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Too afraid to Travel? Development of a Pandemic (COVID-19) Anxiety Travel Scale (PATS)

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A B S T R A C T

Pandemics are affecting tourism in many ways. Being a niche research field before, the coronavirus (COVID-19) pandemic created a strong urgency to develop this topic. For researching pandemic-induced changes in tourist beliefs and travel behaviour, we developed a construct that measures the intra-personal anxiety of travellers (and non-travellers): the Pandemic (COVID-19) Anxiety Travel Scale (PATS), using two large online studies (N = 2180; N = 2062) and including two different cultural contexts (US and Denmark). In Study 1, explorative and confirmative factors analysis confirms a short and easy-to-use 5-item solution, while the presented model adds face validity. Study 2 confirmed the structure (reliability) and tested nomological validity, by putting PATS into the context of different constructs (xenophobia and prevention focus). Although the proposed scale arose from the coronavirus (COVID-19), it is not limited to this specific pandemic and will hopefully prove to be a valuable measurement tool for future pandemics as well.

1. Introduction

For most recent history, pandemics were largely a niche topic in tourism (e.g., Novelli, Burgess, Jones, & Ritchie, 2018; Page, Yeoman, Munro, Connell, & Walker, 2006; Ritchie & Jiang, 2019; Rittichainuwat & Chakraborty, 2009; Zeng, Carter, & De Lacy, 2005), but the outbreak of the coronavirus (COVID-19) has dramatically shifted the narrative. The COVID-19 pandemic is one of the most impactful events of the century and has radically disrupted tourism markets and mobility on a global scale. At the time of writing, the COVID-19 pandemic is still in full swing. For months following its onset, tourism and travel in many countries ground to a complete halt. After months of closed national borders and grounded flights, some countries slowly started to re-open for tourism during early summer 2020 (e.g., allowing citizens of EU member states to travel within Europe), while other countries and regions are still under full or partial lockdown and banned from travel (Boffey, 2020, June 29th).

In just these few months, a large number of social scientists and tourism researchers have started to explore the economic, social and psychological consequences of the outbreak—and one particular focal point has been tourist behaviour. If we assume that this pandemic will "*create deep marks in the tourist's thinking and feeling, and change how tourists travel*" (Zenker & Kock, 2020, p. 2), then we first need to identify and measure this intra-personal cognitive modality of coronavirus anxiety. Therefore, this paper proposes a scale for measuring travellers' (and non-travellerś) anxiety in regards to COVID-19.

Medical researchers have already put forward distinct scales to measure *coronaphobia*—in particular, the Fear of COVID-19 Scale (Ahorsu, Lin, Imani, Saffari, Griffiths, & Pakpour, 2020) and the CAS: Corona Anxiety Scale (Lee, 2020). However, these clinical instruments are not sufficiently tailored (or tested) for use in tourism. Likewise, existing tourism research has studied health risk perception (e.g., Reisinger & Mavondo, 2005; Rittichainuwat & Chakraborty, 2009) and general travel risk perceptions (e.g., Floyd, Gibson, Pennington-Gray, & Thapa, 2004; Seabra, Dolnicar, Abrantes, & Kastenholz, 2013), but has not specifically measured cognitive health concerns related to pandemics. Thus, this paper develops and tests a simple and easy-to-use 5-item Pandemic (COVID-19) Anxiety Travel Scale (PATS).

To show the reliability and validity of this scale, we followed standard procedures in scale development, and conducted two independent studies to test its reliability across different cultural contexts. We purposefully selected the US and Denmark in order to create a more universal scale, which functions consistently in different countries and at different COVID-19 emergency levels. At the time of this research (mid-June 2020), the US and Denmark were at very different stages of the pandemic curve, with the US facing an alarmingly high infection rate

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and death toll record (Boffey, 2020, June 29th). Denmark, on the other hand was at a later stage of the pandemic, with a declining number of new infections and one of the lowest COVID-19 related death tolls in Europe. We focused our second study to test the aspect of nomological validity (Kock, Josiassen, & Assaf, 2019a) because a scale also needs to prove its meaningful explanation value (and must be different to other known constructs). Therefore, we distinguish PATS from the concept of xenophobia (Faulkner, Schaller, Park, & Duncan, 2004; Kock, Josiassen, & Assaf, 2019b) and link it to the concept of prevention focus (Zhao & Pechmann, 2007).

While we tested the scale in an empirical context that is wholly consumed by COVID-19, its conceptual foundations and empirical corroboration may render the PATS applicable to research on other (future) pandemic events.

2. Risk perception and travel anxiety

2.1. Pandemics and global mobility

Global tourism – and with it, the intensifying mobility of capital, goods and people around the world—has contributed to the circulation of infectious diseases (Tatem, 2014; Wilson, 1995). Since the beginning of this millennium, international travel has been affected by several epidemic waves, elevating biosecurity to a prioritized policy issue and public concern. For instance, the previous coronavirus-induced respiratory illnesses of SARS (2003) and MERS (2013) originated from China and Saudi Arabia, respectively; both spread from crowded tourism hotspots (Hong Kong and Jeddah) to over 30 countries across six continents in a matter of few weeks (Al-Tawfiq, Zumla, & Memish, 2014). These occurrences not only revealed international travellers' exposure to severe infections, but also the role of tourism in facilitating the spread of diseases through air travel in densely populated urban areas (Hall, 2015; Raptopoulou-Gigi, 2003) via immunologically naive populations (Widmar, Dominick, Ruple, & Tyner, 2017). Even before COVID-19, extensive media coverage of the Ebola outbreak in West Africa (2013), the recurring waves of Avian and swine flu in South East Asia, and the Zikavirus (ZIKV; 2016) in the Caribbean have heightened the public's awareness about the mobility of highly contagious foreign viruses. Health hazard perceptions are also induced by governments' travel guidelines for citizens and legitimate the World Health Organization's declarations of 'Public Health Emergency of International Concern' (PHEIC; WHO, 2019). Even though many countries have upgraded their biosecurity measures to prevent disease transmission, a borderless globalized world remains extremely vulnerable to novel types of biohazard (Wilson, 2010). On several occasions in the past few years, epidemiologists (Bruin, Fischhoff, Brilliant, & Caruso, 2006; Osterholm & Olshaker, 2017) and tourism researchers (Hall, 2015; Hall & James, 2011) have anticipated a coming global pandemic: a 'perfect storm' that could affect international mobility on an unforeseen scale.

Acknowledging that human mobility is inherently tied to health risks, tourism researchers are increasingly striving to understand the effects of pandemics on travel behaviour (Zenker & Kock, 2020). A growing body of empirical evidence (Joo, Henry, Lee, Berro, & Maskery, 2019; Kuo, Chen, Tseng, Ju, & Huang, 2008; Novelli et al., 2018; Zeng, Carte, & De Lacy, 2005) demonstrates that pandemics have a severe and enduring influence on risk perceptions and related travel decisions to disease-struck regions. In a retrospective study of epidemic-related decline in travel demand to South Korea, Joo et al. (2019) found that destinations hit by SARS in 2003 were associated negatively during subsequent health emergencies; they also faced dwindling visitor numbers during the 2015 MERS epidemic. Singapore and other Asian destinations with a consolidated tourism sector were quick to recover from the SARS crisis and proved remarkably resilient to sudden breakdowns of international travellers (Zeng et al., 2005). However, pandemic outbreaks may have devastating consequences for developing countries with no strong brand image or exposure in global news media, such as Gambia in West Africa (Cahyanto, Wiblishauser, Pennington-Gray, & Schroeder, 2016). Although that country had no reported cases during the most recent Ebola epidemic, incoming tourism arrivals dropped by 50 percent for two years, and triggered the so-called Ebola-induced tourism crisis (Novelli et al., 2018). Evidently, global travellers are sensitive to mediatized images, with perceived health hazards outweighing documented risks in their travel choices.

2.2. Perception of health risks and travel behaviour

On a more general level, overseas travel and exotic destinations are often associated with higher risks and uncertainties regarding personal health and safety levels. One may risk catching contagious infections on public transport, poorly sanitized beaches or through endemic disease vectors (ticks or mosquitoes). As a consequence of such hazards and frequent epidemic outbreaks, 21st century consumer attitudes and risk perceptions toward international travel are fraught with health concerns. One can even argue that global travel patterns are undergoing a paradigm shift (Irwin, 2020, April 16th). Carefree, adventurous and extroverted tourism practices, which characterized international travel in the late 20th century, are giving way to risk-aversive tendencies (Reisinger & Mavondo, 2005). Consequently, people may be deterred from travelling, in order to minimize the risk of disease contraction (Widmar et al., 2017), or compelled to search for technologically safe substitutes (Nanni & Ulqinaku, 2020).

Reisinger and Mavondo (2005) spearheaded research on the risk perceptions and psychographic dimensions of travel concerns. In an extensive empirical study conducted in the aftermath of 9/11, the authors validated a strong relationship between travel risk perceptions, travel anxiety and travel choices. Furthermore, they suggested the inclusion of five different types of perceived risks associated with travel to predict travel anxiety; they found that levels of travel anxiety and perceived safety shaped international travel intentions. In a similar vein, Widmar and colleagues' (2017) -demonstrated that people avoiding travel to destinations potentially contaminated by ZIKV were also more attentive to their general health, were better educated, and often had children in the household.

2.3. Anxiety and COVID-19

In psychopathology, anxiety is defined as a mental disorder captured along cognitive, behavioural, emotional, and physiological dimensions (American Psychiatric Association, 2013). The concept of anxiety is hardly novel to tourism: The complex affective and physiological responses to travel were already described as a nervous condition during the dawn of organized tourism in the middle of the 19th century. Medical experts of the time denoted this ailment as *Reisefieber* (German) or *rejsefeber* (Scandinavian), and diagnosed it as an unbalanced restlessness or overstimulation (Löfgren, 2008). Travel fever arises from the simultaneous feelings of anticipation or longing for the unknown and the fear of temporarily abandoning safe home environments. Most healthy individuals experience moderate levels of anxiety combined with positive arousal before and during vacations. Such transient reactions to specific, stressful situations are termed *state anxiety*, and would normally have little effect on travel intentions and decisions. However, specific conditions of mass travel have also given rise to new phobias producing clinically significant anxiety disorders. Travel-related phobia can be activated by specific spatial or social stimuli, such as vast public spaces (agoraphobia), spatial confinement in a bus or airplane (claustrophobia), crowds and mass gatherings (demophobia/enochlophobia), road travel (hodophobia) air travel (aviophobia), and worries about contracting an infectious disease (nosophobia). Most recently, the nervous condition associated with the COVID-19 pandemic has received a distinct diagnosis labelled *coronaphobia* or coronavirus anxiety (Asmundson & Taylor, 2020). These phobias can be clinically diagnosed along *phobic stimuli* (situations triggering the phobia) as well as two types of anxiety symptoms: somatic modality (physiological symptoms and impairment) and cognitive modality (i.e., distressing thoughts; Nousi, van Gerwen, & Spinhoven, 2008). Phobic stimuli are capable of triggering *anticipatory anxiety,* that is, a persistent fear of stressful or risky situations in the future. Anticipatory anxiety may be evoked prior to stressful situations: for instance, people who are flying phobic (aviophobia) would experience somatic and cognitive distress just by thinking about flying. Enduring somatic symptoms (insomnia, racing pulse levels, sweaty palms, dizziness, etc.) or cognitive symptoms (distress, worries, doubts) may be so severe that they can hinder the accomplishment of planned activities. In the worst case, anticipatory anxiety may develop into acute mental disorders (depression, panic attacks or suicidality) requiring medical treatment (Lee, Mathis, Jobe, & Pappalardo, 2020).

Medical research has developed a range of psychiatric screening tests to effectively diagnose dysfunctional anxiety, such as the Generalised Anxiety Disorder (GAD 7; Spitzer, Kroenke, Williams, & Löwe, 2006) and the Cognitive and Somatic Anxiety (STICSA; van Dam, Gros, Earleywine, & Antony, 2013). These generic scales provided the basis for the development of the Coronavirus Anxiety Scale (CAS; Lee, 2020), a brief 5-item healthcare screener adapted and tested during the beginning of the COVID-19 crisis in the US. Each item of the CAS-scale covers distressing bodily responses (dizziness, sleep disturbance, tonic immobility, appetite loss and nausea); none of them address the cognitive modalities of anxiety. In contrast, Ahorsu et al. (2020) developed the 7-item Fear of COVID-19 (FCV-19S) scale with the help of Iranian healthcare experts and participants. The FCV-19S scale lists items of cognitive anxiety modalities (worries and fears when thinking about COVID-19), but it does not locate symptoms of anticipatory anxiety in any particular situational context.

Anticipating and planning future vacations is primarily a cognitive endeavour; hence, the design of a travel anxiety scale must be informed by context-relevant items that capture both phobic stimuli (spatial or social settings triggering fears before and during travel) and symptoms (modalities) of anticipatory anxiety.

2.4. Identifying the original items

So far, tourism researchers have approached the measurement of travel anxiety on a very simple level, only including the construct as a moderator between risk perceptions and travel intentions. For instance, Reisinger and Mavondo (2005) employed a scale composed of 12 bipolar adjectives to describe emotional states (e.g., calm/worried, relaxed/tense or composed/stressed), which are neither conceptually corroborated nor aligned with clinical measurements of anxiety. Therefore, we consulted the literature in travel medicine and psychopathology (American Psychiatric Association, 2013; Spitzer et al., 2006; van Dam et al., 2013; Widmar et al., 2017), as well as pandemic-related anxiety scales (Ahorsu et al., 2020; Lee, 2020; Lee et al., 2020), to identify relevant item candidates for our study.

As described before, anxiety is defined as a mental disorder captured along cognitive (i.e., worries, repetitive thinking), behavioural (i.e., dysfunctional, compulsive activities, avoidance), emotional (i.e., fear, nervousness), and physiological dimensions (i.e., somatic distress; American Psychiatric Association, 2013). Accordingly, Lee's (2020) coronavirus anxiety scale entirely consists of physiological arousal symptoms associated with fear, such as panic attacks, depression, traumatic situations and general anxiety disorders. However, in the context of travel planning, clinical physiological symptoms (dizziness, sleep disturbance, tonic immobility, appetite loss and nausea) are very rare and more likely manifest themselves in specific travel situations (e.g., flight anxiety; Nousi et al., 2008). In contrast, cognitive and behavioural modalities reflecting anticipatory anxiety towards future travel situations are highly relevant, because the planning of risky purchase and consumption choices generates a fear of unknown consequences and feelings of anxiety (Reisinger & Mavondo, 2005).

Accordingly, we used the Fear of COVID-19 Scale (Ahorsu et al., 2020) as our point of departure and adapted its seven anticipatory items to the tourism context. Driven by the arguments above, we removed the items related to somatic modalities (i.e., sweating hands; sleep disorders; trembling). We kept items depicting cognitive and emotional modalities, but related them to future travels and travel planning (i.e., items related to feelings or perceptions of discomfort; nervousness; anxiety; and fear of death). Furthermore, we also included two items related to behavioural adjustment or avoidance related to travel-specific phobic stimuli (i.e., avoiding crowds; taking precautionary measures—items C and D). This resulted in the identification and translation of eight items for our original Pandemic Anxiety Travel Scale (Table 1).

2.5. Scale development and nomological validity

Scale development is a very common procedure and follows an established sequence of steps. First, developing a list of items that cover the construct from theoretical perspectives, then looking for proof in terms of face, construct, content, and predictive validity, as well as reliability (Churchill, 1979; Hinkin, 1995; Peter, 1981).

In tourism, however, this process is often criticized for methodological approaches that are unnecessarily complicated and often lack a short and precise scale development report (Beritelli, Dolnicar, Ermen, & Laesser, 2016). Furthermore, scale development in tourism has been heavily criticized for not taking nomological validity into account (Kock et al., 2019a). For our scale to be usable and conceptually sound, it needs to be put into a meaningful tourism framework (and also given the possibility to differentiate it from other constructs). To meet both criteria, we put PATS into two short tourism frameworks in order to test its face, predictive and nomological validity.

First, for predictive validity, we assume that PATS has a negative impact on the intention to travel (Zenker & Kock, 2020), as a pathogen threat like COVID-19 should make people avoid crowdedness (Wang & Ackerman, 2019) and unknown situations (Faulkner et al., 2004).

Second, travel anxiety in regards to COVID-19 (PATS) should be influenced by the participants' risk propensity in regards to health risks (Hajibaba, Gretzel, Leisch, & Dolnicar, 2015). People with a higher health risk propensity should have a lower pandemic anxiety level—leading to the first simple face validity model (Fig. 1).

For the nomological validity, we tested PATS in a more complex framework by adding the constructs of prevention focus and xenophobia. Xenophobia is described as a negative predisposition towards, or even the denigration of, groups and/or individuals on the basis of perceived differences (Faulkner et al., 2004). People with xenophobia express a lower intention to travel in order to avoid unknown or foreign experiences (Kock et al., 2019b). This logic is very similar to the proposed influence of PATS on the intention to travel, but for a slightly different reason: Xenophobia is focused more on one's negative predispositions towards other people, while pandemic anxiety centres more on the intra-personal disposition against health hazards. Running both

Table 1
Original Pandemic (COVID-19) Anxiety Travel Scale (PATS) items.

A:	I am anxious to travel to crowded destinations due to COVID-19.	later deleted
B:	COVID-19 makes me worry a lot about my normal ways of travelling.	final scale
C:	COVID-19 makes me think a lot about taking precautionary measures before travelling.	later deleted
D:	Avoiding people when I travel is frequently on my mind due to COVID-19.	later deleted
E:	It makes me uncomfortable to think about COVID-19 while planning my vacation.	final scale
F:	I am afraid to risk my life when I travel, because of COVID-19.	final scale
G:	When watching news about COVID-19, I become nervous or anxious in regards to travel.	final scale
H:	I do not feel safe to travel due to COVID-19.	final scale

Fig. 1. Research model Study 1.

constructs in parallel allows us to show that PATS is measuring a similar, but conceptually distinct predisposition. To do so, we also assume that both constructs are positively influenced by a participant's cognitive prevention focus—as regulation focus theory (Higgins, 1997) suggests that some "*consumers are motivated to avoid threats to security and safety and are sensitive to occasions of hazard*" (prevention focus; Zhao & Pechmann, 2007, p. 672). This creates our final double mediation model (Fig. 2).

Finally, we acknowledge that PATS (and the other used constructs) are highly influenced by (demographic) variables, such as age, gender, education, income, travel companions (e.g., travelling with younger kids), and especially whether one considers him/herself as part of the COVID-19 risk group. Therefore, we added these variables as controls.

3. Study 1

3.1. Study design and sample

We conducted the first study with a US sample acquired via Amazon Mechanical Turk. To ensure high-quality data, we implemented a quality check question. The study ran in week 25–26, 2020, when the pandemic was dominant in the US, with some regions shifting to a full lockdown and others slowly starting to open up again. Most international travel options were still closed off.

A total of 2180 participants finished the survey. Table 2 presents the demographics. Due to the high educational level, we were compelled to keep education as a control variable in our later model. Additionally to people's demographics and their self-reported alignment with the COVID-19 risk group, we measured our original 8 items for PATS, 3 items for intention to travel (Lee, Agarwal, & Kim, 2012), and 1 item for health risk propensity (adopted from Hajibaba et al., 2015). The full survey can be seen in Appendix A.

3.2. Results

We started to scrutinize the data by putting all eight items into an explorative factor analysis (EFA). Both the varimax rotation and the parallel analysis (Horn, 1965) indicated that there are potentially two factors. Thus, we analysed the items and dropped three items. The first item (item A) was removed for not loading on any factor structure and two others (item C and D) were removed because of being highly correlated and exhibiting substantial cross-loading.

The removal of these items can also be justified conceptually. The low loadings of item A can be attributed to its dual focus on both phobic stimuli and a modality of anxiety. Thus, it mixes behavioural and emotional modalities (avoidance + anxiety) in one statement, and suggests that avoiding a specific social context is conditioned by fear of COVID-19. For items C and D, both are related to behavioural modalities of anxiety (behavioural adjustment and avoidance) and hence they capture coping intentions in the future, rather than present behavioural manifestations of anticipatory anxiety.

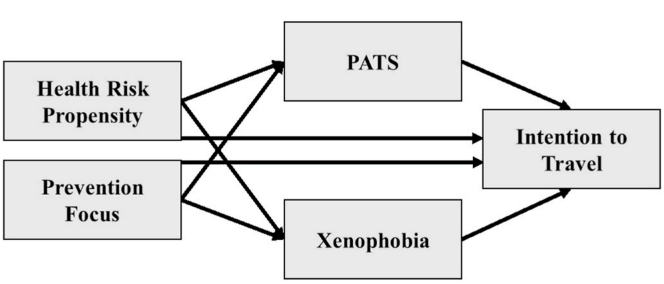

Fig. 2. Research model Study 2.

Again, we conducted an exploratory factor analysis (EFA) on the five remaining items that were included in the survey, using Stata 16. All items loaded accurately on the factor with good factor loadings, while both the Bartlett test of sphericity ($\chi 2 = 8172.80$; df = 10; p = 0.000) and the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO = 0.90) reported satisfactory statistics. The reported eigenvalue of 3.55 and the varimax rotation confirmed the one-factor structure. Likewise, the parallel analysis validated that there is one factor to retain. Next, we followed Nunnally and Bernstein's (1994) advice in examining the item-rest correlation: the correlation between one item and the scale that is formed by the other four items in the PATS construct (see Table 3). The item-rest correlations are high and in the same range. Furthermore, the average inter-item correlations are good and in the same range.

Next, we tested the change in Cronbach's α by removing a good-fitting item, expecting that α would get lower—as Table 3 corroborated. Finally, we can conclude that the five items form a coherent factor given the first-rate values for Cronbach's α, composite reliability (ω) and average variance extracted (AVE).

For testing predictive validity, we had to estimate the conceptual model depicted in Fig. 1. The first step was to incorporate the two constructs in the model in an EFA. The EFA reported two factors with eigenvalues larger than one. The varimax rotation and the parallel analysis evidenced that these are indeed two separate constructs. The second step was to scrutinize the descriptive statistics of the variables and the items of the constructs of interest for this study in Table 4. According to Finney and DiStefano (2006), the values for skewness and kurtosis reported in Table 4 can be regarded as moderately non-normal, implying that the MLM-estimator should be used, as it is robust to data non-normality (Satorra & Bentler, 1994). Hence, for the remainder of the empirical analysis, we employed confirmatory factor analysis (CFA) and structural equation modeling (SEM), using the lavaan package (lavaan 0.6–6) for R (Rosseel, 2012) that includes this estimation option. We reported robust standard errors and the Satorra-Bentler χ^2 statistic (Satorra & Bentler, 1994) in combination with the degrees of freedom (df) and its p-value, even though we anticipated that the χ^2-test is significant in cases with larger sample sizes and (moderate) data non-normality (e.g., Bagozzi & Yi, 2012; Bollen, 1989; Browne & Cudeck, 1993; Hair, Black, Babin, & Anderson, 2014; West, Taylor, & Wu, 2012). Additionally, we followed the advice of Kline (2016) and Goodboy and Kline (2017) to examine the correlation residuals of the estimated models and report the CFI, TLI, SRMR, RMSEA, 90% confidence interval (90%CI) for RMSEA (Steiger, 1990) and the associated PCLOSE. We used cut-off values in line with Bagozzi and Yi (2012): CFI ≥ 0.93, TLI ≥ 0.92, SRMR ≤ 0.07, RMSEA ≤ 0.07.

The third step was to examine the factor structure using confirmatory factor analysis (CFA). The factor loadings, AVE, α and ω were excellent (PATS) and good (intention to travel). Note that Table 5 shows similar factor loadings for PATS as the EFA, as well as similar values for AVE, α and ω. Finally, a separate CFA-model estimated for PATS only produced good fit statistics, thereby supporting the factor structure derived from the EFA: $\chi 2 = 35.72$; df = 5; p = 0.00; CFI = 0.99; TLI = 0.99; SRMR = 0.01; RMSEA = 0.053; 90%CI = [0.042–0.065]; PCLOSE = 0.308.

Following Campbell and Fiske (1959), we confirmed construct validity for the two constructs in the model for Study 1. Table 5 reports the values for Cronbach's α, composite reliability (ω) and the average variance attracted (AVE), which are well above the thresholds for convergent validity. Discriminant validity was also verified, given that the reported AVE's (PATS = 0.73 and intention to travel = 0.62) are much higher than the squared correlation (SC = 0.06) between the two constructs (Fornell & Larcker, 1981).

Subsequently, we verified that the dataset for study 1 is not prone to

Table 2
Demographics (Study 1).

Variable	Categories	*n*	%	Variable	Categories	*n*	%
Gender	Male	816	37.4	Income	Less or equal to 20,000 $	129	5.9
	Female	1364	62.6		20,001–40,000 $	486	22.3
Age	18–30	509	23.3		41,001–60,000 $	458	21
	31–40	689	31.6		60,001–80,000 $	388	17.8
	41–50	451	20.7		80,001–100,000 $	295	13.5
	51–60	313	14.4		100,001 $ and more	424	19.4
	61+	218	10	Job situation	Employed	1464	67.2
Travel with partner	Yes	1468	67.3		Self-employed	256	11.7
	No	712	32.7		Unemployed	145	6.7
Travel with friends	Yes	528	24.2		Homemaker	104	4.8
	No	1652	75.8		Student	64	2.9
Travel with young kids (0–6 years)	Yes	263	12.1		Retired	127	5.8
	No	1917	67.6		Other	20	0.9
Education	Less than high school	4	0.2	Risk group	Definitely not	366	16.8
	High school	623	28.6		Probably not	893	41
	Bachelor	1086	49.8		Probably yes	481	22.1
	Master and higher	467	21.4		Definitely yes	440	20.2

Table 3
Exploratory factor analysis for scale development (Study 1).

Construct's items	Item Label	Mean	Item loadings	Item-rest correlation	Average inter-item correlation	α
COVID-19 make me worry a lot about my normal ways of travelling.	PATS_1	5.52	0.81	0.78	0.74	0.92
It makes me uncomfortable to think about COVID-19 while planning my vacation.	PATS_2	5.30	0.81	0.79	0.73	0.92
I am afraid to risk my life when I travel, because of COVID-19.	PATS_3	5.09	0.88	0.85	0.7	0.90
When watching news about COVID-19, I become nervous or anxious in regards to travel.	PATS_4	5.02	0.84	0.81	0.72	0.91
I do not feel safe to travel due to COVID-19.	PATS_5	5.27	0.87	0.83	0.71	0.91
Cronbach's Alpha (α)						0.93
Composite reliability (ω)						0.93
Average Variance Extracted (AVE)						0.72

Notes: The items were introduced with: 'Please rate the following statement:' and the respondents scored on a seven-point Likert scale (1 = 'strongly disagree'; 7 = 'strongly agree'). AVE, α and ω are derived from the EFA.

Table 4
Descriptive statistics of variables and items of constructs (Study 1).

Variables/Construct's items	Observations	Mean	SD	Min	Max	Skewness	Kurtosis
Health Risk Propensity	2180	3.11	1.68	1	7	0.41	2.19
Risk Group	2180	2.46	0.99	1	4	0.22	1.99
PATS_1	2180	5.52	1.63	1	7	−1.27	3.84
PATS_2	2180	5.30	1.74	1	7	−1.02	3.10
PATS_3	2180	5.09	1.87	1	7	−0.79	2.48
PATS_4	2180	5.02	1.81	1	7	−0.79	2.60
PATS_5	2180	5.27	1.82	1	7	−0.92	2.78
Intention to Travel_1	2180	4.63	1.69	1	7	−0.50	2.31
Intention to Travel_2	2180	5.06	1.47	1	7	−0.86	3.33
Intention to Travel_3	2180	5.60	1.25	1	7	−1.26	4.99

Notes: SD = Standard Deviation.

common method bias as we loaded all items on one common factor in a CFA-framework (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) producing bad fit statistics: $\chi2 = 3619.28$; df = 119; p = 0.00; CFI = 0.70; TLI = 0.66; SRMR = 0.10; RMSEA = 0.116; 90%CI = [0.113–0.119]; PCLOSE = 0.00. Lastly, we estimated a SEM-model for testing predictive validity. As stated before, the variables of interest are health risk propensity, PATS and intention to travel. Nonetheless, we also needed to control for the demographic characteristics of our sample such as age, gender, education and income. Furthermore, we controlled for respondents' assessment of whether they would be in the risk-group in regards to COVID-19. In the final step, we controlled for travel-related variables. In the survey, respondents indicated their usual travel companions; thus, we included three dummy variables for travel with friends, travel with partner, and travel with a young child. Table 6 displays the standardized estimated coefficients: the middle column presents the estimates for PATS and the right column for intention to travel. The goodness-of-fit statistics of the model are all good (see Table 6) and all correlation residuals (besides one) are in the range of −0.10 to 0.10 and even 95% are in the range of −0.05 to 0.05. There is also no manifest pattern in the residuals (and they are both negative and positive residuals present). Most importantly, the estimated coefficients for health risk propensity on PATS (−0.307***) are negative and significant. Similarly, the influence of PATS on intention to travel is negative (−0.210***) and significant. Both estimates meet the expectations of our theoretical model.

Table 5
Factor loadings, Cronbach's α, composite reliability (ω), average variance extracted (AVE) for Study 1.

Construct	Item Label	B	SE	β	α	ω	AVE
PATS					0.93	0.93	0.73
	PATS_1	1.32	0.04	0.81			
	PATS_2	1.42	0.03	0.82			
	PATS_3	1.67	0.03	0.89			
	PATS_4	1.52	0.03	0.84			
	PATS_5	1.61	0.03	0.88			
Intention to Travel					0.80	0.82	0.62
	Intention to Travel_1	1.28	0.03	0.76			
	Intention to Travel_2	1.38	0.03	0.94			
	Intention to Travel_3	0.74	0.04	0.60			

Notes: Concerning the reported β's, both the latent and observed variables are standardized. With regard to the B's, only the latent variables are standardized. All the factor loadings, α, ω and AVE originated from the CFA model; SE = Standard Errors.

Table 6
Estimated research model (Study 1; depicted in Fig. 1).

Effects of	On:	
	PATS	Intention to Travel
Health Risk Propensity	−0.307*** (0.021)	0.140*** (0.025)
Risk Group	0.388*** (0.020)	n.s.
Age	−0.160*** (0.020)	0.079*** (0.025)
Gender	0.079*** (0.021)	0.090*** (0.022)
Education	0.055** (0.021)	n.s.
Income	n.s.	n.s
PATS		−0.210*** (0.025)
Travel with Friends		0.058** (0.022)
Travel withPartner		n.s.
Travel with Young Child		n.s.

*Notes:**p ≤ 0.05; **p ≤ 0.01; ***p ≤ 0.001; n.s. = not significant; Standardized coefficients are reported and the related standard errors are in parentheses; Model fit: $\chi2 = 439.82$; df = 76; p = 0.00; CFI = 0.97; TLI = 0.96; SRMR = 0.030; RMSEA = 0.047; 90%CI = [0.043–0.051]; PCLOSE = 0.90; $R^2 = 0.09$.

4. Study 2

4.1. Study design and sample

For the second study, we chose a country at a later stage of the pandemic with a declining number of new cases (Denmark). This time, we used a professional panel provider (Respondi AG) and again applied a quality check question to ensure high-quality data. The study was running in week 25–26, 2020, when the pandemic was relatively controlled in Denmark and the government had resumed endorsing domestic travel to select European countries.

A total of 2062 participants finished the survey. Table 7 presents the demographics. This sample featured an overall older population than the US sample, so we controlled for age. Like in Study 1, we asked all the demographic questions, as well as how strongly the participants aligned themselves with the COVID-19 risk group. Furthermore, we measured our 5 items for PATS, 3 items for intention to travel (Lee et al., 2012), 6 items for xenophobia (Kock et al., 2019b), 1 item for health risk propensity (adopted from Hajibaba et al., 2015), and 3 items for prevention focus (adapted from Zhao & Pechmann, 2007). The full survey can be seen in Appendix A.

4.2. Results

Seeking to enrich the face validity model of Study 1, Study 2 tests the scale's nomological validity by adopting a different sample (from Denmark) and adding a distinction of PATS with the existing constructs of prevention focus and xenophobia. These four constructs—prevention focus, PATS, xenophobia and intention to travel—were analysed via an EFA. The items loaded nicely on their respective constructs and all four constructs produced eigenvalues larger than one. The factor structure was supported by the varimax rotation. Table 8 depicts the descriptive statistics and the items representing each construct. The skewness and kurtosis values indicate moderate non-normality of the data, implying the need to use the same procedure as in Study 1.

Like in Study 1, we estimated a CFA-model encompassing the four constructs (Table 9) in order to assess construct validity (Campbell & Fiske, 1959). Overall, α and ω are above 0.7 and the AVE is higher than 0.50 for all constructs. For our developed scale PATS, α and ω are above 0.9 and the AVE is 0.69. Next we tested for discriminant validity. All reported AVE's of the four constructs are higher than the squared correlation between the constructs (Fornell & Larcker, 1981); see Appendix B. This is a more rigorous analysis of the AVE, as it implies that the construct explains more of the variance in its items than it shares with the other constructs (Hair et al., 2014). Finally, just like with the US sample, we estimated a separate CFA-model for PATS in the Danish

Table 7
Demographics (Study 2).

Variable	Categories	*n*	%	Variable	Categories	*n*	%
Gender	Male	927	45	Income*	Less or equal to 20,000 $	148	7.2
	Female	1135	55		20,001–40,000 $	376	18.2
Age	18–30	363	17.6		41,001–60,000 $	473	22.9
	31–40	287	13.9		60,001–80,000 $	310	15
	41–50	432	21		80,001–100,000 $	238	11.5
	51–60	410	19.9		100,001 $ and more	517	25.1
	61+	570	27.6	Job situation	Employed	972	47.1
Travel with partner	Yes	1362	66.1		Self-employed	75	3.6
	No	700	33.9		Unemployed	161	7.8
Travel with friends	Yes	430	20.9		Homemaker	35	1.7
	No	1632	79.1		Student	157	7.6
Travel with young kids (0–6 years)	Yes	215	10.4		Retired	587	28.5
	No	1847	89.6		Other	75	3.6
Education	Less than high school	286	13.8	Risk group	Definitely not	673	32.6
	High school	943	45.7		Probably not	498	24.2
	Bachelor	570	27.6		Probably yes	535	25.9
	Master and higher	263	12.7		Definitely yes	356	17.3

Notes: *The income was measured with the equivalent in DKK.

Table 8
Descriptive statistics of variables and items of constructs (Study 2).

Variables/Construct's items	Observations	Mean	SD	Min	Max	Skewness	Kurtosis
Health Risk Propensity	2062	3.39	1.43	1	7	0.04	2.59
Risk Group	2062	2.28	1.10	1	4	0.22	1.71
Prevention Focus_1	2062	4.04	1.51	1	7	−0.26	2.77
Prevention Focus_2	2062	3.85	1.54	1	7	−0.06	2.48
Prevention Focus_3	2062	3.42	1.57	1	7	0.12	2.36
PATS_1	2062	4.57	1.78	1	7	−0.46	2.34
PATS_2	2062	4.42	1.75	1	7	−0.33	2.35
PATS_3	2062	4.13	1.93	1	7	−0.10	1.90
PATS_4	2062	4.01	1.84	1	7	−0.09	2.07
PATS_5	2062	4.61	1.85	1	7	−0.41	2.20
Xenophobia_1	2062	3.07	1.39	1	7	0.38	2.61
Xenophobia_2	2062	2.90	1.47	1	7	0.51	2.55
Xenophobia_3	2062	3.14	1.47	1	7	0.30	2.36
Xenophobia_4	2062	3.08	1.36	1	7	0.25	2.54
Xenophobia_5	2062	2.83	1.41	1	7	0.51	2.60
Xenophobia_6	2062	3.04	1.43	1	7	0.34	2.39
Intention to Travel_1	2062	3.55	1.77	1	7	0.08	2.04
Intention to Travel_2	2062	3.33	1.75	1	7	0.20	2.10
Intention to Travel_3	2062	3.85	1.80	1	7	−0.13	2.08

Notes: SD = Standard Deviation.

Table 9
Factor loadings, Cronbach's α, composite reliability (ω), average variance extracted (AVE) for Study 2.

Construct	Item Label	B	SE	β	α	ω	AVE
Prevention Focus					0.74	0.77	0.54
	Prevention Focus_1	0.68	0.04	0.43			
	Prevention Focus_2	1.28	0.03	0.80			
	Prevention Focus_3	1.32	0.03	0.88			
PATS					0.92	0.92	0.69
	PATS_1	1.32	0.03	0.74			
	PATS_2	1.38	0.03	0.79			
	PATS_3	1.67	0.03	0.86			
	PATS_4	1.66	0.03	0.90			
	PATS_5	1.55	0.03	0.84			
Xenophobia					0.92	0.92	0.66
	Xenophobia_1	0.98	0.03	0.71			
	Xenophobia_2	1.17	0.03	0.80			
	Xenophobia_3	1.22	0.02	0.83			
	Xenophobia_4	1.15	0.02	0.85			
	Xenophobia_5	1.22	0.02	0.86			
	Xenophobia_6	1.21	0.02	0.84			
Intention to Travel					0.85	0.85	0.66
	Intention to Travel_1	1.49	0.03	0.84			
	Intention to Travel_2	1.53	0.03	0.88			
	Intention to Travel_3	1.27	0.04	0.70			

Notes: Concerning the reported β's, both the latent and observed variables are standardized. With regards to the B's, only the latent variables are standardized. All the factor loadings, α, ω and AVE originated from the CFA model. SE = Standard Errors.

sample, which produced good fit statistics: $\chi2 = 30.70$; df = 5; p = 0.00; CFI = 1.00; TLI = 0.99; SRMR = 0.01; RMSEA = 0.050; 90%CI = [0.038–0.063]; PCLOSE = 0.478.

Similar to study 1, we established that common method bias is not a problem for study 2 by estimating a CFA model with all items loading on one common factor that produced bad fit statistics: $\chi2 = 12996.89$; df = 299; p = 0.00; CFI = 0.43; TLI = 0.38; SRMR = 0.14; RMSEA = 0.144; 90%CI = [0.142–0.146]; PCLOSE = 0.00 (Podsakoff et al., 2003). Finally, we assessed nomological validity by estimating a SEM-model that included prevention focus, health risk propensity, PATS, xenophobia and intention to travel as the main variables in the proposed model (depicted in Fig. 2). Furthermore, we included the same demographic control variables (age, gender, education and income) as in Study 1. In the same vein, we accounted for the at-risk group in regards to COVID-19 and the equivalent travel companion variables. The second column of Table 10 displays the anticipated positive effect of prevention focus (0.311***) and the negative effect of health risk propensity (−0.124***) on PATS. In the third column, the expected effect of prevention focus (0.384***) on xenophobia is visible. The right-hand column reports the expected negative impact from PATS (−0.087***) and xenophobia (−0.160***) on intention to travel. All of the main

Table 10
Estimated research model (Study 2; depicted in Fig. 2).

Effects of	On:			
	Prevention Focus	PATS	Xenophobia	Intention to Travel
Health Risk Propensity	−0.089*** (0.025)	−0.124*** (0.023)	n.s.	0.157*** (0.025)
Age	−0.343*** (0.022)	n.s.	−0.125*** (0.022)	−0.089*** (0.027)
Gender	0.046* (0.023)	0.141*** (0.020)	−0.098*** (0.022)	n.s.
Education	n.s.	−0.053** (0.020)	−0.140*** (0.021)	n.s.
Income	−0.136*** (0.024)	n.s.	−0.100*** (0.022)	0.086*** (0.026)
Risk Group	0.146*** (0.025)	0.318*** (0.023)		n.s.
Travel with Friends			−0.080*** (0.019)	0.069** (0.023)
Travel with Partner			n.s.	0.069** (0.025)
Travel with Young Child			n.s.	−0.051* (0.023)
Prevention Focus		0.311*** (0.026)	0.384*** (0.025)	0.091** (0.034)
PATS				−0.087** (0.031)
Xenophobia				−0.160*** (0.029)

Notes: *p ≤ 0.05; **p ≤ 0.01; ***p ≤ 0.001; n.s. = not significant; Standardized coefficients are reported and come with their standard errors in parentheses; Model fit: $\chi2 = 1303.28$; df = 237; p = 0.00; CFI = 0.95; TLI = 0.94; SRMR = 0.033; RMSEA = 0.047; 90%CI = [0.044–0.049]; PCLOSE = 0.991; R^2 = 0.10.

relationships report logical and anticipated effects. Moreover, all correlation residuals of the model are in the range of −0.10 to 0.10 besides one (0.11) and 92% of the correlation residuals are even in the range of −0.05 to 0.05. Again, the residuals show negative and positive values and there is no apparent pattern. Thus, the nomological validity model fit can be regarded as good, due to the analysis of the correlations residuals and the goodness-of-fit statistics reported in Table 10.

5. Discussion

The current coronavirus pandemic (and pandemics as such) calls for a short and easy-to-use scale that can measure travel anxiety in regards to it. For researchers and tourism practitioners alike, this scale needs to be tailored to the context of travel and able to precisely capture anticipatory anxiety prior to holiday trips. PATS aims to deliver just that.

Although we began with an 8-item scale, our analysis revealed that a 5-item structure, comprised solely of cognitive elements, was able to consistently capture apprehensive mental states during travel considerations and planning.

Most importantly, our final 5-item scale is tested and proved reliable in two different countries, cultural contexts and two research models. In order to create a universal scale, which is valid in different stages of a pandemic, we deliberately chose two countries that were very differently impacted by COVID-19 at the time of surveying. The goodness-of-fit statistics of the PATS scale in both studies demonstrate, that the scale works consistently in different stages of the pandemic. The face validity of the scale is further strengthened by results showing that the negative impact of PATS on intention to travel was twice as strong in the US sample compared to the Danish sample. This makes intuitive sense, as these countries were at different stages of the pandemic curve at the time of surveying (the US having the highest number of infections worldwide and Denmark was lifting lockdown restrictions).

Another proof of face validity is the control variable *risk group*, which does not significantly affect the intention to travel once PATS is inserted into the model. While risk group seems to have a very strong influence on PATS in both samples, there is no such effect for intention to travel. When coupling this with the other measurements, we are very confident that our final cognitive elements of pandemic (COVID-19) travel anxiety form a robust scale that will advance future research on this topic.

5.1. Theoretical and practical implications

Scale development papers mostly deliver new options for uncovering theoretical and practical implications, but rarely produce implications by themselves (Kock et al., 2019a). As this pandemic rages on, PATS can deliver explanations for behavioural changes and/or help to explain these changes (Zenker & Kock, 2020). Likewise, the scale opens up a potential research agenda on the drivers (not only demographics, but also other psychological constructs, like the prevention focus used here) and outcomes (e.g., hospitality towards travellers visiting the country or general support for tourism development; Andriotis & Vaughan, 2003) of pandemic anxiety.

In addition, by including the concept of xenophobia (Faulkner et al., 2004; Kock et al., 2019b) our research shows that PATS is distinct from a general fear or a negative predisposition towards foreign groups and/or individuals. However, future research might consider exploring the similarities and differences in this regard, as the pandemic also induces some similar reservations towards foreigners (albeit likely for different reasons).

5.2. Limitations and future research

No research comes without limitations: First, our current research can only measure intentional and self-reported measurements due to current global travel restrictions. Future studies therefore should measure the impact of PATS on real behaviour (Dolnicar, 2018), which could help to improve the scale's predictive validity.

Second, we cannot confirm the scale's applicability and functionality for other pandemics. For obvious reasons, COVID-19 is overshadowing all other pandemic threats and thus constituted our main focus. Future research should seek to test the scale in other pandemic settings once travel is viable again.

Third, a deeper analysis of potential antecedents, mediators and moderators and other outcomes for PATS would be interesting for future research. For instance, it would be relevant to study the effects of media reports, marketers' strategic crisis communication or promotional activities as mediators for the travellers' anxiety levels in a pandemics context. Furthermore, the scale could also be an appropriate mediator between individual coping behaviour (e.g., safety measures to divert risks) and travel intentions or other potential outcomes.

Finally, the scale was only used in two different cultural contexts and at different stages of the pandemic. As a next step, this scale should receive further testing in other cultural environments or exploring more how the different situations might lead to more subjective interpretations of a pandemic anxiety.

Nevertheless, we hope to inspire other researchers to use this scale to probe more deeply tourists' behavioural changes with regards to COVID-19 and other (future) pandemics. At the time of writing, the long-term effects of COVID-19 on people's travel behaviour and attitudes towards tourism-related health risks are still unknown (Zenker & Kock, 2020). Exploring the pandemic's enduring touristic consequences will require longitudinal studies and comparative setups, which have the ability to consider a broader range of psychographic concepts. For instance, the notion of crisis-resistant tourists (Hajibaba et al., 2015) could be re-analysed with the Pandemic (COVID-19) Anxiety Travel Scale. Likewise, scholars could apply PATS to constructs like ethnocentrism (Kock, Josiassen, Assaf, Karpen, & Farrelly, 2019c), risk perception (Rittichainuwat & Chakraborty, 2009), or the issue of trust in government (Nunkoo & Ramkissoon, 2012; Zuo, Gursoy, & Wall, 2017).

6. Conclusion

Measuring pandemic-induced changes in tourists' beliefs and travel behaviours requires a robust and context-specific construct that can effectively capture the intra-personal anxiety of travellers (and non-travellers) in relation to a pandemic. The Pandemic (COVID-19) Anxiety Travel Scale (PATS) delivers just that: a short and easy-to-use 5-item construct that measures the level of pandemic-induced anxiety. PATS has proven its appropriateness and reliability in two different studies and two different cultural contexts. In Study 1, explorative and confirmative factors analysis detected the 5-item structure of PATS, while the presented (SEM) model added face validity for the proposed scale. In Study 2, we further validated the 5-item structure (reliability) and presented a meaningful nomological validation for the scale. By testing PATS against two different constructs (xenophobia and prevention focus), our second study proved that it is a distinct cognitive modality.

Although the proposed scale arose from the coronavirus (COVID-19), it is not limited to this specific pandemic and will hopefully prove to be a valuable measurement tool for future pandemics.

Impact statement

The COVID-19 pandemic one of the most impactful events of the century. Tourism practitioners and researchers are perplexed to understand the wide-ranging consequences of the disruption, especially regarding enduring changes in tourist behaviour and attitudes. Medical scholars have already developed several scales to monitor *coronaphobia*, however, we need tailored scales to measure travel anxiety. Existing tourism-scales on health risk perception, or general travel risk perceptions, are not specific enough. Therefore, this paper develops a short and easy-to-use 5-item Pandemic (COVID-19) Anxiety Travel Scale (PATS).

With the help of PATS, researchers and practitioners alike could measure how tourists are psychologically affected by pandemic anxiety. The scale will assist tourism marketers to develop coping strategies to mediate the current crisis. While we tested the scale with COVID-19, PATS builds also a relevant basis to use as a travel anxiety scale in the context of other (future) pandemics.

CRediT author statement

Sebastian Zenker: Conceptualization; Project administration; Investigation; Methodology; Data curation; Writing - original draft; Writing - review & editing. Erik Braun: Conceptualization; Investigation; Methodology; Formal analysis; Writing - original draft; Writing - review & editing. Szilvia Gyimothy: Conceptualization; Investigation; Writing - original draft; Writing - review & editing.

Declaration of competing interest

None.

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Appendix A. Measures of Model Constructs

Construct	Item Label	Item (English)	Item (Danish)	Source
Health Risk Propensity (Study 1 and 2)	Health Risk Propensity	Some activities involve a **health risk**, such as travelling overseas (e.g. in countries of low hygienic standards) or particular "lifestyle" behaviour (e.g. long sunbathing, unsafe sex, drugs for pleasure) or smoking – that is, there is a risk of catching a harmful disease. *In general, my willingness to accept health risks is...*	Nogle aktiviteter indebærer en **sundhedsrisiko**, såsom udlandsrejser (f.eks. til lande med lave hygiejniske standarder) eller letsindig adfærd (f.eks. at tage lange solbad, partydrugs, usikker sex eller rygning) hvor der er risiko for varige skader eller sygdom. *Generelt er min vilje til at acceptere sundhedsrisici ...*	adopted from Hajibaba et al., 2015
PATS (Study 1 and 2)	PATS_1	COVID-19 makes me worry a lot about my normal ways of travelling.	COVID-19 får mig til at bekymre mig meget om mine normale rejsevaner.	own development
	PATS_2	It makes me uncomfortable to think about COVID-19 while planning my vacation.	Det er ubehageligt at tænke på COVID-19, mens jeg planlægger min ferie.	
	PATS_3	I am afraid to risk my life when I travel, because of COVID-19.	Jeg er bange for at sætte mit liv på spil hvis jeg rejser, på grund af COVID-19.	
	PATS_4	When watching news about COVID-19, I become nervous or anxious in regards to travel.	Når jeg ser nyheder om COVID-19, bliver jeg nervøs for at skulle til at rejse.	
	PATS_5	I do not feel safe to travel due to COVID-19.	Jeg føler ikke at det er sikkert at rejse på grund af COVID-19.	
Intention to Travel (Study 1 and 2)	Intention to Travel_1	Whenever I have a chance to travel, I will.	Hver gang jeg har en chance for at rejse, gør jeg det.	Lee et al. (2012)
	Intention to Travel_2	I will do my best to improve my ability to travel.	Jeg vil gøre alt for at få en mulighed for at rejse.	
	Intention to Travel_3	I will keep on gathering travel-related information in the future.	Jeg vil blive ved med afsøge information om rejser i det nærmeste fremtid.	
Prevention Focus (Only Study 2)	Prevention Focus_1	I am often focused on preventing negative events in my life.	Jeg er ofte optaget af at forhindre negative begivenheder i mit liv.	Zhao and Pechmann (2007)
	Prevention Focus_2	I often worry about making mistakes.	Jeg bekymrer mig ofte om at begå fejl.	
	Prevention Focus_3	I frequently think about bad things that could happen to me.	Jeg tænker ofte på dårlige ting, der kunne ske med mig.	
Xenophobia (Only Study 2)	Intro	Please rate the following statements: *If I travelled to a foreign country...*	Bedøm følgende udsagn: *Hvis jeg rejste til et fremmed land, ville...*	Kock et al. (2019b)
	Xenophobia_1	…I doubt that the locals would be welcoming to tourists like me.	…jeg tvivle på, at de lokale ville byde velkommen til mig som turist.	
	Xenophobia_2	…I would not feel comfortable in the culture.	…jeg ikke føle mig tilpas i en fremmed kultur.	
	Xenophobia_3	…I would probably feel uneasy to engage with locals there.	…jeg sandsynligvis føle at det er besværligt til at snakke med de lokale.	
	Xenophobia_4	…there would be many misunderstandings between me and the locals there.	...der være mange misforståelser mellem mig og de lokale.	
	Xenophobia_5	…I would be suspicious toward the locals I encounter there.	…jeg være mistænksom overfor de lokale, jeg støder på.	
	Xenophobia_6	…I would be worried that the locals would meet me with reservation.	…jeg være bekymret for, at de lokale møder mig med forbehold.	

Appendix B. Discriminant Validity: Fornell and Larcker criterion (Study 2)

	Prevention Focus	PATS	Xenophobia	Intention to Travel
Prevention Focus	**0.54**	*0.12*	*0.18*	*0.00*
PATS	0.35	**0.69**	*0.05*	*0.03*
Xenophobia	0.43	0.23	**0.66**	*0.02*
Intention to Travel	−0.03	−0.16	−0.15	**0.66**

Notes: The estimates of AVE are on the diagonal in bold. The CFA-model produced the correlations in the table. The correlations are below the diagonal. All correlations are significant at $p < 0.001$, but one: the correlation between prevention focus and intention to travel is insignificant. The squared correlations (SC) are above the diagonal in italics.

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