^d,
Amandeep Dhir^{e,d,f,*}

^a O.P. Jindal Global University, Sonapat, India

^b University of Eastern Finland, Yliopistokatu 2, Joensuu 80100, Finland

^c College of Business, Abu Dhabi University, Abu Dhabi, United Arab Emirates

^d Jaipuria Institute of Management, Noida, India

^e Department of Management, School of Business & Law, University of Agder, Norway

^f Optentia Research Focus Area, North-West University, Vanderbijlpark, South Africa

^g European Forest Institute, Finland

^h University of Turku, Yliopistokatu 6, Joensuu 80100, Finland

ARTICLE INFO

Keywords:

SOBC

Extraversion

Neuroticism

Perception of safe travel during COVID-19

Willingness to pay premium for safe travel

Japan

ABSTRACT

COVID-19 has negatively affected the travel and tourism industry and may continue to do so in the future. Therefore, hospitality businesses need to pay attention to consumer reactions, concerns, and motives for travelling in this era. This study leverages the stimulus-organism-behaviour-consequence (SOBC) model to examine psychological factors that influence Japanese travellers' intention to travel and willingness to pay premiums for safe travel by analysing data from 790 respondents. The findings of the study reveal that extraversion positively associates with introjected motivation and negatively with amotivation. Neuroticism personality type positively associates with amotivation and negatively associates with introjected motivation. Introjected motivation positively associates with perception of safe travel during COVID-19, whereas amotivation has a non-significant association with perception of safe travel during COVID-19. Perception of safe travel positively associates with intention to travel and willingness to pay premiums for safe travel. Finally, intention to travel has no effect on willingness to pay premiums for safe travel. These findings provide valuable theoretical and managerial implications.

1. Introduction

The COVID-19 pandemic resulted in global socio-economic disturbances (Buheji et al., 2020), and the lockdowns enforced by countries in its wake led to severe restrictions on people's leisure travel movement (Snuggs & McGregor, 2021). The travel and leisure industry ranked fourth among the most impacted industries during COVID-19 (Kaczmarek, Perez, Demir, & Zaremba, 2021), with an estimated loss of 62 million jobs worldwide in the tourism industry due to the pandemic as of February, 2022 (Statista, 2022). With the pandemic abating and travel restrictions being lifted worldwide, it is imperative to explore consumers' perspectives on and concerns about safety while travelling in order to boost tourism. Recent studies have shown inconsistent findings in consumers' willingness to pay premiums for safe travel (Awad-Núñez,

Julio, Gomez, Moya-Gómez, & González, 2021; Gursoy & Chi, 2020). For instance, Gursoy and Chi (2020) found that one third of restaurant customers and 40% of hotel customers are willing to pay premiums for safety. On the other hand, Awad-Núñez et al. (2021) found that most customers want safety features in travel but only a small proportion are willing to pay a premium for safe travel. Such inconsistencies are a significant knowledge gap since implemented safety and hygiene measures to protect travellers, such as sanitization and disinfection of premises, are an additional substantial cost for the organizations in this sector (Awad-Núñez et al., 2021) which is already facing significant economic losses. Since the demand for leisure travel is likely to be impacted in the medium to long term (Bressan, Duarte Alonso, & Kok, 2021) due to the pandemic, understanding the factors that influence consumers' intent, or the lack thereof, to undertake leisure travel and

* Corresponding author.

E-mail addresses: fauzia.jabeen@adu.ac.ae (F. Jabeen), shalini.srivastava@jaipuria.ac.in (S. Srivastava), amandeep.dhir@uia.no (A. Dhir).

<https://doi.org/10.1016/j.tmp.2023.101095>

Received 30 November 2021; Received in revised form 15 February 2023; Accepted 15 February 2023

Available online 10 March 2023

2211-9736/© 2023 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

their behavioural indicators, such as willingness to pay premium prices for safe travel, is an important research avenue. The insights drawn from such studies can provide significant benefits to practitioners and policymakers in proposing active measures to encourage leisure travel.

Prior research has provided some insight into aspects related to travelling during a pandemic, such as individuals' unwillingness to travel to locations affected by various pandemics such as Ebola, malaria, and avian flu (Aro, Vartti, Schreck, Turtiainen, & Uutela, 2009; Cahyanto et al., 2016). However, these findings are not directly applicable to the COVID-19 context due to the different manner of this pandemic's emergence, its high infection rate (Kim, Park, Lee, et al., 2022), and global spread that has resulted in multiple countries experiencing similar intensities of effect (Islam et al., 2021). As a result, scholars have focused their attention on exploring the pandemic's effect on various aspects of travel-related behaviour, such as willingness to travel during the pandemic (Nazneen, Hong, & Ud Din, 2020). However, the findings so far have been inconsistent, with some scholars finding individuals to be unwilling to travel during COVID-19 (Uğur & Akbrynk, 2020), and others identifying individuals actively planning to do so (Bae & Chang, 2021).

We contend that an individual's psychographic factors could explain these apparently inconsistent findings on consumers' travel behaviour, since prior studies have indicated their influence, particularly personality traits, on eliciting different reactions to COVID-19 (Talwar, Srivastava, Sakashita, Islam, & Dhir, 2022), perhaps due to perceptual variances regarding risks associated with the disease itself (Modersitzki, Phan, Kuper, & Rauthmann, 2020; Stadler et al., 2020). We focus on personality as a core psychographic factor that can explain individual travel behaviour during COVID-19 by applying the Big 5 personality model, which consists of openness to experience, conscientiousness, extraversion, agreeableness, neuroticism (Costa & McCrae, 1980). The model is a well-established theoretical framework that has been previously leveraged, albeit in a limited manner (e.g., Kim et al., 2022). For example, Talwar et al. (2022) found that extraversion has the strongest influence of all five personality types on travel intentions during COVID-19, and Haupt et al. (2020) found that individuals with fun-seeking personalities, such as extraversion, were more likely to have travel intentions during COVID-19. These studies show that a person's reaction to travel during COVID-19 may differ depending on their personality type, as well as how they perceive the risk of travelling for leisure during COVID-19 (Wijngaards, De Zilwa, & Burger, 2020). A study on Chinese individuals' engagement with COVID-19 found that extraversion had lower scores for social distancing practices, and conscientiousness had higher scores for social distancing practices (Carvalho, Pianowski, & Gonçalves, 2020). Additionally, Kim et al. (2022) determined that personality traits significantly influenced tourists' biosecurity behaviour by moderating the relationships between personal norms, attitudes, and behaviour. Thus, limited prior research has determined that personality influences travel behaviour in various capacities, including as antecedents and moderators.

Personality is defined as the features and attributes that influence an individual's behaviour, and it develops via experiences, culture, and education (Feist & Feist, 2009; Roy & Goswami, 2007). An individual's behaviour is distinctive and consistent when they have a certain personality (Feist & Feist, 2009), which implies that personality may be a viable factor in determining the consistency of individual travel behaviour. However, personality traits remain an under-explored area in the tourism with respect to the COVID-19 context (Aschwanden et al., 2021; Talwar et al., 2022). We contend that this is a significant research gap, particularly because personality traits can, in high probability, explain travel intentions and behaviour; particularly with the pandemic still manifesting itself in various forms (Carvalho et al., 2020).

Additionally, aligning with prior studies (e.g., Sheldon and Prentice, 2019), this study contends that it is important to understand the psychological mechanisms that can explain how personality traits translate into specific travel-related perceptions and behaviours. The COVID-19

pandemic has raised health risks and security concerns regarding leisure travel (Humagain & Singleton, 2021). As a result, most scholars studying travel behaviour during COVID-19 have concentrated their efforts on exploring demotivators or inhibitors, such as safety and health risks, and studying ways to overcome them, to travel during COVID-19 (Aebli, Volgger, & Taplin, 2022). However, leisure constraint theory indicates that the removal of inhibitors may not increase travel if individuals are not motivated to travel. In fact, travellers may exhibit learned helplessness and may decide not to travel during COVID-19 (Williams, Armitage, Tampe, & Dienes, 2021). Thereby, motivational studies on travel during COVID-19 may help in examining travellers' leisure travel behaviour. To this end, the self-determination of an individual plays a critical role in determining behaviours such as academic performance (Zhou, 2015), learning attitudes (Butz & Stupnisky, 2016), pro-environmental (Aitken, Pelletier, & Baxter, 2016), and travel behaviours (Nabi, O'Cass, & Siahtiri, 2019; Talwar et al., 2022). Additionally, motivations have been previously studied and found to explain travel behaviour differences before and during the pandemic. For instance, in a study before COVID-19, Chow, Cheng, and Cheung (2019) found that intrinsic motivation has the highest influence on individuals' inclination to travel to Chinese wetlands for ecological purposes. Similarly, Medeiros, Ozturk, Hancer, Weinland, and Okumus (2022) found that intrinsic motivation, i.e., social benefit, and extrinsic motivation, i.e. self-image, had a positive impact on tourists' intention to share travel-related information through mobile apps during COVID-19. Thus, motivational states may be an important factor that explain how individuals with different dominant personality traits exhibit varied behaviour in similar or dissimilar contexts.

Thus, examining the interplay between personality traits and motivational states, as well as their subsequent association with behavioural outcomes such as travel intentions, could provide more nuanced insights into how the pandemic may have affected long-term travel behaviour. Such an examination would contribute to our understanding of the psychological processes that a post COVID-19 traveller undergoes and raise significant implications for both theory and practice. Thus, informed and motivated by the preceding discussions, this study aims to answer three research questions: RQ1. How are the personality types of extraversion and neuroticism associated with amotivation and introjected motivation? RQ2. How are amotivation and introjected motivation associated with perceptions towards travel? RQ3. How is perception towards travel associated with travelling intentions and willingness to pay premiums for safe travel?

To answer these questions, the study employs the Stimulus-Organism-behaviour-Consequence (SOBC) model and Self-determination theory (SDT) for theoretical grounding. Data were collected using a cross-sectional survey design from 498 respondents in Japan, wherein the travel and tourism sectors have been significantly disrupted by the pandemic (Yagasaki, 2021). The findings of this study, derived from structural equation modelling (SEM) analysis, provide three novel contributions to the literature. First, we utilize the SOBC and SDT theories, which have not received much attention in travel and tourism research in the COVID-19 context. The application of SOBC may result in more nuanced understanding of travelling behaviours as it includes various additional linkages (Kim, Lee, & Jung, 2020). This study, to the best of our knowledge, pioneers the concurrent utilization of these theories in context of travel and tourism research.

Second, to the best of our knowledge, no study has examined the interplay between personality traits and motives as antecedents to individual travelling behaviour. Our focus on explicating this interplay is a significant addition to extant knowledge as we suggest motivational state to be a bridging factor that highlights how individual differences (e.g., in personality) can influence behaviours and intentions in the context of leisure travel. Third, we focus on Japan as our study context as it is relatively under-explored in tourism and consumer behaviour literature. Our findings add significant value to extant knowledge with regard to this economy as a favoured leisure travel destination (Nippon,

2020).

This article presents information in the following seven sections. Section 2 presents the theoretical backdrop, and the hypotheses are discussed in Section 3. Sections 4 and 5 describe the research methodology and the results of the data analysis, respectively. The research findings are discussed in Section 6, and Section 7 presents the concluding remarks, implications, limitations and possible future research directions.

2. Theoretical background

2.1. Stimulus-organism-behaviour-consequence model

SOBC is based on the premise of social learning theory (Bandura, 1977) and is an extension stimuli-organism-response theory, or SOR (Mehrabian & Russell, 1974). SOR examines the influence of environmental/internal stimuli (S) on organism's internal states (O), which results in a response (R) (Laato, Islam, Farooq, & Dhir, 2020). In contrast, SOBC considers associations among an individual's internal state (O), behaviour (B), and consequences (C), thereby extending SOR.

A *stimulus* – a trigger that elicits a specific response or action (Talwar, Jabeen, Tandon, Sakashita, & Dhir, 2021) – can be either external (i.e., originating outside an individual's body or mind) or internal (i.e., originating within) (Kim & Lennon, 2013). While prior research has predominantly focused on external stimuli, both in the context of travel and tourism (Chang, Shu, & King, 2014; Rajaguru, 2014) and in other contexts (Hsiao & Tang, 2021; Sultan, Wong, & Azam, 2021), it has been shown that internal stimuli can also exert significant influence on buying and use-related behaviours. For instance, Dhir, Talwar, Sadiq, Sakashita, and Kaur (2021) found that optimism positively influences labelling satisfaction and labelling desire, which then positively influence purchase intentions for buying green apparel. Hence, motivated by these findings, we focus on internal stimuli in our study (see Section 2.3 for details).

The concept of *organism* not only represents the physiological being as in the SOR model but also the psychological being (Dhir, Talwar, et al., 2021). We model motivation and perception of safe travel during COVID-19 as the individual or organism's internal state (O) in our framework. Our choice of these variables as the organism is motivated by prior literature as discussed in Section 2.3. The SOBC further discusses how individuals' organismic states influence their behaviour, which in turn influences the consequences the organism faces. *Behaviour* includes overt (observable) and covert (mental, or cerebral) forms, and *consequence* represents the results obtained from performing that behaviour (Talwar et al., 2021). The present study examines the association of leisure travel intentions (B) on willingness to pay premiums for safety measures (C).

Several scholars have applied SOBC in varied contexts in the recent past, such as social media overload (Whelan, Islam, & Brooks, 2020) and organic product consumption (Talwar et al., 2021). Yet, to the best of the authors' knowledge, the SOBC model has so far not been employed in travel and tourism research. However, travel and tourism scholars indicate that post-behaviour constructs such as revisit intention and loyalty are critical in generating repeat customers (Sreen, Mukherjee, Jebarajakirthy, Kumar, & Sharma, 2022). We therefore believe that SOBC would provide a deeper understanding of an individual's psychological mechanisms, especially in terms of the associations between behaviour and consequence in the context of travel and tourism.

Moreover, SOBC considers the possible influence of the social/internal environment on individual (O) (Talwar et al., 2021), which is important in our study because COVID-19 as an environmental situation or context greatly influences an individual's internal state (e.g., their motivations) which can, in turn, have a significant effect on travelling perceptions (Bae & Chang, 2021). Thus, we believe that our utilization of this framework provides deeper insights into individuals' decision-making processes in the currently cautious approach to leisure travel

during COVID-19.

2.2. Self-determination theory

The SDT posits that there are three types of human motivation: intrinsic motivation, extrinsic motivation, and amotivation (Deci & Ryan, 2010). Each motivation type is ranked across a continuum representing a degree of self-determination contingent on the locus of control possessed by an individual (Deci & Ryan, 1985). Intrinsic motivation represents the highest form of self-determination (Deci & Ryan, 1985), wherein individuals are motivated by internal pleasure and the satisfaction of fulfilling personal needs (Deci & Ryan, 2010). On the contrary, extrinsic motivation is derived from external sources, such as the approval of others (Deci & Ryan, 2010) and is classified into four types on the basis of the level of self-determination. Here, integrated motivation has the highest degree of self-determination, followed by identified, introjected, and external motivation which have decreasing levels of self-determination in that order. Lastly, amotivation describes the state of an individual who lacks confidence that the action in question can provide the desired outcome (Deci & Ryan, 2010).

Scholars have previously utilized SDT to determine that different forms of motivation have varying levels of influence on travel behaviours in different contexts. For instance, Zheng, Luo, and Ritchie (2021) found a stronger impact of intrinsic motives on trip purchase intentions than integrated motives for disabled individuals. Additionally, Yu, Wen, and Yang (2020) found that both intrinsic motivations, such as the desire to relieve pain in the dying process, pursue meaning in life, and champion human rights, and extrinsic motivations, such as religious or social considerations, influenced suicide travel intentions. Thus, following prior literature, we believe SDT to be suited to our study context for examining the organismic motivational state (O) of an individual considering leisure travel.

2.3. Conceptual framework

This study develops a conceptual model by integrating the SOBC and SDT frameworks. Using the SOBC model, this study examines extraverted and neurotic personality types as stimuli (S); introjected motivation, amotivation, and perception of safe travel during COVID-19 as facets of individuals' internal state (O); and intention to travel during COVID-19 (B) and willingness to pay premium prices for safe travel (C) as behaviour and consequence respectively. Fig. 1 displays the theoretical framework, and Table 1 presents a brief conceptualization of the study variables.

2.3.1. Stimuli

We conceptualize stimuli as personality traits as certain prior research has indicated their influence to be significant in determining travel behaviour (Kim et al., 2020; Talwar et al., 2022). Personality traits are individual characteristics that lead to varying affective and cognitive responses (Baloglu, Henthorne, & Sahin, 2014; Das, Habib, Saha, & Jebarajakirthy, 2021; Gao, Rasouli, Timmermans, & Wang, 2017) as personality can influence individuals' ability to cope up with stressful situations (Youn, Kim, & Song, 2017), such as considering travelling during COVID-19. For instance, Talwar et al. (2022) found that of the five primary personality types (Costa & McCrae, 1980), extraversion possesses the highest relative importance in determining travel intentions during COVID-19, followed by conscientiousness, openness to experience, agreeableness, and neuroticism. In our study, we consider the personality traits of extraversion and neuroticism to be stimuli affecting an individual's internal state, i.e. motives. Our focus on these two traits is inspired by studies (e.g., Shokrkon & Nicoladis, 2021) that have posited extraversion and neuroticism to be highly relevant to the study of travel during COVID-19 as these personality types tend to have distinctive implications for individuals' social lives.

Prior research on travel and tourism in the COVID-19 context has

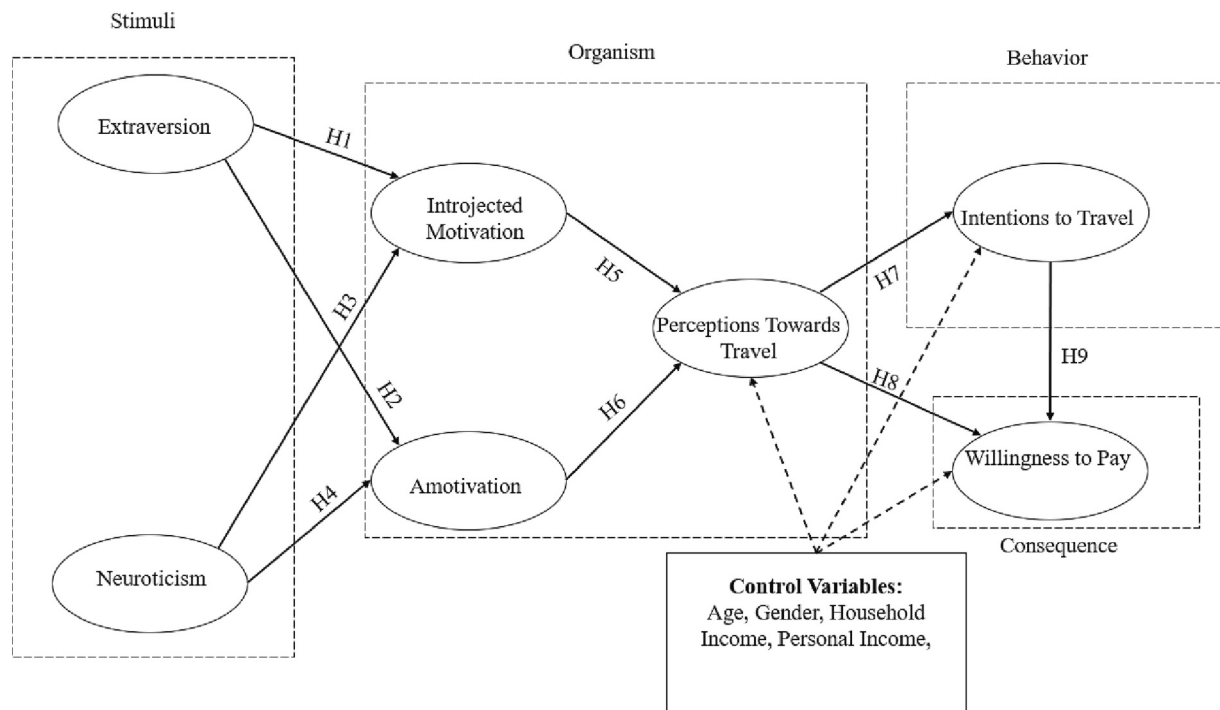


Fig. 1. Hypothesized research model.

Table 1
Description of study constructs.

Study constructs	Brief description	Adapted from
Extraversion	Tendency to enjoy talking to others, being energetic and enthusiastic.	Donnellan et al., 2006
Neuroticism	Tendency to feel negative emotions such as jealousy, loneliness, anxiety, and depression.	Donnellan et al., 2006
Introjected Motivation	Examines an individual's belief that significant others would be mad/angry for not travelling during COVID-19.	Ryan & Connell, 1989
Amotivation	Individuals believe that there is no outcome or benefit of travelling.	Ryan & Connell, 1989
Perception of safe travel during COVID-19	Tendency to feel safe while travelling and performing travel-related activities during COVID-19	Khatib et al., 2020; Dong et al., 2021; Wei et al., 2021
Intention to Travel	Inclination to approach travel for leisure travel in the ongoing COVID-19	Sánchez-Cañizares et al., 2020
Willingness to pay premiums for safe travel	Inclination to pay extra to businesses for providing safety during COVID-19	Sánchez-Cañizares et al., 2020

also propounded that examining extraversion and neuroticism provides a comprehensive understanding of differences in individual reactions to the COVID-19 scenario (Talwar et al., 2022). For instance, Nelson, Pettitt, Flannery, and Allen (2020) found that individuals with high neuroticism have higher scores in anxiety, depression, and concerns related to finances and relationships during COVID-19. Therefore, neuroticism may lead individuals to follow social distancing practices, decline to travel, and generally attempt to avoid risky behaviours (Wijngaards et al., 2020). Contrarily, extraverts are more likely to travel as they strongly desire to have social interactions and develop social relationships (Talwar et al., 2022), and may therefore be disinclined to follow social distancing recommendations during COVID-19 (Carvalho et al., 2020). Based on these findings, we believe that neuroticism and extraversion are suitable stimuli for our study.

2.3.2. Organism

We leverage the SDT to propose that personality traits induce specific motivational states of the organism's or individual's internal state (O). Motivations have been found in prior literature to significantly affect travelling decisions (Cole, Zhang, Wang, & Hu, 2019; Lee & Ewert, 2019) and willingness to pay premiums for safe travel (Huang, Wu, & Shi, 2018). Scholars have found that certain personality traits may affect individual's cognitive evaluations, such as motives, which may impact

other behavioural outcomes (Sheldon & Prentice, 2019). In line with such findings, we conceptualize that personality traits would influence the motivational state, i.e., internal state of an individual.

The SDT has proposed three major forms of motivation – intrinsic motivation, extrinsic motivation, and amotivation as discussed in Section 2.2. A key difference in intrinsic and extrinsic motivation is that while the former is promulgated for one's own benefit, the latter may develop from a sense of duty or obligation to perform a particular behaviour (Deci & Ryan, 2010). We posit that such motivations may also be influenced by an individual's contextual factors, such as the culture they belong to. For instance, our study focuses on Japan as a context whose culture is highly collectivist (Talwar et al., 2021) wherein image consciousness (Reiher & Yamaguchi, 2017) and consideration of others may significantly influence individual behaviour. Thus, it is possible that in such cultures, the feelings and perceived judgements of others may affect one's own behavioural decisions.

Pursuing this supposition, this study considers two forms of motivation as organisms' state (O) – introjected motivation and amotivation. In the present study, introjected motivation refers to the individual's perception that significant others in their life want the individual to travel for leisure (Cole et al., 2019). Introjected motivation is closer to external motivation and creates internalized feelings such as guilt or obligation to perform an action (Zhang, Cole, Hirt, & Bilgihan, 2017).

Cole et al. (2019) found that individuals were more likely to travel as a result of introjected motivations rather than intrinsic motivations. They also argued that items of introjected motivation and extrinsic motivation loaded into a single factor, indicating that both introjected and extrinsic motivation could be similar in nature. Similarly, in our study, we suggest that introjected motivation rests in an individual's belief that family members would experience negative feelings, such as anger, if the individual will not travel for leisure during COVID-19, and may be an essential lens through which to examine attitudes towards travel during COVID-19.

We believe that introjected motivation is a significant facet in our study owing to the context of Japan, wherein family members' expectations have significant influences on an individual's decisions. For instance, a traditional Japanese father may be authoritarian, wield influence over other family members, and command respect (Ang, 2006). Extrapolating this supposition further, we argue that Japanese individuals who live with their family members may be driven by introjected motivation to make certain travel decisions. Our supposition is supported by the findings of Shavanddasht and Schänzel (2017) who found that authoritarian parenting style positively impact introjected motivation for travelling.

Amotivation arises when an individual lacks confidence that an action can provide the desired outcome (Deci & Ryan, 2010). A recent study found that psychological needs of autonomy, competence, and relatedness decrease the experience of amotivation (Behzadnia & FatahModares, 2020). According to Cole, Deci, Zhao, and Wang (2022), the COVID-19 scenario may lead an individual to perceive that (a) the situation is not under their control, (b) they are not sufficiently competent to deal with the situation on their own, and (c) the situational restrictions imposed for combating the pandemic may limit their social activities, and thus their feelings of relatedness. We align with this point to view to posit that in such circumstances (i.e., the pandemic), an individual might feel amotivated or indifferent to the positive outcomes of travelling, which may influence their behaviour and consequent actions.

Perception of safe travel during COVID-19 is an individual's perception that travelling activities, such as transport, hotels, and dining, are safe to use during the pandemic. Scholars have determined changes in the perception of travelling during various health crises situations like Ebola, and H1N1 influenza (Cahyanto et al., 2016; Lee, Song, Bendle, Kim, & Han, 2012). While research on such perceptions in the COVID-19 context is limited, prior studies indicate that the willingness to travel (Gursoy & Chi, 2020) and perceived risks of travel during COVID-19 may vary even after restrictions are fully lifted, according to individual characteristics such as motives (Liu-Lastres, Mirchie, & Cecil, 2021; Neuburger & Egger, 2021). Motives play a key role in individuals' perception of health risk and may act as an essential parameter in estimating the risk associated with travelling during COVID-19 (Chua, Al-Ansi, Lee, & Han, 2020). Hence, perceptions towards travel is also considered an important facet of individual state in this study and we study its associations with motives (O) as well as behaviour – intent to travel (B).

2.3.3. Behaviour

Our framework conceptualizes the intention to travel as a behaviour (B) and view it as an individual's propensity to travel for leisure during and after COVID-19. While reported intentions may not be a true reflection of actual behaviour, they have been indicated as a close proxy (Jin, Bao, & Tang, 2022). Prior scholars have also used consumers' travel intentions during a health crisis (Chien, Sharifpour, Ritchie, & Watson, 2017; Schroeder, Pennington-Gray, Kaplanidou, & Zhan, 2013) as a reflection of their travel behaviour.

2.3.4. Consequence

Lastly, the willingness to pay extra for safety measures when travelling is modelled as the consequence (C), as scholars have found that travellers adopt non-pharmaceutical measures, such as wearing masks,

sanitizing hands, and obeying travelling restrictions to improve their safety during COVID-19 (Aharon, Jacobi, Cohen, Tzur, & Qadan, 2021; Chung, Lee, & Park, 2021). Additionally, travellers are willing to pay premiums for additional safety measures (Sánchez-Cañizares, Cabeza-Ramírez, Muñoz-Fernández, & Fuentes-García, 2020), but this willingness varies across contexts (De Silva, Khan, Vorley, & Zeng, 2020; Qiu et al., 2020), and we consider it interesting and practically beneficial to explore willingness as a consequence in our study. Furthermore, age, gender, personal income, and household income are employed as control variables as they have been previously indicated to influence consumer behaviour (Sreen, Dhir, Talwar, Tan, & Alharbi, 2021), especially in context of travel and tourism (Khanra, Dhir, Kaur, & Joseph, 2021).

3. Hypothesis development

3.1. Stimulus – organism

3.1.1. Extraversion

Studies indicate that individuals with high extraversion are prone to experiencing positive emotions, activity, assertiveness, need for stimulation, and gregariousness (Matzler, Faullant, Renzl, & Leiter, 2005). It is possible that extraverts may therefore have greater ability to cope up with situational crises like the COVID-19 pandemic. Recent studies lend support to this supposition, for example, Shokrkon and Nicoladis (2021), who found that extraversion to be positively associated with physical, social, and emotional well-being during COVID-19. However, an opposing view also exists which suggests that extraverts may feel uneasy during COVID-19 as they get energy through social interactions and reduce stress by talking to others (Wijngaards et al., 2020). Additionally, considering the connotations of Japan as our study context, we posit that extraverts in this geographic context may be driven to talk to their family members and attempt to comply to the wishes expressed in order to show respect (Ang, 2006).

This proclivity to seek pleasure (Lyu, Oh, & Lee, 2013) and social interactions by travelling (Tran, Nguyen, & Nguyen, 2015) may mean that extraverts are more inclined to demonstrate increased mobility (Chan et al., 2021), regardless of the state of pandemic-related restrictions. We believe that these individuals would be introjectedly motivated by their families' and friends' expectations and reactions in order to avoid expressions of anger or displeasure. While, to the best of our knowledge, there is no a priori for this association, our supposition is based on extant studies which indicate that extraversion is associated positively with social approach motives in various contexts (Elliot & Thrash, 2002; Zimmerman, Boswell, Shipp, Dunford, & Boudreau, 2012). Social approach motives predispose individuals towards attaining short term positive outcomes (Nikitin & Freund, 2015). Thus, it is probable that extraverts may be motivated by the desire to comply with the wishes of family and friends regarding leisure travel to avoid negative reactions. Hence, we propose:

H1. Extraversion positively associates with introjected motivation.

The relationship between extraversion and amotivation has not, to the best of our knowledge, been investigated in the context of leisure travel, but the association has been examined in other contexts and the two have been found to share a negative association. For example, Brannon (2010) examined sports motivation and found that amotivation and extraversion are negatively correlated. Similarly, Komarraju, Karau, and Schmeck (2009) found a negative association between extraversion and amotivation for academic performance. We extrapolate these findings to propose that a similar negative association also exists in our context. Our supposition is further supported by prior literature which indicates that extraverts are highly motivated to take part in leisure activities (Lin et al., 2007) and travel (Talwar et al., 2022). Consequently, we believe that extraverts' fun-seeking nature (Paris & Pietschnig, 2015) likely decreases their amotivation towards leisure travel. Hence, the following hypothesis is proposed:

H2. Extraversion negatively associates with amotivation.

3.1.2. Neuroticism

The positive association of neuroticism and introjected motivation has been established in prior studies (e.g., [Clark & Schroth, 2010](#)), such as in the cases of exercising to improve one's weight or appearance ([Ingle-dew & Markland, 2008](#)) and academic performance ([Clark & Schroth, 2010](#)). Extrapolating from these studies, we expect a similar positive association in case of leisure travel as well, which is supported by the belief that neurotic individuals struggle to regulate emotions and feelings of anxiety, which may cause a them to be positively inclined to defer to others for advice ([Rhodes, Courneya, & Hayduk, 2002](#)) and thus be extrinsically motivated ([Yeh, Wang, Hsu, & Lin, 2020](#)). Since introjected motivation is closely linked with extrinsic motivation, we expect that neurotic individuals are motivated by their social groups' (friends and family) persuasive efforts to undertake travel. Hence, we hypothesize:

H3. Neuroticism positively associates with introjected motivation.

[Aronson \(2008\)](#) suggested that individuals with neurotic personality type and high anxiety may engage in substance abuse or unsafe sexual practices because their anxiety levels above a certain threshold lead them to be indifferent to the risks of such behaviours. We believe that Aronson's study (2008) indicates that highly neurotic individuals may exhibit amotivation. This is supported by the limited research that has examined the relationship between neuroticism and amotivation and determined a positive association between the two ([David, 2010](#); [Komarraju et al., 2009](#)). For instance, [West, Rhoden, Robinson, Castle, and St Clair Gibson \(2016\)](#) found significant positive correlation between neuroticism and amotivation for sports participants, and [Khalilzadeh and Khodi \(2021\)](#) found the same association in an academic context. However, to the best of authors' knowledge, no prior study has examined this association in the context of travel and tourism. We therefore extrapolate from existing research to posit that the environmental uncertainties created by the pandemic cause neurotic individuals to experience anxiety about leisure travelling such that they become amotivated. This amotivation or indifference, in our view, would arise from these individuals' perceived lack of control or sense of powerlessness over the outcome ([Bratko, Butkovic, Hlupic, & Pocrnic, 2022](#)). Thus, we propose:

H4. Neuroticism positively associates with amotivation.

3.2. Organism – behaviour

3.2.1. Introjected motivation

Individuals with introjected motivation seek to improve their self-esteem ([Gillison, Osborn, Standage, & Skevington, 2009](#)) and avoid unpleasant feelings ([Kramer & Petzoldt, 2022](#)) by seeking the approval of others for their actions ([Shupe & Gagné, 2016](#)). A recent study ([Cole et al., 2019](#)) found that introjected motivation promoted leisure travel among people with disabilities for two possible reasons: (a) perceived positive emotional outcomes (e.g., pride) from their families, and (b) improved self-worth. We extrapolate from these findings to postulate that individuals driven by introjected motives seek to obtain positive emotional reactions, and avoid displeasure, from family and friends. An individual may also experience introjected motivation in this context when members of their social group attempt to persuade them in favour of leisure travel and the individual bows to group pressure in order to avoid stress or guilt ([Ahn & Janke, 2011a](#); [Osei-Frimpong, 2019](#)). Moreover, individuals may experience partial introjected motivation through external messages ([Graves, Sarkis, & Gold, 2019](#)). Since the restrictions on travel (domestic and international) are lifting, governments and organizations are actively educating the public about the hygiene standards being adopted to ensure a safe travel environment and encourage travel to boost the economy. Based on the literature (e.g., [Graves et al., 2019](#)), we postulate that individuals may be inclined to

believe such external communication and be introjectedly motivated to conclude that travelling during COVID-19 is safe in order to demonstrate their self-worth, their ability ([Ahn & Janke, 2011b](#)) to comply with existing hygiene standards and practices, and their commitment ([Lee, Bentley, & Hsu, 2017](#)) to undertake leisure travel as a way to support this sector's economic recovery. Hence, we propose:

H5. Introjected motivation positively associates with perception of safe travel during COVID-19.

3.2.2. Amotivation

Scholars in travel and tourism research have previously indicated that amotivation hampers travel intentions ([Allan, Autin, & Duffy, 2016](#); [Chow et al., 2019](#)). Recently, [Cole et al. \(2019\)](#) found that an individual who believes a travel destination to be inaccessible to them feels amotivated, which negatively impacts their intentions to travel ([Cole et al., 2019](#)). Such findings can be attributed to the fact that an amotivated individual may start believing that performing a behaviour is of no use and questioning the merits of the behaviour itself ([Deci & Ryan, 2010](#)).

We believe that COVID-19 and the various restrictions placed on travelling may cause an individual to question whether leisure travel during the pandemic yields any positive outcomes and argue that in such cases, the individual may feel amotivated to travel, considering it to be improbable that they will attain the objective of experiencing leisure. We further argue that higher amotivation leads to lower evaluation of positive outcomes (perceptions that such travel would be safe) to be gained from travelling. Hence, a negative relationship. While to the best of our knowledge, there is no a priori support for our argument, our supposition is based on recent findings which indicate that COVID-19 has affected individuals' travel decisions and perceptions of hygiene and safety ([Nazneen et al., 2020](#)) with regards to travel duration and use of travel-related services like dining ([Radic et al., 2021](#)) and transport ([Khaddar & Fatmi, 2021](#)). Thus, we hypothesize:

H6. Amotivation negatively associates with perception of safe travel during COVID-19.

3.2.3. Perception of safe travel during COVID-19

Travelling involves many aspects that individuals may evaluate and question with respect to the perceived safety of travelling during the pandemic. Several scholars who have studied consumers' travel behaviours and intentions during a health crisis suggest that perceived risk of contracting COVID-19 decreases the intentions to travel and generally has a negative impact on all travel-related activities ([Chien et al., 2017](#); [Schroeder et al., 2013](#)). For example, [Khaddar and Fatmi \(2021\)](#) suggested that individuals may want to avoid public transport or air travel because they fear being infected with COVID-19. Besides the mode of travel, the style of accommodation, such as hotels or Airbnb, may also expose an individual to other travellers and hence increase the risk of contracting COVID-19 ([Lee & Deale, 2021](#)). Similarly, dining also presents the risk of contracting COVID-19 because individuals sit together and remove masks to eat ([Radic et al., 2021](#)).

These perceived risks can induce individuals to avoid travel ([Joo, Xu, Lee, Lee, & Woosnam, 2021](#); [Neuburger & Egger, 2021](#)), and we argue that that perceiving travel as 'safe' positively influences individuals' intention to travel as well as their willingness to pay extra for measures that they believe to improve safety. Our argument is supported by scholars such as [Li, Zhong, Zhang, & Hua \(2021\)](#) who demonstrated that safety is the watchword when determining the desirability of service industries during and after COVID-19. Thus, leveraging such findings and prior literature, we make the following hypotheses:

H7. Perception of safe travel during COVID-19 positively associates with intention to travel.

H8. Perception of safe travel during COVID-19 positively associates with willingness to pay premium for safe travel.

3.3. Behaviour – consequence

Consumers pay not only for the functional benefits of a product or service but also for its associated health, societal, and environmental benefits (Chatterjee, Chakraborty, Fulk, & Sarker, 2021). Since provision of safety by tourist destinations or hotels during travel includes societal and health benefits, it seems salient to measure an individual's willingness to pay premiums for safe travel and associated activities like dining out.

A recent study showed that intention to travel acts as an antecedent to a willingness to pay premiums for safe travel (Sánchez-Cañizares et al., 2020). Additionally, several scholars (including Zhang et al., 2017) have determined that intentions can precede consumers' willingness to pay premium prices for a product or a service, for example in case of eco-tourism (Hultman, Kazeminia, & Ghasemi, 2015) and other allegedly environment-friendly products (Barber, Kuo, Bishop, & Goodman, 2012). In case of eco-tourism and environmentally friendly products, an individual considers the benefits that future generations may obtain by one's actions to save the environment through eco-friendly consumption. We posit that in the COVID-19 context, individuals perceive a great deal of responsibility to protect both current and future generations from the effects of the pandemic. Hence, these individuals would be willing to sacrifice monetary resources to protect their family and loved ones (Smith, 2020). Furthermore, individuals who perceive a reduced risk of contracting COVID-19 if leisure travel activities follow recommended safety standards and guidelines may be more likely to enjoy the personal benefits offered by leisure travel. We

thus argue that individuals' concerns for safety during COVID-19 positively incline them to pay a higher price for safe travel environments (Joo et al., 2021). Thus, we hypothesize:

H9. Intention to travel during COVID-19 positively associates with willingness to pay premium for safe travel.

4. Method

4.1. Instrument development

Two experts familiar with Japanese culture and markets reviewed the pertinent literature to develop the survey instrument. Pre-validated scale items anchored on a seven-point Likert scale (strongly disagree – '1' to strongly agree – '7') were used to collect data on most of the study variables (see Table 2 for details). Four items measuring extraversion and neuroticism were adopted from Donnellan, Oswald, Baird, and Lucas (2006), and the four items measuring introjected motivation were adopted from Ryan and Connell (1989). Amotivation was measured through three items from Ryan and Connell (1989), and five items were taken from Sánchez-Cañizares et al. (2020) to measure travel intent and willingness to pay premium prices for safe travel, for a total of ten items. Six items measuring perception of safe travel during COVID-19 assessed the perceived safety of travelling through plane and public transport, staying in a hotel, using recreational facilities in a hotel, and dining in and were adapted from established scales to suit the context of this study (Dong, Ma, Jia, & Tian, 2021; Khatib, Carvalho, Primavesi, To, &

Table 2
Factor loadings for the measurement and structural model.

Constructs	Items	CFA	SEM
Extraversion (E) (Donnellan et al., 2006)	I talk to a lot of different people at parties	0.86	0.87
	I feel comfortable around people	0.81	0.81
	I start conversations	0.66	0.66
	I make friends easily	0.81	0.81
Neuroticism (N) (Donnellan et al., 2006)	I get stressed out easily	0.70	0.72
	I worry about things	0.86	0.86
	I fear the worst	0.85	0.84
	I am filled with doubts	0.71	0.70
Introjected Motivation (IM) (Ryan & Connell, 1989)	My family would be mad if I didn't travel for leisure anymore due to the COVID-19 pandemic	0.85	0.85
	My friends would be mad if I didn't travel for leisure anymore due to the COVID-19 pandemic	0.84	0.84
	My family tell me to keep travelling for leisure despite the COVID-19 pandemic	0.85	0.85
	My friends tell me to keep travelling for leisure despite the COVID-19 pandemic	0.83	0.82
Amotivation (AM) (Ryan & Connell, 1989)	I don't really think travel for leisure is my thing due to the COVID-19 pandemic	0.73	0.73
	I used to have good reasons for travelling for leisure, but now I question if I should continue due to the COVID-19 pandemic	0.76	0.76
	I'm not sure why I still travel for leisure during the COVID-19 pandemic; I do not seem to be getting any benefits from it	0.74	0.74
Perception of safe travel during COVID-19 (PTT) (Dong et al., 2021; Khatib et al., 2020; Wei et al., 2021)	It is safe to travel for leisure by aeroplane during the COVID-19 pandemic	0.81	0.80
	It is safe to travel for leisure by public transport (e.g., bus, train) during the COVID-19 pandemic	0.84	0.83
	It is safe to stay in a chain hotel during the COVID-19 pandemic	0.82	0.81
	It is safe to use the hotel's recreational facilities (e.g., gym, pool) during the COVID-19 pandemic	0.81	0.81
	It is safe to stay in an independent hotel during the COVID-19 pandemic	0.82	0.82
	It is safe to order take out during the COVID-19 pandemic.	0.80	0.79
Intention to travel during COVID-19 (ITT) (Sánchez-Cañizares et al., 2020)	I hope to travel for leisure during the ongoing COVID-19 pandemic	0.87	0.86
	I intend to travel for leisure during the ongoing COVID-19 pandemic	0.92	0.92
	If everything goes as I think, I plan to travel for leisure during the ongoing COVID-19 pandemic	0.91	0.90
	I predict that I should travel for leisure to a tourist destination during the ongoing COVID-19 pandemic	0.91	0.90
	I am willing to visit a tourist destination during the ongoing COVID-19 pandemic	0.87	0.87
	I am willing to pay more for increased safety precautions when I fly to my travel destination for leisure during the COVID-19 pandemic	0.91	0.91
Willingness to pay premium for safe travel (WTP) (Sánchez-Cañizares et al., 2020)	I am willing to pay more for increased safety precautions when I stay in a hotel at my travel destination for leisure during the COVID-19 pandemic.	0.95	0.95
	I am willing to pay more for increased safety precautions when ordering food via room service at my travel destination for leisure during the COVID-19 pandemic.	0.88	0.88
	I am willing to pay more for increased safety precautions when I dine out at my travel destination for leisure during the COVID-19 pandemic.	0.92	0.92
	I am willing to pay more for increased safety precautions when commuting locally at my travel destination for leisure during the COVID-19 pandemic.	0.90	0.90

Note: Items are sourced from references mentioned in Table 1.

Poirier, 2020; Wei, Chen, & Lee, 2021). The questionnaire details are presented in Appendix 1.

One professional translator was hired to translate the survey from English into Japanese to facilitate respondents' clear understanding of the items. Two third-party research professionals helped to review and confirm the translation by back-translating the Japanese questionnaire in English. These professionals also later translated the responses from Japanese into English. The back translation was almost identical to the original English version and confirmed that the translation from English into Japanese was accurate. Any confusing or unclear statements were reworded to ensure clarity in the final instrument. Since some of the items were adapted, we consulted two experts from the fields of consumer behaviour and psychology to assess the instrument's face validity. Subsequently, a pilot study with 20 respondents (11 male and 9 female) was conducted to test language clarity. Minor changes in the language of the items were made based on the expert recommendations and pilot results.

4.2. Data collection

Our study focuses on Japan as the context since the leisure travel and tourism sector in this country was severely affected by the pandemic. Prior to the arrival of COVID-19 in 2019, Japan had a stable domestic travel market of ¥20–22 trillion (approximately 170 billion USD) and an increase in the number of foreign travellers. However, since COVID-19, the travel market value has declined by 69% (Yagasaki, 2021) and Japan has seen a marked decrease in tourism. To boost this sector, in July 22, 2020 the Japanese government initiated "Go-To" campaigns that provided travel discounts and subsidies of up to 50% to domestic and foreign travellers. Despite the campaigns, >713 travel- and tourism-related companies (restaurants, hotels, and transport companies) declared bankruptcy (Teikoku Databank, 2020). Such statistics indicate a critical need to examine if and why Japanese consumers intend to travel for leisure.

An online survey was conducted and data was collected through the services of Macromill Inc. in Japan during December 2020. Macromill is a leading survey data collecting company that has collected data for various government bodies, academics institutions, and industries (Dhir, Malodia, Awan, Sakashita, & Kaur, 2021) and has network of over 2 million Japanese users (Kumagai & Nagasawa, 2019). The sampling frame included these users and thus the authors believed the frame to be expansive and representative of Japan's population. An online survey was used as it saves time and money and improves response rates (Van Selm & Jankowski, 2006). Moreover, online surveys often offer respondents anonymity, which allows the researchers to reduce the possibility of social desirability and respondent bias and thereby obtain more accurate responses from (Jebarajakirthy et al., 2021).

The data collection was directed at individuals residing in Tokyo, and two selection criteria were determined for recruiting respondents who were selected randomly through Macromill's databases. First, students were excluded; second, an equal proportion of solo and group travellers was selected via filter questions asking respondents' current plans to travel solo or in a group. Students were excluded from the sample because it has been shown that student responses tend to vary

significantly from those of the rest of the population and thus may skew results (Henry, 2008). We chose to launch the survey in Tokyo as it is the most populated city in Japan (Worldometer, 2022) and had the highest number of tourists in Japan pre-COVID (10.44 million in 2019, per Arba, 2021).

The Japan Marketing Research Association (JMRA)'s ethical guidelines were followed during the survey. Each respondent was informed that answering the survey was voluntary and that responses were anonymized, and was instructed to read the questionnaire carefully before responding. Respondents were also requested to think of specific businesses allied with the travel industry, e.g., hotels, restaurants, or travel operators while answering the survey questions. This was done to ensure that the respondents considered various aspects and modes of travel and travel-related activities before answering the questions. 980 responses to the survey were received, from which 190 responses with missing values and incomplete data were eliminated, resulting in a final response rate of 80.61%. The final sample of 790 respondents comprised 50.20% males and 49.80% females, and the average age of respondents was 50.02 years. 50.60% of respondents were married, and 57.40% of had children. The sample characteristics align with broader Japanese population statistics, which show roughly equal proportions of gender, low birth rates of around 1.4 children per woman, and a median age of around 49 years (Worldometer, 2022).

5. Data analysis

Before conducting the main analysis, we checked the Kurtosis and skewness values and found that both values fell within the acceptable range (skewness values ranged between -0.5 and $+0.5$), indicating that the data was normally distributed and viable for further testing. The statistical software used in this analysis was SPSS 26.0 and AMOS. Structural equation modelling (SEM) was conducted for evaluating the proposed research model and underlying hypotheses using the two-step procedure (Anderson & Gerbing, 1988). The measurement model's reliability and validity were assessed in the first step while the structural model was then put to the test in the second.

5.1. Measurement model: reliability and validity

Confirmatory factor analysis (CFA) was used to test the measurement model, which showed a good fit: $\chi^2/df = 2.44$, $CFI = 0.95$, $TLI = 0.95$, and $RMSEA = 0.05$. Composite reliability (CR) values ranged between 0.79 and 0.96 and were above the threshold value of 0.70 (Fornell & Larcker, 1981). Each item factor loading score was >0.50 , and all items were retained for further analysis. The average variance extracted (AVE) for each construct was greater than the threshold value of 0.50, indicating suitable convergent validity for the model (Fornell & Larcker, 1981) (Tables 3 and 4). Heterotrait-Monotrait ratio (HTMT) values were calculated to establish discriminant validity and since all of the HTMT values were less than the recommended threshold of 0.85 (Henseler, Ringle, & Sarstedt, 2015), discriminant validity was established. (See Table 5.)

Table 3
Convergent and discriminant validity.

Measures	CR	AVE	E	N	AM	IM	PTT	WTP	PTT
E	0.86	0.62	0.78						
N	0.86	0.61	−0.17	0.78					
AM	0.78	0.55	0.16	0.20	0.74				
IM	0.90	0.70	0.37	−0.17	0.13	0.84			
PTT	0.95	0.79	0.21	−0.12	−0.06	0.59	0.89		
WTP	0.96	0.83	0.20	−0.03	0.27	0.29	0.36	0.91	
PTT	0.92	0.66	0.21	−0.11	0.01	0.59	0.73	0.59	0.82

Note: E: Extraversion; N: Neuroticism; AM: Amotivation; IM: Introjected motivation; PTT: Perception to travel during COVID-19; ITT: Intention to travel during COVID-19; WTP: Willing to pay for safe travel.

Table 4
HTMT- discriminant validity.

	E	N	AM	IM	ITT	WTP	PTT
E	1						
N	0.195	1					
AM	0.170	0.197	1				
IM	0.378	0.155	0.147	1			
ITT	0.207	0.100	0.056	0.588	1		
WTP	0.206	0.015	0.283	0.301	0.367	1	
PTT	0.216	0.098	0.008	0.595	0.733	0.594	1

Note: E: Extraversion; N: Neuroticism; AM: Amotivation; IM: Introjected motivation; PTT: Perception to travel during COVID-19; ITT: Intention to travel during COVID-19; WTP: Willing to pay for safe travel.

Table 5
Hypotheses results.

Hypotheses	Path	Beta	p-value	Support
H1	E → IM	0.36	<0.001	Yes
H2	E → AM	-0.21	<0.001	Yes
H3	N → IM	-0.11	>0.05	No
H4	N → AM	0.24	<0.001	Yes
H5	IM → PTT	0.58	<0.001	Yes
H6	AM → PTT	-0.06	>0.05	No
H7	PTT → ITT	0.68	<0.001	Yes
H8	PTT → WTP	0.69	<0.001	Yes
H9	ITT → WTP	-0.12	>0.05	No

Note: E: Extraversion; N: Neuroticism; AM: Amotivation; IM: Introjected motivation; PTT: Perception to travel during COVID-19; ITT: Intention to travel during COVID-19; WTP: Willing to pay for safe travel.

5.2. Common method bias

Harman's one-factor test was used to check for common method bias (Harman, 1967). A single unrotated factor with all items was generated which accounted for 27.17% of the variance in the data, which is less than the recommended threshold of 50% (Jebbarajakirthi et al., 2021). Thus, we determined that common method bias was not present in the data.

5.3. Structural model and hypotheses testing

The structural model was also found to possess a good model fit: $\chi^2/df = 2.27$, $CFI = 0.94$, $TLI = 0.93$, and $RMSEA = 0.05$. Six out of nine hypotheses were supported (H3, H6, and H9 were not supported). Extraversion positively impacts introjected motivation (H1: $\beta = 0.36$, $p < 0.001$) and negatively impacts amotivation (H2: $\beta = -0.21$, $p < 0.001$). Neuroticism does not have a significant association with introjected motivation (H3: $\beta = -0.11$, $p > 0.05$), whereas it has a significant positive association with amotivation (H4: $\beta = 0.24$, $p < 0.001$). Introjected motivation has a significant positive association with perception of safe travel during COVID-19 (H5: $\beta = 0.58$, $p < 0.001$), whereas amotivation has a non-significant negative association with perception of safe travel during COVID-19 (H6: $\beta = -0.06$, $p > 0.05$). Perception of safe travel during COVID-19 has a significant positive association with intention to travel (H7: $\beta = 0.68$, $p < 0.001$) and willingness to pay premiums for safe travel (H8: $\beta = 0.69$, $p < 0.001$). Intention to travel has a non-significant negative association with willingness to pay premium for safe travel (H9: $\beta = -0.12$, $p > 0.05$). Among the control variables, both gender and age have a significant positive association with intention to travel (Gender: $\beta = 0.34$, $p < 0.001$; Age: $\beta = 0.04$, $p < 0.05$), whereas gender and marital status both have a significant negative association with willingness to pay premiums for safe travel (Gender: $\beta = -0.36$, $p < 0.001$; Marital Status: $\beta = -0.33$, $p < 0.001$). The R^2 values (extracted variance) for intentions to travel and willingness to pay are 56.60% and 38.90% respectively (See Fig. 2) and indicate that the model adequately explains variance in both constructs.

6. Discussion

Extraversion was positively related to introjected motivation, lending support to H1. The study's findings suggest that extraverts believe their family and friends want them to undertake leisure travel, which may be attributed to their recognition of the stress that extraverts experienced during COVID-19 (Wijngaards et al., 2020), and the fact that extraverts crave social acknowledgement (Paris & Pietschnig, 2015). The finding aligns with our understanding of Japanese culture as collectivist (Takano & Osaka, 2018), wherein the expectations and advice of others, especially family members, is given great importance in order to adhere to cultural norms and maintain social relationships.

H2 was also supported, as extraversion was negatively associated with amotivation. Prior studies support this finding: some have found that extraverts may feel uneasy during COVID-19 if they are confined to a particular place (Landmann & Rohmann, 2022) owing to their perceived decline in social connections during the pandemic (Folk, Okabe-Miyamoto, Dunn, & Lyubomirsky, 2020). Additionally, the isolating measures taken in response to COVID-19 may have increased stress and worry for extraverts, as they desire social connections way more than other personality types (Wijngaards et al., 2020). It is plausible that individuals high in extraversion may experience low amotivation since extraverts are fun-loving (Paris & Pietschnig, 2015), talkative, assertive, vigorous, sociable, and adventuresome (Tran et al., 2015; Fayombo, 2010). Consequently, it is plausible to posit that these individuals usually possess positive inclinations towards travel (Mei, Tang, & Lam, 2017) as they may find leisure travel to be beneficial in terms of gaining energy through social interactions and relieving stress by talking to others (Wijngaards et al., 2020). Thus, extraverts may be less likely believe that there are no benefits of leisure travelling during COVID-19 and hence, feel low amotivation.

The analysis showed that neurotic personality type was insignificantly associated with introjected motivation, and so H3 was not supported. In other contexts, individuals with neurotic personality types seek others advise for exercising (Rhodes et al., 2002), and were extrinsically motivated to digital entrepreneurship (Yeh et al., 2020). The probable explanation for no relationship between neurotic personality type and introjected motivation could be that travel is not a necessary step in obtaining counsel or seeking external motivation. We believe that due to their concern of contracting COVID-19, neurotics may wish to adopt social distancing measures which could explain the non-significant connection (Abdelrahman, Li, & Wang, 2020). Talwar et al. (2022) also found that neuroticism has the least relative importance of all five personality traits in predicting travel intentions during COVID-19. As a result, even if friends and family members advise them to travel, neurotics are unlikely to listen since they may be afraid of contracting COVID-19 (Nikčević & Spada, 2020). However, we found support for H4 as neuroticism positively was associated with amotivation, a finding which is lent credence by prior research as well (e.g., Komarraju et al., 2009; West et al., 2016). The high levels of anxiety they face during the pandemic (Khosravi, 2020) may make individuals with this personality type indifferent to the outcome of leisure travel, as they feel powerless in this situation (Anicich, Foulk, Osborne, Gale, & Scherer, 2020). The sense of powerlessness or lack of control may therefore make them believe that there are no benefits of leisure travelling, and hence feel amotivated towards leisure travel.

The analysis shows that introjected motivation has a strong positive association with perceptions of safe travel during COVID-19, and so H5 is supported. Individuals with primarily introjected motivation seek to avoid unpleasant feelings (Kramer & Petzoldt, 2022) and improve their self-worth by conforming to others' expectations and desires (Gillison et al., 2009). Japan is a collectivistic culture in which an individual gives priority to family goals over individual goals (Sreen, Purbey, & Sadarangani, 2018). Thus, family members and friends persuading an individual to leisure travel during COVID-19 in this geographical context may induce the individual follow their advice to avoid the negative

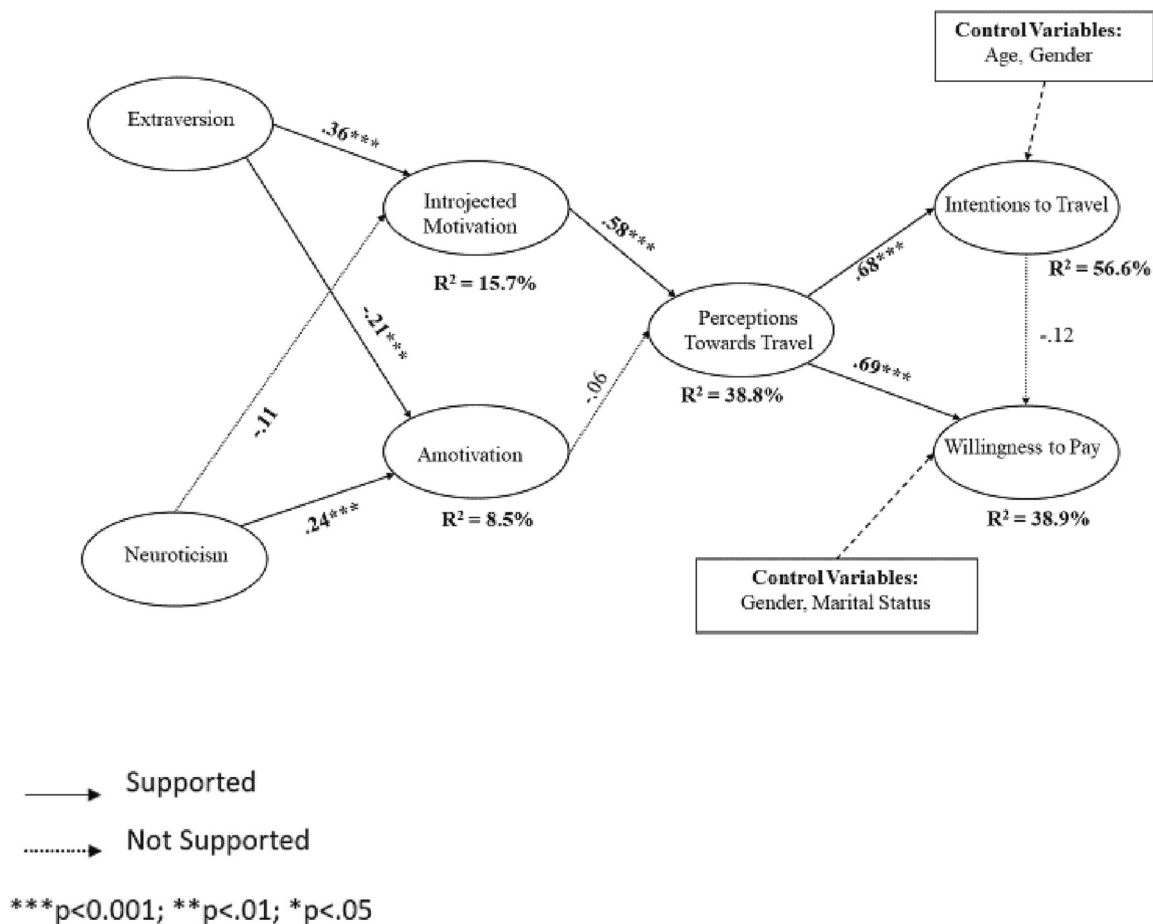


Fig. 2. Structural model.

Note: The beta (path co-efficient) values for control variables are provided under [Section 5.3](#) Structural model and hypotheses testing.

feelings that may arise from disagreeing. Additionally, taking leisure trips during COVID-19 helps people increase self-worth since they can demonstrate their capacity to adhere to safety precautions and contribute to economic recovery. Hence, individuals may be introjectedly motivated to undertake leisure travel and have positive perceptions of safe travel during COVID-19.

H6 was not supported as amotivation shared a non-significant association with perception of safe travel during COVID-19. The restrictions and limitations placed on travelling may have led individuals not to consider leisure travel but undertake only necessary travel related to their employment and sustenance. Amotivated individuals may not have any intention to travel for leisure (Cole et al., 2019) or believe travelling to be sufficiently safe in this scenario, which may be a reason for our findings.

We found support for H7 in that perception of safe travel during COVID-19 was positively associated with travel intentions. Perceived risk reduces one's desire to travel and engage in recreational activities (Chien et al., 2017; Schroeder et al., 2013). An individual performing a leisure travel activity during COVID-19 has to ensure the safety of the airplane, the other public transport they may need to take, their accommodation, and even dining facilities. As a result, safety has become a buzzword in COVID-19 contexts (Li et al., 2021). It is like that people's perceptions of safety when engaging in leisure activities increases their desire to travel, which may explain our findings.

The significant positive association between perception of safe travel during COVID-19 and willingness to pay premiums for safe travel (H8) indicates that even if individuals consider travel to be safe, they are still willing to pay more for purportedly safer travel. This result is unsurprising as multiple institutions have reported the importance of

practicing adequate hygiene while travelling to limit exposure to COVID-19 (Khaddar & Fatmi, 2021; Machida et al., 2020). Since the Japanese culture is collectivist, the consumers in this economy may be more inclined to follow recommended hygiene practices and may also see significant value addition in purchasing services from travel and tourism organizations who claim to provide safe and hygienically-produced services, and therefore be willing to pay higher prices for these services. Such research would significantly aid practitioners in designing products/services and pricing strategies to address consumer concerns in a clear and transparent manner.

Intention to travel has a non-significant association with willingness to pay premium for safe travel and, hence, H9 is rejected. The result is surprising considering prior literature (Hultman et al., 2015; Zhang et al., 2017) which found a positive association between these two variables. A possible reason for the result could be that once individuals form the intent to travel, they may be indifferent to the prices being charged. This is clear from surveys of both domestic and foreign tourists, which demonstrate how keen they are to travel to Japan. For instance, the Japan Travel Bureau Foundation (JTBF) polled overseas visitors to Japan from Asia, Europe, the United States, and Australia and discovered that 80% of the respondents wished to travel to Japan after the COVID-19 restrictions were lifted (Japan Travel Bureau Federation, 2021). A survey by Japan Travel Bureau Federation (2021) in January 2021 that asked domestic tourists if they "wanted to travel more than ever" or "wanted to travel as much as they did before" after COVID-19 restrictions were eased found that 69.40% of them did. Hence, it is possible that Japanese residents may have saved money for future travel plans as a result of the COVID-19's impact on service prices and to overcome the feeling of 'being stuck' at home (Japan Travel Bureau

Federation, 2021). This could explain the insignificant association between travel intention and willingness to pay premium prices, as respondent may have become immune to pricing considerations. However, it is also possible that this is a context specific finding which requires further investigations before any generalizations may be made.

7. Conclusion

Several academics have advocated for a more thorough examination of customers' travel choices (Kim et al., 2022; Talwar et al., 2022) in order to aid the tourism industry's efforts to recover from COVID-19-related losses of around 935 billion USD worldwide (Forbes, 2021). This study responds to this call by empirically examining an individual's travel decision-making using novel mechanisms and pathways based on the SOBC and SDT theoretical lenses. We raised three RQs and evaluated relationships between personality traits, motivational states, safe travel perception, travel intentions, and willingness to pay a premium for safe travel during COVID-19. The findings supported six of the nine hypotheses and revealed a previously unknown mechanism via which individual attributes of personality and motives influence leisure travel decision-making. Given the possibility that COVID-19 may continue to affect individual lives for a long time (McKinsey, 2022), the findings of our study have valuable implications for theory and practice, allowing us to develop propositions that may encourage people to travel safely in these uncertain times. While our contributions are discussed in the following sections, we conclude by emphasizing the need for more research into individual's personal and situational characteristics that can encourage their return to leisure travel and social activities as the world tries to develop a 'new normal' of life in tandem with COVID-19.

7.1. Theoretical implications

The present study makes four key theoretical contributions to travel and tourism literature. First, several scholars have applied the SOR framework to examine affective and behavioural responses for travelling behaviours (Chang et al., 2014; Jang & Namkung, 2009; Rajaguru, 2014) but SOBC is a new theory in this field. Our application of the SOBC framework in the context of travel and tourism contributed to existing literature by exploring its applicability and validating its effectiveness to explain travel-related behaviour in a new context. We urge scholars to further leverage SOBC to explore other travel-related behaviours, such as eco-friendly travel, and food wastage during travel.

Second, we focused on understanding new pathways and previously less studied variables to investigate the influence of individual motives and traits on travel intent during COVID-19. To the best of our understanding, only one recent study included personality traits in the COVID-19 context (Talwar et al., 2022), and the interplay between personality traits and motives to examine consumers' perceptions towards travel during COVID-19 has not been previously investigated. Moreover, scholars have long argued about moving beyond static personality traits in order to explore more dynamic perspectives, such as motives, to define personalities (Sheldon & Prentice, 2019; Koole, Schlinkert, Maldei, & Baumann, 2019). Our study thus expands existing literature and adds valuable insights into travelling during the pandemic by integrating the static personality traits theory with a more dynamic viewpoint of SDT (Cole et al., 2019).

Third, the unsupported correlation of travel intentions and willingness to pay premium for safe travel is a rather surprising result that warrants further examination in our view. We attribute this result to the sample and our inclusion of the select motives and personality traits we focused on. It would be interesting to examine if testing this association in future yields similar results once restrictions are fully lifted since it could have implications for researching the role of pricing (and related factors, such as the perceived severity of COVID-19 and consumers' psychological well-being) in travel-related decision-making. We believe that this finding also provides an opportunity for scholars to investigate

impact of specific hygiene practices on travel intentions and willingness to pay premium prices for safe travel.

Finally, most studies investigating consumers' psychological predispositions towards travelling during COVID-19 have examined culturally western nations like the Netherlands, Norway, and Australia (Isaac & Keijzer, 2021; Jacobsen, Farstad, Higham, Hopkins, & Landa-Mata, 2021; Butler, Szili, Cutler, Hay, & Saikia, 2021). Contrary to prior research, the findings of this study offer valuable knowledge about the relatively under-studied economy and culture of Japan, wherein individual behaviour may differ significantly from that of Japan's western counterparts. For example, the Japanese give much consideration to complying with social regulations and norms, as well as to saving face, which leads to them ensure that others are not embarrassed or perceivably offended in any way (Tashiro & Shaw, 2020). Thus, understanding the travel behaviour of the Japanese adds significant value to current literature.

7.2. Practical implications

7.2.1. Implications for policy makers

Our findings about the associations between personality and motives can assist government and incumbent policymakers to redesign old programs and launch new campaigns that can draw the attention of individuals with these personality traits and motivational sources. For example, raising awareness about job losses in the travel industry and the drastic effects on travel industry employees may catch the attention of individuals high on introjected motivation and extraversion since they may be inclined to actively pursue leisure travel and assist this industry's recovery owing to their propensity for seeking social recognition and positive emotional reactions. The policy makers may create campaigns and commercials that showcase travellers as heroes of the tourism industry and economy.

Additionally, the belief that travel is safe during COVID-19 favourably influences travel intentions, showing that if people believe that leisure travel is safe, they will be more likely to take flights and public transportation, stay in hotels, and eat at restaurants. In light of this conclusion, regulators might collaborate with lodging establishments and travel agencies to develop safety-related criteria and certifications that these businesses could display, perhaps fostering positive attitudes about how the safety of travel is improving. A star rating system for safety may be created by policymakers, wherein a 5-star rating denotes the presence of the finest safety practises and a 1-star rating denotes the presence of the bare minimum.

7.2.2. Implications for hotel managers

Findings showcase that extraverts have introjected motivation to travel during COVID-19. Extraverts look for social relationships and feel energised from interacting with others (Lyu et al., 2013; Tran et al., 2015). Following this finding, we posit that hotel managers can design private dining areas that let patrons converse with one another (their travel group and others) while limiting their exposure to other diners. For example, open private cabins that are six feet away from the next cabin but allows the travellers to talk to each other. Furthermore, managers can fulfil the desire of extraverted individuals to mingle and converse with others by organising theme and activity related events, such as karaoke night. Due to their propensity for introjection, extraverts may be motivated to travel for leisure if family members suggest it. In order to advertise and promote leisure travel in collectivistic communities like Japan, hotel management might also get in touch with formal or informal opinion leaders, such as local celebrities and social media influencers. These influencers and celebrities may help start a conversation between family members and friends to undertake leisure travel.

Additionally, the hotel managers should concentrate on improving travellers' (and potential travellers') knowledge about the safety of their facilities to promote leisure travel during COVID-19. Hotels should make

sure, for instance, that information on hygiene standards, such as clean rooms and dining areas, is available on their website along with photographs from the property to back these claims. Such actions might persuade those who may otherwise decide not to use the hotels' amenities. Booking confirmations may also include information on any safety measures being taken, like the use of masks or hand sanitizers in dining areas. The hospitality sector might run programmes to educate and inform guests about travel safety. It might also post all the safety precautions it is taking on screens located around its facilities. It may also be beneficial for hotels to create campaigns that emphasize appreciation towards visitors who travel and thus contribute to the recovery of the hotel as a business.

7.2.3. Implications for travel agencies

Introjected motivation positively influences perception of safe travel during COVID-19, which then influences travel intentions and willingness to pay premiums for safe travel. Because introjected motivation arises from the desire to increase one's self-worth, travel agencies may provide recognition certificates to leisure travellers that thank them for their contribution in helping the Japanese leisure travel industry and economy recover. Such certificates may increase introjected motivation by offering external validation from which one may gain a greater sense of self-worth. These certifications may be posted in social media that further enhances individual's self-worth in the community.

Furthermore, it is crucial to cultivate a sense of security when travelling in the era of COVID-19, according to our findings regarding perceptions towards travel during COVID-19 and travel intentions. A number of parameters, including vehicle transportation, hotel stay, dining, and ordering food, are considered as potential safety risks by leisure travellers and any weak links may make them apprehensive of travelling during COVID-19. Travel agencies may mitigate these concerns by creating a travel package plan that pick people up from their homes in completely secure and hygienic vehicles, transport them to the airport, obtain flight tickets with little contact from others, and guarantee transportation to the hotel once at the destination.

7.3. Limitations and future research

When considering the results of this report, researchers should keep the following five limitations in mind and develop future research strategies to address these limitations. First, common method bias and social desirability biases can be present in surveys. We tested for common method bias using Harman's one-factor test. To minimize biases in social desirability, we have also ensured the privacy of respondents by keeping them anonymous. However, these strategies may not ensure the elimination of such biases. Scholars may conduct a field experiment or a mixed-method research that would ensure both internal and external validity.

Second, we considered select personality and motivational forms in line with the study objective and this could have limited our findings. Third, this study is a cross-sectional study conducted at a singular point in time. A longitudinal study after the restrictions are lifted or concern about COVID-19 declines may reveal interesting findings. Fourth, the current study looked at safety procedures for all aspects of travel, including transportation, hotel stays, and dining. Individuals may have differing reactions to each travel-related activity, and may regard any of them as posing challenges that significantly influence their travel intentions. For instance, an individual may believe that transport has the highest associated risk of contracting COVID-19 or that dining has the least risk. The present study does not consider the varying reaction to each activity of leisure travel but considers all of them in single construct of perception of safe travel during COVID-19. Future researchers may investigate the impact of individual travel-related activities on travel inclinations.

Last, defining the boundary conditions by including moderators, such as fear of COVID-19, social norms, and mortality salience, may

provide interesting insights for the current theoretical model. Additionally, future scholars may include the effects of other variables that may directly or indirectly affect tested associations – including social demographics – which we included as control variables.

Contribution statement

NS, AT and FB did the conceptualization, writing-original draft, & writing-reviewing and editing. SS and AD did data curation, methodology, project administration, supervision. & writing-reviewing and editing.

Declaration of Competing Interest

None.

Acknowledgements

None.

Appendix A. Questionnaire

Instruction to participants

This survey is aimed to understand peoples' opinion towards travelling, exclusively for academic purpose. Travelling means travels for leisure purposes only (no business travels). Travelling can be abroad or domestic; it can also be alone or group travels.

Screening question one

How many times were you travelling (abroad or domestic; alone or group) on average per one year before COVID19?

(answers: 1 = 0 times, 2 = 1times, 3 = 2times, 4 = 3times, 5 = 4times, 6 = 5times, 7 = 6times, 8 = 7times, 9 = 8times, 10 = 9times, 11 = 10 + times) – > pick 3(2 times per year on average) or more.

Screening question two

As for the travels you answered in the previous question, mostly do you travel alone, or with someone before COVID-19 pandemic? (1 = Alone, 2 = with friend(s), 3 = with partner (girlfreind/boyfriend), 4 = with family member (spouse only), 5 = with family members (spouse, children, and/or parents, etc.), 6 = with other people (colleagues or business partners, classmates, etc.) – > We need 50% solo travellers, and 50% group travellers).

Scale items anchored on a seven-point Likert scale (strongly disagree – '1' to strongly agree – '7').

Extraversion

1. I talk to a lot of different people at parties
2. I feel comfortable around people
3. I start conversations
4. I make friends easily

Neuroticism

1. I get stressed out easily
2. I worry about things
3. I fear the worst
4. I am filled with doubts

Introjected/External motivation

1. My family would be mad if I didn't travel for leisure anymore due to COVID-19 pandemic
2. My friends would be mad if I didn't travel for leisure anymore due to COVID-19 pandemic
3. My family tell me to keep travelling for leisure despite COVID-19 pandemic
4. My friends tell me to keep travelling for leisure despite COVID-19 pandemic

Amotivation

1. I'm not sure why I still travel for leisure during COVID-19 pandemic; I do not seem to be getting any benefits from it
2. I used to have good reasons for travelling for leisure, but now I question if I should continue due to COVID-19 pandemic
3. It is not clear to me anymore; I don't really think travel for leisure is my thing due to COVID-19 pandemic

Perception towards travel during COVID-19 pandemic

1. It is safe to travel for leisure by airplane during the COVID-19 pandemic
2. It is safe to travel for leisure by public transport (e.g., bus, train) during the COVID-19 pandemic
3. It is safe to stay in a chain hotel during the COVID-19 pandemic
4. It is safe to use the hotel's recreational facilities (e.g., gym, pool) during the COVID-19 pandemic
5. It is safe to stay in an independent hotel during the COVID-19 pandemic
6. It is safe to order take out during the COVID-19 pandemic

Willingness to pay for safe travel during COVID-19 pandemic

1. I am willing to pay more for increased safety precautions when I fly to my travel destination for leisure during the COVID-19 pandemic
2. I am willing to pay more for increased safety precautions when I stay in a hotel at my travel destination for leisure during the COVID-19 pandemic.
3. I am willing to pay more for increased safety precautions when ordering food via room service at my travel destination for leisure during the COVID-19 pandemic.
4. I am willing to pay more for increased safety precautions when I dine out at my travel destination for leisure during the COVID-19 pandemic.
5. I am willing to pay more for increased safety precautions when commuting locally at my travel destination for leisure during the COVID-19 pandemic.

Intention to travel (during pandemic)

1. I hope to travel for leisure during the ongoing COVID-19 pandemic
2. I intend to travel for leisure during the ongoing COVID-19 pandemic
3. If everything goes as I think, I plan to travel for leisure during the ongoing COVID-19 pandemic
4. I predict that I should travel for leisure to a tourist destination during the ongoing COVID-19 pandemic
5. I am willing to visit a tourist destination during the ongoing COVID-19 pandemic

Demographic profile

Please mention your age? ____.

Gender

1. Male
2. Female
3. Other

Marital Status

1. Married
2. Single
3. Divorce

Do you have children

1. Yes
2. No

References

- Abdelrahman, Z., Li, M., & Wang, X. (2020). Comparative review of SARS-CoV-2, SARS-CoV, MERS-CoV, and influenza a respiratory viruses. *Frontiers in immunology*, 2309.
- Aebli, A., Volgger, M., & Taplin, R. (2022). A two-dimensional approach to travel motivation in the context of the COVID-19 pandemic. *Current Issues in Tourism*, 25(1), 60–75.
- Aharon, D. Y., Jacobi, A., Cohen, E., Tzur, J., & Qadan, M. (2021). COVID-19, government measures and hospitality industry performance. *PLoS One*, 16(8), Article e0255819.
- Ahn, Y. J., & Janke, M. C. (2011a). Motivations and benefits of the travel experiences of older adults. *Educational Gerontology*, 37(8), 653–673.
- Ahn, Y.-j., & Janke, M. C. (2011b). Motivations and benefits of the travel experiences of older adults. *Educational Gerontology*, 37(8), 653–673. <https://doi.org/10.1080/03601271003716010>
- Aitken, N. M., Pelletier, L. G., & Baxter, D. E. (2016). Doing the difficult stuff: Influence of self-determined motivation toward the environment on transportation proenvironmental behaviour. *Ecopsychology*, 8(2), 153–162.
- Allan, B. A., Autin, K. L., & Duffy, R. D. (2016). Self-determination and meaningful work: Exploring socioeconomic constraints. *Frontiers in Psychology*, 7, 71.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411.
- Ang, R. P. (2006). Effects of parenting style on personal and social variables for Asian adolescents. *American Journal of Orthopsychiatry*, 76, 503–511.
- Anicich, E. M., Foulk, T. A., Osborne, M. R., Gale, J., & Schaerer, M. (2020). Getting back to the “new normal”: Autonomy restoration during a global pandemic. *Journal of Applied Psychology*, 105(9), 931.
- Aro, A. R., Varti, A. M., Schreck, M., Turtiainen, P., & Uutela, A. (2009). Willingness to take travel-related health risks-a study among Finnish tourists in Asia during the avian influenza outbreak. *International Journal of Behavioral Medicine*, 16(1), 68–73. <https://doi.org/10.1007/s12529-008-9003-7>
- Aronson, E. (2008). Fear, denial, and sensible action in the face of disasters. *Social Research: An International Quarterly*, 75(3), 855–872.
- Aschwanden, D., Strickhouser, J. E., Sesker, A. A., Lee, J. H., Luchetti, M., Stephan, Y., ... Terracciano, A. (2021). Psychological and behavioural responses to coronavirus disease 2019: The role of personality. *European Journal of Personality*, 35(1), 51–66.
- Awad-Núñez, S., Julio, R., Gomez, J., Moya-Gómez, B., & González, J. S. (2021). Post-COVID-19 travel behaviour patterns: Impact on the willingness to pay of users of public transport and shared mobility services in Spain. *European Transport Research Review*, 13(1). <https://doi.org/10.1186/s12544-021-00476-4>
- Bae, S. Y., & Chang, P. J. (2021). The effect of coronavirus disease-19 (COVID-19) risk perception on behavioural intention towards 'untact' tourism in South Korea during the first wave of the pandemic (March 2020). *Current Issues in Tourism*, 24(7), 1017–1035. <https://doi.org/10.1080/13683500.2020.1798895>
- Baloglu, S., Henthorne, T. L., & Sahin, S. (2014). Destination image and brand personality of Jamaica: A model of tourist behaviour. *Journal of Travel & Tourism Marketing*, 31(8), 1057–1070. <https://doi.org/10.1080/10548408.2014.892468>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84(2), 191.
- Barber, N., Kuo, P. J., Bishop, M., & Goodman, R. (2012). Measuring psychographics to assess purchase intention and willingness to pay. *Journal of Consumer Marketing*, 29(4), 280–292. <https://doi.org/10.1108/07363761211237353>
- Behzadnia, B., & FatahModares, S. (2020). Basic psychological need-satisfying activities during the COVID-19 outbreak. *Applied Psychology: Health and Well-Being*, 12(4), 1115–1139. <https://doi.org/10.1111/aphw.12228>
- Brannon, D. R. (2010). *Sport motivation and personality traits in NCCA division I student-athletes: An examination of amotivation*. Doctoral dissertation. University of Georgia.
- Bratko, D., Butkovic, A., Hlupic, T. V., & Pocrnic, M. (2022). Etiology of basic psychological needs and their association with personality: A twin study. *Journal of Research in Personality*, 97, Article 104201.
- Bressan, A., Duarte Alonso, A., & Kok, S. K. (2021). Confronting the unprecedented: Micro and small businesses in the age of COVID-19. *International Journal of Entrepreneurial Behaviour and Research*, 27(3), 799–820. <https://doi.org/10.1108/IJEBR-09-2020-0602>
- Buheji, M., da Costa Cunha, K., Beka, G., Mavrić, B., Leandro do Carmo de Souza, Y., Souza da Costa Silva, S., ... Chetia Yein, T. (2020). The extent of COVID-19

- pandemic socio-economic impact on global poverty. A global integrative multidisciplinary review. *American Journal of Economics*, 10(4), 213–224. <https://doi.org/10.5923/j.economics.20201004.02>
- Butler, G., Szili, G., Cutler, C., Hay, I., & Saikia, U. (2021). Changing Australian leisure mobilities in the COVID-19 pandemic: Exploring the role of automobilities. *Leisure Studies*, 40(5), 698–713.
- Butz, N. T., & Stupnisky, R. H. (2016). A mixed methods study of graduate students' self-determined motivation in synchronous hybrid learning environments. *The Internet and Higher Education*, 28, 85–95.
- Cahyanto, I., Pennington-Gray, L., Thapa, B., Srinivasan, S., Villegas, J., Matyas, C., & Kiouis, S. (2016). Predicting information seeking regarding hurricane evacuation in the destination. *Tourism Management*, 52, 264–275.
- Carvalho, L. D. F., Pianowski, G., & Gonçalves, A. P. (2020). Personality differences and COVID-19: Are extroversion and conscientiousness personality traits associated with engagement with containment measures? *Trends in Psychiatry and Psychotherapy*, 42, 179–184.
- Chan, H. F., Moon, J. W., Savage, D. A., Skali, A., Torgler, B., & Whyte, S. (2021). Can psychological traits explain mobility behaviour during the COVID-19 pandemic? *Social Psychological and Personality Science*, 12(6), 1018–1029.
- Chang, C. H., Shu, S., & King, B. (2014). Novelty in theme park physical surroundings: An application of the stimulus-organism-response paradigm. *Asia Pacific Journal of Tourism Research*, 19(6), 680–699. <https://doi.org/10.1080/10941665.2013.779589>
- Chatterjee, S., Chakraborty, S., Fulk, H.K., & Sarker, S. (2021). Building a compassionate workplace using information technology: Considerations for information systems research. *Int J Inf Manag*, 56, 102261. <https://doi.org/10.1016/j.ijinfomgt.2020.102261>
- Chien, P. M., Sharifpour, M., Ritchie, B. W., & Watson, B. (2017). Travelers' health risk perceptions and protective behaviour: A psychological approach. *Journal of Travel Research*, 56(6), 744–759.
- Chow, A. S., Cheng, I. N., & Cheung, L. T. (2019). Self-determined travel motivations and ecologically responsible attitudes of nature-based visitors to the Ramsar wetland in South China. *Annals of Leisure Research*, 22(1), 42–61.
- Chua, B. L., Al-Ansi, A., Lee, M. J., & Han, H. (2020). Tourists' outbound travel behavior in the aftermath of the COVID-19: Role of corporate social responsibility, response effort, and health prevention. *Journal of Sustainable Tourism*, 29(6), 879–906.
- Chung, J. Y., Lee, C. K., & Park, Y. N. (2021). Trust in social non-pharmaceutical interventions and travel intention during a pandemic. *Journal of Vacation Marketing*, 27(4), 437–448.
- Clark, M. H., & Schroth, C. A. (2010). Examining relationships between academic motivation and personality among college students. *Learning and Individual Differences*, 20(1), 19–24.
- Cole, S., Deci, E. L., Zhao, H., & Wang, W. (2022). How environmental and psychological factors interact with travel participation after spinal cord injury. *Rehabilitation Psychology*, 67(2), 152–161. <https://doi.org/10.1037/rep0000439>
- Cole, S., Zhang, Y., Wang, W., & Hu, C. M. (2019). The influence of accessibility and motivation on leisure travel participation of people with disabilities. *Journal of Travel & Tourism Marketing*, 36(1), 119–130. <https://doi.org/10.1080/10548408.2018.1496218>
- Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 38(4), 668.
- Das, M., Habib, M., Saha, V., & Jebarajakirthy, C. (2021). Bandwagon vs snob luxuries: Targeting consumers based on uniqueness dominance. *Journal of Retailing and Consumer Services*, 61, Article 102582.
- David, A. (2010). Examining the relationship of personality and burnout in college students: The role of academic motivation. *Educational Measurement and Evaluation Review*, 1, 90–104.
- De Silva, M., Khan, Z., Vorley, T., & Zeng, J. (2020). Transcending the pyramid: Opportunity co-creation for social innovation. *Industrial Marketing Management*, 89, 471–486.
- Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19(2), 109–134.
- Deci, E. L., & Ryan, R. M. (2010). Self-determination. *The Corsini Encyclopedia of Psychology*, 1–2.
- Dhir, A., Malodia, S., Awan, U., Sakashita, M., & Kaur, P. (2021). Extended valence theory perspective on consumers' e-waste recycling intentions in Japan. *Journal of Cleaner Production*, 312, Article 127443. <https://doi.org/10.1016/j.jclepro.2021.127443>
- Dhir, A., Talwar, S., Sadiq, M., Sakashita, M., & Kaur, P. (2021). Green apparel buying behaviour: A stimulus-organism-behaviour-consequence (SOBC) perspective on sustainability-oriented consumption in Japan. *Business Strategy and the Environment*, 30(8), 3589–3605.
- Dong, H., Ma, S., Jia, N., & Tian, J. (2021). Understanding public transport satisfaction in post COVID-19 pandemic. *Transport Policy*, 101, 81–88.
- Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The mini-IPIP scales: Tiny-yet-effective measures of the big five factors of personality. *Psychological Assessment*, 18(2), 192.
- Elliot, A. J., & Thrash, T. M. (2002). Approach-avoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology*, 82(5), 804–818. <https://doi.org/10.1037/0022-3514.82.5.804>
- Fayombo, G. (2010). The relationship between personality traits and psychological resilience among the Caribbean adolescents. *International Journal of Psychological Studies*, 2(2), 105.
- Feist, J., & Feist, G. J. (2009). *Theories of personality*. Boston, MA: McGraw Hill Higher Education.
- Folk, D., Okabe-Miyamoto, K., Dunn, E., & Lyubomirsky, S. (2020). Did social connection decline during the first wave of COVID-19? The role of extraversion. *Collabra: Psychology*, 6(1), 1–13. <https://doi.org/10.1525/collabra.365>
- Forbes (2021). The Covid-19 Pandemic Has Cost The Global Tourism Industry \$935 Billion. Accessed on 12-12-22. <https://www.forbes.com/sites/duncannmadden/2021/01/14/the-covid-19-pandemic-has-cost-the-global-tourism-industry-935-billion/?sh=50aaaa877d40>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Gao, Y., Rasouli, S., Timmermans, H., & Wang, Y. (2017). Understanding the relationship between travel satisfaction and subjective well-being considering the role of personality traits: A structural equation model. *Transportation Research Part F: Traffic Psychology and Behaviour*, 49, 110–123. <https://doi.org/10.1016/j.trf.2017.06.005>
- Gillison, F., Osborn, M., Standage, M., & Skevington, S. (2009). Exploring the experience of introjected regulation for exercise across gender in adolescence. *Psychology of Sport and Exercise*, 10(3), 309–319.
- Graves, L. M., Sarkis, J., & Gold, N. (2019). Employee proenvironmental behavior in Russia: The roles of top management commitment, managerial leadership, and employee motives. *Resources, Conservation and Recycling*, 140, 54–64.
- Gursoy, D., & 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.
- Harman, D. (1967). A single factor test of common method variance. *Journal of Psychology*, 35(1967), 359–378.
- Haupt, M. R., Weiss, S. M., Chiu, M., Cuomo, R., Chein, J. M., & Mackey, T. (2020). Profiles of Social Distance Compliance: Psychological and Situational Predictors of Risky Behavior during COVID-19. *medRxiv*, 2020–06.
- Henry, P. J. (2008). Student sampling as a theoretical problem. *Psychological Inquiry*, 19(2), 114–126.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Hsiao, C. H., & Tang, K. Y. (2021). Who captures whom—Pokémon or tourists? A perspective of the stimulus-organism-response model. *International Journal of Information Management*, 61, Article 102312.
- Huang, Y., Wu, J., & Shi, W. (2018). The impact of font choice on web pages: Relationship with willingness to pay and tourism motivation. *Tourism Management*, 66, 191–199.
- Hultman, M., Kazemina, A., & Ghasemi, V. (2015). Intention to visit and willingness to pay premium for ecotourism: The impact of attitude, materialism, and motivation. *Journal of Business Research*, 68(9), 1854–1861.
- Humagain, P., & Singleton, P. A. (2021). Examining relationships between COVID-19 destination practices, value, satisfaction and behavioral intentions for tourists' outdoor recreation trips. *Journal of Destination Marketing & Management*, 22, Article 100665.
- Inglede, D. K., & Markland, D. (2008). The role of motives in exercise participation. *Psychology and Health*, 23(7), 807–828.
- Isaac, R. K., & Keijzer, J. (2021). Leisure travel intention following a period of COVID-19 crisis: A case study of the Dutch market. *International Journal of Tourism Cities*, 7(3), 583–601.
- Islam, T., Pitafi, A. H., Arya, V., Wang, Y., Akhtar, N., Mubarik, S., & Xiaobei, L. (2021). Panic buying in the COVID-19 pandemic: A multi-country examination. *Journal of Retailing and Consumer Services*, 59, Article 102357.
- Jacobsen, J. K. S., Farstad, E., Higham, J., Hopkins, D., & Landa-Mata, I. (2021). Travel discontinuities, enforced holidaying-at-home and alternative leisure travel futures after COVID-19. *Tourism Geography*, 1–19.
- Jang, S. S., & Namkung, Y. (2009). Perceived quality, emotions, and behavioural intentions: Application of an extended Mehrabian-Russell model to restaurants. *Journal of Business Research*, 62(4), 451–460.
- Japan Travel Bureau Federation. (2021). https://www.dbj.jp/en/topics/investigate/2021/html/20210623_203339.html (Accessed on 22nd January, 2022).
- Jebarajakirthy, C., Das, M., Maggioni, I., Sands, S., Dharmesthi, M., & Ferraro, C. (2021). Understanding on-the-go consumption: A retail mix perspective. *Journal of Retailing and Consumer Services*, 58, Article 102327.
- Jin, X., Bao, J., & Tang, C. (2022). Profiling and evaluating Chinese consumers regarding post-COVID-19 travel. *Current Issues in Tourism*, 25(5), 745–763.
- Joo, D., Xu, W., Lee, J., Lee, C. K., & Woosnam, K. M. (2021). Residents' perceived risk, emotional solidarity, and support for tourism amidst the COVID-19 pandemic. *Journal of Destination Marketing & Management*, 19, Article 100553.
- Kaczmarek, T., Perez, K., Demir, E., & Zaremba, A. (2021). How to survive a pandemic: The corporate resiliency of travel and leisure companies to the COVID-19 outbreak. *Tourism Management*, 84, Article 104281.
- Khaddar, S., & Fatmi, M. R. (2021). COVID-19: Are you satisfied with travelling during the pandemic? *Transportation Research Interdisciplinary Perspectives*, 9(December 2020), Article 100292. <https://doi.org/10.1016/j.trip.2020.100292>
- Khalilzadeh, S., & Khodi, A. (2021). Teachers' personality traits and students' motivation: A structural equation modeling analysis. *Current Psychology*, 40(4), 1635–1650.
- Khanra, S., Dhir, A., Kaur, P., & Joseph, R. P. (2021). Factors influencing the adoption postponement of mobile payment services in the hospitality sector during a pandemic. *Journal of Hospitality and Tourism Management*, 46, 26–39. <https://doi.org/10.1016/j.jhtm.2020.11.004>
- Khatib, A. N., Carvalho, A. M., Primavesi, R., To, K., & Poirier, V. (2020). Navigating the risks of flying during COVID-19: A review for safe air travel. *Journal of Travel Medicine*, 27(8), 1–9.

- Khosravi, M. (2020). Neuroticism as a marker of vulnerability to COVID-19 infection. *Psychiatry Investigation*, 17(7), 710.
- Kim, J., & Lennon, S. J. (2013). Effects of reputation and website quality on online consumers' emotion, perceived risk and purchase intention. *Journal of Research in Interactive Marketing*, 7(1), 33–56.
- Kim, J., Park, J., Lee, J., et al. (2022). COVID-19 and extremeness aversion: The role of safety seeking in travel decision making. *Journal of Travel Research*, 61(4), 837–854. <https://doi.org/10.1177/00472875211008252>
- Kim, M. J., Lee, C. K., & Jung, T. (2020). Exploring consumer behaviour in virtual reality tourism using an extended stimulus-organism-response model. *Journal of Travel Research*, 59(1), 69–89. <https://doi.org/10.1177/0047287518818915>
- Komarraju, M., Karau, S. J., & Schmeck, R. R. (2009). Role of the big five personality traits in predicting college students' academic motivation and achievement. *Learning and Individual Differences*, 19(1), 47–52.
- Koole, S. L., Schlinkert, C., Maldei, T., & Baumann, N. (2019). Becoming who you are: An integrative review of self-determination theory and personality systems interactions theory. *Journal of Personality*, 87(1), 15–36.
- Kramer, J., & Petzoldt, T. (2022). The role of self-concordance for self-reported strategic, tactical, and operational eco-driving. *Transportation Research Part F: Traffic Psychology and Behaviour*, 84, 83–98.
- Kumagai, K., & Nagasawa, S. Y. (2019). Psychological switching mechanism of consumers' luxury and non-luxury brand attitude formation: The effect of store location prestige and self-congruity. *Heliyon*, 5(5), Article e01581. <https://doi.org/10.1016/j.heliyon.2019.e01581>
- Laato, S., Islam, A. K. M. N., Farooq, A., & Dhir, A. (2020). Unusual purchasing behaviour during the early stages of the COVID-19 pandemic: The stimulus-organism-response approach. *Journal of Retailing and Consumer Services*, 57(March), Article 102224. <https://doi.org/10.1016/j.jretconser.2020.102224>
- Landmann, H., & Rohmann, A. (2022). When loneliness dimensions drift apart: Emotional, social and physical loneliness during the COVID-19 lockdown and its associations with age, personality, stress and well-being. *International Journal of Psychology*, 57(1), 63–72.
- 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.
- Lee, K., & Ewert, A. (2019). Understanding the motivations of serious leisure participation: A self-determination approach. *Annals of Leisure Research*, 22(1), 76–96.
- Lee, K. F., Bentley, J., & Hsu, H.-Y. M. (2017). Using characteristics of serious leisure to classify rock climbers: A latent profile analysis. *Journal of Sport and Tourism*, 21(4), 245–262. <https://doi.org/10.1080/14775085.2017.1327369>
- Lee, S. H., & Deale, C. (2021). Consumers' perceptions of risks associated with the use of Airbnb before and during the COVID-19 pandemic. *International Hospitality Review*, 35(2), 225–239.
- Li, B., Zhong, Y., Zhang, T., & Hua, N. (2021). Transcending the COVID-19 crisis: Business resilience and innovation of the restaurant industry in China. *Journal of Hospitality and Tourism Management*, 49, 44–53.
- Lin, J. Y.-C., Wang, E. S.-T., & Cheng, J. M.-S. (2007). The relationship between extraversion and leisure motivation: Evidence from fitness center participation. *Social Behavior and Personality: An International Journal*, 35(10), 1317–1322.
- Liu-Lastres, B., Mirehie, M., & Cecil, A. (2021). Are female business travellers willing to travel during COVID-19? An exploratory study. *Journal of Vacation Marketing*, 27(3), 252–266.
- Lyu, S. O., Oh, C. O., & Lee, H. (2013). The influence of extraversion on leisure constraints negotiation process: A case of Korean people with disabilities. *Journal of Leisure Research*, 45(2), 233–252.
- Machida, M., Nakamura, I., Saito, R., Nakaya, T., Hanibuchi, T., Takamiya, T., ... Inoue, S. (2020). Incorrect use of face masks during the current COVID-19 pandemic among the general public in Japan. *International Journal of Environmental Research and Public Health*, 17(18), 6484.
- Matzler, K., Faullant, R., Renzl, B., & Leiter, V. (2005). The relationship between personality traits (extraversion and neuroticism), emotions and customer self-satisfaction. *Innovative Marketing*, 1(2), 32–39.
- McKinsey. (2022). <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/when-will-the-covid-19-pandemic-end> (Accessed on 30th May 2021).
- Medeiros, M., Ozturk, A., Hancer, M., Weinland, J., & Okumus, B. (2022). Understanding travel tracking mobile application usage: An integration of self-determination theory and UTAUT2. *Tourism Management Perspectives*, 42, Article 100949.
- Mehrabian, A., & Russell, J. (1974). *An approach to environmental psychology*. Cambridge, MA: MIT Press.
- Mei, C., Tang, F., & Lam, D. (2017). The role of extraversion and agreeableness traits on Gen Y's attitudes and willingness to pay for green hotels. *International Journal of Contemporary Hospitality Management*, 29(1), 607–623. <https://doi.org/10.1108/IJCHM-02-2016-0048>
- Modersitzki, N., Phan, L. V., Kuper, N., & Rauthmann, J. F. (2020). Who is impacted? Personality predicts individual differences in psychological consequences of the COVID-19 pandemic in Germany. *Social Psychological and Personality Science*. <https://doi.org/10.1177/1948550620952576>
- Nabi, N., O'Cass, A., & Siahtiri, V. (2019). Status consumption in newly emerging countries: The influence of personality traits and the mediating role of motivation to consume conspicuously. *Journal of Retailing and Consumer Services*, 46, 173–178.
- Nazneen, S., Hong, X., & Ud Din, N. (2020). COVID-19 crises and tourist travel risk perceptions. *SSRN*. <https://doi.org/10.2139/ssrn.3592321>
- Nelson, B. W., Pettitt, A., Flannery, J. E., & Allen, N. B. (2020). Rapid assessment of psychological and epidemiological correlates of COVID-19 concern, financial strain, and health-related behaviour change in a large online sample. *PLoS One*, 15(11), Article e0241990. <https://doi.org/10.1371/journal.pone.0241990>
- Neuburger, L., & Egger, R. (2021). Travel risk perception and travel behaviour during the COVID-19 pandemic 2020: A case study of the DACH region. *Current Issues in Tourism*, 24(7), 1003–1016. <https://doi.org/10.1080/13683500.2020.1803807>
- Nikčević, A. V., & Spada, M. M. (2020). The COVID-19 anxiety syndrome scale: Development and psychometric properties. *Psychiatry research*, 292, 113322.
- Nikitin, J., & Freund, A. M. (2015). The indirect nature of social motives: The relation of social approach and avoidance motives with likeability via extraversion and a agreeableness. *Journal of Personality*, 83(1), 97–105.
- Nippon. (2020). <https://www.nippon.com/en/japan-data/h00803/> Accessed on 20th June 2022.
- Osei-Frimpong, K. (2019). Understanding consumer motivations in online social brand engagement participation: Implications for retailers. *International Journal of Retail & Distribution Management*, 47(5), 511–529.
- Paris, C. M., & Pietschnig, J. (2015). 'But first, let me take a selfie': Personality traits as predictors of travel selfie taking and sharing behaviors.
- Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *General psychiatry*, 33(2).
- Radic, A., Lück, M., Al-Ansi, A., Chua, B. L., Seeler, S., & Han, H. (2021). Cruise ship dining experiencescape: The perspective of female cruise travellers in the midst of the COVID-19 pandemic. *International Journal of Hospitality Management*, 95, Article 102923.
- Rajaguru, R. (2014). Motion picture-induced visual, vocal and celebrity effects on tourism motivation: Stimulus organism response model. *Asia Pacific Journal of Tourism Research*, 19(4), 375–388.
- Reiher, C., & Yamaguchi, T. (2017). Food, agriculture and risk in contemporary Japan. *Contemporary Japan*, 29(1), 2–13.
- Rhodes, R. E., Courneya, K. S., & Hayduk, L. A. (2002). Does personality moderate the theory of planned behaviour in the exercise domain? *Journal of Sport and Exercise Psychology*, 24(2), 120–132.
- Roy, S., & Goswami, P. (2007). Structural equation modeling of value-psychographic trait-clothing purchase behavior: A study on the urban college-goers of India. *Young Consumers*, 8(4), 269–277.
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57(5), 749.
- Sánchez-Cañizares, S. M., Cabeza-Ramírez, L. J., Muñoz-Fernández, G., & Fuentes-García, F. J. (2020). Impact of the perceived risk from COVID-19 on intention to travel. *Current Issues in Tourism*, 1–15.
- Schroeder, A., Pennington-Gray, L., Kaplanidou, K., & Zhan, F. (2013). Destination risk perceptions among US residents for London as the host city of the 2012 summer olympic games. *Tourism Management*, 38, 107–119.
- Shavandash, M., & Schänzel, H. A. (2017). Effects of perceived parental style on adolescents' motivations in a tourism context. *Anatolia*, 28(2), 263–275.
- Sheldon, K. M., & Prentice, M. (2019). Self-determination theory as a foundation for personality researchers. *Journal of Personality*, 87(1), 5–14.
- Shokrkon, A., & Nicoladis, E. (2021). How personality traits of neuroticism and extroversion predict the effects of the COVID-19 on the mental health of Canadians. *PLoS One*, 16(5), Article e0251097.
- Shupe, F. L., & Gagné, P. (2016). Motives for and personal and social benefits of airplane piloting as a serious leisure activity for women. *Journal of Contemporary Ethnography*, 45(1), 85–112.
- Smith (2020). Accessed on 12-01-23. https://greatergood.berkeley.edu/article/item/why_your_sacrifices_during_pandemic_matter
- Snuggs, S., & McGregor, S. (2021). Food & meal decision making in lockdown: How and who has COVID-19 affected? *Food Quality and Preference*, 89, Article 104145.
- Sreen, N., Dhir, A., Talwar, S., Tan, T. M., & Alharbi, F. (2021). Behavioural reasoning perspectives to brand love toward natural products: Moderating role of environmental concern and household size. *Journal of Retailing and Consumer Services*, 61, Article 102549. <https://doi.org/10.1016/j.jretconser.2021.102549>
- Sreen, N., Mukherjee, S., Jebarajakirthy, C., Kumar, S., & Sharma, H. (2022). Role of personal values on revisiting green hotels: A hierarchical value map approach. *Tourism Recreation Research*, 1–21.
- Sreen, N., Purbey, S., & Sadarangani, P. (2018). Impact of culture, behaviour and gender on green purchase intention. *Journal of Retailing and Consumer Services*, 41, 177–189.
- Stadler, M., Niepel, C., Botes, E., Dörendahl, J., Krieger, F., & Greiff, S. (2020, March 31). *Individual psychological responses to the SARS-CoV-2 pandemic: Different clusters and their relation to risk-reducing behaviour*. <https://doi.org/10.31234/osf.io/k8unc>
- Statista. (2022). COVID-19: Job loss in travel and tourism worldwide 2020, by region Accessed through: <https://www.statista.com/statistics/1104835/coronavirus-travel-tourism-employment-loss/> Accessed on 8-05-2022.
- Sultan, P., Wong, H. Y., & Azam, M. S. (2021). How perceived communication source and food value stimulate purchase intention of organic food: An examination of the stimulus-organism-response (SOR) model. *Journal of Cleaner Production*, 312, Article 127807.
- Takano, Y., & Osaka, E. (2018). Comparing Japan and the United States on individualism/collectivism: A follow-up review. *Asian Journal of Social Psychology*, 21(4), 301–316.
- Talwar, S., Jabeen, F., Tandon, A., Sakashita, M., & Dhir, A. (2021). What drives willingness to purchase and stated buying behaviour toward organic food? A stimulus-organism-behaviour-consequence (SOBC) perspective. *Journal of Cleaner Production*, 293, Article 125882. <https://doi.org/10.1016/j.jclepro.2021.125882>
- Talwar, S., Srivastava, S., Sakashita, M., Islam, N., & Dhir, A. (2022). Personality and travel intentions during and after the COVID-19 pandemic: An artificial neural

- network (ANN) approach. *Journal of Business Research*, 142, 400–411. <https://doi.org/10.1016/j.jbusres.2021.12.002>
- Tashiro, A., & Shaw, R. (2020). COVID-19 pandemic response in Japan: What is behind the initial flattening of the curve? *Sustainability*, 12(13), 5250.
- Teikoku Databank. (2020). New coronavirus related bankrupt. Available at: <https://www.tdb.co.jp/tosan/covid19/index.html> (Accessed on 19 February 2021).
- Tran, X., Nguyen, B. L., & Nguyen, M. C. (2015). Effects of the Big Five personality traits on recreation types—The case of Vietnam tourism. *Travel and Tourism Research Association: Advancing Tourism Research Globally*. Retrieved from <https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1043&context=ttra>.
- Uğur, N. G., & Akbiyik, A. (2020). Impacts of COVID-19 on global tourism industry: A cross-regional comparison. *Tourism Management Perspectives*, 36, Article 100744.
- Van Selin, M., & Jankowski, N. W. (2006). Conducting online surveys. *Quality and Quantity*, 40(3), 435–456.
- Wei, C. V., Chen, H., & Lee, Y. M. (2021). Factors influencing customers' dine out intention during COVID-19 reopening period: The moderating role of country-of-origin effect. *International Journal of Hospitality Management*, 95, Article 102894.
- West, J., Rhoden, C., Robinson, P. D., Castle, P., & St Clair Gibson, A. (2016). How motivated are you? Exploring the differences between motivational profiles and personality traits. *Sport and Exercise Psychology Review*, 12(1), 28–42.
- Whelan, E., Islam, A. N., & Brooks, S. (2020). Applying the SOBC paradigm to explain how social media overload affects academic performance. *Computers & Education*, 143, Article 103692.
- Wijngaards, I., De Zilwa, S. C. M. S., & Burger, M. J. (2020). Extraversion moderates the relationship between the stringency of COVID-19 protective measures and depressive symptoms. *Frontiers in Psychology*, 11(October), 1–9. <https://doi.org/10.3389/fpsyg.2020.568907>
- Williams, S. N., Armitage, C. J., Tampe, T., & Dienes, K. A. (2021). Public perceptions of non-adherence to pandemic protection measures by self and others: A study of COVID-19 in the United Kingdom. *PLoS One*, 16(10), Article e0258781.
- Worldometer. (2022). <https://www.worldometers.info/demographics/japan-demographics/> Accessed on 10th March, 2022.
- Yagasaki, N. (2021). Impact of COVID-19 on the Japanese travel market and the travel market of overseas visitors to Japan, and subsequent recovery. *IATSS Research*, 45 (4), 451–458. <https://doi.org/10.1016/j.iatssr.2021.11.008>
- Yeh, C. H., Wang, Y. S., Hsu, J. W., & Lin, S. J. (2020). Predicting individuals' digital entrepreneurship: Does educational intervention matter? *Journal of Business Research*, 106, 35–45.
- Youn, H., Kim, J. H., & Song, H. (2017). The leading causes and consequences of citizenship pressure in the hotel industry. *International Journal of Contemporary Hospitality Management*, 29(6), 1541–1559. <https://doi.org/10.1108/IJCHM-09-2015-0472>
- Yu, C. E., Wen, J., & Yang, S. (2020). Viewpoint of suicide travel: An exploratory study on YouTube comments. *Tourism Management Perspectives*, 34, Article 100669.
- Zhang, Y., Cole, S., Hirt, E., & Bilgihan, A. (2017). Self-determined travel facilitation with mental construal priming. *Tourism Management*, 61, 472–483.
- Zheng, D., Luo, Q., & Ritchie, B. W. (2021). Afraid to travel after COVID-19? Self-protection, coping and resilience against pandemic 'travel fear'. *Tourism Management*, 83, Article 104261. <https://doi.org/10.1016/j.tourman.2020.104261>
- Zhou, M. (2015). Moderating effect of self-determination in the relationship between big five personality and academic performance. *Personality and Individual Differences*, 86, 385–389.
- Zimmerman, R. D., Boswell, W. R., Shipp, A. J., Dunford, B. B., & Boudreau, J. W. (2012). Explaining the pathways between approach-avoidance personality traits and employees' job search behaviour. *Journal of Management*, 38(5), 1450–1475. <https://doi.org/10.1177/0149206310396376>



Naman Sreen (PhD) is a professor at O.P. Jindal Global University, Sonapat, India. His research appears in Journal of Retailing and Consumer Services among others.



Anushree Tandon (PhD) is currently a postdoctoral researcher at Turku School of Economics, University of Turku, Finland. Her research appears in *Computers in Human Behaviour*, *Computers in Industry*, *Appetite* among others.



Fauzia Jabeen (PhD) is a Full Professor of Management at the College of Business at Abu Dhabi University. She has published works on organizational behaviour, gender studies, entrepreneurship, social responsibility, sustainability, etc., in high impact factor journals. She also serves as the Head of Engagement and Corporate Relations and Beta Gamma Sigma society-chapter advisor at Abu Dhabi University. She has been a Visiting Professor to the Burgundy School of Business, Dijon, France.



Shalini Srivastava (Ph.D.) is a professor at Jaipuria Institute of Management, India. Her research appears in *Journal of Hospitality and Tourism Management*, *Journal of Hospitality Marketing & Management*, *Personnel Review* among others.



Amandeep Dhir (DSc, PhD) is a Professor of Research Methods at University of Agder, Norway. He is also a visiting professor at Norwegian School of Hotel Management, University of Stavanger, Norway. His research appears in the *Technology Forecasting and Social Change*, *Internet Research*, *Journal of Retailing and Consumer Services*, *International Journal of Information Management*, *Computers in Human Behaviour*, *Computers in Industry*, *International Journal of Hospitality Management*, *Journal of Cleaner Production*, *Food quality and preferences*, *Appetite*, *Information Technology & People*, *Australasian Marketing Journal*, *Enterprise Information Systems* among others.