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The moderating role of nationality on the satisfaction loyalty link: evidence from the tourism industry

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The purpose of this study is to investigate the moderating effects of Hofstede's taxonomy of nationalities on the interpersonal and environmental service dimensions that influence satisfaction as well as the link between satisfaction and loyalty. Using exploratory and confirmatory factor analyses and structural equation modelling on a multinational pool of 1544 hotel customers from 10 different countries visiting the island of Crete, the study offers to the literature by confirming that national cultural differences affect perceived satisfaction and loyalty. Moreover, it offers a solid understanding of the role of the service delivery process and its moderating effects on the physical and interactive dimensions of overall satisfaction. However, Hofstede's taxonomy is not fully supported.

Keywords: national culture; service features; customer satisfaction; Hofstede taxonomy

Introduction

As the 'global consumer' seems to be a myth, the role of cultural differences on the formation of customer behaviour and the perceptions of the satisfaction from the service offered are gaining support in the international marketing literature (Keillor, Lewison, Hult, & Hauser, 2007; Kozak, 2001; Liu, Furrer, & Sudharshan, 2001; Woodside, Hsu, & Marshall, 2011). These cross-cultural studies have been used as an 'umbrella' that includes elements, such as shared values, beliefs and norms that distinguish between several differing layers of culture, either at a national or an ethnic level.

Hofstede (1980, 2001) conducted a rigorous and comprehensive cross-cultural study and provides by far the most influential national cultural framework, designed initially for studying employees but also successfully and widely applied to consumer research (Patterson, Cowley, & Prasongsukarn, 2006; Van Birgelen, De Ruyter, De Jong, & Wetzels, 2002; Voss, Roth, Rosenzweig, Blackmon, & Chase, 2004). His framework has been used to investigate a number of marketing issues, such as consumer tipping behaviour and brand market share (Roth, 1995), consumer responses to market signals of quality (Dawar & Parker, 1994), the use of humour in ads, response style tendencies (Steenkamp & Baumgartner, 1998), new product development (Nakata & Sivakumar, 1996) and consumer innovativeness (Steenkamp, ter Hofstede, & Wedel, 1999).

Especially in the fields of tourism and hospitality, cross-cultural research remains at its infancy; only a handful of studies address the issue despite its international importance (Li, 2012). Seven studies have been identified in these fields (Li, 2012), and they support the notion that travellers from different countries may have different preferences that alter their expectations (Yuksel, 2004) and level of satisfaction (Bowen & Clarke, 2002)

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from the services received. Furthermore, the cognitive and affective assessment of a destination image (Beerli & Martin, 2004) and the perceptions of the hospitality received (Kozak, 2001) and hotel services (Armstrong, Mok, Go, & Chan, 1997) are culture-bound rather than culture-free.

Several studies have addressed the relationship between culture and satisfaction or between culture and loyalty/repeat patronage (Crotts & Erdmann, 2000; Liu et al., 2001) However, a number of scholars have pointed to the lack of research in general and of theoretical and empirical rigor in existing studies of international services marketing (Malhotra, Ulgado, Agarwal, Shainesh, & Wu, 2005; Javalgi & White, 2002). Indeed, the historical emphasis has been on domestic, mono-cultural or pair-wise service marketing issues, particularly in the area of service quality (SQ).

Searching the recent literature, no study has investigated the logical next steps in the relationship between culture, satisfaction and loyalty. The first step is to determine the role of national culture in the satisfaction–loyalty link with respect to service provision and whether cultural differences strengthen or weaken this link. In addition to the strong evidence linking customer satisfaction (CS) and loyalty, and the plethora of dimensions influencing this relationship, no robust empirical evidence on the role of nationality in this link is evident, yet this influence is regarded as of considerable importance and worthy of further study (Kozak, 2001; Keillor et al., 2007; Woodside et al., 2011).

The second step is to examine the role that national culture plays in the relative importance of service dimensions (tangibles and intangibles), which directly form overall satisfaction. The two heavily debated constructs of quality and satisfaction tend to merge into an overall evaluation of relationship satisfaction, especially in long-term relationships (Grönroos, 2001; Leverin & Liljander, 2006; Pantouvakis, 2010). As different consumers in different counties evaluate and perceive SQ differently (Witkowski & Wolfinbarger, 2002), and the SERVQUAL dimensions and their importance have been proven to be different among several cultures (Furrer, Sudharshan, & Thomas, 2001), many researchers suggest going beyond SQ to more generic dimensions. Thus, following recent recommendations (Keillor et al., 2007; Yap & Sweeney, 2007; Zaibaf, Taherikia, & Fakharian, 2012) the Nordic school dimensions of interactive (functional, process or intangible) and physical (tangible or technical) features of service are used here to explain overall satisfaction. These effects of specific dimensions of service on satisfaction and loyalty have not attracted much attention in the literature, but their importance is widely recognised (Jamal & Anastasiadou, 2009; Wong & Sohal, 2003).

The final step is to gain insight into the Hofstede categorisation of cultures. While his framework has been applied extensively, scholars have recently raised concerns about overreliance on this framework, based either on the population (IBM employees), the time frame (late 1960s), the lack of recent updates of his ratings (Van Birgelen et al., 2002), or the need to introduce more cultural value dimensions (Zhang, Beatty, & Walsh, 2008). In order to expand our understanding of the issue, the present research examines national cultures on two levels: one as grouped by Hofstede and the other individually by nation. Should the categorisation prove correct, no differences within nations belonging to the same cultural groups (Hofstede, 2001) are expected. Culture and nationality are used almost interchangeably in this work, not only because it is common in cross-cultural research (Li, 2012) but also as country regions tend to cluster along national lines rather than be intermixed with other countries' regions in the same cultural area (Minkov & Hofstede, 2012).

This article is organised as follows. First, the literature on pair-wise relationships between satisfaction, loyalty and cultural differences are examined. Then, the hypotheses

developed in the specific setting are presented. Next, we describe the method employed to investigate the research objectives. The paper continues with the presentation and discussion of results, followed by some managerial implications.

Literature review and hypothesis formation

Cross-national effects on satisfaction, loyalty and their linkages

Cultural variation results from different cultural values and affects perceptions and experiences that play an important role in consumers' attitude behaviours (Kim & Prideaux, 2006), satisfaction (Van Birgelen et al., 2002), loyalty (Mattila & Choi, 2005), decision making or perceptions of a hospitality business (e.g. Huang, Huang, & Wu, 1996). Many studies have examined the role that culture plays on satisfaction, loyalty and SQ. For example, Spreng and Chiou (2002) identified different satisfaction and loyalty scores for American and Taiwanese students when evaluating a digital camera. Examining six different nationalities, Crotts and Erdmann (2000) found that national cultural differences influence and moderate satisfaction and loyalty. Using 425 North American and Latin American fast food customers, Brady, Robertson, and Cronin (2001) differentiated between satisfaction and service value as the dominant predictors of behavioural intentions and purchase decisions. Examining 796 KFC customers from the USA and China, Witkowski, Ma, and Zheng (2003) provide evidence that the latter had more favourable brand identity impressions. Tsaur, Lin, and Wu (2005) found significant differences in loyalty, willingness to pay more and external response between Asian, English and European tourist groups towards perceived SQ. Khan, Bakkappa, Metri, and Sahay (2009) presented evidence of both similarities and differences across countries in the way customers conceptualise relevant constructs and evaluate supplier performance, whereas Woodside et al. (2011) corroborate the need for identifying important asymmetrical relationships between complex causal recipes and culture. A full review of the literature on the effects of cultural differences on satisfaction and loyalty can be found in Furrer, Liu, and Sudharshan (2000), Zhang et al. (2008) and Li (2012).

In the area of cross-national investigation of variation in the 'traditional' links among certain SQ literature constructs, Van Birgelen et al. (2002) found that the perceived SQ–CS relationship is moderated particularly by national culture in the case of an after-sales service contact mode mediated by technology. Drawing evidence from 130 US firms, Voss et al. (2004) corroborate that national differences influence the relationship between customer feedback, SQ, and CS, whereas Jin, Park, and Kim (2008) demonstrated that cultural differences influence the links between reputation and satisfaction as well as loyalty for Korean and US internet users. Broyles (2009) identified attitudinal and behavioural loyalty as distinct constructs, which influence expectations and affective feeling states and are moderated by culture. Finally, Sharma, Chen, and Luk (2012) showed significant moderating influences of individualism and collectivism on most of the links in the service evaluation process.

The link between CS and loyalty was found to be influenced by several factors, such as involvement (Bloemer & Kasper, 1995), personal and demographic characteristics such as age and income (Homburg & Giering, 2001), variety seeking (Heskett, Sasser, & Schlesinger, 1997), technophobia (Floh & Treiblmaier, 2006), ability of store choice elaboration or positive emotions (Bloemer, Rutyer, & Wetzels, 1999; Deruyter, Bloemer, & Peeters, 1997), type of failure recovery effort and switching costs (Webster & Sundaram, 1998) or relationship value (Chen & Myagmarsuren, 2011; Lu, Tu, & Jen, 2011). However, none of the above studies explicitly addressed the moderating influence of

culture or cross-national differences on the satisfaction–loyalty link. This has not received due attention in the literature and has not been supported empirically, but further study was recommended by Keillor et al. (2007) and Kim and Prideaux (2006).

Physical and interactive elements of CS

CS measures how well expectations are met by a service related experience, to which both tangible and intangible components are essential. Initially, satisfaction was considered as a partial or indirect outcome of SQ. However, more recent approaches to the phenomenon have introduced a direct link between the physical (servicescape) and interactive elements of service and satisfaction (Grönroos, 2001; Yap & Sweeney, 2007; Caceres & Paparoidamis, 2007; Jamal & Anastasiadou, 2009; Pantouvakis, 2010; Tsai, Hsu, & Chou, 2011). At the forefront of the extant literature is the idea that the physical features of services (Grönroos, 2001) or the servicescape (Bitner, 1992), as the manmade physical surrounding (a much broader issue than tangibles as defined by Parasuraman) directly affects the perceived satisfaction from the service provided (Pantouvakis & Lymperopoulos, 2008), the customer's loyalty intentions (Harris & Ezeh, 2008), their affective or emotional responses and their willingness to spend more time or money (Babin, Hardesty, & Suter, 2003). Namasivayam and Lin (2004) found that customer perceptions of the servicescape lead to overall satisfaction, but this link is moderated by the core service or interactions with the service provider. However, research on the relative importance of tangibles intangibles on SQ and/or CS has produced ambiguous results, with some scholars arguing in favour of the importance of tangibles (Parasuraman, Zeithaml, & Berry, 1988; Reimer & Kuehn, 2004; Pantouvakis & Lymperopoulos, 2008) and others for the importance of intangibles (Keillor et al., 2007; Namasivayam & Hinkin, 2003; Yap & Sweeney, 2007). By contrast, Pantouvakis (2010) and Luk and Layton (2004) support the value of the measurement instrument itself when measuring the relative importance of tangibles and intangibles.

In the area of cross-cultural investigation of the relative importance of service dimensions, no distinct ordering of dimensions is apparent. For example, Choi and Chu (2000) obtained feedback from 540 travellers at Hong Kong Airport, organised into Asian travellers and Western travellers. They identified value as the most influential factor in relation to Asian travellers' overall satisfaction, followed by staff SQ, while physical environment (room quality and general amenities) was evaluated as the least important. Their Western counterparts identified physical environment (room quality) as the most important factor for their overall satisfaction. By examining 5136 fast food customers from Jamaica, Scotland, the USA and Wales, Gilbert, Veloutsou, Goode, and Moutinho (2004) empirically derived two cross-cultural fast food CS dimensions: satisfaction with the personal service and satisfaction with the service setting. They reported sufficient variation among cultures, suggesting a non-stable construct. Using data from 1912 fast food customers from Australia, China, Germany, India, Morocco, the Netherlands, Sweden and the USA, Keillor et al. (2007) suggested that servicescape is a powerful means for achieving positive attitudes in a variety of cultural settings and also complements SQ. However, they recommended considering the nature of differences across countries and/or cultures as well as the importance and significance of these differences.

Hofstede's culture taxonomy

Hofstede (1980, 2001) was among the first to measure cultural and national differences. He defined culture as 'collective programming of the mind which distinguishes the members

of one group or category of people from those of another' (Hofstede, Hofstede, & Minkov, 1991, p. 5). He used a data set from 53 countries and regions that create 12 distinct clusters of populations based on five dimensions: individualist-collectivist, masculinity–femininity, power of distance, uncertainty avoidance, and time orientation. These clusters are generally accepted and have been applied extensively in comparing national cultures or cultural traits (Keillor et al., 2007; Chu, Spires, & Sueyoshi, 1999) besides critics regarding its universal application (Zhang et al., 2008). Furthermore, he clustered most Northern European countries (such as Denmark, Finland and Sweden) together, as he does for almost all English speaking (Australia, USA and GB), French speaking (Belgium, France) and German speaking (Austria, Germany) countries. Finally, neighbouring countries were also grouped together, such as Greece and Turkey as well as Malaysia and the Philippines.

In the area of multinational SQ, most researchers have used Hofstede's classification or pair-wise comparisons, but very few have analysed cultural differences between European countries. Van Birgelen et al. (2002) demonstrated that culture moderates the link between SQ and satisfaction among 11 European countries. However, the authors did not provide evidence on the differences between nationalities. Similarly, Kozak (2001) found that British travellers to Turkey and Mallorca were more satisfied in terms of accommodation, cleanliness and hygiene than Germans.

Hypotheses

Following the rationale previously presented, a set of hypotheses to be tested is developed:

H1: Given the same service experience, overall satisfaction as described by its interactive and physical features explains loyalty as perceived by multi-cultural respondents.

H2: Given the same service experience, respondents belonging to different Hofstede nationality clusters moderate the link between CS and loyalty, whereas no such moderation exists for respondents belonging to the same Hofstede group.

H3: Given the same service experience, the relative importance of interactive and physical features of the service on overall satisfaction will vary across respondents of nationalities belonging to different Hofstede clusters.

H4: Given the same service experience, the relative importance of interactive and physical features of service on overall satisfaction will be invariant across respondents belonging to the same Hofstede cultural segment.

Sample selection

Four clusters of respondents were formed from eight distinct nationalities based on Hofstede's (2001) framework. A multinational group of respondents (belonging to 12 nationalities and labelled as 'other') and a random half-sample of the total group of Germans served as two baseline comparison (holdout) groups to test whether differences and similarities are the outcome of a structured difference rather than a random or systemic error. The four distinct clusters are: Germans and Austrians, French and Belgians, US Americans and British, and Dutch and Scandinavians. All respondents were tourists visiting Crete and staying in neighbouring towns at similar five-star hotels. This operationalisation of nationalities follows Hoftede's suggestions on groupings based on each nationality's index score in any one of the five dimensions and are in line with the works of Reisinger and Crotts (2010) and Magnini, Kara, Crotts, and Zehrer (2012). The underlying assumption of this

study is that between Hofstede's group differences should be significant, whereas within group variations are minimal. This way the use of Hofstede's clusters as a means for market-isation will be useful in tailoring the tourism product and its promotional mix.

Methodology

Questionnaire design

A multi-item measurement instrument was developed to assess the constructs for the phys-ical and interactive features of services and the satisfaction and loyalty constructs using the scale development procedures for latent constructs and presented in Table 1. Recent studies of CS have tended to use multi-items scales in which respondents are asked to give their opinions about their overall satisfaction with the service offered or with respect to value for money. Moreover, satisfaction items with a hospitality experience may be considered as the sum of total satisfaction with the individual elements or attributes of the service (Pizam & Ellis, 1999). These items tend to represent attributes of the service, such as staff friendliness, cleanliness, etc. The wording of the selected items was adapted from relevant work by Choi and Chu (2000) in the hospitality industry.

Three demographically balanced focus groups, 20 in-depth interviews, as well as two expert reviews were used to purify the scales and guided on expressing their opinions about the different open-air settings (facilities). Then, a pre-test involving 75 respondents was conducted. The reliability of the scales was found to be high for both physical (servi-cescape) and interactive features, thus verifying good scaling of the instrument. The sig-nificance and contribution of each item in the scale was also examined by the 'Alpha if item removed' measure, and 15 items were retained for the analysis. Following the descriptive data analysis, an exploratory factor analysis (EFA) was then performed (prin-cipal components analysis with Varimax rotation), which revealed three variables (ques-tions) with multi-factor loadings that were subsequently excluded in order to improve the clarity of the analysis (Hair, Black, Babin, Anderson, & Tatham, 2006). The final

Table 1.   The questionnaire.

	How satisfied are you with the ….
Interactive	Friendliness of the hotel's staff
	'Check-in' process
	Helpfulness of the hotel staff
	Hotel staff's courtesy and discretion
	Ability of the hotel staff to respond to requests
Servicescape	Total hotel 'atmosphere'
	Overall condition and appearance of the hotel
	Swimming pool condition
	Room features and fittings
	Room cleanliness
	Cleanliness of the restaurants/bars/lobbies
	Variety/quantity/quality of food
Satisfact.	My overall opinion is that the hotel I am staying in is
	My overall opinion about the service I experienced in my hotel is
	My overall opinion is that the 'value for money' is
	Would you recommend this hotel to someone else?
	Will you come back next year?

Table 2. Socio-demographic characteristics.

		Freq.	%	
Nationality	Austrian	85	5.5	Age
	Belgian	126	8.2	
	UK	211	13.7	
	French	164	10.6	
	German[a]	561	36.3	
	Netherlands	111	7.2	
	Other European	134	8.7	
	Scandinavian			
	USA	98	6.3	
	Australia	54	3.5	

[a]For the main and the holdout sample.

12-item questionnaire was based on a 7-point Likert-type scale and was tested further during a quantitative pre-test phase. The second section of the questionnaire, the satisfaction section, consisted of three questions on a 7-point Likert-type scale, which were designed to identify overall CS. Finally, loyalty was measured by two items that focused on the likelihood of continuing visitation and recommending the hotel to others.

The six appropriate language versions of the questionnaire (English, German, French, Danish, Swedish and Dutch) were then developed via the back-translation method (Pizam & Ellis, 1999) to ensure that all foreign-language versions were functionally and semantically alike, and linguistic equivalence of the construct was assured (Kumar, 2000).

The sample

The analysis was based on personal interviews conducted by experienced interviewers on a sample of 1544 customers/tourists who visited the island of Crete and belonged to one of the countries-of-origin groups. Customers were approached inside their five-star hotels with consent of the hotel management. The socio-demographic characteristics of the eight nationalities are presented in Table 2, and an almost equal number of males and females participated.

Analysis and results

The scale reliability, measured by the coefficient alpha, was examined for the twelve interactive and servicescape satisfaction items; a very good alpha value of 0.898 was obtained, indicating that the items present internal consistency. An EFA was then performed to examine whether all items load well on a two-factor solution for the physical and interactive elements; it indicated good convergent and discriminant validity. As expected, the results of the principal components analysis with Varimax rotation indicate that the twelve service items load well on two factors (servicescape and interactive elements), explaining almost 70% of the variance extracted. The Kaiser-Meyer-Olkin statistic is 0.922, indicating strong relationships among items. Finally, the confirmatory factor analysis also revealed that the two factors fit the data excellently, thus confirming the good measurement properties of the instrument ($x^2 = 5.26$, CFI = 0.976, GFI = 0. 971, AGFI = 0.955, NFI = 0.971, RFI = 0.961, Delta2 = 0.976 and RMSEA = 0.053). In checking for convergent validity, the measurement factor loadings were all found to be
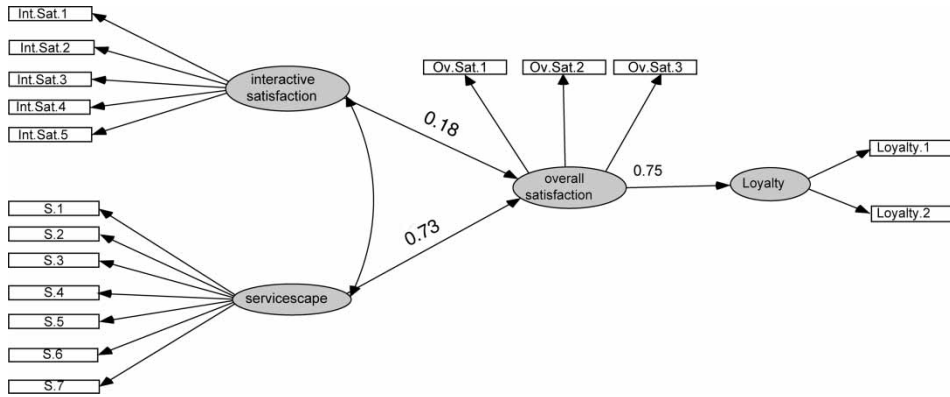
Figure 1. Tested model.

Table 3.   Results for the tested model.

Interactive → satisfaction		Servicescape → satisfaction		Satisfaction → loyalty	
	0.18		0.73		0.75
R^2 (satisfaction)	0.76	R^2 (loyalty)	0.56		

Note: All paths are statistically significant at the 0.000 level.

significant; the construct reliabilities were over 0.8, and the average variance extracted was over 0.5. The tested model is presented in Figure 1.

Hypothesis testing

A usual for multi-cultural studies in hospitality and tourism structural equation model with AMOS software was used to verify the hypotheses. The model fit was very good, with a chi-square of 810.45 (df = 112, $p = 0.000$) and GFI = 0.941, AGFI = 0.920, NFI = 0.944, RFI = 0.932, Delta2 = 0.951, TLI = 0.941, CFI = 0.951 and RMSEA = 0.063. These figures support a very good fit for the model, given the sample size and the number of variables tested. Moreover, Table 3 indicates the relative ability of the two factors to explain variance in overall satisfaction and loyalty (as measured by R^2) presenting as well the standardised regression weights of the constructs.

As hypothesised, the results indicate that both the physical (servicescape) and interactive elements of a service have a positive influence on overall satisfaction, and servicescape counts more in customers' minds when they evaluate their hotel. Also, the standardised regression weight of satisfaction on loyalty indicates a positive influence; accordingly, the first hypothesis is confirmed.

Testing for moderating effects

The nature of the data supports the use of Multiple Group Analysis to test the moderating effects by using the un-standardised beta coefficients of the different groups (Baron & Kenny, 1986). Initially, the four groups were tested unconstrained. Then, a second model was tested, adding a constraint by adjusting the relationship between physical and interactive elements of services so that they are equal in both groups. The effect on the model fit was estimated by the change in $x^2(\Delta x^2)$ when the first constraint was

Table 4. Results for the moderating effects of the four groups.

	Austrian–German	French–Belgian	Americans–British	Scandinavian–Dutch
Interactive → satisfaction	0.15	0.18	0.25	0.23
Physical → satisfaction	0.76	0.76	0.71	0.55
R^2 (satisfaction)	0.76	0.83	0.83	0.56
R^2 (loyalty)	0.53	0.70	0.57	0.45
Satisf. → loyalty	0.73	0.84	0.76	0.76

Note: All paths are statistically significant at the 0.05 level.

Table 5. Results for the moderating effects of the nationalities.

	Austrian	German	French	Belgian	American	British	Scandinav.	Dutch	Other Europ.
Interactive → satisf.	0.08*	0.14	0.15	0.07*	0.38*	0.22	0.23	0.32*	0.10*
Servicescape → satisf.	0.61	0.80	0.80	0.88	0.54	0.74	0.66	0.33*	0.79
Satisf. → loyalty	0.72	0.73	0.76	0.98	0.91	0.74	0.77	0.49	0.78
R^2 (satisfaction)	0.44	0.83	0.78	0.90	0.76	0.84	0.71	0.38	0.78
R^2 (loyalty)	0.51	0.54	0.58	0.97	0.83	0.55	0.59	0.24	0.60
Satisfact. (mean)	5.46	5.39	5.57	5.58	5.57	5.4	5.32	5.47	5.17
Loyalty (mean)	5.54	5.27	5.53	5.28	5.34	5.24	5.52	5.3	5.17

All paths are statistically significant at the 0.000 level except those indicated with an asterisk, which are not statistically significant at the 0.05 level.

imposed. This constraint harmed the model fit, as the chi-square x^2 increased from 2.7 (CMIN/df) to 3.1 and is significant at the $p = 0.000$ level (Hair et al., 2006). This led us to conclude that nationalities moderate the importance of physical and interactive elements on overall satisfaction and the link between satisfaction and loyalty (Table 4).

In order to determine whether there was support for the second hypothesis that there is a moderation effect between nationalities possessing similar characteristics to Hofstede's framework, a multiple group analysis was used to determine whether any differences prevailed between nationalities belonging to the same group. The results (Table 5) demonstrate that nationality membership moderates the satisfaction loyalty link; thus, our second hypothesis is partially accepted. However, results on populations belonging to the same Hofstede group support that such moderation also exists for nationalities within every tested group, thus partially rejecting our second hypothesis. Moreover, the relative importance of interactive and physical features of the service on overall satisfaction varies across different Hofstede clusters, confirming our third hypothesis. Nevertheless, the relative importance of the same features on overall satisfaction also varies across every nationality regardless of group membership, rejecting our fourth hypothesis.

Discussion

Current multi-cultural studies cover a wide area of SQ issues with an emphasis on destinations, largely ignoring hotels (Li, 2012). This study focuses on an industry where intensive cross-cultural host–guest encounters exist. The data set confirms the moderating

effect of nationality on the positive link between CS and loyalty when the same service is provided at the same place to customers of different countries of origin. Overall, our results converge with Hofstede's notion that culture penetrates consumer attitudes and results in different opinions. Moderating effects on the link between satisfaction and loyalty have been revealed and the influence of servicescape and interactive elements on overall satisfaction identified. In line with Van Birgelen et al. (2002), our results suggest that people tend to differ in their levels of satisfaction and loyalty as a result of nationality. However, these differences are not based on Hofstede's matrix; instead, every nationality seems to possess its own features that are not easily explained by the adopted taxonomy. For example, Belgian and Americans present the highest satisfaction and loyalty scores (over 0.80) and differ from French and British satisfaction and loyalty scores, respectively. Dutch tourists present the lowest satisfaction and loyalty scores, and servicescape and interactive scores are not statistically significant.

Our findings indicate the importance of the servicescape in forming overall CS, which challenges Keillor et al.'s (2007) findings that the interaction with the service provider is more important than the servicescape. A plausible explanation may be that the physical environment of a hotel (i.e. a service factory) is of more interest to the hospitality consumer than interacting with the personnel. The importance of the physical and interactive environments seems to vary across nationalities. For example, Belgians report the least importance for the interactive features of service, whereas British and Scandinavians consider interactive features to be of great importance (0.22 and 0.23, respectively). At the same time, Belgians see the servicescape as critical to their satisfaction (0.88), while Austrians and Scandinavians regard it as less important (0.61 and 0.66, respectively). These results do not corroborate findings from Sabiote, Frias, and Castaneda (2012), who conclude that tourists from more individualistic countries tend to be more independent than tourists from more collectivist countries. American tourists, for example, although grouped as highly individualist, pose the greatest importance to interactive elements of service (0.38) in contrast to Austrians, who present a rather collectivist Hofstede profile but do not attribute any importance to interactive elements of service.

Global customers may have different expectations as well as different ways of evaluating performance and may be influenced differently by the service provider. These findings lend strength to the view that customers from different cultures can receive the same service from the same personnel and yet value the experience differently. The need for managers and tourism professionals to focus their efforts on differentiating between specific consumer audiences when developing a service-based strategy is therefore evident. A better infrastructure will be valued more by some nationalities, while investing in people-related services will be more highly valued by others.

Managerial implications

Culture has once again been shown to play a significant role in customers' travel patterns. Such findings add credence to the call for managers to consider the importance of servicescape and interactive elements of services on satisfaction and the impact of different cultures on the satisfaction and loyalty link. Regardless of the findings, hotel customers appear to place considerable weight on the servicescape in evaluating their satisfaction. This suggests that atmospheric and environmental elements of hotel services are particularly important to consumers. Even when tourists are faced the same servicescape and the same service, they seem to present different overall evaluations. Hence, it is important for hotel managers to understand cultural differences and respond promptly according to the

customer's country of origin. The results of this study thus offer a market segmentation tool that is useful for reaching and serving various overseas markets.

Limitations and suggestions for future research

As with any other work in the complex multinational marketing research realm, this one suffers from certain limitations. These include issues related to data collection, construct development and its generalisability. Regarding data collection, the use of personal interviews limits the total number of data points, thus introducing a potential sampling bias. Although the developed construct was carefully designed and tested, it is applied to the tourism industry only and only one location (island of Crete). This approach may introduce areas of concern for potential methodological and/or procedural errors; accordingly, the process of reaching total multinational survey equivalence may account for inconsistencies in the results.

Moreover, best practice suggests that scale purification to be done at a pre-test at the same target market, which was not the case in this survey as tourists arrive for a short period of time, and pretesting had to focus on respondents mainly living in Greece. Finally, although care was taken to select respondents from as many countries as possible, it is very difficult in such research to use samples that represent the whole spectrum of nationalities as introduced and analysed by Hofstede. Future research may focus on the construct's application to other contexts as well (health services, education, insurance, etc.) and should more explicitly assess differences in each nationality's home country and during normal working operations to ensure that measures reflect stable cultural differences and to avoid volatile moods (Minkov, Blagoev, & Hofstede, 2013).

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