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# The cultural impact of navigation design in global e-commerce

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## Abstract:

**Purpose:** The present paper investigates the effect of the navigation design (static or dynamic) in e-commerce. Specifically, a comparison is made of consumers from two cultures: the Dutch and the Greek.

**Methods:** A total of 221 Dutch and Greek subjects participated in an experimental survey, where they judged an online search page of a hotel booking website. The study had a 2x2 between-subjects design with the factors navigation design (dynamic or static) and cultural background (Dutch or Greek). The primary dependent variable was the behavioural intention to use (the website). The hedonic and utilitarian attitudes were the mediators.

**Results:** The analysis of the results showed that the navigation design preferences are culturally affected and influence the consumers' attitudes and behavioural intentions. The static navigation design was perceived as less useful, compared to the dynamic navigation design. For the Dutch group the dynamic navigation was more persuasive than the static one, whereas for the Greek group no significant difference was found.

**Implications:** As a future recommendation, localising the websites' content should be considered in global e-commerce, especially when it comes to the hospitality and hotel industry, in order to avoid unintended effects that a specific navigation design may have on the targeted audiences.

**Keywords:** e-commerce, navigation design, cultural differences, consumer behaviour

**JEL Classification:** M31, M37

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## 1 INTRODUCTION

The globalisation of e-commerce has brought along implications for online marketers and website designers. They need to consider whether the standardisation of (international) marketing communications is appropriate. After all, cultural adaptation to the "local" preferences of the consumer can enhance the persuasive effectiveness of the message. The optimisation of the web design contributes to a positive user experience on the website. Specifically, the ease of navigation and searching for (product) information will enhance the website's usability, and subsequently, users' experience and satisfaction. Finally, the consumer will take the desired action in a web store.

The aim of this study is to explore website navigation design with a focus on cultural preferences of European online consumers. To this end, a comparison is made between consumers from Greece and the Netherlands. The focus of this paper will be on e-commerce, specifically on online hotel bookings, which are tremendously increasing throughout the

last years. Due to an abundance of online resources in the hospitality industry, many consumers prefer to book hotel rooms online, rather than using traditional means such as travel agencies. Even so, not all consumers are comfortable using the internet to book hotel rooms, since the online environment may sometimes cause uncertainty due to cultural differentiation. This study is an expansion on earlier studies on visual e-commerce in which other cultural differentiations of website design persuasivity are examined: exclusivity (Broeder & Derksen, 2018), colour (Broeder & Snijder, 2019; Broeder & Wildeman, 2020), and privacy notice (Broeder, 2020).

The next section goes into the specifics of website navigation design. Structural and functional navigation distinctions are described through and related to behavioural intentions. Next, the role of hedonic and utilitarian attitudes is specified. Finally, an updated inventory is presented, to show how culturally specific navigation markers are related to the cultural dimension theory of Hofstede (2020). This provides the basis for four working hypotheses. Then, the Method and the specific hotel booking site used for the experimental

survey are described. The results are presented in a way that will put the working hypotheses to the test. Having tackled the above, the outcomes of the experiment will be used to conclude this paper and show how these findings can be used in practice for managerial purposes and applications.

## 2 LITERATURE REVIEW AND HYPOTHESES

### 2.1. Navigation design

An efficient and effective website design caters for the consumer's individual needs and expectations. The information is well organised and presented, and made accessible through a (search) navigation that makes the use of the website a functional and engaging experience (see Allison et al. 2019 for a comprehensive framework for website evaluation). A literature review by Garrett et al. (2016) showed that navigation is one of the most examined elements of web design. There are three main types of navigation design that can be distinguished. First, navigation designs can differ in linearity. Linear (static) navigation provides sequential availability of web pages. Non-linear (dynamic) navigation is characterised by predefined categories which are meant to be scrolled down upon. The consumer moves forwards and backwards with multiple choices on the same web page.

Kralisch (2005) found that the linear or non-linear navigation behaviour of consumers is influenced by their cultural background. Second, websites differ in the number of navigation levels (depth) and the number of options per navigation level (breadth). In general, studies suggest that breadth navigation (the number of options varied per study) is preferred over depth navigation, (e.g., Reinecke & Bernstein, 2013; Cui, Wang, & Teo, 2015). Finally, the dynamism of the navigation might differ. In static (vertical) menus the user has to deal with some visible navigation options, including filters that can be selected or deselected in order to narrow down or broaden the search results. In contrast, dynamic menus require more extensive navigation; the user has to process the visible options, select and open one, and subsequently process the specific information (Alexander, Murray, & Thomson, 2017). There is evidence that a vertical navigation design is usually preferred compared to a dynamic one (Leuthold et al., 2011).

Several studies support a positive correlation between website navigation design and diverse outcomes including user's attitudes towards a website (e.g., Lim & Dubinsky, 2004; Ashraf et al., 2019). A user's attitude includes the level of satisfaction, trust, and loyalty (e.g., Cheung & Lee, 2008; Cyr, 2008; Chang & Chen, 2008; Faisal et al., 2017), as well as the behavioural intentions to use a website, recommend it, or purchase from it (e.g., Hausman & Siepke, 2009; Ganguly et al., 2010; Lee & Kozar, 2012; Wang et al., 2015; Ali, 2016). The following hypothesis is formulated:

*Hypothesis 1: Navigation designs influence the consumers' attitude and behavioural intentions.*

### 2.2. Hedonic and utilitarian attitudes

A consumer's online behaviour is influenced by their attitudinal dispositions towards the product and the shopping process in general. In line with previous marketing research

on consumer behaviour, two different components of shopping attitude can be distinguished (Hirschman & Holbrook, 1982; Halkiopoulou et al., 2020). The first is the utilitarian component which relates to the instrumental benefits derived from shopping, while the second is the hedonic component referring to the emotions and feelings immediately experienced while shopping.

The utilitarian attitude is more task-oriented and focuses on the tangible outcome of the online shopping experience, such as, convenience, a wider range of products to choose from, lower prices, and the easy of comparing prices and products (Park et al., 2012). The utilitarian consumer consciously needs the intended outcome, and therefore uses or purchases the service/product. A functional evaluation takes place when the consumer has a clear goal and is pursuing a specific consequence (Bridges & Florsheim, 2008; Amanatidis et al., 2020). A hedonic attitude, on the other hand, is more process-related. This means, that the disposition arises from the social and emotional experience, and the positive feelings that one gains from the online shopping process; some examples are viewing shopping as an adventure, stress relief, and value shopping (searching for deals and buying products at a good price). A consumer motivated by hedonism seeks for fun and positive emotional arousal during the purchase, and in this case online shopping is enjoyed regardless of the final outcome (Park et al., 2012; Shiau & Wu, 2013).

For a shopping experience to be complete, both hedonic and utilitarian motivations play an important role. Several studies have provided empirical evidence for this. Anderson et al. (2014) unravelled consumers' motivations for shopping on retail Facebook pages in the US. Purchase intentions were found to be utilitarian motivated by time-savings and access to information. Experiential shopping (hedonic) was related to loyalty (not purchase).

The study of Sarkar (2011) found that high hedonic Indian consumers perceive more risks and less benefits in online shopping and tended to avoid it. In contrast, consumers with high utilitarian shopping values perceive greater benefits. Consumers mainly purchased online because of the greater convenience (saving time and decreasing the costs). The findings suggested that successful website designs should also increase the entertainment (hedonic) value. This fun element is necessary to acquire new customers and retain existing consumers online. Scarpi (2012) also reported that the website layout seems to be an important aspect for both types of consumers. For the utilitarian type it was important to provide a website that is easy to navigate, without many unneeded images or videos that lead to the final destination (i.e., the purchase) as fast as possible. However, for the hedonic buyers, the experience of online shopping should be enjoyable and include images, videos and personalised features. In summation, it is important to understand the orientation of the consumer (both utilitarian and hedonic) in order to create websites that are more profitable. Hence, the following hypotheses:

*Hypothesis 2: Utilitarian attitudes influence the relationship between navigation design and behavioural intention.*

*Hypothesis 3: Hedonic attitudes influence the relationship between navigation design and behavioural intention.*

### 2.3. Cultural differentiations

Nordhoff et al. (2018) analysed the design diversity of the 2,000 most popular websites from 44 countries (in total 80,901 websites) using computational image metrics. They found that local (country-specific) website designs differed in visual complexity and colourfulness. In contrast, global (internationally focused websites) did not localise web designs. Unfortunately, although very informative, Nordhoff et al. (2018) analyses did not include navigation designs. Several studies on cultural markers in web design and, the effects of cultural website localisation provided supporting evidence that the cultural values of countries were naturally reflected on websites and that countries had specific web design elements (Moura et al., 2016). These studies mostly used Hofstede's (2020) theory of cultural dimensions. Table 1 aggregates findings of these studies.

Table 1: Inventory of cultural markers in navigation design

Cultural characteristic	Navigation elements		Cultural characteristic
Individualistic	Greater variety in navigation style. Customisable and individual paths. A variety of choices through slide bars and menus.	Top-oriented navigation style. Group-oriented: non-customisable (official) role paths. As few slide bars and menus as possible.	Collectivistic
Low Power Distance	Shallow hierarchy. Most information at interface level. Free access to many pages/paths.	Tall hierarchy. Little information at first level. Restricted access.	High Power Distance
Femininity	Multiple choices. Orientation towards relationships.	Limited choices. Orientation towards goals.	Masculinity
Short-Term orientation	Need for quick results. Presence of a search engine. Reduced information density.	Tolerance for long procedures or paths, contemplation-oriented. More information at interface level.	Long-Term orientation
Uncertainty Tolerance	Complex navigation: non-linear, dynamic. Many options and paths available. More use of site-maps. Long pages with scrolling.	Easier navigability: simple (vertical or linear) menus and intuitive navigation. Less use of site maps. Detailed (less) information. More animation. Limited scrolling.	Uncertainty Avoidance
Indulgence	Goal oriented. Interaction fun using informal communication.	Process-oriented. Interaction in an explainable manner using formal communication. Less and clearly defined choices.	Restrained

Several sources were used in order to compile this schematic overview of navigation elements for each of Hofstede's cultural dimensions. Marcus and Gould (2000) performed manual a cross-country comparison of 10 websites from America (USA, Costa Rica), Asia (China, Japan, Malaysia), and Europe (Belgium, Germany, the Netherlands, UK, Sweden). Calahan (2008) evaluated visual similarities and differences of 900 university websites for 44 countries. Calabrese et al. (2012) compared Scandinavian and Malaysian commercial websites. Other sources that have been used researched web design strategies (Hermeking, 2006; Würtz, 2006; Reinecke & Bernstein, 2011 and 2013; Yakunin, Bodrunova, & Gourieva, 2018), and cross-cultural usability interfaces (Christou & Kassianidis, 2008; Khanum, Fatima, & Chaurasia, 2012; Lo, & Gong 2005; Christou & Sigala, 2003; Alexander, 2019; Heimgärtner, 2019). Finally, reviews of studies on user website perceptions (El Mimouni & MacDonald 2015; Moura et al., 2016; Nizamani et al., 2018), and the meta-analysis of literature on cultural localisation of websites by Cermak and Smutny (2018) were integrated in the inventory presented in Table 1.

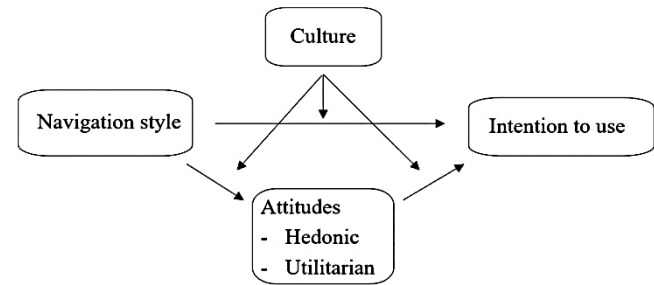
Based upon this inventory of prior investigations, it is expected that cultural background influences the relationships among navigation design type and behavioural purchase intention:

*Hypothesis 4: Culture influences the relationship among navigation design, attitude, and behavioural intention.*

### 3 METHODOLOGY

The present study had a 2 x 2 between-subjects design with the factors navigation design (dynamic or static) and cultural background (Dutch or Greek). The primary dependent variable was the behavioural intention to use (the website). The hedonic and utilitarian attitudes were the mediators. Culture influences the relationship between the navigation design and the behavioural intention. The other dependent variable was the recommendation intent. The conceptual model is given in Figure 1. Participants were randomly assigned to one of two conditions (websites), each with a different website navigation design.

Figure 1: Conceptual model of the present study



#### 3.1. Sample

Originally, a total of 227 participants completed an online survey. Their cultural background was identified through self-identification ("To what ethnic group do you belong to?"), which had to match with the birth-country and the country-of-living (the Netherlands or Greece), as well as, their home language use (Dutch or Greek). Mismatches (N = 6) in this cultural identification were omitted. The final sample consisted of 221 participants. There were 115 Dutch and 106 Greek participants. The average was 25,63 years (range: 17-53), the gender distribution was 50:50. Table 2, profiles the Dutch national culture and the Greek national culture according to Hofstede (2020). Greece has a high uncertainty avoidance national culture (scores on a 0-100 scale).

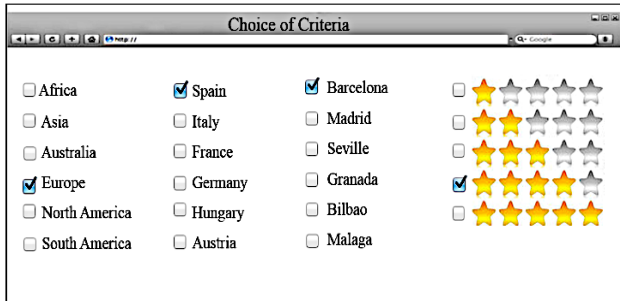
Table 2: Hofstede's (2020) cultural dimension indices for Dutch and Greek national culture respectively (Index score on a 0-100 scale)

Dutch national culture	Hofstede's dimension index		Greek national culture
Individualistic	80	35	Collectivistic
Low Power Distance	38	60	High Power Distance
Femininity	14	57	Masculinity
Short-Term Orientation	67	45	Long-Term Orientation
Uncertainty Tolerance	53	100	Uncertainty Avoidance
Indulgence	68	50	Restrained

**3.2. Material**

Two different versions of a hotel room booking website were designed. The aim was to create two different navigation designs that conveyed the same information. The website with the dynamic navigation design is given in Figure 2. The dynamic navigation reflects that the presented information changes every time based on the user’s choices.

Figure 2: Website with the dynamic navigation



The information beneath each category displays continents, countries, cities, and hotel stars. Next to each selection there is a box that can be selected. The website user filters the options and is automatically presented with the hotels that match the desired preferences. In our experimental condition, the user of the website is interested in visiting a country in Europe and selects the offers in Spain. The country filter shows that there are offers available in six Spanish cities. Finally, the hotel filter shows the star rating of each respective hotel.

Figure 3: Website with static navigation



Figure 3 shows the website with the static navigation design. The four information categories (continents, countries, cities, and hotel stars) are the same as in the dynamic navigation design. However, the static navigation design constitutes a hierarchical structured three-click process. In this concept the website user has to click every information unit and browse through the list manually until the best option is found.

**3.3. Questionnaire**

The participants saw the hotel booking website and were presented with the following scenario: “Imagine that you want to book a hotel room. Your choice of criteria is given as seen above”. They then answered a number of questions. The Appendix gives all items that were used in the scales of the questionnaire. Usage intention (“I would like to use this website”) and recommendation intention (“I would like to recommend this website to friends”) were measured on a 5-point Likert-type scale (“strongly (dis)agree”). The hedonic

evaluation scale (e.g., “(no)fun”) and the utilitarian evaluation scales (e.g., “(not)informative”) consisted of adjective pairs on a 5-point-scale. There were four manipulation questions that cross-checked prior knowledge and experience with the respective navigation designs.

**4 RESULTS AND DISCUSSION**

**4.1. Manipulation check**

Table 3 compares the average knowledge and experience with the two navigation designs within each condition.

Table 3: Manipulation check: means on a 5-point-scale, where 1=min. (completely disagree) and 5=max. (completely agree)

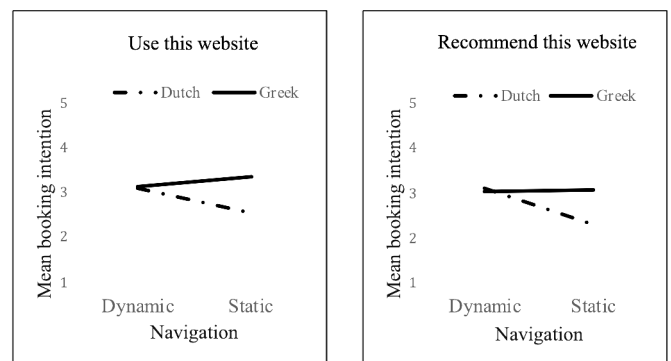
	Dynamic navigation (n=105)	Static navigation (n=116)
I have more knowledge about this type of website than friends	3.36 (0.95)	3.41 (0.98)
I am familiar with all the features of this type of website	3.64 (0.91)	3.56 (0.91)
I have a lot of experience using this type of website	3.51 (0.99)	3.51 (0.98)
I used this type of website in all kinds of different situations	3.34 (0.92)	3.23 (1.03)

Two-way ANOVAs revealed no main effects for the navigation design condition ( $F(1,217) = 0.139, p = .710$ ) and the cultural group ( $F(1,217) = 0.015, p = .497$ ) on the prior knowledge and experience of the participants with the navigation design. These findings provide statistical evidence for the successful random assignment of the two sample to each of the navigation design conditions.

**4.2. Effect of website navigation on behavioral intention**

The relationships between the navigation design and the usage intention for the Dutch and Greek participants are plotted in Figure 4.

Figure 4: Relationships between navigation design and behavioural intention per cultural group



Remarkably, the mean usage and recommendation intentions of the Dutch group were lower with the static navigation, compared to the dynamic navigation. The ANOVA for usage intention indeed revealed the significant interaction between cultural background and the navigation design,  $F(1, 217) = 8.061, p = .014$ . This indicates that the Dutch and Greek participants were affected differently by the navigation design. Simple effects analysis confirmed that the usage intentions with a static navigation design were significantly lower than those with a dynamic design in the Dutch group,



$F(1, 217) = 6.285, p = .013$ , but not in the Greek group,  $F(1, 217) = 0.926, p = .337$ . The same pattern was noticed for the recommendation intentions. This partly supported Hypothesis 1.

### 4.3. Hedonic and utilitarian evaluation

The further analyses will now focus on usage intentions. The recommendation intentions will be disregarded as no differences are expected in comparison to usage intention. To examine whether the usage intentions can be explained by the navigation design, a regression analysis was performed using PROCESS procedures developed by Hayes (2018). In the static multiple mediator model, the navigation design was the predictor. The two mediators were the hedonic and the utilitarian evaluation of the navigation design. The outcomes of this regression are presented in Table 4.

Table 4: Regression coefficients, standard errors (SE) and model summary information (5,000 bootstrap samples) for the influence of the navigation design static multiple mediator model depicted in Figure 5

Independent	Dependent											
	$M_1$ (Hedonic)			$M_2$ (Utilitarian)			$Y$ (Usage intention)					
	Coeff.	SE	$p$	Coeff.	SE	$p$	Coeff.	SE	$p$			
$X$ (Navigation)	$a_1$	0.037	0.128	.769	$a_2$	-0.403	0.130	.002	$c'$	0.041	0.104	.693
$M_1$ (Hedonic)	---	---	---	---	---	---	---	---	$b_1$	0.523	0.074	<.001
$M_2$ (Utilitarian)	---	---	---	---	---	---	---	---	$b_2$	0.498	0.075	<.001
$W$ (Culture)	$d_1$	-0.321	0.127	.012	$d_2$	-0.206	0.123	.114	$d_3$	-0.164	0.955	.087
$X \times W$	$f_1$	-0.062	0.256	<.001	$f_2$	-1.271	0.260	<.000	$f_3$	0.367	0.210	.805
$M_1 \times W$	---	---	---	---	---	---	---	---		0.230	0.149	.123
$M_2 \times W$	---	---	---	---	---	---	---	---		-0.128	0.146	.381
Constant	$\beta_1$	-0.008	0.064	.902	$\beta_2$	-0.009	0.65	.884	$\beta_3$	3.051	0.047	<.001
	$R^2 = 0.098$			$R^2 = 0.141$			$R^2 = 0.660$					
	$F(3,217) = 7.888,$			$F(2,217) = 11.940,$			$F(7,213) = 59.112,$					
	$p < .001$			$p < .001$			$p < .001$					

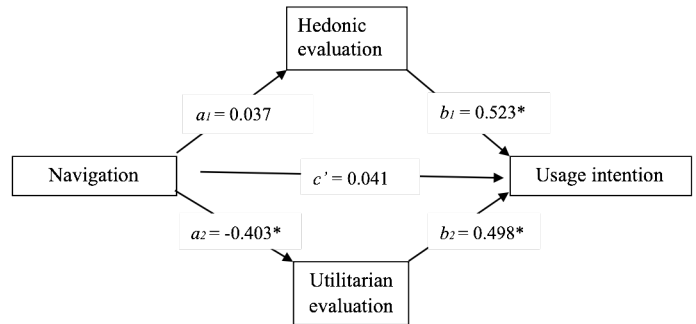
In the regression analysis bias corrected and accelerated (BCa) confidence intervals (CI) were based on 5,000 bootstrap samples. The confidence intervals of the bootstrap testing should be entirely above or below zero. There was no statistically significant effect of the navigation design on the hedonic evaluation ( $a_1 = 0.037$ , 95% BCa CI [-0.22, 0.28]). In contrast, there was a negative effect on the utilitarian evaluation. This means that the respondents deemed the static navigation design as less useful, compared to the dynamic navigation design, ( $a_2 = -0.403$ , 95% BCa CI [-0.66, -0.14]). In addition, both the hedonic evaluation ( $b_1 = 0.523$ , 95% BCa CI [0.36, 0.67]) and the utilitarian evaluation ( $b_2 = 0.498$ , 95% BCa CI [0.36, 0.64]) were found to positively contribute to usage intention. There was no statistical evidence that navigation design directly influenced the usage intention regardless of the hedonic and utilitarian evaluation ( $c' = 0.041$ ). These findings support the mediating (indirect) effect of attitudes (Hypothesis 2 and 3).

### 4.4. Culture specific preferences

The assumption was made that cultural background would influence the hedonic and the utilitarian evaluation of the navigation design (Hypothesis 2 and 3). As can be seen in Table 4, the cultural background moderated with statistically significance the hedonic evaluation ( $d_1$ ) and the utilitarian

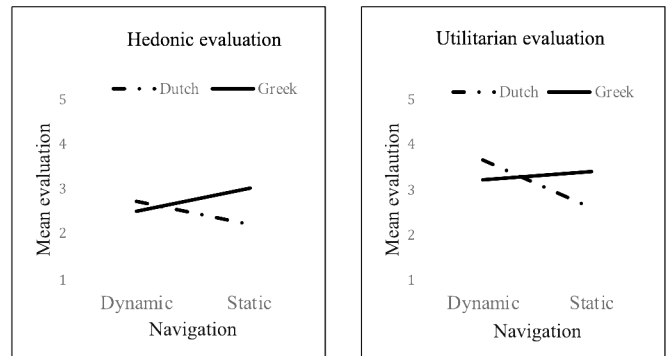
evaluation ( $d_2$ ) of the navigation design. The mean evaluation of the two navigation designs by the Dutch and Greek participants is visualised in Figure 6.

Figure 5: A statistical diagram of the multiple mediator model for the presumed influence of the navigation design



The dynamic navigation design had a similar mean evaluation among the two cultural groups. In contrast, their evaluation of the static navigation design was different. The Dutch evaluations of the static navigation design were lower (hedonic:  $M = 2.20, SD = 0.82$ ; utilitarian:  $M = 2.60, SD = 0.96$ ), whereas the Greeks' evaluations were higher (hedonic:  $M = 3.02, SD = 0.88$ ; utilitarian:  $M = 3.40, SD = 0.96$ ), compared to the evaluations of the dynamic design.

Figure 6: Relationship between navigation design and hedonic/utilitarian evaluation per cultural group



The hedonic and utilitarian evaluation differences between the two cultural groups implied a condition indirect effect on usage intentions. More specifically, for the Greek group there was a negative indirect effect of the navigation design on the usage intentions through the hedonic evaluation ( $b = -0.331$ , 95% BCa CI [-0.59, -0.09]) and through the utilitarian navigation ( $b = -0.460$ , 95% BCa CI [-0.75, -0.22]). In contrast for the Dutch group, there was a positive indirect effect of the navigation design on the usage intentions through the hedonic evaluation ( $b = 0.226$ , 95% BCa CI [0.05, 0.44]), not through the utilitarian navigation ( $b = 0.115$ , 95% BCa CI [-0.07, 0.35]). These findings support the moderating effect of culture (Hypothesis 4).

## 5 CONCLUSIONS

The study analyses whether different navigation designs influence website attitudes and whether this leads to different

behavioural intentions, as well as, the extent to which consumers' cultural background can influence their attitude. In the experimental survey of this study, there was a direct effect of the navigation design on behavioural intention for the Dutch sample group (Hypothesis 1). For this group, the website with the dynamic navigation design resulted in higher booking and recommendation intentions, compared to the website with the static navigation.

In contrast, the Greek sample group did not display significant differentiation between the two designs. There was also a difference in the utilitarian attitudes towards the different navigation designs. The static navigation design was perceived as less useful, compared to the dynamic navigation (Hypothesis 2). Hedonic attitudes towards the navigation design did not differ (Hypothesis 3).

In this study, there was an indirect effect of a navigation design on behavioural intention. The findings showed that both utilitarian and hedonic attitudes played a mediation role in the influence of the navigation design on the booking intention (Hypothesis 3). Finally, there was clear evidence that cultural background had a moderating effect (Hypothesis 4). The Dutch and Greek participants in this study differed in their perceptions and evaluations of the different navigation design, which subsequently resulted in different attitudes and behavioural intentions. Similar to review syntheses of Vyncke and Bergman (2010) and Moura, Singh, and Chun (2016) the empirical findings of this study support the importance of congruence between the website navigation design and cultural values on the users.

### 5.1. Limitations and further research

This study has limitations that provide some suggestions for further research. First, the questionnaire was drafted in English, which is not the native language for both the Dutch and Greek participants. This is an important point of attention in cross-cultural investigations. In this respect, Harzing (2005) concluded that when performing a cross-country comparison, cultural differences appear to be less when using English-language questionnaires than native-language questionnaires. It is worth noting that Greek is one of the very few European languages that does not have the Latin script. This may have influenced the way Greek users approach hotel booking websites, as another cause of uncertainty for them. Further research could investigate to what extent language may be a key factor in influencing users' online choices.

The second limitation of this study might be the experiment screenshots of the navigation designs. There was no natural interaction with the web elements and the users did not have the experience they would have when booking a hotel room in real-life conditions. Extending this limitation, it may be possible that the navigation screenshots were not clear for everyone and the flow of each design was not understood by all participants.

The third limitation relates to the way the core construct culture is operationalised. In almost all prior cross-cultural studies, cultural identification of groups is based on national culture (Hofstede 2020), country of living or birth-country. In this study the Dutch and Greek group were distinguished by cultural profiles based on country, home language use, and ethnic self-identification (see the Appendix for the specific questions). This multiple identification has proven to be

highly valid for defining cultural groups in Europe, China, and South-Africa (Broeder & Stokmans, 2013).

Finally, cross-cultural (or cross-country) comparisons lack a clear and consistent synthesis of the navigation design elements. Including an inventory of cultural markers present in this study might be an updated contribution to this. In terms of further research, the findings of this study call for researches that focus on other types of navigation designs, other e-commerce contexts (than the hotel booking realm) and other cultural groups. This is still needed for progressing insights in the culturability, culture and usability (Barber & Badre 1998), of website navigability.

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## Appendix

### Operationalisation of the constructs

Culture: *In which country were you born?*  
*In which country do you live now?*  
*Which is the language mostly spoken at your home?*  
*To what ethnic group do you belong to?*

Usage intention: *I would like to use this website.*

Recommend intention: *I would recommend this website to friends.*

Hedonic evaluation: *I think the website is...*

<i>Irritating</i>	-	<i>enjoyable</i>
<i>unappealing</i>	-	<i>nice</i>
<i>frustrating</i>	-	<i>relaxing</i>
<i>no fun</i>	-	<i>fun</i>
<i>not amusing</i>	-	<i>amusing</i>

Utilitarian evaluation: *I think the website is...*

<i>not informative</i>	-	<i>informative</i>
<i>unnecessary</i>	-	<i>necessary</i>
<i>useless</i>	-	<i>worthwhile</i>
<i>pointless</i>	-	<i>useful</i>
<i>inexperienced</i>	-	<i>experienced</i>
<i>stupid</i>	-	<i>sensible</i>
<i>unsafe</i>	-	<i>safe</i>
<i>untrust worthy</i>	-	<i>trustworthy</i>

Manipulation check:  
*I have more knowledge about this type of website than friends*  
*I am familiar with all the features of this type of website*  
*I have a lot of experience using this type of website*  
*I used this type of website in all kinds of different situations*