Original Article

CRISIS-INDUCED SHIFTS IN TRAVEL DESIRE: WHAT DRIVES OR HINDERS DISTANCE TRAVEL IN GERMANY?

Lukas Johann Schneider

German Institute for Tourism Research, FH Westküste University of Applied Sciences, Heide.

DOI:https://doi.org/10.5281/zenodo.17120441

Abstract: Modelling complex consumptive decision-making during crisis periods represents a burgeoning research avenue, particularly in the context of intercontinental travel. Examining data generated from a representative online sample of n = 2,021 Germans as potential long-haul travelers, this study investigated which socio-demographic, psychographic and behavioral factors positively (drivers) or negatively (dampers) influenced distance desire during the contemporary era characterized by crisis events. After applying multiple linear regressions with distance desire as the dependent variable, it was found that in crisis periods, hedonistic travel motives, a high affinity for risk and previous long-distance travel experience are the drivers of distance desire, whilst socio-demographic factors (e.g., income or age) and the desire to maintain a low climate footprint do not exert a significant dampening influence. Results can support attempts to influence long-distance travel behavior in crisis periods since they clarify which travel motives and other factors drive the desire for long distance travel in Germany.

Keywords: distance desire; long-distance travel intention; multiple linear regression; crises; distance decay; travel destination choice.

1. Introduction

Distance can affect travel destination decisions in two contradictory ways since it can have both constraining and catalyzing effects. As postulated in distance decay theory, the constraint effect can be explained by limited market access to more distant destinations due to time, cost and effort requirements (Greer & Wall, 1979; McKercher, 2018; McKercher & Mak, 2019). During the COVID-19 pandemic, this effect was amplified by temporary travel restrictions and an increased perceived travel risk associated with distant destinations (Gyimóthy et al., 2022; Karl et al., 2020; Köchling et al., 2022). Although COVID-19-related travel restrictions have gradually been lifted, one can assume that the psychological impact of risk perception might linger after the pandemic. Moreover, the war in Ukraine and the resulting energy crisis with rising inflation have led to higher costs of living and travel worldwide, thereby potentially intensifying the constraint effect of distance in travel destination choice.

Original Article

Moreover, the growing awareness of climate change (Venghaus et al., 2022) has impacted the demand dynamics associated with long-distance travel, resulting in behavioural phenomena such as eco-anxiety (i.e. climate change fears) and flight shaming (Aamaas et al., 2013; Mkono, 2020), which may reinforce the constraint effect of distance. Besides the current situation of multiple crises (Pinkwart et al., 2022), global demand for long-distance air travel had nearly reached pre-pandemic levels by the end of 2022 and is expected to reach (or exceed) them by the end of 2023 (International Air Transport Association, 2022). While the number of business trips by air is decreasing, privately undertaken air trips are increasing significantly (Arbeitsgemeinschaft Deutscher Verkehrsflughäfen, 2023). This development reflects that, in contrast to the constraint effect, choosing distant destinations is essential for some people to escape from everyday life (McKercher, 1998) and associated with gaining better aesthetic experiences (Cao et al., 2020). Therefore, distance can also have a catalytic effect on destination choice expressed in distance desire (Boerwinkel, 1995; Cao et al., 2020; Lin & Morais, 2008). After three years of the COVID-19 pandemic and in light of further global crises, longing for escape (and a corresponding distance desire) might have grown, potentially leading to pent-up travel behaviour (Kim et al., 2022; McKercher, 2021; Yao et al., 2023) and increased long-distance travel intentions (Cao et al., 2020). On the one hand, the importance of international tourist arrivals to emerging economies cannot be overstated. On the other hand, carbon dioxide (CO_2) emissions from commercial aviation are set to triple by 2050, accounting for a quarter of CO_2 emissions from all sectors (Graver et al., 2020). As such, the carbon footprint caused by longdistance travel (Lenzen et al., 2018; Peeters & Papp, 2023) must be urgently reduced to fight climate change. Constraining mobility is the key aspect of reducing carbon emissions (Gössling et al., 2002). These two conflicting viewpoints on long-distance travel reflect the complexity of sustainable tourism development and the fact that the fulfilment of the UNWTO Sustainable Development Goals (SDGs; United Nations Department of Economic and Social Affairs, 2023) can conflict with each other. While fulfilling SDG 1 (no poverty) requires tourism growth in emerging economies, SDGs 12 (responsible consumption and production) and 13 (climate action) call for reductions in international travel. Hence, understanding tourists' demand dynamics toward future long-distance international travel is highly relevant for both the tourism industry and academia. Moreover, preempting the susceptibility of international long-distance tourism to global events and shocks is critical. Despite these considerations, little is known about the phenomenon of distance desire and the associated catalytic distance effect. In particular, as one of the effects of the multiple contemporary crises that were preceded by the recent COVID-19 pandemic, potential paradigm shifts in the longdistance travel desire of tourists generally remain unknown and require urgent empirical inquiry. To fill this knowledge gap, the present research explored the sociodemographic, behavioural and psychographic factors positively (drivers) or negatively (dampers) influencing distance desire in the context of multiple crises (Pinkwart et al., 2022). As the top European and third-largest outbound market worldwide by spending (UNWTO, 2022), as well as the fifth-largest departure country for passenger aviation-related carbon emissions in 2019 (Graver et al., 2020), Germany plays a central role in the future of long-distance travel and its impacts. Therefore, Germany was taken as an example source market to answer the following research question: What are the drivers and dampers of distance desire in times of multiple crises? An online survey of 2,021 respondents from a consumer panel in Germany (quota sample) was conducted in November 2022 to measure distance desire, as well as several potential predictors of this construct. At the time

Original Article

Of the survey, the effects of the COVID-19 pandemic in Germany had subsided significantly. However, inflation was at a new high and public debate was focused on the energy crisis and related energy generation alternatives, including climate crisis issues. Multiple linear regression was calculated to identify the drivers and dampers of distance desire and to discuss theoretical and managerial implications. To the best of the authors' knowledge, this is the first study to demonstrate that factors other than those influencing perceived distance as a barrier to travel (the constraint effect) impact the construct of distance desire—and thus the catalytic effect of distance. Moreover, this study highlights which psychographic factors related to the present multiple-crisis situation influence positive perceptions of distance, and which are irrelevant for such travel desires. Overall, the present study thus contributes to a better understanding of the construct of distance desire in crisis situations, which can subsequently become a central lever in the choice of travel destination. Only if there is knowledge about the factors that influence the individual distance desire can the tourism industry set a strategic course to either translate these desires into targeted action or prevent action in the interests of reducing carbon emissions. By analysing a wide range of potential influencing factors, the most comprehensive possible picture of the phenomenon can be created, which in turn can serve as a basis for subsequent target group segmentation.

Literature review

2.1. The antinomy of distance effects on destination choice

In the recreational tourism context, distance decay theory postulates that tourism demand peaks at a relatively close distance to the source market and then declines exponentially as distance increases (Greer & Wall, 1979; McKercher, 2018; Tobler, 1970; Walmsley & Jenkins, 1992). Since the 1980s, this interrelationship between distance and destination choice has been extensively studied. Although variations point to the shape of the decay curve (Lee et al., 2012; McKercher et al., 2008), an overall agreement on the frictional effect of distance on destination choice exists (see e.g., Cook & McCleary, 1983; Kim & Fesenmaier, 1990; McKercher & Mak, 2019; Nicolau, 2008; Tan et al., 2022; Walmsley & Jenkins, 1992; Yan, 2011). The unique attraction of a distant destination can lead to a second – yet significantly smaller – peak in demand despite the distance (McKercher & Prideaux, 2020). Physical distance serves as a proxy for a variety of factors associated with travelling to far-away destinations, such as higher costs, longer travel times, cultural unfamiliarity or associated restrictions on travel comfort (McKercher & Mak, 2019). Therewith, instead of the physical distance itself, the cognitive distance – i.e., "the mental representation of actual distance moulded by an individual's social, cultural, and general life experiences" (Ankomah & Crompton, 1992, p. 324) – exerts the effect on demand. Early research on cognitive distance found that it may be quite inaccurate depending on travel experiences as well as the degree, source and content of spatial information (Cook & McCleary, 1983). Due to the variety of experiences influencing cognitive distance, Walmsley and Jenkins (1992, p. 29) assumed that "the links between distance estimates and independent variables like age and gender are likely to be less than clear cut". However, several scholars have noted that the explanatory power of cognitive distance with regard to tourist behaviour was greater than physical distance as the individual, psychological component of distance perception was acknowledged (Ankomah & Crompton, 1992; Boerwinkel, 1995; Cao et al., 2020; Cook & McCleary, 1983). The considerations of cognitive distance were also accompanied by the first recognition of a catalytic effect of distance on destination choice. This positive distance principle contradicted the distance decay theory by postulating that the frequency of visits increases

Original Article

when a destination is further away from one's place of residence (Boerwinkel, 1995). The rationale behind this principle is that the distance travelled is in itself part of the travel experience and that distant destinations allow for a greater distance from everyday life (Lin & Morais, 2008). The concept of distance desire in the travel context was only recently introduced by Cao et al. (2020) and goes one step further than cognitive distance. In addition to reflecting tourists' psychological representation of distance information (cognitive), tourists' emotional evaluation of such distance information is also acknowledged. Therefore, the authors build upon Bullough`s (1912) aesthetic study and his concept of psychological distance, which defined distance desire as "the subjects' will to take certain distance actions to gain better aesthetic experiences within the interval between overdistancing and underdistancing" (Cao et al., 2020, p. 616). The distance desire concept was further operationalised by the authors based on four dimensions: escape – getting close; pleasantness – unpleasantness; excitation – quietness; strain – relaxation. Moreover, the authors found that distance desire directly promotes tourist travel intention and also serves an important mediating role in the process of further behavioural variables (i.e. attitude and social norms) that impact tourist travel intention (Cao et al., 2020). Overall, the catalytic and frictional effects of spatial distance form the antinomy of distance effects in destination choice. However, while the frictional effect has been extensively discussed in traditional destination choice studies (see e.g., McKercher & Mak, 2019; Tan et al., 2022; Yan, 2011), the catalytic effect has been neglected in tourism research.

2.2. Potential generic aspects influencing distance perception

To determine which aspects could potentially influence distance desire and should thus be included as independent variables in the model, the previous literature on factors influencing the perception of distance to travel destinations was consulted. This literature has largely referred to distance decay theory or cognitive distance and is thus based on the rationale that the decision of how far to travel is primarily made for rational reasons (McKercher & Mak, 2019). Therefore, the frictional effect of distance was found to be associated with several socio-demographic aspects, such as the number of children, size of the city of residence, and disposable income (McKercher, 2018; McKercher & Mak, 2019; Nicolau, 2008). Additionally, a higher sensitivity to distance was observed among less-educated individuals and young professionals (McKercher & Prideaux, 2020). Therefore, the level of education and occupation, which is related to time availability (McKercher, 2018), also seems to have an impact on distance perception. Some authors have also mentioned age (McKercher, 2018; McKercher & Mak, 2019) as an influencing factor. However, the effect of age could not be proven in a choice experiment conducted by Nicolau (2008). Concerning the accuracy of cognitive distance estimates, differences were also mentioned in relation to the gender of travellers (Lin & Morais, 2008). Moreover, psychographic aspects were analysed concerning sensitivity to distance in travel decisions. For example, McKercher (2018, p. 907) stated that "motives and willingness or ability to enter culturally different destinations" may filter out some tourist segments in relation to distance. In contrast, Larsen and Guiver (2013, pp. 977–978) stated that due to tourists' search for novelty, the distance appears attractive "when novel cultures become associated with physical distance". Cultural distance was also mentioned as an influencing factor in cognitive distance estimates (Lin & Morais, 2008). Nicolau and Más (2006) found that tourist motivations have a moderating effect on perceived distance and destination choice. More precisely, Nicolau (2008) found that the travel motives to search for a destination with a good climate, curiosity about a destination, as well as visiting friends and relatives were positively correlated to travelling to

Original Article

distant destinations, while this could not be shown for the travel motive to search for relaxation. The author also discovered that the motivation to discover new places as well as variety-seeking positively impacts the decision to travel to distant places. Another motivation related to the perception of travelling to distant, exotic countries is the pursuit of social recognition and prestige through differentiation from the group (Vigneron & Johnson, 1999) since such trips cannot be undertaken by everyone. Some authors have shown that elitist motives favour the undertaking of long-distance travel since such travel is often viewed as a status symbol (Correia et al., 2007; Laing & Crouch, 2005). Last, several trip characteristics have been shown to influence distance perceptions, such as travel party size and composition, travel costs, choice of transport mode and use of travel intermediaries (Lin & Morais, 2008; McKercher, 2018; McKercher & Mak, 2019; Nicolau, 2008). Furthermore, an interaction between the difference in the economic situation of the source market and destination (economic distance) and the physical distance of destinations was reported (Wong et al., 2021).

2.3. Potential crisis-related impacts on distance perception

Apart from trip-related aspects, other potential factors influencing the perception of distance to a travel destination reported to date are relatively stable over time since they are connected to personal characteristics. In addition to these general aspects, situational aspects of crises may also influence distance preferences. Studies have shown that during the COVID-19 pandemic, travel was associated with a higher perception of risk and that people therefore preferred destinations closer to home (Karl et al., 2020; Köchling et al., 2022). Feelings of insecurity were further exacerbated after the pandemic by the Russian war against Ukraine, the emerging energy crises and the associated high inflation rates (Zakeri et al., 2022). This situation of multiple crises could increase the frictional effect of distant travel destinations since long-distance travel might still be associated with a higher risk while lower available budgets additionally restrict travel options. Accordingly, it seems plausible that a person's financial situation and general risk perception may influence his or her distance desire, particularly in crisis situations. It can also be assumed that people with low disposable income and/or high risk aversion tend to have a lower distance desire. Travel and tourism are responsible for huge carbon emissions (Gössling et al., 2023; Sonnenschein & Smeby, 2018) with transport being the largest source of emissions by far (Lenzen et al., 2018). Efforts to decrease the ecological footprints from travel are a high priority not only for this industry, but also for the society in general as presented in the United Nations goal 13: "Climate Action" (United Nations Department of Economic and Social Affairs, 2023). As such, the climate crisis and a growing awareness that long-distance travel in particular has a negative impact on the climate (Aamaas et al., 2013; Graver et al., 2020; Lenzen et al., 2018) – as reflected in feelings such as eco-anxiety and flight shame (Mkono, 2020) – could strengthen the frictional effect of the distance of the destination and vice versa reduce distance desire. In Germany, for example, it can be observed that in large parts of the population, the attitude towards sustainable travel is positive, yet actual travel behaviour only changes slowly (Schmücker et al., 2023). This reflects the wide attitude-behaviour gap in sustainable tourism (Juvan & Dolnicar, 2014), where people tend to find several justifications to fly besides the awareness of climate issues (Árnadóttir et al., 2021). However, since this topic was particularly present in the German media during the upcoming energy crisis at the time of the survey, it seems plausible that more thought could be given to the connection between long-distance travel and climate change, thus dampening the desire for long-distance travel. Travellers generally draw on their own memories and experiences from previous trips when

Original Article

making decisions (Woodside, 2018). These experiences shape the initial travel motivation (Pearce & Lee, 2005) as well as the entire decision-making process. Therefore, it can be assumed that people's long-distance travel behaviour before and during the pandemic impacts distance desire in the post-pandemic era. During the COVID19 pandemic, travel was restricted and travelling to destinations that are further away was particularly difficult. In this regard, several authors have suggested a rising travel demand during the post-pandemic era to compensate for the restricted pandemic period (Kim et al., 2022; McKercher, 2021; Yao et al., 2023). Therefore, the pent-up desire to travel and the wish to escape a crisisridden everyday life could, in contrast to the other aspects described before, be a driver of distance desire since distant destinations are associated with "experience and meeting that which is different" (Larsen & Guiver, 2013, p. 979).

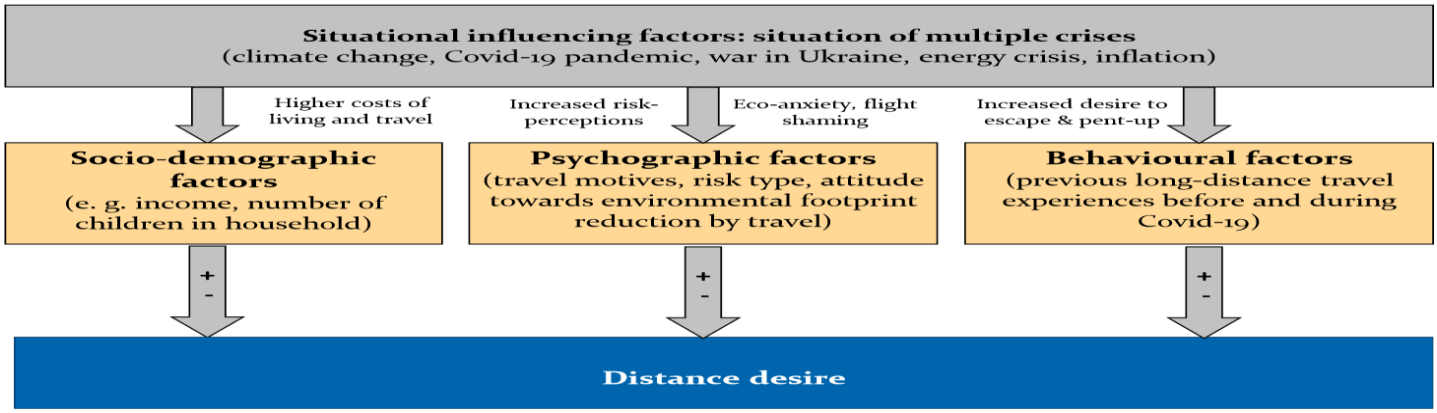

Figure 1. Conceptual framework

The conceptual framework of this research is summarised in Figure 1. The aim was to explore the sociodemographic, psychographic and behavioural factors influencing distance desire in the real-life situational context of multiple crises in Germany. Thereby, the aforementioned potential influencing factors were considered to analyse their driving or dampening effect on distance desire.

Methods

Data collection

Methodologically, the study is based on a positivist perspective, which attributes objectivity, validity and generalisability to quantitative findings (Crotty, 2015). A quantitative deductive approach was used to test hypotheses derived from the literature about potential factors influencing distance desire (see 3.2). Such an approach facilitates the use of statistical tools to analyse data and provides a robust framework for testing hypotheses and establishing relationships between variables. Data were collected between 11 and 25 November 2022 via an online survey of German-speaking individuals aged 18 to 74 living in private households in Germany (quota sample by age, gender, federal state and education level). The data was collected via a consumer panel managed by the German international research company Bilendi GmbH (www.bilendi.de), which invited panel members to participate in the survey. Residence in Germany and plans to travel internationally in the next 3 years were inclusion criteria for participation. As the research presented here was part of a larger survey that also included questions about South Africa as a potential long-haul destination for Germans, awareness of South Africa

Original Article

(at least by name or association) was a further prerequisite for participation. After data cleansing, a total of n= 2,021 cases were available for analysis.

Measuring instrument and hypotheses

Based on existing theory and previous studies a questionnaire was designed. In the survey, long-distance trips were defined as travel to destinations outside Europe and the Mediterranean region for private purposes. The measurement instrument was then subjected to a rigorous review process by a committee of experts in the field of tourism, after which it was evaluated and granted an ethics clearance number by a university faculty ethics committee. The dependent variable distance desire was measured based on a five-point Likert-type scale ranging between 1 = 'Strongly disagree' and 5 = 'Strongly agree', adapted from Cao et al. (2020). The respondents were requested to indicate the extent to which they agreed with five statements pertaining to their general choice of destination for private travel. These included one item on the overall evaluation of the distance of the destination, one item on the motivation to escape, and three items on the emotional evaluation of the distance of the destination. These items reflected the four distance desire dimensions highlighted by Cao et al. (2020) (see Table 2). Based on the literature related to the general and crisis-related perceptions of distances to tourist destinations (see 2.2 and 2.3), the following hypotheses regarding potential socio-demographic, psychographic and behavioural predictors of distance desire in times of multiple crises were set:

H1: Age is negatively related to distance desire.

H2: Income is positively related to distance desire.

H3: Gender has an impact on distance desire.

H4: The number of children in the household is negatively related to distance desire.

H5: The number of children with minor age groups in the household is negatively related to distance desire.

H6: The level of education is positively related to distance desire.

H7: The employment status (as a proxy for time availability) has an impact on distance desire.

H8: Long-distance travel motives (particularly escape and prestige / elitist motives) are positively related to distance desire.

H9: Risk tolerance is positively related to distance desire.

H10: Frequency of past long-distance travel behaviour during and before COVID-19 is positively related to distance desire.

H11: Importance to minimise one's private travel's environmental impact (e.g., carbon footprint) is negatively related to distance desire. The corresponding predictors were integrated as variables in the survey. Since the study was related to long-distance destinations in general and not to a specifically planned long-distance trip, other trip characteristics (e.g., the size and composition of the travel group, the choice of transport or the use of an intermediary) were not included in the study. The composition of the travel group regarding the inclusion of children was indirectly measured by the number of children in the household. Age and number of children in the household were measured using open questions (metric), with age being recoded into five groups thereafter. The scale used to measure travel motives was adapted from Wolf et al. (2017). Using a five-point Likert-type scale, respondents were asked to what extent they agreed with nine specific intrinsic travel motives that could describe the purpose of their private longdistance travel in the next 3 years (see Table 2). Risk type was measured as a

Original Article

self-assessment on a fivepoint scale ranging from 1 = 'I am very risk-averse' to 5 = 'I am not at all risk-averse'. The importance of minimising the environmental impact of one's private travel (e.g., carbon footprint) was assessed on a five-point scale ranging from 1 = 'not important at all' to 5 = 'very important'. All other aspects were measured using categorical variables. Moreover, for predictive validity checks of the distance desire construct, the intention to undertake longdistance travel in the next 3 years was measured based on a five-point Likert-type scale with three items ranging from 1 = 'Strongly disagree' to 5 = 'Strongly agree', adapted from Prayag et al. (2017) and Zhang et al. (2017). The items of all multi-item scales were randomly presented to avoid sequential effects. **3.3. Data analyses**

Data were analysed in a hierarchical regression analysis using IBM SPSS Statistics V29. All categorical variables were dummy-coded before data analyses. Predictors were entered in four blocks starting with socio-demographic aspects (age, income, gender, number of children in household, age groups of children, level of education, current occupation) and travel motives (psychographic aspects). Variable selection for this first block was based on previous studies on distance decay, cognitive distance or sensitivity to distance, which suggested a general influence of these aspects on the perception of travel destination distance – and thus presumably on distance desire (see 2.2). Thereafter, the frequencies of past long-distance travel behaviour during and before the COVID-19 pandemic (behavioural aspects) were entered into a second block due to the assumption that the well-established impact of past travel experiences on future travel behaviour (Woodside, 2018) will also be apparent with regard to distance desire. Third, the variable used to measure the general risk type (psychographic aspect) was added since risk perception was proven to impact destination choice during the pandemic (Karl et al., 2020; Köchling et al., 2022) and should still be present in the uncertain post-pandemic period with ongoing crises. Last, the variable importance of minimising the environmental impact of one's private travel (psychographic aspect) was included to consider the potential impact of increasing environmental awareness related to long-distance travel in Germany. To the best of the authors' knowledge, aspects entered in the last three blocks had not been analysed in relation to the perception of distant destinations to date, yet have become more relevant during the current context of multiple crises. An overview of the hierarchical regression model is presented in Figure 2.

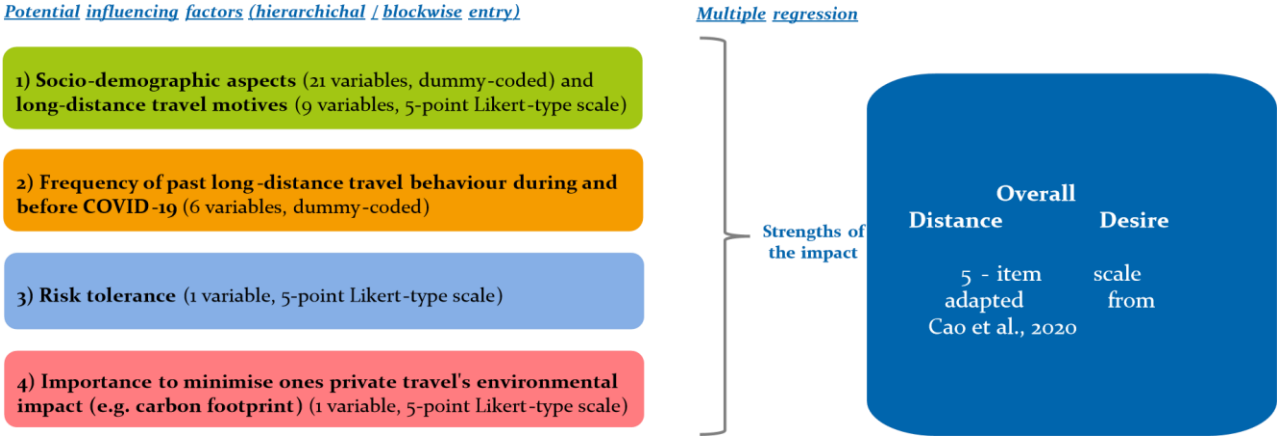

Figure 2. Model of regression analysis

Results

4.1. Respondent profile

Original Article

As the quota sample intended, the sample strongly represents the German resident population regarding age, gender, place of residence (federal state) and educational level. Descriptive results of the categorical variables used as predictors in the model are presented in Table 1. Most respondents were rather experienced in longdistance travel: before the pandemic, 83% took at least a few long-distance trips; during the pandemic, 35% travelled long-distance at least once for private purposes (see Table 1). Descriptive statistics of distance desire (dependent variable) as well as the metric and interval-scaled predictors are presented in Table 2. The five-item distance desire scale showed high reliability (Cronbach's alpha = 0.909). Therefore, to measure the dependent variable (i.e. participants' overall distance desire), the mean values of the five items were calculated (M = 3.0, SD = 1.05). Moreover, Pearson's correlation values for distance desire and the intention to undertake longdistance travel in the next 3 years (mean value of the three respective items, see 3.2) were calculated and a strong positive correlation was detected (r = 0.672, p <0.001; Cohen, 1988), supporting the validity of the distance desire construct.

Table 1. Respondent profile (categorical variables)

Variables (categorical)	Categories	n	%
Age	18 to 29 years	323	16.0%
	30 to 39 years	347	17.2%
	40 to 49 years	332	16.4%
	50 to 59 years	426	21.1%
	60 to 74 years	593	29.3%
Gender	Male	976	48.3%
	Female	1038	51.4%
	Non-binary	7	0.3%
Education	Low level	597	29.5%
	Medium level	697	34.5%
	High level	727	36.0%
Current occupation	Self-employed / freelancer	104	5.1%
	Employee / civil servant	1087	53.8%
	Not employed / in training / student / pensioner / housewife or -man	830	41.1%
Household net income	Up to under 1,500 euros	304	15.0%
	1,500 to under 2,500 euros	454	22.5%
	2,500 to under 3,500 euros	481	23.8%
	3,500 euros and more	628	31.1%
	No indication	154	7.6%
Private long-distance trips during Covid-19 pandemic	None	1292	63.9%
	One	444	22.0%
	More than one	263	13.0%

Original Article

Don`t know 22 1.1%

Private long-distance trips before Many (at least every 2-3 years) 1242 61.5% Covid-19 pandemic Few 434 21.5% No 309 15.3%

Don`t know 36 1.8%

Source: Survey data

Agreement regarding the nine motives for long-distance travel exhibited ranges between M = 3.96 for 'to experience nature' (SD = 1.16) and M = 2.47 for 'health and fitness purposes' (SD = 1.21). Overall, participants assessed themselves as medium risk-averse (M = 2.82, SD = 1.00) and the importance of minimising the environmental impact of one's private travel reached M = 3.34 (SD = 1.17) (Table 2) **Table 2.** Statistics of the dependent variable distance desire and interval-scaled predictors

Variables	Item	Mean	SD	Skewness		Kurtosis	
				Statistic	Std.-Error	Statistic	Std.-Error
Distance desire (DV)	The farther the destination is from my place of residence, the more I want to visit that place.	2.87	1.228	0.068	0.054	-0.875	0.109
		3.17	1.258	-0.238	0.054	-0.899	0.109
Cronbach Alpha=0.909	I want to escape from my present life, and travel to distant destinations can help me achieve this goal.						
	The farther the destination is, the happier I feel when I think of visiting there.	2.88	1.236	0.034	0.054	-0.893	0.109
	The farther the destination is, the more relaxed I feel when I think of visiting there.	2.69	1.165	0.172	0.054	-0.729	0.109
	The farther the destination is, the more excited I am to think about visiting there.	3.41	1.253	-0.459	0.054	-0.741	0.109
	Overall distance desire	3.00	1.051	-0.136	0.054	-0.664	0.109
Number of children and adolescents in household		0.39	0.78 7	2.276	0.054	6.271	0.109

4

Original Article

Travel Motives	…for my wellbeing	3.73	1.235	-0.819	0.054	-0.236	0.109
	… to seek relaxation	3.85	1.225	-0.944	0.054	-0.012	0.109
	… for health and fitness purposes	2.47	1.214	0.438	0.054	-0.723	0.109
	… to travel for escape	3.77	1.254	-0.825	0.054	-0.286	0.109
	... to seek enjoyment and excitement	3.36	1.262	-0.398	0.054	-0.779	0.109
	... to experience something exclusive that not everyone can experience like this	3.29	1.315	-0.360	0.054	-0.949	0.109
	... to experience nature (beautiful landscapes, clean air, clean water)	3.96	1.158	-1.083	0.054	0.444	0.109
	... to gain new impressions, to get to know something completely different	3.95	1.165	-1.074	0.054	0.401	0.109
	... to do something for culture and education	3.36	1.225	-0.406	0.054	-0.686	0.109
Risk type		2.82	1.002	-0.060	0.054	-0.366	0.109
Importance to minimise one's private travel's environmental impact (e.g. carbon footprint)		3.34	1.174	-0.363	0.054	-0.557	0.109

Note: n=2021

4.2. Drivers and dampers of distance desire: Hierarchical regression analysis First, the prerequisites for calculating the multiple linear regression were checked. Linearity and the equality of variance of the residuals (homoscedasticity) were visually confirmed using scatter plots. Additionally, checking leverage value (< 0.066) and Cook distance (< 0.129) confirmed a lack of outliers (Huber, 1981). Moreover, the model has no autocorrelation since the Durbin-Watson statistic was 2.014. Multicollinearity was evaluated using the tolerance and Variance Inflation Factor (VIF) value. In a test run, the dummy-coded variable "few long-distance trips preCOVID" as well as those for gender and the variable "number of children and adolescents in the household" were removed due to VIF values >5 (Diamantopoulos & Riefler, 2008; Weiber & Mühlhaus, 2014). The normal distribution of the residuals was visually confirmed using a histogram and Q-Q plot. Four models were calculated using the block wise approach (see 3.3). In the first block, the remaining 18 socio-demographic variables and nine travel motives for long-distance travel were entered. Since previous experiences shape desires and behavior, longdistance travel experiences before and during COVID were added as further predictors (five variables) and a second model was calculated based on the total of 32 predictors. In the third step, the risk type was integrated (one variable). In the fourth step, the importance of a low ecological footprint (one variable) was added. Thus, 34

Original Article

variables were included in the fourth model. However, four dummy-coded variables were automatically excluded during the regression calculation (age 60–74 years, high level of education, employee or civil servant and no private long-distance trips during COVID) due to multi collinearity issues. Thirty predictors remained in the final model, all showing acceptable VIF values < 5 (see Table 3) The R^2 values for the first, second and third models were 0.453 (adjusted R^2 = 0.447), 0.464 (adjusted R^2 = 0.456) and 0.476 (adjusted R^2 = 0.468), respectively. In the fourth model, R^2 stagnated at the level of model 3 (R^2 = 0.476, adjusted R^2 = 0.468). Thus, the importance of minimizing one's environmental impact of travel does not explain a statistically significant amount of variance in the dependent variable distance desire after accounting for all other variables. However, these values are indicative of a high goodness-of-fit according to Cohen (1988). As shown by the ANOVA, the predictors in the fourth model significantly predicted distance desire, F (30, 1998) = 59.504, $p < 0.001$. The final model's coefficient results are presented in Table 3 sorted in descending order according to the standardized beta coefficients. Only nine predictors showed a statistically significant positive influence on distance desire as summarized in Figure 3. The travel motives to travel for escape and to experience something exclusive had the strongest positive impact with standardized beta coefficients of approximately 0.2 (small effect; Cohen, 1988). However, the risk type also had a minor impact on distance desire (β = 0.119): The more risk-tolerant the respondents considered themselves to be, the higher their distance desire. The motive to do something for culture and education was also significantly associated with stronger distance desire (β = 0.106), as were hedonistic motives such as seeking enjoyment and excitement (β = 0.0076), health and fitness (β = 0.0069) and well-being (β = 0.066) – albeit to a lesser extent. The fifth-strongest influence on distance desire was the experience of longdistance travel before the COVID-19 pandemic: respondents who took many private long-distance trips before the pandemic showed a higher distance desire (β = 0.081) in crisis periods. Last, the motive to gain new impressions (associated with variety-seeking) showed a very small, significant and positive impact on distance desire (β = 0.055). As such, H8 was accepted for seven out of nine tested motives (not for nature and relaxation), H9 (risk tolerance) was accepted and H10 was accepted for the pre Covid long-distance travel behavior but not for the frequency of long-distance trips pre-Covid. No significant influence on distance desire was found for any socio-demographic variables leading to rejections of H1-H7. Furthermore, there was no significant influence on the importance of minimizing one's travel-related ecological footprint (rejection of H11).

Table 3. Coefficients in the final model of the block wise regression analysis

Predictors in the final model	Unstandardized coefficients		Standardized Coefficients	t	Sig.	95.0% confidence Interval for B		Collinearity Statistics	
	B	SE	Beta			Lower	Upper	Tolerance	VIF
(Constant)	0.293	0.122		2.402	0.016	0.054	0.533		
Motive for long-distance travel: to travel for escape*	0.178	0.023	0.211	7.831	0.000	0.133	0.222	0.365	2.736

Original Article

Motive for long-distance travel: to experience something exclusive that not everyone can experience like this*	0.155	0.018	0.193	8.423	0.000	0.119	0.191	0.508	1.970
Risk type*	0.125	0.019	0.119	6.621	0.000	0.088	0.162	0.827	1.209
Motive for long-distance travel: to do something for culture and education*	0.091	0.020	0.106	4.653	0.000	0.053	0.129	0.516	1.938
Many private long-distance trips undertaken pre Covid (Dummy)*	0.174	0.046	0.081	3.772	0.000	0.084	0.265	0.584	1.712
Motive for long-distance travel: to seek enjoyment and excitement*	0.064	0.020	0.076	3.121	0.002	0.024	0.104	0.445	2.249
Motive for long-distance travel: for health and fitness purposes*	0.06	0.017	0.069	3.442	0.001	0.026	0.094	0.665	1.503
Motive for long-distance travel: for my wellbeing*	0.056	0.025	0.066	2.226	0.026	0.007	0.105	0.307	3.253
Motive for long-distance travel: to gain new impressions, to get to know something completely different*	0.049	0.025	0.055	1.970	0.049	0.000	0.099	0.347	2.881
One private long-distance trip undertaken during Covid (Dummy)	0.063	0.047	0.025	1.343	0.180	-0.029	0.155	0.777	1.288
No employment relationship (Dummy)	0.049	0.043	0.023	1.145	0.252	-0.035	0.134	0.656	1.523
Self-employed or freelancer (Dummy)	0.11	0.081	0.023	1.355	0.176	-0.049	0.268	0.925	1.081

Original Article

Household net income 2.500 to less than 3.500 Euro (Dummy)	0.05	0.072	0.020	0.696	0.487	-0.091	0.192	0.312	3.202
18-29 years	0.052	0.060	0.018	0.864	0.388	-0.066	0.170	0.603	1.657
More than one private long-distance trip undertaken during Covid (Dummy)	0.053	0.057	0.017	0.914	0.361	-0.060	0.165	0.783	1.276
50-59 years	0.041	0.054	0.016	0.751	0.453	-0.066	0.148	0.596	1.677
Children 0-6 years in household (Dummy)	0.044	0.059	0.014	0.747	0.455	-0.072	0.160	0.800	1.250
Children 14-17 years in household (Dummy)	0.047	0.067	0.012	0.701	0.484	-0.084	0.178	0.898	1.114

Predictors in the final model	**Unstandardised coefficients**		**Standardised Coefficients**	**t**	**Sig.**	**95.0% confidence Interval for B**		**Collinearity Statistics**	
	B	**SE**	**Beta**			**Lower**	**Upper**	**Tolerance**	**VIF**
Children 7-13 years in household (Dummy)	0.033	0.060	0.010	0.544	0.586	-0.085	0.151	0.805	1.243
Medium level of education (Dummy)	0.018	0.043	0.008	0.426	0.670	-0.066	0.103	0.709	1.410
Low level of education (Dummy)	0.015	0.047	0.006	0.319	0.750	-0.077	0.107	0.647	1.545
Household net income up to 1500 Euro (Dummy)	0.006	0.078	0.002	0.075	0.940	-0.147	0.159	0.380	2.635
Motive for long-distance travel: to experience nature (beautiful landscapes, clean air, clean water)	-0.001	0.024	-0.001	-0.030	0.976	-0.048	0.047	0.374	2.673

Original Article

Household net income 1.500 to less than 2.500 Euro (Dummy)	-0.022	0.073	-0.009	-0.298	0.766	-0.165	0.121	0.318	3.142
Household net income 3.500 Euro and above (Dummy)	-0.020	0.071	-0.009	-0.283	0.777	-0.159	0.119	0.274	3.652
Importance to minimize ones private travel's environmental impact (e.g. carbon footprint)	-0.009	0.015	-0.010	-0.557	0.578	-0.039	0.021	0.915	1.093
Motive for long-distance travel: to seek relaxation	-0.010	0.024	-0.012	-0.405	0.685	-0.058	0.038	0.330	3.033
No private long-distance trips preCovid (Dummy)	-0.037	0.058	-0.013	-0.636	0.525	-0.151	0.077	0.676	1.480
30-39 years	-0.040	0.064	-0.014	-0.626	0.531	-0.167	0.086	0.507	1.971
40-49 years	-0.047	0.062	-0.016	-0.753	0.451	-0.168	0.075	0.561	1.783

4

Hierarchical regression analysis (ENTER, block wise); dependent variable: Distance desire: mean value; R^2 = 0.453 (adjusted R^2 = 0.447) for the first model and 0.476 (adjusted R^2 = 0.468) for the final model; F (30, 1998) = 59.504, $p < 0.001$; *significant on the .05-level

Discussion and conclusion

This research highlights the catalytic effect of perceived distance from destinations by investigating the sociodemographic, psychographic and behavioral factors positively (drivers) and negatively (dampers) influencing distance desire in crisis periods. The fact that a significant influence on distance desire was only found for psychographic and behavioral aspects and that hedonistic travel motives (in particular, escape and prestige/elitist motives) were identified as the central drivers underlines that the construct reflects the emotional,

Original Article

aesthetic aspect of distance perception in travel destination choice (Cao et al., 2020). In contrast, socio-demographic aspects connected to the frictional effect of distance and context of cognitive distance (e.g., age, income, number of children) (McKercher, 2018; McKercher & Mak, 2019) have no demonstrable influence on distance desire. Concerning age, these findings are in line with Nicolau (2008), who could not prove a significant influence of age on sensitivity to distance. Despite the difficult economic situation in Germany at the time of the survey, aspects such as income or the number of children in a household did not affect the emotional perception of longhaul destinations. Distance desire seems largely independent of potential rational travel constraints. Dreaming of

4

47

Original Article

long-haul destinations is possible regardless, while the extent to which a long-haul trip can be realised is another matter.

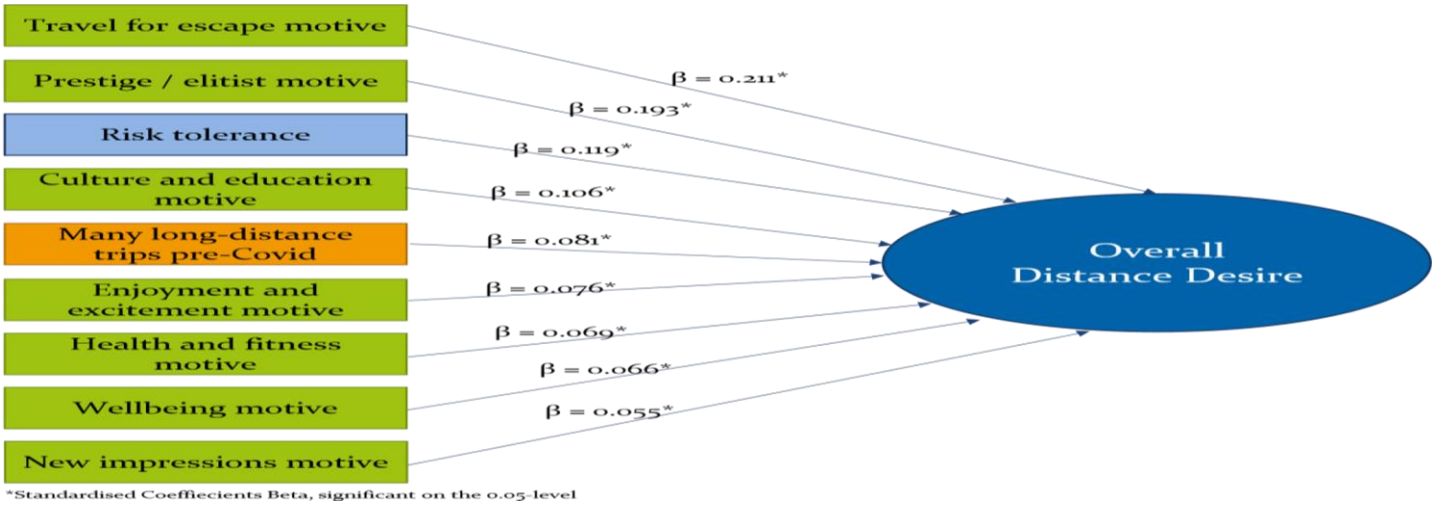

Figure 3. Identified drivers of distance desire in times of crises

The travel motive results highlight directions similar to research undertaken in non-crisis situations. Correia et al. (2007) and Laing and Crouch (2005) also found that elitist motives (such as the herewith analysed motive "to experience something exclusive that not everyone can experience") favour longdistance travel since it is a status symbol. This reflects that despite the increasingly perceived negative consequences of spatial mobility, the attitude towards spatially mobile people in Germany remains predominantly positive (Aidley & Eisenstein, 2022). Nicolau (2008) investigated similar aspects and found that tourist motivation has a moderating effect on perceived distance and destination choice. The author also found no significant correlation between the relaxation motive, while the motivation to discover new places and the desire for variety positively influenced the decision to travel to distant countries. This is in line with this study's findings on the influence of the motive "to gain new impressions/experience something completely different". The positive influence of the motive "to do something for culture and education" identified here also goes in a similar direction to the driving effect of curiosity and the search for novelty on the attractiveness of distant destinations identified by Nicolau (2008) and Larsen and Guiver (2013). Overall, our research indicates that the motives influencing distance desire in crisis periods are similar to those in normal times. Another travel motive without a significant influence on distance desire was the experience of nature. Furthermore, the assumption that risk type influences the perception of long-haul destinations during crisis periods (e.g., during the COVID-19 pandemic) (Karl et al., 2020; Köchling et al., 2022) was confirmed. Therefore, a high affinity for risk is another important driver of the desire for long-distance travel. Also, the assumption that previous long-distance travel behavior is a driver of distance desire (Woodside, 2018) was confirmed. However, despite increased attention to climate change issues in the German media due to the energy crisis and a strong awareness of sustainable travel among the German population (Schmücker et al., 2023), a significant influence of the importance of having a low carbon footprint on distance desire could not be verified. In this vein, Larsen and Guiver (2013, p. 979) stated, "Many tourists desire distance in the form of experience and meeting that which is different, which they associate with long physical distances, this strongly suggests that

Original Article

Voluntary travel behaviour change is unlikely". Unfortunately, our results underline the irrelevance of climate considerations for distance desire. Similar to existing income barriers, the negative consequences of long-distance travel appear to initially be ignored in emotional associations with distant destinations. Perhaps the survey timing at the end of the COVID-19 pandemic also affected this since the desire to escape from everyday life and treat oneself was particularly great.

Implications, limitations and future research

This study has several theoretical implications. First, it helps researchers to better understand the distance desire construct. For example, it became evident that it is a largely emotional construct independent of rational considerations and driven by psychographic and behavioral factors alone. This underlines the antimony of distance: while the constraint effect is mostly based on rational considerations (destination affordability, sufficient holiday time etc.), distance desire is a feeling related to hedonistic needs and motives. This study shows that at least in crisis periods, risk perception impacts distance desire. Last, it points to the large attitude-behavior gap (Juvan & Dolnicar, 2014) in Western European countries, where hedonistic needs often win the conflict of interest with sustainable travel. The results also have several practical implications. For example, long-distance destinations from Germany – particularly emerging markets for which Germany is a central source market – could address the identified factors promoting distance desire during crisis periods (particularly escape and prestige / elitist motives) in their marketing. As such, the study helps destination managers in emerging markets to identify relevant target groups within Germany supporting SDG 1 (no poverty; United Nations Department of Economic and Social Affairs, 2023). However, to achieve urgent reductions in long distance travel and to support SDGs 12 (responsible consumption and production) and 13 (climate action; United Nations Department of Economic and Social Affairs, 2023), destinations closer to Germany (Europe) could focus on either motives seemingly independent of distance desire (nature and relaxation) or – if aiming to address hedonic travel motives promoting distance desire – combine this with (crisis-related) advantages of proximity such as safety or reduced travel costs. Since travel decisions are also rationally driven, emotional and rational benefits could be combined to potentially "win" against distance desire. However, this study suggests that without reactions from suppliers and policies (e.g., pricing in the real carbon footprint) or radical structural innovations (e.g., biofuels and energy saving technologies in aviation), reductions to carbon footprints from long-distance travel will fail since distance desire seems largely independent of reflecting on the importance of sustainable travel. This research holds certain limitations and suggestions for future research. Since it only used Germany as a long-haul source market, it would be interesting to compare the results with other cultural environments. Moreover, familiarity with South Africa (at least by name) and a general interest in international travel within three years were study inclusion criteria. These sample characteristics might have influenced the results, which highlights the relevance of further studies on this topic. Since distance desire and its influencing factors were measured at only one point in time, it would also be worthwhile to repeat the study and observe developments over time. Repeating the study in less crisis ridden times would be useful for determining whether influences such as risk perception change in relevance. Additionally, the rarely explored construct of distance desire offers room for further research (e.g., on it's functioning in complex travel decisions). Also, qualitative studies could contribute to a deeper understanding of distance desire.

Original Article

References

Aamaas, B., Borken-Kleefeld, J., & Peters, G. P. (2013). The climate impact of travel behavior: A German case study with illustrative mitigation options. Environmental Science & Policy, 33, 273–282.

Aidley, D., & Eisenstein, B. (2022, May 19). Räumliche Mobilität und Reisen: Einstellungen im Wandel? [Conference Presentation]. AKTF Annual Conference, St. Peter-Ording.

Ankomah, P. K., & Crompton, J. L. (1992). Tourism cognitive distance. Annals of Tourism Research, 19(2), 323–342.

Arbeitsgemeinschaft Deutscher Verkehrsflughäfen. (2023, August 15). Umfassende repräsentative Fluggastbefragung: Klarer Trend - Der Passagier wird jünger und Kurzreisen nehmen ab

Árnadóttir, Á. Czepkiewicz, M., & Heinonen, J. (2021). Climate change concern and the desire to travel: How do I justify my flights? Travel Behavior and Society, 24, 282–290.

Boerwinkel, H. W. J. (1995). Management of recreation and tourist behaviour at different spatial levels. In G. J. Ashworth, & A. Dietvorst (Eds.), Tourism and spatial transformations; implications for policy and planning (pp. 241–265). CAB International.

Bullough, E. (1912). 'Psychical Distance' as a factor in art and as an aesthetic principle. British Journal of Psychology, 5(2), 87–118.

Cao, J., Zhang, J., Wang, C., Hu, H., & Yu, P. (2020). How far is the ideal destination? Distance desire, ways to explore the antinomy of distance effects in tourist destination choice. Journal of Travel Research, 59(4), 614–630. Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd Ed.). Erlbaum.

Cook, R. L., & McCleary, K. W. (1983). Redefining vacation distances in consumer minds. Journal of Travel Research, 22(2), 31–34.

Correia, A., Santos, C. M., & Barros, C. P. (2007). Tourism in Latin America: A choice analysis. Annals of Tourism Research, 34(3), 610–629.

Crotty, M. (2015). The foundations of social research: Meaning and perspective in the research process. SAGE (Original work published 1998).

Diamantopoulos, A., & Riefler, P. (2008). Formative Indikatoren: Einige Anmerkungen zu ihrer Art, Validität und Multikollinearität. Zeitschrift Für Betriebswirtschaft, 78(11), 1183–1196.

Gyimóthy, S., Braun, E., & Zenker, S. (2022). Travel-at-home: Paradoxical effects of a pandemic threat on domestic tourism. Tourism Management, 93, Article 104613.

Original Article

Gössling, S., Balas, M., Mayer, M., & Sun, Y.-Y. (2023). a review of tourism and climate change mitigation: The scales, scopes, stakeholders and strategies of carbon management. Tourism

Management, 95, 104681.

Gössling, S., Hansson, C. B., Hörstmeier, O., & Saggel, S. (2002). Ecological footprint analysis as a tool to assess tourism sustainability. Ecological Economics, 43(2–3), 199–211.

Graver, B., Rutherford, D., & Zheng, S. (2020). CO2 emissions from commercial aviation: 2013, 2018, and 2019. The International Council on Clean Transportation.

Greer, T., & Wall, G. (1979). Recreational hinterlands: A theoretical and empirical analysis. In G. Wall (Ed.), Recreational land use in Southern Ontario: Dept. of Geography publication series #14 (pp. 227– 246). Waterloo University.