

Tourists as caged birds: Elaborating travel thoughts and craving when feeling captive

Abstract

Being unable to travel feels like being a caged bird for many and trapped in unwanted situations strengthens travel desire. This study contextualizes travel deprivation and subsequent desire thinking in relation to the concept of craving. It introduces lockdown captivity and travel craving as relevant factors to understand tourism demand when travel is impossible. This research demonstrates the usefulness of the elaborated intrusion theory in the tourism context and newly defines wanderlust in association with craving. Empirical support for the hypotheses that lockdown captivity and wanderlust are key determinants of travel craving is provided. Travel craving should be used as an alternative concept to travel intention in situations in which travel is curtailed or impossible. Tourism marketers and practitioners are advised to build on the caged bird metaphor to effectively communicate their offerings during crises that result in travel restrictions and to show their empathy towards would-be tourists.

Keywords: elaborated intrusion theory, lockdown captivity, travel craving, wanderlust

1. Introduction

In March 2021, on return from Iraq, Pope Francis lamented having felt ‘imprisoned’ due to Covid-19 restrictions. Travelling again made him feel alive, he said (Horowitz 2021). Travel bans are depriving us of tourism products and services (Ioannides and Gyimóthy 2020). For many, losing the freedom to travel can feel like being a caged bird, a captive (Irimiás and Mitev 2021). Captives, like caged birds, are constantly on the alert and in search of external stimuli. A screen reveals only a sliver of the big wide world – seen as if through the bars of a cage –, but such experiences may strengthen people’s desire to discover more. “Imagination breaks free from captivity and roams in time and space” Rao (2010:x) wrote in *Captive Imagination: letters from prison*. The Russian writer Alexander Solzhenitsyn, while imprisoned, imagined himself travelling from Asia to Europe and drew a map on the floor of his cell to make his dream tangible (Csikszentmihalyi 1990). To escape, some people, like prisoners, use their imaginations. It can be hypothesized that travel-deprived tourists – like captive birds who want nothing more than to fly free – very often think about escaping and travelling again. The metaphor of the caged bird captures not only the physical limitations imposed by the pandemic, but also the psychological impact these restrictions have on individuals.

Feeling trapped, finding oneself in an unwanted situation, causes distress (Parkman 2020). Research shows that when freedom of behavior is eliminated or threatened by an uncontrolled event, people experience unpleasant states (Miron and Brehm 2006; Steindl et al. 2015). The pandemic has curtailed tourists’ mobility with travel bans dramatically reducing the freedom to travel. Psychological reactance theory (Brehm 1966; Miron and Brehm 2006) posits that when individuals’ freedom of behavior is threatened, restricted, or lost, they experience reactance, defined as an unpleasant motivational state triggered when we want what we cannot have. Psychological

reactance prompts behavioral and affective efforts to respond to the curtailment of their freedom and influences the cognitive reactions of thwarted individuals (Steindl et al. 2015).

This research is centered on individuals' reactance when they feel captive because they cannot travel. Do tourists fantasize about and crave travel when it is forbidden? Positioned within the theoretical field of the psychology of tourist behavior (Pearce and Packer 2013), this study contextualizes travel deprivation and subsequent desire thinking within the concept of craving to investigate the cognitive and emotional processes that underlie tourists' mindsets. Brock (1968), reflecting on restrictions, concluded that commodities are valued to the extent that they are unavailable. Empirical applications of commodity theory (Bushman and Stack 1996; Lynn 1992) have confirmed that people value a product or a service more when it is difficult to obtain due to scarcity, cost, or restrictions: restrictions on products and services increase their desirability and heighten consumer arousal. In tourism, Kim et al. (2021) applied reactance theory to show that perceived threat of COVID-19 influenced tourists' variety-seeking behavior.

It is worth exploring how lockdown situations (in which travel is severely restricted) influence the cognitive-affective states of individuals deprived of their tourist role and trapped in unwanted situations. How intense and frequent is such desire thinking, and how strongly do people feel the need to travel when they cannot do so? In line with recent research on how travel fear and travel risk perceptions which have been exacerbated by the current pandemic have influenced travel decision making and are shaping tourist behavior (e.g., Karl et al. 2021; Zenker and Kock 2020; Zheng, Luo and Ritchie 2021), our aim is to advance knowledge by assessing the psychological effects of travel deprivation. Our approach analyses what triggers thoughts about, and the visualization of, an object of desire such as travel.

The first contribution of this study is to apply the elaborated intrusion theory (EI) on desire and craving to the broader context of tourism. Secondly, this study provides empirical evidence to support the notion that feeling captive in lockdowns impacts on people who wish to travel but

cannot do so. These cognitive-emotional events with a focus on travel are here referred to as travel craving (Mitev and Irimiás 2021). Thirdly, by investigating the psychological effects of feeling captive and deprived of one's tourist-role, the study responds to Marianna Sigala's (2020:313) call for a closer examination of (non)-tourists' psychological and behavioral reactions to the Covid-19 pandemic. Another important subject that deserves scholarly inquiry is whether feeling captive in lockdown influences travel craving directly or through mediators.

2. Theoretical background and hypotheses development

2.1 Theoretical background

In this section we first demonstrate the usefulness of the elaborated intrusion theory in the tourism context. Second, we give an overview of the study's key constructs – lockdown captivity, wanderlust, social media checking and travel craving – and then set out the arguments in support of our nine hypotheses, which involve testing the relationships between these constructs. Lastly, we hypothesize social media checking and wanderlust as constructs that mediate the relationship between lockdown captivity and travel craving.

The Elaborated Intrusion (EI) theory and its usefulness in the tourism context

The Elaborated Intrusion theory was developed in clinical psychology (Kavanagh, Andrade and May 2005) in relation to substance-addiction to map the cognitive-affective processes which define craving when the desired object/activity is unavailable. Kavanagh et al. (2013) conceptualized desire as an affectively charged cognition about an object or activity. EI theory suggests that restrictions on a desired behavior or unavailability of the desired object are potential triggers of craving. Intrusive repetitive thoughts and mental images of a desire object/activity are associated with anticipatory pleasure or relief within a stressful situation (Kavanagh et al. 2013). May, Kavanagh and Andrade (2015) make a distinction between the automatic processes (intrusive thoughts of a desire object/activity) and the controlled processes (the elaboration of such intrusive thoughts) that trigger desire. The elaboration of mental images in EI theory can refer to individuals' voluntary or conditioned cognitive processes about desired travel experiences. Fantasizing is a voluntary process, while conditioned processes are induced by cues (Caselli, Soliani and Spada 2013; May, Kavanagh and Andrade 2015). The EI theory has been expanded by Richins and

Balducci (2021) to investigate the internal processes driving consumer behavior and to study the mental processes (elaborations) behind product desire.

In this study, we argue that the EI theory is particularly useful within the broader tourism context and we further expand this theoretical framework to shed light on the internal process of travel craving. The desire to travel is central to understanding tourists' behavior (Pearce and Packer 2013). This study newly defines the concept of wanderlust as a voluntary cognitive-affective process of fantasizing about travel and expands the EI theory and the elaborations of travel desire. Travel desire can be sustained by external stimuli such as projected destination images (e.g. Stepchenkova and Zhao 2013), visual cues on destination websites or travel-related social media content (e.g. He et al. 2021; Ye and Tussyadiah 2011). Although the importance of investigating the mental processes that sustain consumers' desire was first suggested by Belk et al. (2003), previous studies in tourism have mainly focused on external factors of desire. Imagining, visualization of the product or activity and other mental processes have rarely been examined in tourism. Furthermore, Belk et al. (2003:327) argued that "consumer desire is a passion born between consumption fantasies and social situational contexts". In consumer research it is widely accepted that the scarcity or inaccessibility of a desired object/experience increases its desirability. Fantasizing about travel is a psychological experience which deserves scholarly attention in tourism because it includes imaginary and verbal thoughts about the desired target. Tourists' imaginations and travel cravings seem to promise an escape from unwanted situations such as lockdowns.

It is assumed that travel-deprived individuals are likely to fantasize about tourism experiences; such fantasies can also be evoked by travel related visual cues. However, neither the potential triggers of desire to travel nor the psychological factors that lead from desire to craving have yet been studied. Several elements of EI theory make it an appropriate overarching theory for this research: developed in clinical psychology, it is well suited to exploring the cognitive-affective processes of travel craving and it can also provide insights on the visual cues that simulate imaginary/virtual tourism experiences.

2.2 Hypotheses development

2.2.1 *Desire thinking, wanderlust and travel craving*

Desire thinking is defined as a voluntary cognitive process about a desired target (Caselli, Soliani and Spada 2013; May, Kavanagh and Andrade 2015). In the context of tourism, at the verbal level, desire thinking means repetitive self-talk about the need to travel. At the visual level, it means constructing mental images about a particular travel experience. For obvious reasons, both tourism scholars and tourism marketers have devoted considerable attention to people's desire to travel (Hsu, Cai and Lee 2010; Pearce and Lee 2005). Shields (2011) analyzed tourists' strong travel desire as a consistent trait, referring it as 'wanderlust' (Gray 1970; Seddighi and Theocharous 2002). We draw on Shields's (2011) study to extend and re-conceptualize wanderlust.

The Online Etymology Dictionary traces the noun 'wanderlust' back to the German Romantics, it translates as 'the enjoyment of hiking' [*wandern*=to hike and *Lust*=desire]. Wanderlust refers to the desire of mainly young adults to explore the world while simultaneously freeing themselves from the restrictions imposed by their domestic environment. The concept is thus clearly very well suited to the present study. Applying evolutionary psychology approaches to tourism research, Kock, Josiassen and Assan (2018) argued that the need/desire for exploration (wanderlust) is one of the five fundamental motives (along with evading harm, affiliation, status, and mating) that influences tourism behavior. We extend the definition of wanderlust by drawing on Caselli, Soliani and Spada's (2013) conceptualization of desire thinking, defining it as a voluntary cognitive-affective process which involves the verbal and/or visual elaboration of a desired travel experience.

Wanderlust can modify cognitive-affective experiences and these experiences can be understood as the psychological reactance of confined individuals (Miron and Brehm 2006; Steindl et al. 2015).

When unable to travel, individuals' cognitive and affective experience of strong desire can lead to travel craving (Mitev and Irimiás 2021). Scholars distinguished between behavioral (Griffiths and Szabo 2014) and substance addiction (Flannery, Volpicelli and Pettinati 1999) with a common

characteristic of experiences of craving when the desired object/activity is unavailable (Baumer et al. 2015). Although travel is not addictive, the travel focused cognitive-affective events experienced by individuals who have lost their tourist role due to restrictions can be described in terms of craving (Mitev and Irimiás 2021). Craving is conceptualized as triggered by specific events in time and involves sensory experiences of different intensities (Kavanagh et al. 2013). May, Kavanagh and Andrade (2015) showed that everyday desires (wanderlust, in the present context) and dysfunctional desires (travel craving, in the present context) lie on the same continuum but differ in intensity, frequency and strength. Applying research on desire thinking to the tourism context strengthens our conceptual model which predicts that the stronger wanderlust is, the more likely individuals are to experience craving. These arguments lead to the following hypotheses:

Hypothesis 1: Wanderlust has a direct positive effect on travel craving.

2.2.2 Social media checking and travel craving

Here, we define ‘social media checking’ as a conscious and repeated activity of social media users, which involves navigating content, managing social networks and connecting to services.

Smartphone connectivity is embedded in the lives of young adults (Vorderer, Krömer and Schneider 2016). Pre-pandemic studies revealed that social media users spent an average of 3.5 hours per day staring at their smartphone screens (Vanden Abeele 2020). During the pandemic, this average time has increased. Social media impacts a number of tourism-related phenomena (Gretzel 2019).

Exposure to travel visuals on social media can anticipate the pleasure of travel experiences (Walters, Sparks and Heringtons 2012; Ye and Tussyadiah 2011). Travel related visual cues influence decision-making processes because the images stimulate individuals’ affective and cognitive capacity (Bogicevic et al. 2019; Liu, Wu and Li, 2019; Walters, Sparks and Heringtons 2012; Ye and Tussyadiah 2011). Bogicevic et al. (2019) evidenced how mental imagery evokes a strong sense of presence. Liu, Wu and Li (2019) argued that social media users’ engagement is

enhanced by aesthetic cues. There is a consensus that media in general, and social media in particular, play a role in arousing travel desires (Wang, Yu and Fesenmaier 2002).

It comes as no surprise that people under lockdown have relied on their social media when seeking information (e.g. about Covid-19) and/or entertainment, and to keep in touch with family, friends and acquaintances (Passavanti et al. 2021). Travel related photos and videos may have functioned as external stimuli while feeling captive in lockdown. We assume that elaborating thoughts on travel visuals and anticipating the pleasure of travel experiences may have an impact on travel craving (Mitev and Irimiás 2021). Thus, this study proposes:

Hypothesis 2: Social media checking has a direct positive effect on travel craving.

2.2.3. Lockdown captivity and travel craving

Lockdown captivity is defined as ‘an unwanted situation in which individuals feel trapped because, unable to travel, they experience the loss of their tourist role, and are powerless to do anything about it’ (Irimiás and Mitev 2021:2706). In an effort to contain Covid-19, most governments-imposed lockdowns. Although lockdown restrictions varied from country to country, home confinement, social distancing and restrictions on non-essential mobility were typically involved. Under such conditions, individuals experience emotional and psychological distress and mood disorders which impact their mindsets and mental health (Van Rheeën et al. 2020). During lockdowns, people found themselves in unwanted, stressful situations, some perceiving themselves as caged birds. When people feel that a stressful situation is inescapable - that they cannot break free - they experience themselves as captive (Aneshensel, Pearlin and Schuler 1993; Pearlin 1975). Both the ways in which would-be tourists who are unable to travel elaborate the loss of their tourist role and the ways in which non-tourists think about tourism when travel bans and restrictions are in

place are significant. We assume that individuals' reactance when they feel captive elicits a strong desire to travel. Thus, this study expects:

Hypothesis 3: Lockdown captivity has a direct positive effect on travel craving.

2.2.4. Social media checking and wanderlust

Social media sites are currently flooded with travel and tourism related content, and visual cues linked to travel experiences can strengthen people's desire to travel (Volo and Irimiás 2020). Social media content enhances individuals' ability to remember/evoke their tourism experiences, thereby eliciting conditioned responses such as travel desire (Bogicevic et al. 2019; Lee and Gretzel 2012). Furthermore, tourism research shows that - among social media sensory stimuli - visual cues have the greatest power to induce mental imagery about tourism experiences (Walters, Sparks and Heringtons 2012; Ye and Tussyadiah 2011). Ye and Tussyadiah (2011) argued that visual cues best communicate tourism experiences because visuals trigger travel fantasies and different visual cues trigger different travel expectations. Travel related visual cues are particularly appealing and effective for delivering personalized content (Gretzel 2019). The EI theory provides a framework for understanding how thoughts about, and visualization of, a desired object can influence cognitive and affective processes when the desired object is unavailable (Kavanagh et al. 2013; Kavanagh, Andrade and May 2005). The theory posits that thoughts and mental imagery can anticipate pleasure and this anticipation can be triggered by visual cues that intrude into our consciousness. Such anticipation of pleasure, when a desire cannot be fulfilled, can lead to craving (Kavanagh, Andrade and May 2005). When an individual feels like a caged bird, visual cues can trigger travel fantasies. Kock, Josiassen and Assan (2018) argued that wanderlust can be triggered by visual cues. This is consistent with research in clinical psychology, which has found that apparently spontaneous thinking about a desired object/activity is usually triggered by external cues (May, Kavanagh and

Andrade 2015). When individuals feel captive, social media content can heighten their travel fantasies. Thus, this study assumes:

Hypothesis 4: Social media checking has a direct positive effect on wanderlust.

The experience of feeling captive has received considerable attention in clinical psychology (Aneshensel, Pearlin and Schuler 1993). Liu et al. (2019) applied the stress process model in their study and clearly showed that feeling captive is not a personality trait and stressors can change over time. As Csikszentmihályi (1990:92) stated: “When adversity threatens to paralyze us, we need to reassert control by finding a new direction in which to invest psychic energy, a direction that lies outside the reach of external forces.” Csikszentmihályi (1990) argued that people in difficult situations (in prison, for example), have survived by consciously turning away from their (external) situation, over which they have no control, and immersing themselves in a subjectively controllable experience: reciting poetry, mental chess playing, or travelling in their fantasies.

We propose that:

Hypothesis 5: Lockdown captivity has a direct positive effect on wanderlust.

Individuals who feel captive often use social media. The tenets of psychodynamics theory (Horowitz 1998) suggest that when people experience a feeling of entrapment, they activate defense mechanisms that adjust their cognitive setups. Ng, Shao and Liu (2016) argue that social media checking is one such defense mechanism and that the ‘captives’ who engage in social media checking can be understood as adopting a self-therapeutic behavior, in that they are successfully distracting themselves within a stressful situation. In clinical psychology, this coping behavior is referred to as ‘avoidance coping strategy’ (Karekla and Panayiotou 2011) and is one of three coping strategies (along with problem-focused, emotion-focused coping) that can alleviate stressful situations. Avoidance coping is understood to mitigate the negative effect of feeling trapped. Social

media checking enables people to cope emotionally with unwanted situations (temporarily, at least). Hence, we hypothesize that:

Hypothesis 6: Lockdown captivity has a direct positive effect on social media checking.

These six hypotheses on travel craving are depicted in our conceptual framework (Fig. 1).

PLEASE INSERT FIG. 1 HERE

Mediating role of social media checking and wanderlust

The discussion thus far has hinged on the arguments that in lockdown captivity people must adapt to their new non-tourist role and that feeling trapped in an unwanted situation can lead to travel craving. The path to travel craving can lead through different dimensions: it can be increased directly or indirectly by both social media checking and by wanderlust.

The next issue that needs to be resolved is whether social media checking mediates the relationship between lockdown captivity and wanderlust. Given that visual cues of past or potential tourism experiences on social media (Bogicevic et al. 2019) can cause individuals who are unable to travel to fantasize about desired travel experiences, i.e., experience wanderlust, we infer that social media checking plays a mediating role in this dynamic. We therefore propose the following hypothesis:

Hypothesis 7: The relationship between lockdown captivity and wanderlust is mediated by social media checking.

We also expect wanderlust (the strong desire to travel) to play a mediating role between social media checking and travel craving, and propose the following hypothesis:

Hypothesis 8: The relationship between social media checking and travel craving is mediated by wanderlust.

It is important to investigate the mediating mechanisms between travel deprivation under lockdown and travel craving. In the field of clinical psychology (Kavanagh et al. 2013), craving involves the anticipation of an experience and is driven by different senses, including sight: checking travel-related content on social media provides access to a vast array of visual stimuli that can inspire users to construct mental images about future travel experiences (Wood 2020). Hence, the preceding claims provide a foundation for the three mediation hypotheses proposed below:

Hypothesis 9a: The relationship between lockdown captivity and travel craving is mediated by social media checking.

Hypothesis 9b: The relationship between lockdown captivity and travel craving is mediated by wanderlust.

Hypothesis 9c: The relationship between lockdown captivity and travel craving is mediated by social media checking and wanderlust.

3. Methodology

3.1. Sampling and data collection

The cross-cultural sampling frame consisted of students at two universities, one in Italy, the other in Hungary. In this exploratory study, the student sample was considered appropriate because academia is a public domain that has been seriously affected by the pandemic lockdowns; students (in both countries) were forced to severely restrict their movements and social behavior and to radically change their daily routines. We believe that students felt the captivity of lockdown particularly acutely. It was assumed that the loss of their tourist role due to Covid-19 pandemic restrictions would cause them to experience travel craving. The survey link was shared with participants by email. Of the 627 participants who accessed the survey, 92 submitted incomplete responses: the final convenience sample included 535 complete responses. This sample size is larger than both that of Shields (2011) and of Hur et al. (2017). Average participant age was 22.74 years (SD 1.98; Italian 62.2%, Hungarian 37.8%). The descriptive analysis showed that female (73.1%) respondents were overrepresented. The data was collected (using an online survey) between 22nd May and 7th June 2020) in Trento (Italy) and Budapest (Hungary), where the authors were then located. The different restrictions in place in the two countries also motivated our decision to choose them for our data collection. In Italy, the severe lockdown restrictions prohibited almost all mobility and outdoor activity, while in Hungary less severe restrictions permitted outdoor activities. To assess the effects of lockdown, the data collection period was crucial since restrictive measures were easing in both countries.

3.2. Research instrument

We designed a structured, web-based Qualtrics survey in English following Dolnicar's (2013) evidence-based guidance for survey design. Multi-item scales for construct assessment were developed following the guidelines proposed by Diamantopoulos et al. (2012). The elaboration of the four constructs (Lockdown captivity, Social media checking, Wanderlust, Travel craving) used in this study was based on prior research. In line with the Diamantopoulos et al. (2012) guidelines and using an established format, the constructs were rated in accordance with statements on a 7-point scale (1 = strongly disagree, 7 = strongly agree). All our constructs were of a reflective nature (Diamantopoulos et al., 2012). The initial construct definitions were tested to assess answer scale validity and to ensure reliability using short open-ended interviews with a pilot sample of (n=20) MA students who were asked about their lockdown experience and whether checking social media and/or thinking about travel alleviated the unpleasant condition of feeling trapped. Social distancing meant that the pilot study took place on Microsoft Teams; data gathering started one week later. Multiple (19) items to assess the four constructs were generated, based on data from the pilot study. Following the pre-test, we invited four scholars to provide expert validation and ensure the items' consistency. Only the items on which the experts agreed were included in the multi-item scale, resulting in 12 items related to four constructs. The survey completion time was less than 10 minutes, and respondent fatigue was minimal.

3.3 Constructs and measures

Lockdown captivity was modelled as a construct following Pearlin (1975) and Parkman (2020). The concept of role captivity is well-established in clinical psychology (Pearlin, 1975; Parkman 2020) and has recently been adapted to tourism (Irimiás and Mitev 2021). Convergent and discriminant validity were assessed during the scale-adaptation process. The results of a two-way ANOVA showed no significant effect on lockdown captivity between Italy and Hungary [$F(1, 531) = 0.113$,

$p = 0.737$] (Irimiás and Mitev 2021). The concept was assessed using the following items, adapted from the Role Captivity Scale (Pearlin et al. 1990): how much do you ‘Feel trapped by the lockdown situation’, ‘Wish you could just run away’, ‘Wish you could break out of the lockdown situation’?

Social media checking was modelled as a construct following Hur et al. (2017). Respondents’ social media checking level was gauged by developing a single-item construct: ‘In the last three months how often have you checked your social media per day?’.

Wanderlust was modelled drawing on Gray (1970) and on Seddighi and Theocharous (2002). To assess this construct, we adapted the Wanderlust Scale deployed by Shields (2011). Since the research objective was to explore lockdown captivity and travel craving, the experts validated only the following three items to assess the construct: ‘I get really excited waiting for my vacation.’; ‘I love to pursue new and different vacation experiences’; ‘I like to fantasize about vacation travel’.

Travel craving was modelled following Flannery, Volpicelli and Pettinati (1999) Penn Alcohol-Craving Scale, widely used in clinical psychology to measure craving. Flannery et al. (2003) showed that the single-item visual analogue scale (VAS) had limited reliability when measuring craving. Survey participants were asked to share the psychological effects of travel-deprivation that they had experienced. The items used to measure the construct were adapted to tourism (Mitev and Irimiás 2021). Convergent and discriminant validity were assessed during the scale-adaptation process and the internal consistency of the cross-cultural sample was high (Cronbach's α ($\alpha_{TOTAL}=0.892$; $\alpha_{IT}=0.905$; $\alpha_{HUN}=0.866$). Based on the invariance measurement we can affirm that the travel craving scale was invariant across countries with a unidimensional good fit multi-item scale (Mitev and Irimiás 2021). Kavanagh et al. (2013:1574) argued that ‘since craving is better characterised as a state than a trait, test–retest reliability is less relevant’. Kock, Josiassen and Assaf

(2019:1227) claimed that scales to advance tourism research should “explain a pressing phenomenon” which, we believe, travel craving is. In fact, all items measure different components of craving: frequency, duration, intensity, ability to resist, thus nomological validity is assessed. The concept of travel craving was assessed using five items: ‘How often have you thought about travel or how good would travel make you feel?’, ‘At its most severe point, how strong was your craving for travel?’, ‘How much time have you spent thinking about travelling or how good travel would make you feel?’, ‘How difficult was it to resist traveling?’, ‘Please rate your overall travel craving.’

3.4 Data analysis

The descriptive analysis was carried out using SPSS (version 25). Our model was tested using Partial Least Scale Structural Equation Modeling (PLS-SEM) to investigate the associations between latent constructs including lockdown captivity, social media checking, and wanderlust and people’s travel craving. PLS-SEM has been used in recent tourism studies on the effects of Covid-19 related travel fear on travel intentions (Zheng, Luo and Ritchie 2021), and those of Covid-19-induced social distancing on tourism behavior (Itani and Hollebeek 2021). ADANCO (version 2.2.1) was applied to test the measurement and structural model used in the research (Dijkstra and Henseler 2015). The use of PLS-SEM is justified by (1) the exploratory nature of this study; (2) the scale development assessed in this study in which items are measured on a 7-point scale. The risk of systematic measurement error was avoided by assessing internal consistency, convergent validity and discriminant validity.

4. Results

4.1. Model measurement: validity and reliability

We developed PLS-based structural equation modelling to test our hypotheses. Factor loadings were used to assess the properties of the constructs to test convergent validity. All factor loadings were well above the favorable 0.7 value, and the lowest loading was 0.74 (Dijkstra and Henseler 2015). In Table 1, Dijkstra and Henseler's rho (ρ_A) values provide evidence of internal consistency; Dijkstra-Henseler's rho (ρ_A) was used to evaluate the reliability of the construct scores where the decision criterion is: $\rho_A > 0.707$.

PLEASE INSERT TABLE 1 HERE

The average variance extracted (AVE) index was applied to measure convergent validity (values should be above the threshold of 0.5 in each construct) (Hair et al. 2017). AVE for each construct is between 0.69 and 1.00.

We verified discriminant validity in accordance with the established guidelines (Henseler, Hubona and Ray 2016), and conducted the heterotrait–monotrait (HTMT) test ($HTMT_{inference}$). All HTMT ratios were below the recommended value of 0.85, the highest value of the HTMT ratio was 0.66, providing evidence of good discriminant validity (Hair et al. 2017). To further test discriminant validity, we checked Fornell and Larcker's criterion, which demonstrated that in all cases the AVE measurement was larger than the squared latent variable correlations (Table 2). The composite reliability (CR) is between 0.87 and 1.00, exceeding the acceptable threshold of 0.70 (Hair et al. 2017). All the squared inter-correlations between the constructs are lower than the AVE.

PLEASE INSERT TABLE 2 HERE

PLS-SEM is a nonparametric statistical model – unlike CB-SEM – and it does not require data to be normally distributed. Following the guidelines (Hair et al. 2017), we deployed nonparametric bootstrapping. The standardized root mean square residual (SRMR) was 0.058, remaining below the threshold (Henseler, Hubona and Ray 2016) and suggesting a good approximate model fit (SRMR < 0.08 criterion).

4.2. Structural model and hypothesis testing

The structural model was evaluated by multicollinearity, the coefficient of determination (R^2) and path coefficients (β) (Table 3). The values of both the inner and outer Variance Inflation Factor (VIF) are less than 5 (between 1 and 3.100), which eliminated the issue of multicollinearity among the variables.

PLEASE INSERT TABLE 3 HERE

The results related to the research hypotheses are presented in Table 3 and Fig. 2. In H1, wanderlust is hypothesized to increase travel craving. The findings indicate that the hypothesized positive effect of wanderlust on travel craving is supported ($\beta = 0.44$, $p < 0.001$). H2 hypothesized the positive effect of social media checking on travel craving. However, the results show that the effect of social media checking on travel craving is not significant ($\beta = -0.02$, $p = 0.263$), therefore H2 is rejected. H3 suggests that travel craving is positively affected by lockdown captivity ($\beta = 0.25$, $p < 0.001$), this is supported.

In H4, social media checking is hypothesized to increase wanderlust while under lockdown. The results reveal that wanderlust can be significantly increased by SM checking ($\beta = 0.18, p < 0.001$), thus supporting H4. In H5 the hypothesized positive effect of lockdown captivity on wanderlust is supported ($\beta = 0.26, p < 0.001$). In H6, lockdown captivity is hypothesized to increase social media checking. The results show that lockdown captivity has a significant effect on social media checking ($\beta = 0.12, p < 0.01$), thus H6 is supported.

4.3 Mediation effect analysis

Mediation analysis with inference statistics was employed, based on the assumption that the effect of lockdown captivity on travel craving would be mediated by wanderlust and by social media checking. Following Nitzl, Roldan and Cepeda-Carrion's (2016) guidelines, the logic of Zhao, Lynch and Chen (2010) and Hair et al. (2017), nonparametric bootstrapping was applied to calculate the Bootstrap Percentile Confidence Interval (BPCI) and to test whether the indirect effect differed significantly from zero (Sarstedt et al. 2020). Since the bootstrap method does not rely on an assumption of normality, its use is justified in PLS-SEM.

The mediating effects are shown in Table 4. Hair et al. (2017:232) argued that complementary (partial) mediation occurs when 'the indirect effect and the direct effect are both significant and point in the same direction', while indirect-only (full) mediation occurs when 'the indirect effect is significant but not the direct effect'.

PLEASE INSERT TABLE 4 HERE

In H7, we hypothesized that the relationship between lockdown captivity and wanderlust could be mediated by social media checking. Results show that, although the path between lockdown captivity and wanderlust is partially mediated by SM-checking (the confidence interval does not include zero [0.005, 0.024], supporting H7), this effect is only marginal. H8 suggests that the relationship between social media checking and travel craving is mediated by wanderlust. Results support H8, as the indirect effect between social media checking and travel craving is significant ($\beta = 0.08$, $p < 0.001$), but the direct effect is not ($\beta = -0.02$, $p = 0.263$): wanderlust therefore fully mediates the path between social media checking and travel craving.

As well as the direct path between lockdown captivity (LC) and travel craving (TC), three indirect paths emerge. The first path, $LC \rightarrow SM \rightarrow TC$, reveals no mediation effect (the confidence interval includes zero [-0.013, 0.006]), suggesting that social media checking does not mediate the relationship between LC and TC at all. Thus, H9a is rejected. The second path is $LC \rightarrow W \rightarrow TC$, findings show that the relationship between LC and TC is partially mediated by wanderlust (PBCI 95%: [0.075, 0.158]), thus supporting H9b. Since the indirect effect ($\beta = 0.25$, $p < 0.001$) and the direct effect ($\beta = 0.11$, $p < 0.001$) are both significant and point in the same direction, this is a complementary mediation. The third path is $LC \rightarrow SM \rightarrow W \rightarrow TC$, here social media checking and wanderlust combined have a partial mediation effect on the relationship between lockdown captivity and travel craving (the confidence interval does not include zero [0.002, 0.018]). Thus, H9c is supported, though this mediation effect is marginal.

In summary, lockdown captivity strengthens wanderlust and people who feel captive want to tear off their chains and travel, even if just in their fantasies. Lockdown captivity therefore increases social media checking and wanderlust is directly affected by lockdown captivity and social media checking. However, note that lockdown captivity not only acts directly on wanderlust, but also indirectly, through social media checking, although the latter effect is weak. Both lockdown captivity and wanderlust directly affect travel craving, while social media checking can only act

indirectly through wanderlust. Wanderlust has a strong effect on travel craving, the stronger the wanderlust, the stronger the travel craving.

5. Discussion, implications, and further research

5.1 Discussion

Individuals, having lost their tourist role, have felt like caged birds under lockdown. Our findings reveal that these captives, constantly on the alert and in search of internal and external stimuli, think and fantasize about travel, and that this has an impact on their cognitive-affective states.

The highlight of the current study is to introduce lockdown captivity and travel craving as relevant concepts to understand tourism demand when travel is impossible. This study provides evidence that lockdown captivity, an unwanted situation in which individuals feel trapped because they are unable to travel, significantly enhances travel craving. Lockdowns have led to a considerable increase in mood disorders (Van Rheen et al. 2020) and people who feel trapped try to distract themselves and adopt coping strategies to escape (mentally) from unwanted situations (Ng, Shao and Liu 2016). Our findings indicate that individuals deprived of their tourist role seek escape in fantasies about past/future travels. The more the captives think about travel, the more their travel craving increases. These findings are in line with McKercher and Pine (2006) who argued that the magnitude of tourism demand in the immediate post-SARS period was linked to travel deprivation.

In addition, we have provided a comprehensive understanding of the psychological processes underlying feelings of entrapment and the latter's impact on travel craving. Research on the psychological impacts of Covid-19 (Zheng, Luo and Ritchie 2021) has focused on fear and avoidance; findings suggest that people in badly affected regions are reluctant to travel and that the perceived severity of future threats will influence 'travel fear' in the post-pandemic world. Our results extend these findings while focusing on wanderlust and travel craving, demonstrating the relevance of cognitive-affective psychological states in planning future travel. The established link

between lockdown captivity and travel craving adds to the limited literature on tourists' psychological mindset (Kim et al. 2021; Sigala 2020).

Another contribution of this paper relates to the mediating role of wanderlust and social media checking. The results confirm the proposed relationships and demonstrate the mediating role of the cognitive-affective process of wanderlust but reject the mediating role of social media checking. Our results reveal that social media checking in lockdown captivity does not directly affect travel craving.

The findings show that although individuals dedicate a significant amount of time to social media checking and are thus exposed to travel related visual cues, this activity *per se* does not affect their wish to travel, although, by evoking wanderlust, it does produce a significant effect. Such thoughts and desires (wanderlust) are increased by the introduction of visual cues such as travel photos or videos. These results are in line with previous studies: Stepchenkova and Zhao (2013), for instance, pointed to an increase in tourists' travel desire following exposure to travel related imagery shared on social media. Increased social media checking can be explained by the fact that it provides users with potential escape routes to (virtual) freedom. It also, of course, facilitates information gathering and enables people to keep in touch with significant others and has thus had a particularly important role to play during the pandemic.

Theoretical implications

By exploring the relationship between feeling captive in lockdown, the wish to break free and travel craving, this paper responds to recommendations for further in-depth research on the cognitive-affective processes behind tourist behavior (Pearce and Peacker 2013; Sigala 2020; Zenker and Kock 2020). This study helps to pave the way for further investigations of tourist psychology (Pearce and Packer 2013; Zenker and Kock 2020).

First, our study contributes to knowledge in the field by applying the Elaborated Intrusion theory of desire – a well-established theory in both clinical psychology (May, Kavanagh and Andrade 2015) and consumer behavior (Richins and Balducci 2021) – to the context of tourism. The EI theory describes the elaboration processes behind increased desire, postulating that intrusive thoughts about travel and the capacity to elaborate such thoughts increases travel desire: a frame which has never been applied to tourism. In addition, this study provides evidence of the relationship between elaboration and craving, demonstrating that fantasizing about past/future travel experiences influences travel craving. Specifically, the results illustrate how, when individuals are unable to travel, wanderlust and the elaboration of travel-related thoughts are connected.

Second, this paper contributes to filling a gap in tourism literature by providing evidence of the key role wanderlust plays in future travel demand. Some studies in tourism have touched upon wanderlust (Kock, Josiassen and Assan 2018; Shields 2011), but individuals' visualization of travel experiences arising from internal stimuli has received limited attention in tourism research. Specifically, this study newly defines the concept of wanderlust (a voluntary cognitive-affective process of fantasizing about travel) in association with craving, demonstrating that it has an important direct influence on travel craving and is a significant mediator between lockdown captivity and travel craving. In addition, we provide insights on how intense and frequent desire thinking is and how strongly individuals feel the need to travel: as we theorized initially, wanderlust strengthens travel craving.

The third contribution of this study is its investigation of the impact of lockdown captivity on travel craving. Past research in clinical psychology on feeling captive in an unwanted situation has documented the emotional and physical distress generated (Aneshensel, Pearlin and Schuler 1993). Lynn (1992) showed that a desired object, when unavailable, usually becomes more desirable. The Covid-19 pandemic has meant that tourists – accustomed to consuming tourism products and services – have had little or no access to travel. To our knowledge, this study is the

first to investigate the impact of feeling captive on the strong desire to travel again. The usefulness of the Lockdown Captivity Scale applied in this model is confirmed by the nomological network between the constructs, which means that they can be employed to test any situation in which people feel trapped and fantasize about breaking free.

Fourth, we suggest that travel craving should be used as an alternative concept to travel intention in situations in which travel is curtailed or impossible (e.g., under government-imposed restrictions or due to disability) and/or in cases when travel desire cannot be met immediately, for whatever reason. Whereas prior research has focused mostly on travel intentions and motivations, the present study investigates the cognitive-affective processes of people who feel captive in a situation that they cannot change and simultaneously experience travel craving. The concepts of lockdown captivity and travel craving, adapted to tourism from clinical psychology, have proved particularly suitable to describe how travel-deprived individuals think about tourism.

Managerial implications

This study offers insights for destination management organizations and tourism practitioners. According to our findings, when individuals feel captive their fantasizing about travel (wanderlust) can predict travel craving. The caged bird metaphor, used in this study, vividly describes the situation of feeling captive and can be decoded easily by both non-tourists and individuals who have lost their tourist role. Moreover, in using metaphors like that of the caged bird, tourism marketers and practitioners demonstrate their full understanding of the cognitive-emotional events experienced by temporary non-tourists and show their empathy towards them.

Tourism marketers are advised to build on this metaphor to effectively communicate their offerings during crises that result in travel restrictions. Such communication should be relevant, targeted, and persistent. Our results show that the general use of social media fails to impact travel craving but has an indirect effect by evoking wanderlust. In order to be effective, communication on social media has to resonate with an individual's mental processes to stimulate the elaboration of travel

fantasies. Desire thinking – visualizing a target object, travelling and travel experiences, in this case – gives people pleasure. It is necessary to identify the factors (e.g. cues on past travel experiences, travel narratives, tourism visuals) likely to boost wanderlust and travel craving in the target segment. Narrative transportation through stories, films, TV shows can give individuals an opportunity to escape their cage (Irimiás, Mitev and Michalkó 2021).

A DMO's communication should stimulate travel fantasies (wanderlust), while keeping in mind common human mental processes during and after crises. Tourism practitioners and marketers can employ the elaborated intrusion theory to trigger tourists' perceptions and desire. DMO communications should also persist –during and after a crisis– in order to create competitive advantage. In their cages, captives are alert to both external and internal stimuli. Such stimuli can vary in intensity and frequency.

Emotional links between destinations and tourists can be strengthened by consumer narratives and projected images, building on wanderlust and/or nostalgia: tourism promotion can be emotion-focused, using verbs like 'desire' and 'wish' when addressing tourists. Communicating stories that directly address the captives, using phrases such as 'we wish you were here' or 'we are thinking about you' can also highlight and increase service providers' and tourists' shared longing that travel be possible again. Visual cues such as photos and videos about travel destinations getting ready to host tourists again are particularly well-suited to encouraging wanderlust.

Limitations and further research

Notwithstanding its significant findings, the study has certain limitations.

First, our model explores the cognitive-emotional events experienced during the pandemic by university students (who have felt the captivity under lockdown particularly acutely). The sample selection may limit the generalizability of our findings. In future we aim to evaluate the model with participants from different age cohorts and in different situations. The applicability of our model and the proposed scales can be tested in any other unwanted situation in which

individuals feel trapped and wish to break free. People who want to travel may be unable to do so for multiple reasons – financial, health, social, cultural – and thus feel captive. Better understanding of their mental processes and travel cravings might enable DMOs, tourism marketers and practitioners to design appropriate and empathetic social tourism offerings.

Second, we also acknowledge that multiple-item scales are not without limitations (see e.g., Dolnicar and Grün 2013). Nevertheless, since the main constructs (lockdown captivity and travel craving) refer to events and states rather than traits, test and retest reliability is less relevant (Kavanagh et al. 2013). As in all survey research, the adapted scale items measured self-reported data, thus only representing a snapshot of the phenomena being investigated. The concepts and scales adapted from clinical psychology to the tourism context need to be evaluated in other situations.

Third, mental processes such as desire and craving are not easy to measure; future studies could expand the psychological reactance theory (Brehm 1966; Kim et al. 2021; Miron and Brehm 2006) and the elaborated intrusion theory to investigate the unpleasant motivational states experienced when travel is not feasible. Although travel fear will (probably) vanish once the pandemic is over, and tourists' confidence will (probably) recover (McKercher and Pine 2006), travel restrictions may persist (Karl et al. 2021). Understanding tourists' elaboration of travel thoughts and imagery and their reactance and coping strategies when responding to constraints will enable us to better predict their post-pandemic behavior.

Fourth, our study applied quantitative analysis in investigating the relationships between constructs such as lockdown captivity, wanderlust, social media checking and travel craving. Given the complexity of the psychological processes underlying the model, in future we aim to use a mix-methods approach (Khoo-Lattimore, Mura and Yung 2019) to further explore similar relationships. Looking to the future, we believe that a longitudinal research design could shed light on how lockdown captivity and travel craving will evolve once tourists and hosts have been vaccinated

against SARS-Cov2. As Zenker, Braun and Gyimóthy (2021) have pointed out, the pandemic's long-term effects on consumer behavior in tourism remain to be seen.

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