



# Assessing pre-travel online destination experience values of destination websites: scale development and validation

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## Abstract

Destination websites, provided by destination marketing/management organisations (DMOs), are central environmental drivers of tourist experiences in the pre-travel phase. DMOs increasingly apply experiential marketing on their websites to support positive online destination experiences (ODEs) and attract tourists. Despite the ongoing scientific debate on technology-driven tourist experiences, research into pre-travel ODEs is still nascent and theoretical knowledge on the nature of ODEs is limited. Particularly, an appropriate measurement tool to evaluate the pre-travel experience value of destination websites is missing. In this paper, we propose a reliable, valid, and parsimonious measure for assessing pre-travel ODEs on destination websites, building on two prior studies. In a quasi field experiment, German millennials ( $n=1820$ ) evaluated the ODEs of different real destination websites using an online questionnaire. The ODE scale was developed using principal component analysis based on half of the cases; the other half was used to validate the scale via confirmatory composite analysis. In result, the overall ODE is reflected by two interrelated dimensions: hedonic and utilitarian experiences. Websites with a high level of experiential design yield significantly higher ODE values, supporting the construct validity. Results contribute to the theoretical understanding of the technology-driven tourist experience in the anticipatory phase. Moreover, the developed scale yields a methodological knowledge gain and will help destination managers to evaluate, purposefully review and improve their website designs and contents.

**Keywords** Destination website · Online destination experience · Experiential marketing · Scale development · Scale validation · Pre-travel phase

## 1 Introduction

Inspiring tourists to visit a destination by promising memorable experiences (Tung and Ritchie 2011) and thus securing destination competitiveness are core responsibilities of destination marketing/management organisations (DMOs; Eisenstein 2014). Accordingly, the anticipation phase of the tourist experience (Agapito 2022) is particularly important to DMOs. In this pre-travel phase, experiences occur when consumers are exposed to marketing communication (Brakus et al. 2009), such as destination websites – one of the key sources of information in the travel-decision process (Choi et al. 2016; Jeon et al. 2018). We refer to these specific pre-travel experiences as online destination experiences (ODEs) and define them as *destination website users' internal and subjective responses to the destination as presented*. Positive ODEs that evoke pleasure, fantasies and dreams (Holbrook and Hirschman 1982) have an inherent value and influence travel decisions (Lohmann and Kuhn 2021). Furthermore, such anticipatory experiences can shape trip expectations (Larsen 2007), are connected to subsequent experience phases (Chen et al. 2018), and influence satisfaction during and after the trip (Ek et al. 2008; Tung and Ritchie 2011). In the wake of the Covid-19 pandemic, when travel has been subject to many restrictions and planned trips often have to be postponed, mental pre-travel experiences and associated affective forecasts (Wilson and Gilbert 2005) of the trips have become even more important as they can mitigate travel risk perceptions and increase patience (Karl et al. 2021, 2022).

The experiential marketing approach to tourism claims that sensory and physical stimuli (corporeal and virtual) can be addressed in the process of tourism experience design (Agapito 2022). When searching for information on tourist offers, needs are not only functional, but can also be hedonic, innovative, aesthetic, and social (Vogt and Fesenmaier 1998). Accordingly, DMOs increasingly apply experiential marketing instead of traditional marketing (Dixit 2020; Sotiriadis & Gursoy, 2016). This also applies to their websites where they want to engage website visitors beyond the places' rational aspects, attempting to awaken their senses and emotions using complex contents (Hudson and Ritchie 2009; Nelson 2014) to create technology-empowered experiences (Neuhofer et al. 2014). The suitability of Schmitt's (1999) experiential marketing approach as a framework to analyse destination marketing campaigns was confirmed by Ketter (2018). However, studies on experience characteristics and triggers in the anticipatory travel phase remain scarce despite the relevance for DMOs. Moreover, evaluation instruments for websites in tourism focus primarily on technical website characteristics and related attitudinal outcomes (e.g. ease of use, usability), neglecting the specifics of the customer journey's early stages (Sun et al. 2017; Tang et al. 2012). Yet, DMOs that can assess the experiential pre-visit value of their websites gain competitive advantages by improving their website design and contents accordingly. Initial attempts to measure pre-travel ODEs underline the general relevance of the experiential marketing perspective to destination websites. In these attempts, the authors utilised Brakus et al.'s (2009) multi-dimensional brand experience scale derived from product brands (Schmitt 1999) in the online destination context (Jiménez-Barreto et al. 2019, 2020), differentiating sensory, affective, intellectual, and behavioural experiences. However, early qualita-

tive approaches (Jiménez-Barreto, Sthapit, et al., 2019) and two of our prior studies (Köchling 2020, 2021) suggest that pre-travel ODEs have particularities such as a spatio-temporal component and higher interrelation of singular experience aspects. Hence, a more context-specific measurement instrument is needed.

This study aims to develop and validate a scale for measuring ODEs in the pre-travel phase. The underlying research question is: How can we measure the values of pre-travel ODEs on destination websites? Assuming that ODEs can be positively influenced to some extent by a website design that goes beyond the provision of information, appeals to the senses and evokes emotions, we adopt an experiential marketing perspective. Building on the knowledge gained in two prior studies, we applied a quantitative quasi-experimental design (online field experiment) with German millennials as the respondents ( $n=1820$ ). We used half the dataset for developing the scale and the other half for validating it. The quasi-experimental approach allowed us to test the scale's validity by comparing the ODE scores of destination websites at different levels of experiential design (treatments) under controlled conditions and contributes to the study's originality.

## 2 Development of the conceptual model

### 2.1 The experience concept in tourism marketing

Fantasies, feelings, and fun (Holbrook and Hirschman 1982) and affective forecasts – ‘predictions about [...] emotional reactions to future events’ (Wilson and Gilbert 2005, p. 131) – guide consumption decisions to a considerable degree, complementing rational arguments. The experiential marketing approach (Schmitt 1999, 2011) emphasises that experiences, while personal, can be partially designed to facilitate both emotional and rational customer engagement. The opportunities to design consumption environments supporting the creation of positive experiences have been underlined in tourism (Agapito 2022; Frochot and Batat 2013; Tussyadiah 2014). This research is centred on experiences arising from destination websites being one of the most important consumption environments in the pre-travel phase (FUR, 2020; Jeon et al. 2018). Beyond the phasic nature (Aho 2001), further characteristics of tourist experiences must be considered in the application of experiential marketing; tourist experiences are multidimensional (Seeler 2018) but perceived holistically, hedonic in nature and determined or co-created by situational factors and factors internal to the individual (subjectivity; Agapito 2022). As experiences are subjective, it is particularly crucial for emotion-focused marketing that ‘marketing content is appraised as highly goal-relevant by targeted customers’ (Le et al. 2020, p. 7). A stringent target group orientation is consequently of great relevance in experiential marketing.

### 2.2 Conceptualising pre-travel ODEs

According to Churchill (1979), specifying the construct's domain is the first step in developing a measurement instrument. The ODE construct encompasses destination

website users' psychological reactions to the destination in the anticipation phase of the tourist experience. In accordance with other authors (Jiménez-Barreto et al. 2019; Zhang et al. 2018), we limit the ODE to the virtual experience of the *destination*, thus differentiating it from the experience with or the perception of the *destination website* (i.e. the perceived website quality, including aesthetics, usefulness, ease of use, trust, and interactivity). Most existing studies on destination website performance have focussed on evaluating website characteristics (Sun et al. 2017; Tang et al. 2012), without analysing the experiential outcome regarding the destination. Choi et al. (2016) analysed the antecedents and outcomes of telepresence on destination websites (i.e. the experience of being temporarily present in the remote environment rather than the physical environment; Steuer 1992); they adapted Huang's (2005) scale to measure the utilitarian (benefit-oriented) and hedonic (fun-oriented) website performance, which also focusses on the general site performance instead of destination pre-experiences. They used a separate scale to capture telepresence (Park et al. 2010) and showed the 'I am there' feeling mainly results from entertaining website features and contributes to hedonic and utilitarian website performance (Choi et al. 2016).

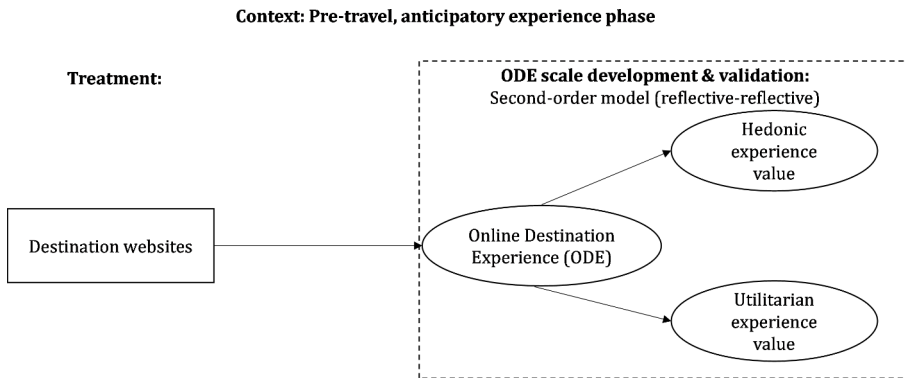
The few existing studies that measured multidimensional ODEs (Jiménez-Barreto et al. 2019, 2020; Khan and Fatma 2021; Yu et al. 2022) adapted the experience modules and measurement instrument from the product brand context (Brakus et al. 2009; Schmitt 1999). Hence, they differentiated between *sensory, affective, intellectual, and behavioural experiences* that contribute to the overall 'online destination brand experience'. Jiménez-Barreto, Sthapit, et al.'s (2019) initial qualitative approach revealed that *social experiences*, which refer to communicative aspects, also occur with destination websites. Moreover, Jiménez-Barreto et al. (2020) concluded that further research on the construct is advisable.

To gain a deeper understanding of the ODE dimensions, we conducted a preliminary exploratory qualitative study (Köchling 2020), analysing the experiential reactions of German millennials exposed to destination websites in the inspiration phase. While participants were surfing on pre-selected destination websites, their gaze was recorded (eye-tracking) accompanied by video observations of their faces. After the website visit, retrospective think-aloud protocols and semi-structured interviews were carried out. The collected data was interpreted in a qualitative content analysis to extract the facets of the ODE construct. We found that, beyond the four elements adapted in previous research, the development of a *spatio-temporal idea of the destination* (e.g. accessibility, location of attractions) and reflections on *social encounters* with the destinations' residents, other tourists (e.g. crowding), or family and friends form part of the ODE. We also found that the affective ODE element includes a future-oriented perspective related to a consumption vision or *affective forecasting of the trip* (Karl et al. 2021, 2022; Walters et al. 2012; Wilson and Gilbert 2005) and telepresence (Choi et al. 2016; Steuer 1992).

In a follow-up online experiment (Köchling 2021), we made a first attempt to assess the ODE and tested items developed from this exploratory study and the literature covering all expected facets of the ODE (sensory, affective, intellectual, social, spatio-temporal and behavioural) on a representative sample of German internet users. We simulated the travel inspiration phase and used three websites of the destination

Reunion Island with different levels of experiential marketing as stimuli. Results showed that the ODE was less differentiated than previous studies proposed. Instead, the ODE was *holistic*, with sensory, affective, intellectual, behavioural, and social elements all loading on the same component. We explained this, among others, by the fact that travel destinations are such all-encompassing products that, unlike the model of consumer goods brands, they might be experienced more holistically and singular facets of the experience become blurred. We suspected that this could be intensified in the simulated inspiration phase when involvement is still low. Moreover, the items we included to capture the spatio-temporal aspects and most items related to social encounters were omitted from the analysis due to low communalities. In the experiment as well as in the first qualitative study, participants visited destination websites independently of their general interest in travelling to the destination. We used rather unknown destinations to simulate the inspiration phase which reinforced the low involvement of the participants. However, inspiration and information phases merge smoothly and destination websites are also used for these purposes by people who already visited the destination considered. Overall, further validation of the findings from this study with an adapted scenario was deemed necessary.

With this research, we aim to re-evaluate the dimensionality of the ODE construct and continue the development and validation of a measurement instrument. By designing a scenario that is likely to result in a higher level of involvement and, therewith, becomes even closer to reality, we expect to observe more differentiated ODE dimensions compared to our second study. Nevertheless, as a learning from that study, we still expect a less differentiated experience construct than previous studies based on the consumer goods industry model assumed (Jiménez-Barreto et al. 2019, 2020; Khan and Fatma 2021; Yu et al. 2022). Building on dual process theory as the theoretical foundation of experiential marketing (Holbrook and Hirschman 1982; Le et al. 2019), we suggest that ODEs are reflected in *two* underlying components (second-order model), covering the elements identified in previous research. The first component reflects the *hedonic value of the destination experience*, encompassing sensory, affective, and related spatio-temporal (affective forecasts or telepresence) aspects. Hedonic value primarily results from the fast, automatic, and affective mental processes triggered by affective features (Holbrook and Hirschman 1982) that lead to high-level imagery processing (Kim et al. 2014; Le et al. 2019, 2021). This hedonic ODE component may be predominant in the inspiration phase, in which website users dream about a potential holiday without immediate travel needs or plans (Dai et al. 2022) and involvement is low (Petty and Cacioppo 1986; Tang et al. 2012). The second, complementary ODE component will be strongly interrelated to the hedonic one, reflecting the slow, rational, and analytic route of information processing associated with rational thinking (Holbrook and Hirschman 1982); it will embrace the *utilitarian value*. This ODE component will likely encompass intellectual, social, and behavioural aspects and dominate the mental processes in the information phase arising directly from the inspiration, wherein website content is processed cognitively and involvement is higher (Petty and Cacioppo 1986; Tang et al. 2012). The developed scale is supposed to differentiate the overall experiential values on these two dimensions generated through destination websites rather than describe concrete individual experiences (e.g. particular feelings). This is in line with



**Fig. 1** Conceptual model

the brand experience scale, which also aims for a general assessment within the four experience dimensions it differentiates (Brakus et al. 2009).

Along with personal (e.g. previous visiting experience; Choe et al. 2014; Gowreesunkar, & Dixit, 2016; Le et al. 2021) and situational (e.g. exposure characteristics; Voorveld et al., 2009) factors, ODEs will be informed by experiential marketing: the integration of experiential design elements such as pictures and videos (hedonic component) and content that rouses curiosity (utilitarian component; Jiménez-Barreto et al. 2020). The perceived quality of the website is also an important predictor of destination emotional experiences (i.e. the expectation of pleasure and excitement when travelling to the destination; Zhang et al. 2018). Congruity theory, which suggests that individuals are more likely to develop positive attitudes towards a product when the elements composing the consumption environment are perceived as consistent, can explain this (Agapito 2022). The overall conceptual model of our quasi field experiment is summarised in Fig. 1 and will be explained in the following section.

### 3 Methods

#### 3.1 Research design

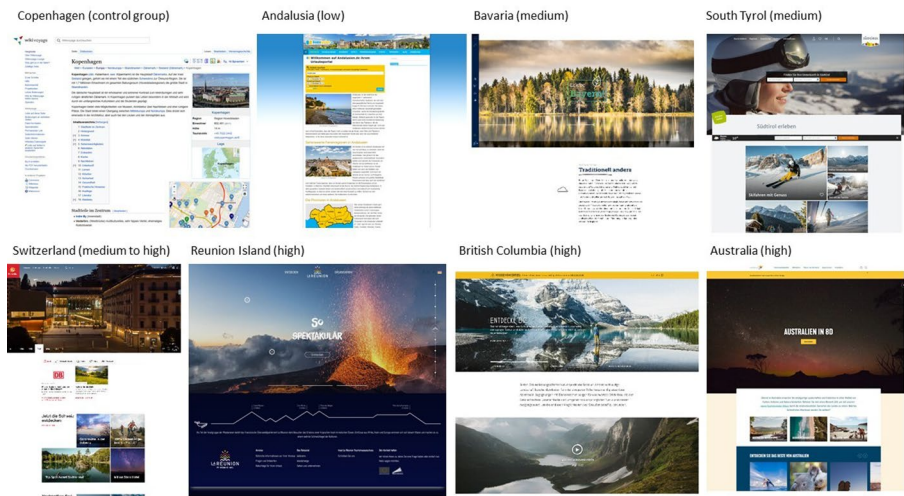
We conducted a quasi field experiment using an online questionnaire and eight different real destination websites as treatments (between-subjects design). In a *quasi* experiment the allocation of participants to the treatments (experimental groups) is not purely random which differentiates it from *true* experiments (Kirk 2013, p. 6). As we aimed at increasing the involvement of the participants with the assigned destinations compared to the previous study, we allocated them to the websites on the basis of interest in visiting the destination (see 3.2). For the development and general validation of the scale, we intended to include different websites and travel destinations in order to avoid destination specific biases and confounders such as an over- or under-representation of singular experience facets. Accordingly, all data was included in the data analysis independent of the assigned treatment. However, for the validation of the construct validity the advantage of the quasi-experimental approach

came into play as it enabled us to compare the ODE values of the destination websites under controlled conditions closely simulating reality (external validity). To control for non-stimulus-related factors influencing the ODE while also ensuring a high degree of personal relevance regarding the topic and destinations presented, the sample was drawn from a homogenous group, namely millennials (25–35 years old) living in Germany with an affinity for holidays and interest in travelling to at least one of the selected sample destinations. The narrowing down of the sample to German millennials was based on the fact that this target group has a great preference for travel and online activities (Ketter 2021) and uses destination websites more often than average for inspiration or information before the journey (FUR, 2020).

Several aspects guided the selection of the destination websites (treatments). Destinations should provide many natural and/or cultural attractions, rendering them potentially interesting to the target group. A mixture of different destination categories (city, nation, region) should demonstrate that the scale is applicable independently of the destination scope. However, building on the experiential marketing perspective, the most important selection criteria were the experiential design and the quality of the website. Previous research has shown that the application of pictures and videos as well as high-quality content (e.g. sensory or narrative descriptions) positively impact imagery elaboration and pre-consumption emotions (Björk 2010; Gretzel and Fesenmaier 2003; Jiménez-Barreto et al. 2020; Le et al. 2019; Lee and Gretzel 2012). Guided by these principles, we aimed at selecting one website without experiential design elements (i.e. a purely informative website) as a control group and one website with only a few experiential design elements (e.g. small pictures, no moving images). The remaining websites contained higher degrees of experiential design elements (i.e. sensory/ emotional elements such as large images, videos or sensual descriptions). The perception of the website quality in terms of aesthetics or design, usefulness, ease of use, trust, and interactivity impacts the destination experience (Jiménez-Barreto et al. 2019; Zhang et al. 2018). Aesthetics or design and interactivity are directly related to the experiential design, while trust is highly subjective and difficult to control for; thus, we aimed to select websites with solid usefulness (relevant content) and ease of use (easy navigation) parameters. A pre-selection of websites based on these criteria and the experiences made in the two prior studies was evaluated with regard to the aforementioned aspects by the research team. Thereafter, the pre-selected websites were evaluated in a quantitative pre-test ( $n=50$ ) with students. The pre-test included both an open-ended question (spontaneous naming of keywords) and a closed-ended question on the evaluation of the respective platform with regard to the aforementioned aspects (including emotional design). This resulted in the final website selection for the eight treatment groups and overall assessment of experiential design level (Table 1). As we did not find a destination website without any application of experiential design, we chose Copenhagen's representation on Wikivoyage as the control website. Screenshots of the websites are displayed in Fig. 2.

**Table 1** Destination website selection (experimental groups)

Destination	Website URL	Assessment of Experiential Design Level
Copenhagen (Denmark)	<a href="https://de.wikivoyage.org/wiki/Kopenhagen">https://de.wikivoyage.org/wiki/Kopenhagen</a>	No (control)
Andalusia (Spain)	<a href="https://www.andalusien.de/">https://www.andalusien.de/</a>	Low
Bavaria (Germany)	<a href="https://erlebe.bayern/">https://erlebe.bayern/</a>	Medium
South Tyrol (Italy)	<a href="https://www.suedtirol.info/de">https://www.suedtirol.info/de</a>	Medium
Switzerland	<a href="https://www.myswitzerland.com/de-de/">https://www.myswitzerland.com/de-de/</a>	Medium to high
British Columbia (Canada)	<a href="https://www.hellobc.de/">https://www.hellobc.de/</a>	High
Reunion Island (France)	<a href="https://www.insel-la-reunion.com/">https://www.insel-la-reunion.com/</a>	High
Australia	<a href="https://www.australia.com/de-de">https://www.australia.com/de-de</a>	High

**Fig. 2** Screenshots of selected websites from November 2021 and the assessed experiential design level. Source: see Website URL in Table 1

### 3.2 Research procedures and measures

Data collection occurred via the field-institute respondi's online consumer panel from 4 to 25 November 2021; we used a web questionnaire to collect the data. The participants who completed the entire survey received incentives. After data cleaning, 1820 complete questionnaires remained in the dataset. Various questions on personal and situational aspects were included to facilitate a comparison of the participants' general conditions and to control these between the experimental groups in the assessment of the construct validity (see 4.4). Based on the experiential marketing perspective, we aimed to isolate the effect of website design as much as possible. The participants' age (filter question), gender, origin (federal state), and level of education were requested. Furthermore, the number of long holiday trips (at least 4 nights) undertaken in the past 4 years was used as the inclusion criterion (at least 3 trips). Regarding situational factors, we measured the device used for the survey

as a categorical variable. Smartphone users were excluded to ensure that the participants had a similar visual experience on the websites. The participants' current mood was measured on a 5-point rating scale with values ranging from '-2=very bad' to '+2=very good'. In addition, the frequency of using destination websites before a trip was included as a categorical variable, indicating the experience with the information source. The respondents were also asked to indicate their familiarity with the destinations: from one or more personal visit(s), by name only, or not at all. Finally, the interest in visiting the familiar destinations (at least by name) for a holiday trip was rated on a 5-point scale with values ranging from '-2=not at all interested' to '+2=very interested'.

In the main part of the survey, the respondents were assigned a destination they had expressed interest in visiting. This supported the goal relevance and a higher involvement. As destination websites are also used for inspiration and information purposes by people who already visited the destination before, a previous visiting experience was not an exclusion criterion for the website assignment. The respondents were asked to imagine that they wanted to decide whether their next trip should be to the destination or not. Then, to facilitate decision-making, they were asked to browse the assigned website for 5 min to gather information on the destination and attempt to obtain an accurate picture of their potential holiday at the destination. To guarantee that this minimum time was met, the follow-up questions could only be answered after 5 min. Respondents who needed more than 15 min to answer the follow-up questions were excluded from the survey to ensure that the experience's evaluation could be conducted immediately after browsing. The respondents also had to answer at least one out of two control questions correctly, verifying they had visited the website.

For the ODE evaluation, the participants had to rate what they thought and felt about the destination and the associated holiday experience while browsing the website on a multi-item scale. In accordance with Churchill's (1979) proposed procedure for scale development, we first generated a sample of 30 items based on our two preliminary studies and the literature review (see 2.2) covering all potential experience facets that had emerged (sensory, affective, intellectual, spatio-temporal, social, and behavioural). In our pre-test study ( $n=50$ ), the participants were also asked to evaluate their ODE based on these items and comment whether the items seemed inappropriate for the chosen task or were formulated incomprehensibly; this eliminated ambiguity (Podsakoff et al. 2012). Based on this feedback and an evaluation of inter-item correlations, we purified the measure (Churchill 1979) and deleted ten items. In particular, we reduced four items that had emerged in our first, exploratory study (Köchling 2020), concerning the perceived distance of the destination (spatio-temporal aspects) and three items reflecting thoughts on crowding and potential encounters with other people at the destination (social aspects). Dropping these items aligned with the results of our second study (Köchling 2021), and confirmed that these facets do not belong to the ODE construct. Besides, we deleted three items based on the feedback from pre-test participants on their comprehensibility or appropriateness and added one further item reflecting the facet of experiencing the destination together with family and friends. Furthermore, our formulations were partially revised. We had used an equal number of positively and negatively worded items in the pre-test.

Since this was partially perceived as confusing, in the final study all items were formulated positively with the exception of one control item. This is supposed to lead to a lower proportion of residual error compared to balanced negative and positive scales (Peng and Finn 2016). In addition, the item formulations were sharpened so that they focus solely on the *destination* experience and can thus be more clearly distinguished from the technological website experience (website quality). Finally, we included 21 statements in the questionnaire and added two items from Zhang et al.'s (2018) research to operationalise 'destination emotional experiences' to test whether they correlate to our newly developed scale, thus supporting the construct validity. Unlike the personal questions (mood and interest), for the evaluation of the ODE we used a 7-point Likert-type scale ranging from '-3=don't agree at all' to '+3=fully agree' as in this context, seven-category responses have shown to perform better compared to five and eleven categories (Peng and Finn 2016). Respondents with inconsistent response behaviour were excluded.

The respondents then rated the website quality on a 7-point Likert-type scale. Five items covering aesthetics, usefulness, ease of use, trust, and interactivity were formulated based on the measurement instruments used in previous studies (Jiménez-Barreto et al. 2019; Zhang et al. 2018). The aim involved using the perceived website quality as part of our manipulation check and checking the discriminant validity. The manipulation check served to verify whether the selected destination websites were perceived in terms of their design as expected by our pre-selection and pre-test (Table 1). Therefore, the main part of the manipulation check comprised the inclusion of three items for evaluating the perception of the website's experiential design (e.g. 'The website is very emotionally designed.'). Furthermore, we used a single-item scale to measure the intention to revisit the website on a 7-point scale ranging from '-3=on no account' to '+3=in any case'. This variable supported the nomological validation. A list of all items related to the evaluation of the website and the ODE is displayed in Appendix A.

All scale points were numbered, with only the end points labelled. Thus, intervals between response options appeared equidistant to the respondents, and the scales could be interpreted as interval scales (Alreck and Settle 2004; Fowler 2014). Items of the multi-item scales were randomised to avoid sequential effects. To facilitate result interpretation, the scale labels were converted to purely positive values for data analysis (i.e. instead of -3 to +3, we used 1 to 7).

### 3.3 Operationalising the ODE

We operationalised the ODE as a higher-order construct that is reflective at the first and second order for several reasons. First, our preliminary studies have shown that individual experience elements correlate very strongly in the online destination context; we expect this to occur for the two assumed ODE dimensions (hedonic and utilitarian; see 2.2). Hence, in the first order, each ODE dimension is expected to be a composite latent construct whose indicators are assumed to be influenced, affected, or caused by the underlying latent variable (Hair et al. 2020). In the second order, the overarching ODE can be seen as a latent construct that manifests in each identified dimension instead of being formed by it. Another argument supporting this

**Table 2** Descriptive statistics of sample and sub-samples

Variables		Randomly split datasets			Statistics & Significance
		Total (n=1820)	Dataset 1: scale de- velopment (n=937)	Data- set 2: scale validation (n=883)	
Gender	Male	41.1%	39.3%	43.0%	$\chi^2(2)=2.752$ ; $p = .253^*$
	Female	58.6%	60.4%	56.7%	
	Diverse	0.3%	0.3%	0.2%	
Age	M	30.8	30.9	30.8	$t(1818)=0.395$ , $p = .693^*$
Number of holiday trips 2018–2021	M	6.7	6.8	6.7	$t(1818)=0.477$ , $p = .634^*$
Usage of destination websites before a trip	Always	26.5%	25.9%	27.1%	$\chi^2(5) = 2.056$ ; $p = .841^*$
	Often	33.1%	33.4%	32.7%	
	Sometimes	24.5%	24.2%	24.8%	
	Rarely	10.5%	11.0%	10.0%	
	Never	4.8%	4.6%	5.0%	
	Don't know	0.7%	0.9%	0.5%	

Note: \*not significant on the 5%-level

operationalisation is that, in previous studies that used an adapted version of Brakus' (2009) four-dimensional scale to measure online destination brand experiences, the construct was also operationalised as reflective-reflective (Jiménez-Barreto et al. 2020). While we are aiming to develop a more context-specific scale and expecting only two dimensions to emerge in the first order, we agree with the authors regarding the overall operationalisation. Finally, as compared to formative models, modelling the ODE as a reflective construct is more advantageous in terms of interpreting the scale's reliability and validity (Hair et al. 2020).

## 4 Results

### 4.1 Descriptive statistics

The respondents' structure in the relevant characteristics was as planned: millennials with a high affinity for holiday travel. The average age was 30.8 years, and the number of female participants (58.6%) was higher than the number of male participants (41.1%). The high affinity for holidays was expressed in the following mean value: 6.7 long holiday trips in the last 4 years (2018–2021). Furthermore, most participants stated they used destination websites at least occasionally for holiday preparation (Table 2), confirming the relevance of this information source for the target group. As we intended to use the data collected for developing and validating the scale, we randomly split the dataset via IBM SPSS Statistics 27 into two datasets, each containing approximately 50% of the cases, prior to data analysis. No significant differences

were found between the sub-samples regarding the personal and situational aspects (Table 2) or the number of cases assigned to the different treatments.

## 4.2 Scale development

To further purify the measure for the ODE assessment and analyse the construct's dimensionality, we used the entire Dataset 1 ( $n=937$ ). We conducted a principal component analysis (PCA) with oblique rotation (direct oblimin) on all 21 items (see 3.2 and Appendix A). The negatively connoted control item was reversed before data analysis. Oblique rotation was chosen as we expected the experience dimensions to be interrelated. Sampling adequacy for the analysis was verified using the Kaiser-Meyer-Olkin measure ( $KMO=0.975$ ) and  $KMO$  values  $>0.9$  for all individual items (Kaiser and Rice 1974). Furthermore, Bartlett's test of sphericity was significant (12,233.75; d. f. = 210,  $p<.001$ ).

Two components with Eigenvalues greater than one (Kaiser's criterion: Kaiser and Rice 1974), explaining 58.5% of the variance, were derived. The scree plot and parallel analysis (Horn 1965) also indicated that two components should be retained. We deleted four items due to low communalities ( $\leq .5$ ) and four other items due to high cross-loadings (i.e. loadings  $>.3$  for both components and difference between loadings  $\leq .2$ ; Appendix A). The resulting two-component solution explained 64.3% of the variance. Table 3 shows the component loadings after rotation.

The first component represents the *predominantly rational evaluative part (utilitarian value)* of the ODE, while the second component represents its *affective immersive part (hedonic value)*. The fact that the item 'I had positive feelings about the destination' loads onto the utilitarian component may seem surprising at first glance. However, in contrast to the items loading on the hedonic component, this item is formulated in a rather sober, reflective and less immersive way, so that higher cognitive information processing can be assumed (see 2.2). Both components were highly correlated ( $r=.668$ ), which justified applying oblique rotation and confirmed that the two components belong to a *reflective higher-order construct*. Moreover, both components exhibited high reliability, with Cronbach's alpha (CA) and composite reliability (CR) being higher than 0.8. The deletion of further items did not engender an increase in the CR of the respective components. The average variance extracted (AVE) was greater than 0.5 for both components, indicating the convergent validity.

## 4.3 Confirming the measurement's validity and reliability

We used the entire Dataset 2 ( $n=883$ ) to conduct a confirmatory composite analysis (CCA; Hair et al. 2020), using the software Smart PLS 3 (Ringle et al. 2015) to assess the dimensionality and validity of the developed ODE scale. We chose a CCA (i.e. variance-based structural equation modelling, SEM) instead of a confirmatory factor analysis (CFA, covariance-based SEM) because the ODE construct is still in the early phase of theory development; therefore, we are focused on analysing the content validity of the construct which is supported by CCA as this procedure produces larger loadings and the number of items retained is higher than with CFA (Hair et al. 2020). Cases from all eight treatment groups (Table 1) were included.

**Table 3** PCA results ODE measurement: pattern matrix of final two-component solution (n=937)

Question: We would now like to know what you thought and felt while browsing the website in relation to the destination and the associated holiday experience. To do this, you will find some statements below. Please indicate in each case to what extent you agree with the statement.

Items	Utilitarian ODE	He-donic ODE	CA	CR	AVE
I would like to tell friends and acquaintances about a holiday spent in the destination.	<b>.922</b>	-.137	.901	.895	.553
I would very much like to share my experiences in the destination with family or friends afterwards.	<b>.835</b>	-.048			
I would love to explore the destination with family or friends.	<b>.779</b>	-.040			
I think I could experience a lot in the destination.	<b>.672</b>	.132			
The destination seemed very interesting to me.	<b>.669</b>	.207			
The destination looked great.	<b>.648</b>	.188			
I had positive feelings about the destination.	<b>.633</b>	.254			
I could really feel the holiday experience.	.009	<b>.842</b>	.888	.893	.584
The destination touched me emotionally.	-.061	<b>.813</b>			
I could imagine the destination very well spatially (location of the sights, surroundings, etc.).	-.072	<b>.795</b>			
I was able to put myself very well into the travel experience on site.	.095	<b>.758</b>			
The destination stimulated my senses.	.196	<b>.686</b>			
I imagined how good I would feel during a visit to the destination.	.166	<b>.676</b>			

Note: Rotation method: Oblimin with Kaiser normalisation. The rotation has converged in eight iterations. Bold numbering denotes high component loadings (>0.5).

In accordance with the operationalisation of the ODE as a reflective-reflective second-order measure, we calculated a model with the two components and the underlying items extracted from PCA (first order) and the overall ODE (second order) via a repeated indicators approach (Sarstedt et al. 2019). We expected the two components to be distinct, yet related, constructs that are concrete reflective manifestations of the higher-order ODE construct. For assessing the first-order components, we followed the steps in CCA with the reflective measurement models proposed by Hair et al. (2020); we began by assessing the indicator loadings and their significance. Other than one item of the hedonic dimension, the standardised loadings for the two components (first order) showed significant ( $p < .001$ ) values above the critical threshold of 0.708 (Hair et al. 2020). At the second-order level, the loadings of four items were slightly below this threshold, showing that the overall model might benefit from a further purification of the measure. Hence, we tested whether deleting any of the five items would increase the CR and AVE. Eventually, we dropped all five items (Appendix A), as the AVE increased for both subscales, and estimated the model again. Consequently, we received satisfactory loadings for both components. Moreover, the reliability and convergent validity were confirmed by CA and CR values greater than .8 and AVE greater than .5 for both dimensions (Table 4).

We conducted another PCA on the final eight items, with the specification of a two-component solution, with Dataset 1. The CR values for both components were still over .8, and the AVE values increased, becoming greater than .64. This solution explained 71.6% of the variance. The higher AVE values (Table 3) confirmed the better suitability of the reduced item solution for this sample as well.

We continued with Dataset 2 to check the discriminant validity between the two first-order components, using the heterotrait-monotrait ratio of correlations (HTMT). HTMT values smaller than 1 indicate that the true correlation between the two constructs should differ. Discriminant validity problems occur when HTMT values are high. For conceptually similar models, such as our two interrelated ODE dimensions, scholars propose a value lower than 0.90 as the threshold for discriminant validity (Hair et al. 2019). In our study, the HTMT value was 0.85; hence, the discriminant validity was satisfactory.

We then checked the relationships between the higher-order component and its lower-order components to assess the measurement model of the second-order construct (i.e. the overall ODE) applying the criteria proposed by Sarstedt et al. (2019). Therefore, in our reflective-reflective measurement model the two components had to be interpreted as if they were indicators of the overall ODE construct, and the path coefficients between the ODE and its two components represented loadings (Sarstedt et al. 2019). The analysis produced significant ( $p < .001$ ) loadings of .931 for the utilitarian ODE and .926 for the hedonic ODE, thereby supporting indicator reliability for the higher-order component. As proposed by Sarstedt et al. (2019), we calculated further reliability and validity criteria based on these loadings and obtained high values for both the CR (.926) and AVE (.862). Finally, we checked the discriminant validity for the higher-order component. We calculated the HTMT values for the higher-order component and each of the five items for measuring the website quality (aesthetics, usefulness, ease of use, trust, and interactivity) and the single-item measure for assessing the revisit intention for the website (Appendix A). All HTMT values were

**Table 4** CCA results: loadings, CA, CR, and AVE of the final solution (first order;  $n=883$ )

Items	Loadings first order*				
	Utilitarian ODE	Hedonic ODE	CA	CR	AVE
The destination looked great.	.848		.853	.901	.694
The destination seemed very interesting to me.	.843				
I had positive feelings about the destination.	.824				
I think I could experience a lot in the destination.	.817				
I was able to put myself very well into the travel experience on site.		.826	.838	.891	.672
The destination stimulated my senses.		.826			
I could really feel the holiday experience.		.824			
I imagined how good I would feel during a visit to the destination.		.803			

Note: \*Based on bootstrapping procedure ( $n=3000$ ) loadings are significant for a two-tailed test at the 5% level ( $p<.001$ )

lower than 0.70 and, thus, well below the critical, more conservative threshold of 0.85 (Hair et al. 2019).

For a first check of the construct validity based on the entire dataset, we assessed whether the resulting construct scores of the first-order components were consistent within the nomological network (i.e. the representation of further constructs within our study and their interrelation; Hair et al. 2020). To examine whether our scale corresponds with other measures designed to measure similar constructs (convergent validity; Churchill 1979), we checked correlations with the two-item scale (mean value) we had adapted from Zhang et al. (2018) to measure ‘destination emotional experiences’. We found very strong (Cohen 1992) significant ( $p<.001$ ) correlations between the construct and both ODE dimensions (utilitarian ODE:  $r=.806$ ; hedonic ODE:  $r=.704$ ), confirming the convergent validity. We then assessed whether the scale was behaving as expected (Churchill 1979). We expected positive ODE values to be a predictor of the revisit intention for the website; hence, we analysed correlations with the revisit intention for the website and found positive significant ( $p<.001$ ) correlations (utilitarian ODE:  $r=.538$ ,  $p<.001$ ; hedonic ODE:  $r=.595$ ). Overall, the significant, strong correlations with the other constructs in our study indicate the nomological validity of the developed scale (Hair et al. 2020).

#### 4.4 Differences between the websites: ANOVA

Finally, as a central proof of the construct validity, we tested whether the developed measurement instrument revealed different ODE values corresponding to the treatment (destination website). Based on the experiential marketing perspective, we tested the following hypotheses:

- H1: Websites that apply experiential elements generate higher ODE values (both dimensions) compared to a website without experiential design.
- H2: This effect becomes greater depending on the level of experiential marketing applied.

For this analysis, we used both datasets to ensure a sufficiently large number of cases for each group to detect small and medium effects. Other factors influencing the ODE should be controlled as far as possible in order to test the hypotheses. As the proportion of participants with destination experience differed significantly between the eight treatment groups ( $\chi^2(7)=516.062$ ,  $p<.001$ ) and prior knowledge impacts imagination (Choe et al. 2014; Gowreesunkar, & Dixit, 2016; Le et al. 2021), to ensure homogenous groups, this analysis was based on participants without previous visiting experience of the destination. As most respondents of the destination Bavaria already had visiting experiences (90% of respondents), we excluded the group exposed to this website completely from the analysis and finally included 1163 cases distributed among seven groups. Descriptive statistics confirmed the homogeneity of the experimental groups regarding personal (e.g. age and gender) and situational (e.g. device used) impact factors (Appendix B).

First, we checked whether the websites were perceived as expected (manipulation check, see 3.2). We applied ANOVAs for the perception of the experiential website design (mean value of three items) and for each website quality aspect. The results confirmed that the websites were perceived as expected, with significant differences between the seven groups and a large effect (Kirk 1996; Appendix C). Furthermore, we found significant differences between the websites concerning the quality aspects. However, the effect sizes differed; they ranged from large to medium for aesthetics, interactivity, and trust but, as intended, were small for usefulness and ease of use. Australia received the highest scores on all variables, while Copenhagen and Andalusia received the lowest; hence, the overall perception of the stimuli aligned with our expectations (Table 1).

We then calculated ANOVAs for the two ODE dimensions. We found that the utilitarian ODE (Welch's  $F(6, 473)=21.442$ ,  $p<.001$ ,  $\omega^2 = .093$ ) and hedonic ODE (Welch's  $F(6, 474)=19.268$ ,  $p<.001$ ,  $\omega^2 = .083$ ) differed significantly, with medium effect sizes between the seven groups. To test our hypothesis, we calculated planned contrasts and used the Wikivoyage website about Copenhagen (no experiential design) as the comparison group. Table 5 displays the mean scores and mean differences for both ODE dimensions.

Overall, the mean values for the utilitarian ODE were higher than those for the hedonic ODE. Even the scores for the non-experiential Wikivoyage presentation of Copenhagen ( $M=5.58$  on the 7-point scale) indicated that the impact of the experiential website design was rather limited for the utilitarian ODE dimension. Effect sizes were strong for Australia and British Columbia, medium for Reunion Island and Switzerland, and small for Andalusia. The South Tyrol website also scored higher than the Copenhagen one; however, the difference was non-significant. For the hedonic ODE, the mean values varied between  $M=4.81$  (Copenhagen) and  $M=5.68$  (Australia), and mean differences compared to Copenhagen were significant for all groups, with effects being strong for Australia, British Columbia, and Reunion Island, medium for

Switzerland, and small for South Tyrol and Andalusia (Table 5). The comparison of these results with our assessment of the experiential design (Table 1) and the manipulation check (Appendix C) *supports our hypotheses that the experiential website design is a predictor for both ODE dimensions (H1)*; this is further supported by the *bigger effect sizes depending on the level of experiential marketing (H2)*, particularly for the hedonic ODE. Overall, the results show that the measurement instrument is suitable for differentiating high ODE values from lower ones depending on different stimuli, which is a further indication of the construct validity.

## 5 Discussion and conclusion

DMOs heavily invest in the experiential design of their websites to arouse emotions, along with rational arguments, to inspire tourists to visit. The Covid-19 pandemic has engendered various travel restrictions, and often, tourists can only visualise rather than actualise their next trip; in this context, inspiration from destination websites has become extremely important (Dai et al. 2022). DMOs are keen to attract new guests and mitigate the perception of travel risks. The experiential marketing perspective adopted here assumes that an experiential (i.e. not only informative but also emotional) website design supports positive pre-travel ODEs and can help DMOs achieve these goals. However, there was a need for a context-specific measurement tool to assess ODE values based on a deeper theoretical understanding of the dimensions of ODEs. In this study, we developed and validated a *reliable, valid, and parsimonious higher-order measure of ODEs*.

Based on our two previous studies (see 2.2 and Köchling 2020, 2021), we expected ODEs to show fewer differentiated dimensions than product brands (Brakus et al. 2009). These assumptions were confirmed in this study, as individual theoretically relevant experience facets (sensory, affective, intellectual, spatio-temporal, behavioural) merged into two interrelated experience dimensions. These dimensions – *hedonic and utilitarian* – can be explained by the dual-process theory (Holbrook and Hirschman 1982) and have also been used to explain general website performances (Huang 2005).

The hedonic dimension requires a high level of mental imagery processing (Le et al. 2019), leading to affective forecasts (Karl et al. 2021, 2022; Wilson and Gilbert 2005) of the future holiday experiences and feelings of telepresence (Choi et al. 2016; Steuer 1992). This experience dimension incorporates items reflecting sensory and affective facets, as well as space-time facets, and is particularly dependent on the experiential website design (e.g. videos, pictures). The utilitarian experience value incorporates an evaluation of the benefit of the potential destination experience, including intellectual, behavioural, and affective aspects, albeit with an evaluative character (the feeling was good). This experience component is predominantly triggered by informative content, as seen in the high values obtained even for the Wikivoyage page about Copenhagen. Generating utilitarian ODEs involves rational thinking and, therefore, requires higher levels of involvement compared to hedonic ODEs (Petty and Cacioppo 1986). Our research participants were interested in the destinations they rated; furthermore, as the task involved collecting information about a potential

**Table 5** Descriptive statistics ODE scores and planned contrasts

Variable	Group	Descriptive Statistics					Planned Contrasts (Copenhagen as comparison)						
		n	M	SD	95% CI		M <sub>Dif</sub>	SE	95% CI		UB	p	Cohens d
Utilitarian ODE	Copenhagen	161	5.58	0.79	5.45	5.70							
	Andalusia	161	5.81	0.83	5.68	5.94	0.23	0.09	0.01	0.45	0.45	.011*	.302
	South Tyrol	125	5.75	0.90	5.59	5.91	0.17	0.10	-0.06	0.41	0.41	.090	.226
	British Columbia	203	6.21	0.68	6.11	6.30	0.63	0.08	0.42	0.84	0.84	<.001*	.819
	Switzerland	113	5.97	0.84	5.81	6.13	0.39	0.10	0.15	0.64	0.64	<.001*	.510
	Reunion Island	183	6.14	0.77	6.03	6.26	0.57	0.08	0.35	0.78	0.78	<.001*	.736
Hedonic ODE	Australia	217	6.30	0.66	6.21	6.39	0.72	0.08	0.52	0.93	0.93	<.001*	.936
	Total	1163	6.00	0.81	5.95	6.05							
	Copenhagen	161	4.81	0.96	4.66	4.96							
	Andalusia	161	5.18	1.00	5.03	5.34	0.37	0.11	0.09	0.65	0.65	.001*	.384
	South Tyrol	125	5.25	0.96	5.08	5.42	0.44	0.12	0.14	0.74	0.74	<.001*	.452
	British Columbia	203	5.66	0.88	5.54	5.78	0.85	0.10	0.59	0.98	0.98	<.001*	.871
	Switzerland	113	5.48	1.15	5.26	5.69	0.67	0.12	0.36	0.98	0.98	<.001*	.686
	Reunion Island	183	5.61	0.99	5.47	5.75	0.80	0.11	0.53	0.98	0.98	<.001*	.821
	Australia	217	5.68	0.96	5.55	5.81	0.87	0.10	0.61	0.98	0.98	<.001*	.890
	Total	1163	5.41	1.02	5.35	5.47							

Note: \*significant on a .05 level, CI=Confidence Interval, LB=Lower Bound, UB=Upper Bound

holiday in the destination, the level of involvement was rather high. This partially explains the overall higher scores on this experience dimension. The lower values on the hedonic dimension, even for destinations with high levels of experiential design, show that this experience aspect is more difficult to arouse. However, particularly in the inspiration phase, when involvement is low, triggering hedonic experience value with experiential website designs can ensure DMO competitiveness.

Our data analysis has shown that the developed second-order measurement tool based on these experience components is reliable and valid across different destinations. The differences between the experiential websites and the control website were mostly in line with our expectations based on the website selection and the manipulation check. However, the comparatively poor performance of the South Tyrol website was surprising. The manipulation check showed that the evaluation of the experiential design and all quality aspects of the website was higher for the South Tyrol website than for Andalusia. As we have chosen a quasi field experiment conducted online with real websites to create a scenario closely simulating reality (high external validity), the possibilities of controlling external influences were limited. Hence, the South Tyrol scores cannot be explained in detail. Nevertheless, overall, the differences between the websites and the experience dimensions showed plausible results, indicating the construct validity of the measurement instrument.

The contributions of our study to the field of technology-driven tourist experiences are threefold. First, the theoretical value lies in an increased understanding of the mental processes at a central online marketing contact point in the under-researched anticipatory travel experience phase. As a result, it was confirmed that the ODE is only two-dimensional in contrast to the multidimensional product brand experience. Although the facets of the experience show many parallels, context-specific characteristics such as the high importance of the hedonic vision of the future holiday experience also emerged. Second, the presented measurement instrument constitutes a valuable methodological contribution: through the generated understanding of the dimensionality of the pre-travel ODE and the developed measurement tool, we have shown that the previously practised adaptation of the brand experience scale in the online destination context (Jiménez-Barreto et al. 2019, 2020; Khan and Fatma 2021; Yu et al. 2022) falls short while our more context-specific scale that incorporates aspects of affective forecasting and telepresence is appropriate. Third, the new measurement instrument delivers managerial value as it will support DMOs in assessing the experiential outcomes of their websites. This can help improve website design and content depending on specific target groups of potential tourists. Moreover, we assume the measurement instrument can be easily utilised by DMOs as the scale is relatively short, with only 8 items. Supplementing it with previous more technology-oriented analysis tools (e.g. for measuring usability or recording the length of stay on the website), it provides a more comprehensive picture of the success of destination websites. Since DMOs do not usually have the task of generating bookings, such qualitative analysis systems are particularly important. Furthermore, our studies have shown that despite the subjectivity of the experience, the application of experiential design on destination websites adds value to the website users and thus will most probably pay off on the image of the destinations.

However, our research has certain limitations that must be considered in future research. Considering the length and complexity of the online survey, we refrained from collecting variables that quantify the behavioural consequences of positive ODEs with regard to the destination (e.g. a change in the intention to visit). Thus, our options for testing the predictive validity (Hair et al. 2020) with our data were limited to checking correlations with intentions to re-visit the website. In further studies, this aspect should be expanded. Furthermore, as per Churchill's (1979) steps for delivering better marketing measures, the next step should be to collect further data from destination websites to develop 'norms' (i.e. a standard of comparison). When comparing ODE values between different destinations, destination-specific characteristics cannot be excluded as a cause for different experience values. Thus, norms should be developed for different destination categories to create the best possible comparisons for destinations. In our study, the scale development and validation were based on samples of German millennials, who were used to test the differences between the websites with a homogeneous target group. In further studies, the measurement instrument should also be tested for different target groups, including those from other cultural backgrounds. Finally, the developed measurement instrument relies on self-reports. Future studies could supplement this with psychophysiological techniques to capture emotions during the moment of surfing, thus obtaining a more holistic idea of the ODE (Godovykh and Tasci 2020).

## 6 Appendix

**Appendix A: Table 6** Items used for the included constructs and reasons for dropping items from the ODE scale.

Constructs	Items**	ODE scale: Main reason for dropping the item
Online Destination Experience (ODE)*	<b>The destination looked great.</b>	
	<b>The destination stimulated my senses.</b>	
	<b>I could really feel the holiday experience.</b>	
	The destination looked very stimulating.	PCA: low communalities
	<b>I had positive feelings about the destination.</b>	
	<b>I imagined how good I would feel during a visit to the destination.</b>	
	The destination touched me emotionally.	CCA: low loadings on second-order
	My interest was aroused to learn even more about the destination.	PCA: high cross loadings
	I became very curious about the destination.	PCA: high cross loadings
	<b>The destination seemed very interesting to me.</b>	
	I could imagine the destination very well spatially (location of sights, surroundings, etc.).	CCA: low loadings on first and second-order
	I now have a much more concrete picture of the destination (location of attractions, surroundings, etc.).	PCA: low communalities
	I have discovered where I could do which activities.	PCA: low communalities
	<b>I was able to put myself very well into the travel experience on site.</b>	
	I would like to tell friends and acquaintances about a holiday spent in the destination.	CCA: low loadings on second-order
Destination Emotional Experience (Zhang et al. 2018)	I would very much like to share my experiences in the destination with family or friends afterwards.	CCA: low loadings on second-order
	I would love to explore the destination with family or friends.	CCA: low loadings on second-order
	<b>I think I could experience a lot in the destination.</b>	
	It really made me want to visit the destination.	PCA: high cross loadings
	I would like to start my holiday there right away.	PCA: high cross loadings
	I would rather not go there. (control item)	PCA: low communalities
	A trip to the destination would make me feel good.	
	A trip to the destination would make me feel enthusiastic.	
	WQ: Aesthetics***	The design of the website looks nice.
	WQ: Usefulness***	The website is useful for my travel decision.
WQ: Ease of Use****	The categories on the website are well organised.	
	WQ: Trust***	The website looks trustworthy.
	WQ: Interactivity***	The website has interactive features (e.g. commenting on content) that meet my needs.

Constructs	Items**	ODE scale: Main reason for dropping the item
Perceived Experiential Design (Manipulation Check)	The website is very much focused on experiencing the destination before the trip. The publishers of the website want to make browsing an experience. The website is very emotionally designed.	
Website Revisit Intention	Would you like to surf the website again?	

Note: \*The 21 items included in the main survey are listed. \*\*Bold text indicates that the item was included in the final scale. \*\*\* WQ=Website quality adapted from Zhang et al. (2018) \*\*\*\* adapted from Jiménez-Barreto et al. (2019).

**Appendix B: Table 7** Descriptive statistics experimental groups and total. Base: respondents without visiting experience (n=1163)

Variables		Total	Co-pen-hagen	Andalusia	South Tyrol	Switzerland	British Columbia	Reunion Island	Australia	Statistics & Significance
Gender	Male	39.5%	39.8%	38.5%	44.8%	38.1%	39.9%	34.4%	41.5%	
	Female	60.1%	59.6%	60.9%	54.4%	61.9%	60.1%	65.6%	57.6%	
	Diverse	0.4%	0.6%	0.6%	0.8%	0.0%	0.0%	0.0%	0.9%	
Age	M	30.8	30.9	30.8	30.6	30.8	30.9	30.9	30.8	
	SD	2.9	3.0	3.0	3.0	2.5	2.9	3.0	3.0	
Number of holiday trips 2018–2021	M	6.7	6.5	6.6	6.2	7.1	3.7	7.0	6.6	
	SD	4.0	3.7	3.8	4.0	5.3	3.7	4.3	3.5	
Current mood	M	3.8	3.8	3.7	3.8	3.7	3.7	3.8	3.8	
	SD	0.9	0.8	0.9	0.9	0.8	0.9	0.8	0.9	
	Min	1	1	1	1	1	1	1	1	
	Max	5	5	5	5	5	5	5	5	

De- vice used	Lap- top with- out ex- ternal moni- tor	51.8%	49.1%	52.8%	56.0%	51.3%	52.2%	53.0%	49.8%
	Lap- top or PC with ex- ternal moni- tor	37.7%	39.1%	34.8%	37.6%	41.6%	37.4%	34.4%	40.1%
	Tablet	10.0%	11.2%	11.8%	6.4%	6.2%	10.3%	12.6%	9.2%
	An- other device (e.g. smart TV)	0.4%	0.6%	0.6%	0.0%	0.9%	0.0%	0.0%	0.9%
Gen- eral usage of desti- nation web- sites before a trip	Always	26.2%	28.6%	22.4%	28.8%	29.2%	27.6%	25.7%	23.5%
	Often	31.7%	34.2%	28.0%	29.6%	30.1%	35.0%	28.4%	34.6%
	Some- times	24.6%	19.9%	29.8%	27.2%	23.0%	23.2%	29.0%	21.2%
	Rarely	11.5%	13.7%	12.4%	5.6%	14.2%	8.9%	11.5%	13.8%
	Never	5.3%	3.1%	6.8%	8.0%	2.7%	4.9%	4.4%	6.9%
	Don't know	0.6%	0.6%	0.6%	0.8%	0.9%	0.5%	1.1%	0.0%

**Appendix C: Table 8** Manipulation check: comparison of website perception between the groups

		Experimental groups								
Vari- ables		Total	Co- pen- hagen	Anda- lusia	South Tyrol	Swit- zer- land	Brit- ish Co- lum- bia	Re- union Island	Aus- tralia	
Expe- riential Web- site De- sign*	M	5.19	3.81	4.31	5.34	5.66	5.61	5.67	5.76	F(6,
	SD	1.28	1.33	1.28	0.98	1.06	0.92	0.95	0.88	
	Min	1.00	1.00	1.00	1.00	1.00	2.67	2.33	2.00	
	Max	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	
	M	5.49	4.11	4.37	5.87	5.94	5.93	5.91	6.15	F(6,
	SD	1.48	1.54	1.70	1.12	1.08	1.11	1.15	0.98	
	Min	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.00	
	Max	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	

Experimental groups									
M	5.48	4.96	5.09	5.53	5.55	5.69	5.57	5.82	F(6, 476) =
SD	1.24	1.47	1.29	1.10	1.31	1.16	1.13	1.03	
Min	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Max	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	
M	5.53	5.37	5.27	5.44	5.60	5.72	5.30	5.84	F(6,
SD	1.23	1.21	1.26	1.15	1.29	1.17	1.42	1.02	
Min	1.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	
Max	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	
M	5.68	5.09	5.01	5.88	5.91	5.97	5.80	6.02	F(6,
SD	1.14	1.20	1.34	0.92	1.01	1.00	1.02	0.96	
Min	1.00	1.00	1.00	3.00	3.00	1.00	2.00	2.00	
Max	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	
M	4.73	4.16	4.25	4.74	4.86	4.95	4.86	5.12	F(6,
SD	1.33	1.49	1.29	1.12	1.44	1.20	1.25	1.25	
Min	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	
Max	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	

Note: \* Mean value of three items (for details of the items, see Appendix A) \*\*WQ=Website quality

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**Data Availability** The data that support the findings of this study are available from the corresponding author upon reasonable request.

## Declarations

**Competing interests** There are no financial or non-financial competing interests to be declared.

**Consent** Participants in the study were generated via an online panel. Accordingly, participation was voluntarily agreed to, compliant with data protection regulations and rewarded with an incentive.

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