Author's personal copy

International Journal of Hospitality Management 37 (2014) 11–20

Contents lists available at ScienceDirect

International Journal of Hospitality Management

journal homepage: www.elsevier.com/locate/ijhosman

Personality, satisfaction, image, ambience, and loyalty: Testing their relationships in the hotel industry

Dev Jani[a,1], Heesup Han[b,*]

[a] University of Dar-es-Salaam Business School, Dar-es-Salaam 35046, Tanzania
[b] College of Hospitality and Tourism Management, Sejong University, 98 Gunja-Dong, Gwanjin-Gu, Seoul 143-747, Republic of Korea

ARTICLE INFO

Keywords:
Hotel
Image
Satisfaction
Ambience
Personality
Loyalty

ABSTRACT

This article appraises a theoretical model that relates personality, satisfaction, loyalty, ambience, and image in a hotel setting. The results of the structural equation modeling indicated that extraversion, agreeableness, and neuroticism among the Big Five Personality Factors significantly affect satisfaction. Satisfaction had a significant impact on hotel image and guests' loyalty. Compared to satisfaction, hotel image had a lesser impact on loyalty as well as being a mediator for the impact of satisfaction on loyalty. The moderating role of hotel ambience in the proposed theoretical framework was also identified. The results offer hoteliers potential strategies/tactics for loyalty enhancement.

© 2013 Elsevier Ltd. All rights reserved.

1. Introduction

Hotel guest loyalty is of the utmost importance given the competitive nature of the lodging sector. The increasing expansion of hotels into other hospitality and related areas amplifies the continuing importance of guest loyalty and the need to ensure guests' recurring reservations at a perceived favorite hotel. Articles that have focused on loyalty link it to customer satisfaction (Oliver, 1999), image (Kandampully and Hu, 2007), perceived value (Yang and Peterson, 2004), and customer characteristics (Durukan and Bozaci, 2011), such as personality (Lin, 2010a). Despite the presence of abundant studies on loyalty, the relationship between the antecedents of service customer loyalty, particularly in hospitality and tourism, are inconclusive. This is true, too, about the relationship between customer satisfaction and image and their impacts on loyalty. Some researchers perceive image as an antecedent to satisfaction that does not have an influence on loyalty (Lai et al., 2009) while others have perceived this relationship the other way around (Kandampully and Suhartanto, 2000). The variability in perceptions and guidance leaves hoteliers without sure ways to accurately strategize their efforts.

Since personality reflects an individual's psychological characteristics, it has been cited as having a significant role in consumer behavior (e.g., Mowen, 2000). In particular, the Big Five Factors of Personality that have been widely used in marketing and consumer behavior studies have been noted to influence consumers' affective responses (Orth et al., 2010), satisfaction (Faullant et al., 2011; Lin and Worthley, 2012; Matzler et al., 2005), post-purchase behavior (Mooradian and Olver, 1994), and loyalty (Durukan and Bozaci, 2011; Lin, 2010a). Unfortunately, none of these studies have integrated personality with satisfaction, image, and loyalty in a single study to ascertain their relationships. Using hotel as the study context, Lin and Worthley (2012) noted that personality's influence on guests' emotions and impact on satisfaction consequently influenced their post-purchase behavior. Furthermore, the available literature seems to have neglected the interaction of person and environment in evoking their behaviors under hotel consumption situations despite the interaction being a common agreement (Schiffman and Kanuk, 2005).

Research on the effect of servicescapes on consumers has burgeoned after Bitner's (1992) seminal work on the serviscape. Ambience as a part of the serviscape that is sensorial in nature includes light, sound, smell, décor, and air quality—factors that influence customer behaviors such as time and money spent at a specific lodging location/on a specific lodging brand (Morrison et al., 2011) and desire to stay (Wakefield and Baker, 1998). Despite the informative nature of these studies, they appear to look only at the environmental aspects of consumer behavior or at individual characteristics at the expense of other behavioral facets (Eroglu and Machleit, 2008).

In filling the perceived knowledge gap, this study put forward the following objectives: (1) to develop a model of loyalty involving five personality factors (i.e., openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism), satisfaction, and hotel image, (2) to examine the moderating role of the appraisal of hotel ambience in the proposed theoretical framework, (3) to

* Corresponding author. Tel.: +82 2 3408 4462; fax: +82 2 3408 4314.
E-mail addresses: yogi_dev@hotmail.com (D. Jani), heesup.han@gmail.com (H. Han).
[1] Tel.: +255 717 028 780.

0278-4319/$ – see front matter © 2013 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.ijhm.2013.10.007

Author's personal copy

identify the relative importance of personality factors in generating satisfaction, and (4) to investigate the mediating impact of satisfaction and hotel image.

2. Theoretical framework

2.1. Personality and customer satisfaction

The psychological qualities that determine individuals' feelings, thinking, and behavior that are distinct and enduring are referred to as personality (Pervin and Cervone, 2010). Personality has been operationalized differently in different contexts; the commonly used operationalization in consumer behavior appears to be the Big Five Factors (Mowen, 2000) that include openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. Briefly, openness to experience pertains to the individuals' proactiveness in seeking and appreciating novelty; conscientiousness reflects individuals' achievement propensity; extraversion factors indicate individuals' quantity and intensity of interpersonal interaction; while agreeableness, on the other hand, deals with individuals' orientation toward being empathetic with others; and neuroticism relates to individuals' proneness to psychological distress (Mowen, 2000).

Previous research differs in the incorporation of personality, particularly the Big Five Factors. For instance, looking at hotel consumption studies, Lin and Worthley (2012) employed openness to experience and extraversion only, arguing that conscientiousness, agreeableness, and neuroticism were applicable to individual social-, achievement-, and sickness-related qualities, respectively, and thus not related to the consumption context. Selective use of the BFF was utilized by Matzler et al. (2005) and Faullant et al. (2011), who used extraversion and openness in explaining the consumption experience. In examining the evocation of feelings when viewing advertising, Mooradian (1996) used only extraversion and neuroticism because these two aspects of personality were more universal than others. Other researchers (e.g., Orth et al., 2010) used all Big Five Factors in relating brand attachment to results, indicating that all of the factors had a significant influence. Based on the latter study findings, this study reasoned that the use of all Big Five Factors would serve to elucidate the impact personality on hotel guest satisfaction in a more comprehensive way.

Customer satisfaction is a common research variable due to its culminating effect on customers' future behaviors such as repurchasing and spreading positive reviews to potential new customers about a particular product or service. Several researchers have found that customer satisfaction is dependent on factors such as service environments (Han and Ryu, 2009), perceived cost/price (Jani and Han, 2011), and consumption emotions (Ladhari et al., 2008), among other factors. Few studies have focused on the impact of personal variables such as personality on customer satisfaction (Gountas and Gountas, 2007)—for this reason, there is little evidence on the relationship. Among the few studies that have related personality and satisfaction, results are not converging (Vazquez-Carrasco and Foxall, 2006). Gountas and Gountas (2007), utilizing Jungian personality types of thinking, material, feeling, and intuitive as factors influencing satisfaction, noted a significant relationship. Faullant et al. (2011) in utilizing joy and fear as aspects of extraversion and neuroticism respectively, noted the joy to have a positive effect on overall customer satisfaction while the fear to have a negative effect on overall customer satisfaction. A study by Mooradian and Olver (1997) on automobile customers noted extraversion to have a positive impact on their satisfaction via positive emotions while neuroticism to have a negative effect through negative emotions. Lin (2010b) in studying toys and video game customers noted agreeableness to have a strong significant positive effect on customers' affective loyalty and openness to experience to have a moderate significant positive effect on affective loyalty. Since loyalty emanates from customer satisfaction (e.g. Lee et al., 2009), then by extrapolation agreeableness and openness to experience have a potential positive influence on hotel guest satisfaction. Orth et al. (2010) noted openness to experience, conscientiousness, extraversion, and agreeableness to have a positive relationship with satisfaction while neuroticism to relate with satisfaction in a negative way. Vazquez-Carrasco and Foxall (2006) using need for social affiliation that is an aspect of agreeableness and need for variety reflecting high scores in openness to experience observed an absence of a relationship between personality variables and service satisfaction, thus making the relationship between consumer personality and their satisfaction inconclusive. Therefore, due to this lack of concrete evidence on the influence of personality (Big Five Factors) on customer satisfaction, this study aimed to test the following hypotheses within hotel settings:

H1a. Openness to experience has a positive impact on satisfaction.

H1b. Conscientiousness has a positive impact on satisfaction.

H1c. Extraversion has a positive impact on satisfaction.

H1d. Agreeableness has a positive impact on satisfaction.

H1e. Neuroticism has a negative impact on satisfaction.

2.2. Customer satisfaction, hotel image, and loyalty

The overly researched construct of customer satisfaction emanates from its pivotal influence on future sales to satisfied customers or their post-consumption behavioral intentions to repeat consumption of a product/service and/or to spread good reviews about a consumed product/service. Customer satisfaction in general pertains to the evaluation of a product or its features (Hunt, 1977). This understanding of customer satisfaction implies that the concept can be applied at the micro and macro levels, with the former pertaining to product feature(s) and the latter to the overall product. This study takes the overall satisfaction aspect of a hotel service as it is perceived in determining guests' image of and loyalty to a hotel and its services. Despite the number of studies in this area, the relationship among customer satisfaction, image, and loyalty remains equivocal. Some researchers have cited image as an antecedent to customer satisfaction (Andreassen and Lindestad, 1998; Bloemer and Ruyter, 1998; Clemes et al., 2009; Lai et al., 2009; Milfelner and Korda, 2011; Prayag, 2008), with satisfaction having a consequential positive impact on loyalty. On the other hand, others have perceived satisfaction to be a precursor for image and image together with satisfaction being factors impacting loyalty (Helgesen and Nesset, 2007; Kandampully and Hu, 2007). Furthermore, Brunner et al. (2008) noted that the impact of customer satisfaction and image on loyalty varies with the nature of the customer—experienced customers are loyal due to their image of a service while new customers' loyalty is motivated by their level of satisfaction.

Image is the sum of individuals' beliefs, ideas, and impressions of a place (Baloglu and Brinberg, 1997). Countryman and Jang (2006) used impression in the hotel setting to connote guests' attitude toward a hotel. Despite the embedding of impression in the definition of image, such a concept appears to be short term-oriented compared to image, that is long term-oriented (Andreassen and Lindestad, 1998). One's impression of a hotel appears to be based on a reconnaissance of the environment while hotel image goes beyond mere reconnaissance to include all accumulated information, whether based on firsthand experiences or communication processes (Gartner, 1993). Countryman and Jang (2006), in researching hotel guests' impressions of the hotel lobby,

Author's personal copy

noted that those impressions depend on atmospheric elements that include style, layout, colors, and lighting, and did not consider other sources of information as well as past experiences that could alter guests' image of a hotel over time. The cumulative approach of image is supported by Assael (1984) in his assertion that global perception of a product that includes overall image develops over time rather than via a 'one shot on the spot' perception. Armed with this understanding of hotel image, this study asserted that customer satisfaction with a hotel influences cumulative or overall image of that hotel.

The effect of customer satisfaction on loyalty is undeniable (Kandampully and Hu, 2007; Oliver, 1999). Loyalty as a concept has been categorized into cognitive, affective, conative, and action loyalty phases (see, for example, Evanschitzky and Wunderlich, 2006; Oliver, 1999). Among these four phases, the attitudinal and conative loyalty phases have been described as reflecting overall loyalty (Han et al., 2011) and thus were adopted in this study. Guest loyalty pertains to guests' favorable attitudes toward a product together with their intention to repurchase the service frequently (Han and Ryu, 2009). This implies that this construct may go beyond the bifurcated measure of behavioral intentions to revisit intention and spreading good word-of-mouth by factoring both behavioral intentions in the loyalty construct (Han and Ryu, 2009).

Despite previous research on the influence of guest satisfaction on loyalty, the inclusion of other factors such as image in the relationship has yet to be affirmed (Brunner *et al.*, 2008; Oliver, 1999). Kandampully and Suhartanto (2000), in relating hotel image and customer satisfaction with guest loyalty, noted that the former factor contributes more than the latter. This affirmation was further upheld by a subsequent study by Kandampully and Hu (2007) in the hotel industry. A study by Clemes et al. (2009) noted that hotel customer satisfaction has a greater positive impact on behavioral intentions and therefore reflects an element of loyalty compared to the hotel image held by customers. Brunner et al. (2008), after categorizing travelers into new and repeat groups, noted that satisfaction has a greater influence on new customer loyalty while for repeat customers image is more influential. Since this study used the post-consumption measurement of overall image (Beerli and Martin, 2004) and took overall image as a dynamic cumulative construct, it was believed to be altered by current hotel consumption satisfaction. Based on previous arguments cited here, this study tested the following hypotheses:

H2. Satisfaction has a positive impact on hotel image.

H3. Satisfaction has a positive impact on overall loyalty.

H4. Hotel image has a positive impact on overall loyalty.

2.3. Moderation effect of hotel ambience

Ambient conditions that are part of the broader serviscape (Bitner, 1990) have long been noted as having an influence on customer satisfaction, behavioral intentions (Simpeh et al., 2011), and image (Baker et al., 1994). A comfortable ambience acts to enhance customer satisfaction, serves to ensure behavioral intentions toward the service environment and positive reviews about service, and creates a favorable image of the service or brand in the mind of the customer. Apart from influencing such variables, ambience can have a differential influence on responses from customers with different personalities. The Mehrabian and Russell (1974) model of stimulus–organism–response (S–O–R) supports the personality and ambience argument. In the consumption context, the model explains how the environment evokes different consumer responses that lead to either approach or avoidance behavior toward the service environment. In perceiving atmosphere to be a much broader concept which includes the physical environment, Turley and Milliman (2000) argued that potential interactions between atmosphere and individuals' characteristics determine individuals' responses to an environment. Turley and Milliman (2000) asserted that a different environment might produce a different response in different individuals. This personality and environment interaction yielding different individual responses implies a complex relationship that can mean either of the causation factor be regarded as an independent factor with the other one being a moderator. Namasivayam and Lin (2004) for instance insisted that servicescapes can be antecedents of consumers' service/product evaluations as well as moderators of the evaluation process. Lin and Worthley (2012) proposed and verified the moderating impact of different servicescape situations on customers' post-purchase behavior. Their study was based on an experimental design in which, in order to create differential servicescapes, ambient stimuli combining colors and music were manipulated. In another study, Lin (2010b) further tested the interactive effect of *Gestalt* situation that entailed a different combination of color and music in moderating arousal and emotional tendency. This study further position servicescape elements including ambience being a potential moderator with other variables being the main ones in consumer response factors. Jiang and Wang (2006) in using hedonic and utilitarian service as moderators in testing the influence of affect on satisfaction noted under hedonic environments the relationship to be stronger. The way they expounded the hedonic context like Karaoke vs. utilitarian context like banking services basically boil down onto service ambience like music for instance thus further providing insights onto the potential moderation effect of ambience on the present study relationships. In this study, hotel ambience that was measured was dichotomized into low and high ambience groups through cluster analysis; together with the above discussion the following were hypothesized:

H5a. The effect of openness on guests' satisfaction is stronger for the high ambience group than for the low ambience group.

H5b. The effect of conscientiousness on satisfaction is stronger for the high ambience group than for the low ambience group.

H5c. The effect of extraversion on satisfaction is stronger for the high ambience group than for the low ambience group.

H5d. The effect of agreeableness on satisfaction is stronger for the high ambience group than for the low ambience group.

H5e. The effect of neuroticism on satisfaction is stronger for the high ambience group than for the low ambience group.

H5f. The influence of satisfaction on hotel image is stronger for the high ambience group than in the low ambience group.

H5g. The influence of satisfaction on the overall loyalty is stronger for the high ambience group than in the low ambience group.

H5h. The influence of hotel image on the overall loyalty is stronger for the high ambience group than in the low ambience group.

Fig. 1, which shows theoretical relationships among study variables, was developed based on the aforementioned conceptual and empirical foundations.

3. Methodology

3.1. Measurement instruments

Data for this study were collected via a self-administered questionnaire provided to guests of five-star hotels in one Korean metropolitan city. Five star hotels were opted for in the present study due to their relatively higher level ambience characteristics

Author's personal copy

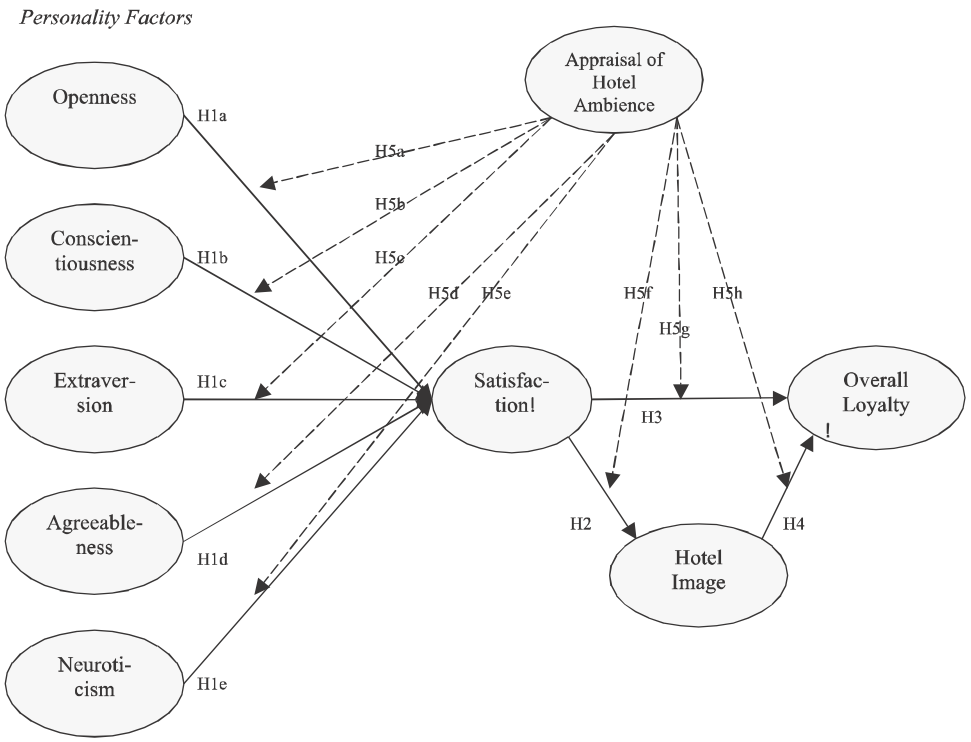


Fig. 1. Conceptual model.

compared to lower level hotels (Roubi and Littlejohn, 2006). This implies that the guests are more likely to respond consciously to that environment. Two versions of the questionnaire (English and Korean) were used to cater to local and Korean-origin guests as well as those guests who could not communicate in Korean. Since most of the measurement items were adopted from an academic literature written in English, the items had to be translated into Korean and back-translated into English for consistency checks. Measures for all study variables included in the questionnaire are shown in the Appendix. The questionnaire items with the exception of demographic variables were framed in a 5-point Likert-type scale with 1 indicating 'strongly disagree' and 5 for 'strongly agree'. The Big Five Factor items were adapted from Yoo and Gretzel (2011) due to their simplicity and understandability. Three items for overall hotel guest satisfaction were used that were utilized in previous studies (Han et al., 2011; Maxham and Netemeyer, 2002) and indicated higher reliability. Prayag (2008) argued for the use of overall image rather than attribute base image because the latter only captures the elemental aspects of image rather that its totality or Gestalt. Since this study was aimed at relating overall hotel image, we re-sorted items that captured the construct with three items adapted from previous research (Clemes et al., 2009; Kandampully and Suhartanto, 2000; Milfelner and Korda, 2011). Ambient conditions were measured by five items adapted from previous research (Bitner, 1992; Wakefield and Baker, 1998). Overall loyalty items used for this study were similar to those used in hospitality settings (Han et al., 2011).

3.2. Sample and data collection procedure

Trained research assistants distributed the self-administered questionnaire to guests of 5-star hotels while they were in the lobby. The lobby was selected as the point of interception since it is the most important serviscape (Countryman and Jang, 2006) in a hotel. Also, intercepting guests in the lobby increases the chances of accessing most guests rather than other hotel environs related to private consumption of the hotel experience. After omitting incomplete cases and extreme outliers, a total of 529 responses were utilized in further data analyses. The sample was 54% male and 46% female; the average respondent was 35 years old; and 53% indicated that they were single. The majority of the respondents had at least a college degree (85%). Regarding the frequency of guests' hotel stay within the last one year, about 49.2% reported that they had stayed at a hotel 3 times or fewer; 26.7% described 4–6 times; and 24.1% indicated 7 times or more. A majority of the participants indicated that their purpose of this hotel stay was for pleasure (48.0%), followed by business (27.2%), other (16.4%), and conference/meeting (8.4%). Lastly, Among 529 survey participants, a total of 277 (52.4%) respondents completed the questionnaires in Korean, and 252 (47.6%) participants filled out the questionnaires in English. A test for measurement invariance on these two sets of data was conducted. A non-restricted model was assessed ($\chi^2 = 1553.748$, $df = 868$, $p < .001$, RMSEA = .039, CFI = .920, NFI = .907), and then this model was compared to the full-metric invariance model ($\chi^2 = 1581.056$, $df = 892$, $p < .001$, RMSEA = .038, CFI = .919, NFI = .904). Results of the invariance test showed that there was no significant chi-square difference ($\Delta\chi^2$ (24) = 27.308, $p > .01$), implying that the measurement structure for these two sets of responses is not significantly dissimilar.

4. Findings and results

4.1. Confirmatory factor analysis

A measurement model using the maximum likelihood estimation method was assessed. The initial measurement items for all study variables (40 items) were subjected to Confirmatory Factor Analysis (CFA). The results indicated that the model adequately fit the data ($\chi^2 = 1556.880$, $df = 702$, $p < .001$, RMSEA = .048, CFI = .911, NFI = .881). However, three items included low factor loadings and low squared multiple correlations. The measurement model was re-estimated excluding these items (excluded items

Author's personal copy

Table 1
Correlations, squared correlations, composite reliability, and AVE.

Variables	Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism	Satisfaction	Hotel image	Appraisal of hotel ambience	Overall loyalty
Correlations									
Openness	1.000								
Conscientiousness	.253	1.000							
	(.064)								
Extraversion	.362	.148	1.000						
	(.131)	(.022)							
Agreeableness	.316	.206	.250	1.000					
	(.100)	(.042)	(.063)						
Neuroticism	−.144	−.132	−.270	−.031	1.000				
	(.021)	(.017)	(.073)	(.001)					
Satisfaction	.154	.117	.244	.260	−.213	1.000			
	(.024)	(.014)	(.060)	(.068)	(.045)				
Hotel image	.075	.117	.246	.250	−.080	.647	1.000		
	(.006)	(.014)	(.061)	(.063)	(.006)	(.419)			
Appraisal of hotel	.146	.111	.218	.204	−.141	.575	.551	1.000	
ambience	(.021)	(.012)	(.048)	(.042)	(.020)	(.331)	(.304)		
Overall loyalty	.085	.154	.151	.221	−.114	.793	.677	.550	1.000
	(.007)	(.024)	(.023)	(.049)	(.013)	(.629)	(.458)	(.303)	
Mean	3.856	3.591	3.496	3.953	2.541	3.724	3.839	3.558	3.649
Composite reliability	.803	.845	.838	.781	.837	.891	.866	.848	.851
AVE	.506	.524	.511	.543	.511	.731	.684	.528	.590

Goodness-of-fit statistics for the measurement model:
$\chi^2 = 1229.731$, df = 591, $p < .001$, RMSEA = .045, CFI = .930, NFI = .904
Note 1: Squared correlations are in the parentheses.
Note 2: Goodness-of-fit statistics before removing three items: $\chi^2 = 1556.880$, $df = 702$, $p < .001$, RMSEA = .048, CFI = .911, NFI = .881 (the Chi-square difference between two models was significant: $\Delta\chi^2$ (111) = 327.149, $p < .001$).

are shown in the Appendix) (Ford et al., 1986). The results of the CFA with the remaining 37 items provided an excellent fit to the data ($\chi^2 = 1229.731$, $df = 591$, $p < .001$, RMSEA = .045, CFI = .930, NFI = .904). This second model was significantly better than the first CFA model ($\Delta\chi^2$ (111) = 327.149, $p < .001$). Findings from the measurement model are summarized in Table 1. AVE values ranged from .506 to .731, showing evidence of convergent validity. These proportions of variance extracted from each variable were all greater than the square of the coefficient representing its correlation with other variables. Thus, discriminant validity of study variables was evident (Fornell and Larcker, 1981). In addition, all values of construct reliability exceeded the minimum criterion of .60. Thus, internal consistency of multiple indicators for each latent construct was evident (Bagozzi and Yi, 1989).

4.2. Structural equation modeling

Structural Equation Modeling (SEM) with the maximum likelihood estimation method was estimated to evaluate the proposed model. As shown in Table 2 and Fig. 2, the goodness-of-fit statistics for the model was satisfactory ($\chi^2 = 1028.674$, $df = 444$, $p < .001$, RMSEA = .050, CFI = .931, NFI = .905). Our conceptual model had a strong ability to predict overall loyalty. Approximately 84.3% of the variance in loyalty was accounted for by this model. The proposed links between personality factors and satisfaction were tested. While the impact of openness ($\beta = .016$, $p > .05$) and conscientiousness on satisfaction ($\beta = .018$, $p > .05$) was insignificant, the impact of extraversion ($\beta = .121$, $p < .05$), agreeableness ($\beta = .262$, $p < .01$), and neuroticism ($\beta = -.187$, $p < .01$) was significant. This result supported Hypotheses 1c, 1d and 1e. The hypothesized role of satisfaction in forming hotel image and loyalty were tested. Findings indicated that satisfaction significantly affects hotel image ($\beta = .725$, $p < .01$) and loyalty ($\beta = .709$, $p < .01$). Thus, Hypotheses 2 and 3 were supported. The proposed association between hotel image and loyalty was also found to be significant ($\beta = .263$, $p < .01$). Therefore, Hypothesis 4 was supported. It should be noted that agreeableness was the strongest predictor of satisfaction among personality factors, followed by neuroticism and extraversion.

The indirect impact of study variables was examined. Findings indicated that agreeableness ($\beta = .236$, $p < .01$) and neuroticism ($\beta = -.169$, $p < .01$), among personality factors, have a significant indirect impact on loyalty, implying that satisfaction and image mediate the impact of these personality components on loyalty. It was also found that satisfaction indirectly and significantly affects loyalty through hotel image ($\beta = .191$, $p < .01$). That is, hotel image has a significantly mediating role in the relationship between satisfaction and loyalty.

4.3. Test of the hypothesized moderating impact

To identify the impact of the appraisal of hotel ambience on the relationships among study constructs, a test for metric invariance

Table 2
Standardized maximum-likelihood parameter estimates.

Proposed Paths	Coefficients	*t*-Values	Hypotheses
H1a: O → Satisfaction	.016	.261	Not supported
H1b: C → Satisfaction	.018	.365	Not supported
H1c: E → Satisfaction	.121	2.055*	Supported
H1d: A → Satisfaction	.262	4.571**	Supported
H1e: N → Satisfaction	−.187	−3.587**	Supported
H2: Satisfaction → HI	.725	15.427**	Supported
H3: Satisfaction → OL	.709	11.920**	Supported
H4: HI → OL	.263	5.240**	Supported

Indirect impact:	Goodness-of-fit statistics for the structural model:
O – Satisfaction – HI – OL = .014	$\chi^2 = 1028.674$, df = 444, $p < .001$, RMSEA = .050, CFI = .931, NFI = .905
C – Satisfaction – HI – OL = .016	
E – Satisfaction – HI – OL = .109	
A – Satisfaction – HI – OL = .236**	R^2 (adjusted):
N – Satisfaction – HI – OL = −.169**	Satisfaction = .156
Satisfaction – HI – OL = .191**	Hotel image = .525
	Attitudinal loyalty = .843

Note: O = openness, C = conscientiousness, E = extraversion, A = agreeableness, N = neuroticism, HI = hotel image, AHA = appraisal of hotel ambience, and OL = overall loyalty.
* $p < .05$.
** $p < .01$.

Author's personal copy

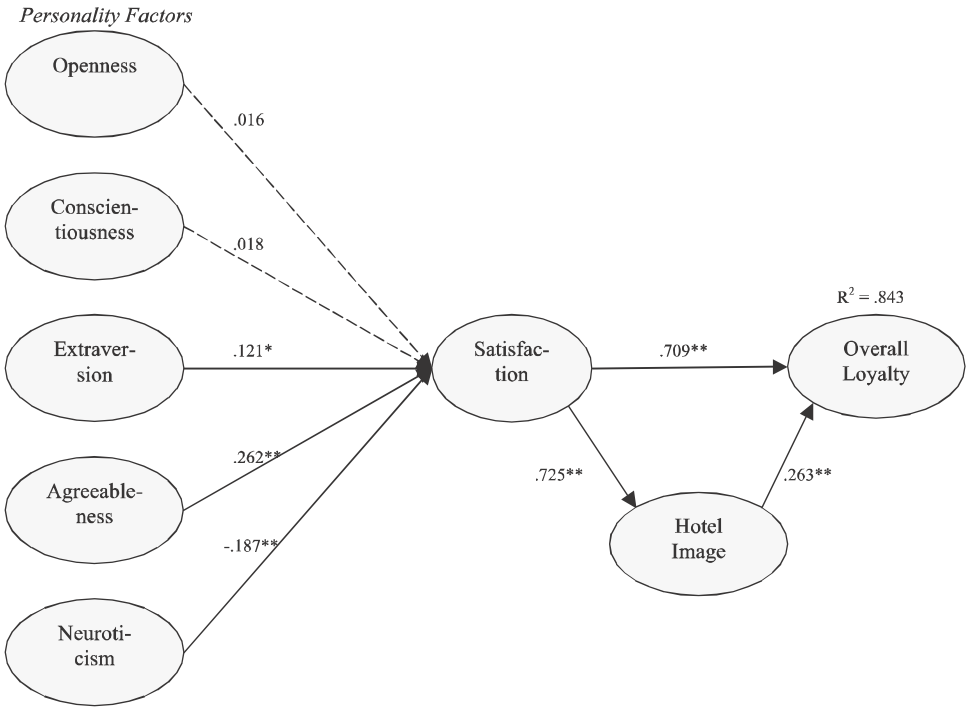


Fig. 2. Results of the structural equation modeling.

was conducted. Prior to conducting the test, the cases were split into high and low groups in appraising hotel ambience. A *K*-means cluster analysis was utilized in this grouping process. The split cases were 291 for the high group and 238 for the low group. These cases were used for a measurement invariance test. A non-restricted CFA model was first generated. The goodness-of-fit statistics for this model were adequate ($\chi^2 = 1613.269$, $df = 868$, $p < .001$, RMSEA = .040, CFI = .935, NFI = .908). This model was compared to the full-metric invariance model ($\chi^2 = 1647.110$, $df = 892$, $p < .001$, RMSEA = .040, CFI = .934, NFI = .904) that constrained all factor loadings to be equal across the high and low groups. Findings indicated no significant chi-square difference between these two models ($\Delta\chi^2$ (24) = 33.841, $p > .01$), thus supporting full-metric invariance (see Table 3). The result implied that the probable variation between two groups in the measurement structure is minor.

A SEM was run by including the proposed paths to the full-metric invariance model to generate a baseline model. Overall, this baseline model had an excellent fit to the data ($\chi^2 = 1689.729$, $df = 912$, $p < .001$, RMSEA = .040, CFI = .931, NFI = .901). To test the proposed moderating impact, this baseline model was compared to nested models that constrain a particular parameter to be equal between groups in sequence. The results are summarized in Table 4 and Fig. 3.

In the relationships between personality factors and satisfaction, the impact of extraversion ($\Delta\chi^2$ (1) = 4.320, $p < .05$), agreeableness ($\Delta\chi^2$ (1) = 7.500, $p < .01$), and neuroticism ($\Delta\chi^2$ (1) = 5.461, $p < .01$) on satisfaction was significantly different across the high and low groups. In particular, impact on satisfaction was greater for the high group in appraising hotel ambience than for the low group, supporting Hypotheses 5c, 5d and 5e (note that the linkages were only significant in the high group). However, the impact of openness ($\Delta\chi^2$ (1) = 1.157, $p > .05$) and conscientiousness ($\Delta\chi^2$ (1) = 2.061, $p > .05$) on satisfaction was not significantly different between groups. Thus, Hypotheses 5a and 5b were rejected. In addition, the paths from satisfaction to hotel image ($\Delta\chi^2$ (1) = .184, $p > .05$) and loyalty ($\Delta\chi^2$ (1) = 2.240, $p > .05$) insignificantly differed across ambient condition groups. Hence, Hypotheses 5f and 5g were not supported. The relationship between hotel image and loyalty ($\Delta\chi^2$ (1) = 3.847, $p < .05$) was found to be significantly different across the high and low groups. This association was stronger in the high group than the low group, supporting Hypothesis 5h. Overall, findings from the structural invariance test revealed that the appraisal of hotel ambience acts as a significant moderator for the paths from extraversion, agreeableness, and neuroticism to satisfaction and for the link from satisfaction to overall loyalty, implying that such relationships become stronger when customers experience favorable hotel ambient conditions.

5. Discussion and implications

The aim of this study was test the relationships among hotel guests' personality, their satisfaction, their overall image of the hotel, and their overall loyalty by factoring hotel ambience as a moderator of the relationships. Overall, the study noted the presence of significant relationships among extraversion, agreeableness, and neuroticism personality factors on hotel guest satisfaction, with agreeableness and neuroticism having an indirect effect on guest loyalty. Satisfaction is noted to have more or

Table 3
Invariance test for the measurement model.

Models for the high & low groups in appraising hotel ambience	χ^2	*df*	RMSEA	CFI	NFI	$\Delta\chi^2$	Full-metric invariance
Non-restricted model	1613.269	868	.040	.935	.908	$\Delta\chi^2$ (24) = 33.841, $p > .01$ (insignificant)	Supported
Full-metric Invariance	1647.110	892	.040	.934	.904		

Author's personal copy

Table 4
Invariance test for the structural model.

Links	High group (mean = 3.950, SD = 322)		Low group (mean = 3.080, SD = 317)		Baseline model (freely estimated)	Nested model (constrained to be equal)
	Coefficients	*t*-Values	Coefficients	*t*-Values		
O → Satisfaction	.072	.829	.067	.716	χ^2 (912) = 1689.729	χ^2 (913) = 1690.886[a]
C → Satisfaction	.094	1.3794	.059	.7562	χ^2 (912) = 1689.729	χ^2 (913) = 1691.790[b]
E → Satisfaction	.158	2.002*	.055	.587	χ^2 (912) = 1689.729	χ^2 (913) = 1694.049[c]
A → Satisfaction	.319	3.700**	.072	.882	χ^2 (912) = 1689.729	χ^2 (913) = 1697.229[d]
N → Satisfaction	−.206	−2.664**	−.109	−1.475	χ^2 (912) = 1689.729	χ^2 (913) = 1695.190[e]
Satisfaction → HI	.658	10.413**	.643	8.992**	χ^2 (912) = 1689.729	χ^2 (913) = 1689.913[f]
Satisfaction → OL	.712	9.065**	.670	7.792**	χ^2 (912) = 1689.729	χ^2 (913) = 1691.969[g]
HI → OL	.294	3.780**	.240	3.600**	χ^2 (912) = 1689.729	χ^2 (913) = 1693.576[h]

Chi-square difference test:

[a] $\Delta\chi^2$ (1) = 1.157, $p > .05$ (insignificant)	Thus, H5a was not supported.
[b] $\Delta\chi^2$ (1) = 2.061, $p > .05$ (insignificant)	Thus, H5b was not supported.
[c] $\Delta\chi^2$ (1) = 4.320, $p < .05$ (significant)	Thus, H5c was supported.
[d] $\Delta\chi^2$ (1) = 7.500, $p < .01$ (significant)	Thus, H5d was supported.
[e] $\Delta\chi^2$ (1) = 5.461, $p < .01$ (significant)	Thus, H5e was supported.
[f] $\Delta\chi^2$ (1) = .184, $p > .05$ (insignificant)	Thus, H5f was not supported.
[g] $\Delta\chi^2$ (1) = 2.240, $p > .05$ (insignificant)	Thus, H5g was not supported.
[h] $\Delta\chi^2$ (1) = 3.847, $p < .05$ (significant)	Thus, H5h was supported.

Note 1: O = openness, C = conscientiousness, E = extraversion, A = agreeableness, N = neuroticism, HI = hotel image, AHA = appraisal of hotel ambience, and OL = overall loyalty.
Note 2: Other goodness-of-fit indices of the baseline model: RMSEA = .040; CFI = .931; NFI = .901.
* $p < .05$.
** $p < .01$.

less the same impact on loyalty and overall hotel image. Compared to hotel image, satisfaction has a greater impact on hotel guest loyalty; further, there is an indication that hotel image mediates the impact of satisfaction on loyalty. Hotel ambience moderates study relationships with high ambience strengthening some of the relationships. The theoretical and managerial implications of the findings are amplified in the ensuing paragraphs.

5.1. Theoretical implications

From the study, the following theoretical implications are derived. The study upholds and extends the utility of personality in explaining satisfaction in the hotel context. Gountas and Gountas (2007) used the thinking-feeling and material-intuitive personality dimensions in their study because these dimensions have a significant impact on satisfaction. This study complements findings from their study through the observed impact of the Big Five Factors of personality on guest satisfaction. Our study findings indicated that extraversion, agreeableness, and neuroticism have a significant impact on guest satisfaction that corresponds to previous studies (Faullant et al., 2011; Matzler et al., 2005; Mooradian, 1996). Baudin et al.'s (2011) findings on the effect of extraversion and neuroticism on life satisfaction in a positive and negative manner, respectively, signify that these two facets of the Big Five Factors

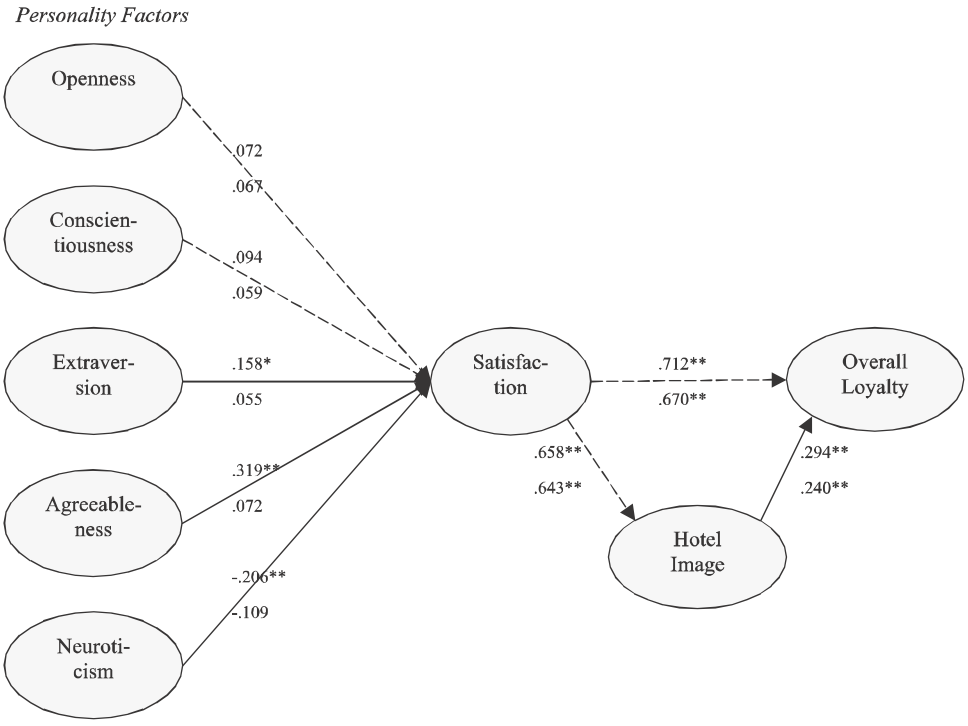


Fig. 3. Results of the structural model for the high and low ambience groups in appraising hotel ambience.

Author's personal copy

are the universal factors for satisfaction in general. Like Lin and Worthley (2012), openness to experience—hypothesized to have a significant influence on guest satisfaction (H1a)—was not affirmed. On the other hand, Matzler et al. (2006) observed a direct significant positive effect of openness to experience on brand affect for hedonic experiences that can be related to an affective part of satisfaction (Oliver, 1997). The lack of significant effect of openness to experience on satisfaction might be to the nature of Five-star hotels that are more less uniform and thus not of concern to those higher in the trait that might compel them to visit alternative innovative accommodations. Nevertheless, this disparity requires further research attention. The lack of a significant effect of conscientiousness factor on guest satisfaction might be due to the nature of hotel services that are more of hedonic than utilitarian (Jiang and Wang, 2006) and thus making the effect of the trait on the guest's satisfaction insignificant. The positive greater effect of agreeableness compared to other personality dimensions on satisfaction observed in this study that did not receive attention in previous studies or had mixed effects (Baudin et al., 2011) may indicate that the dimension is context-specific. Finding that not only agreeableness and neuroticism affect satisfaction but also exert an indirect effect on loyalty adds to the theoretical body of knowledge on the utility of the Big Five factors of personality on consumer behavior.

The significant effect of guest satisfaction on guest loyalty and hotel image noted in this study affirms the satisfaction-overall image-loyalty temporal arrangement proposed in this study within the hotel industry (Kandampully and Hu, 2007; Zhang and Mao, 2012) rather than image-satisfaction-loyalty (e.g., Andreassen and Lindestad, 1998; Prayag, 2008). The moderation effects of hotel ambience in the study model add on the present state of knowledge. Components of servicescape have often been considered predictors of behavioral intention or post-purchase behavior in previous studies. This study is one of the few empirical studies to conceptualize and verify the moderating role of ambience in forming hotel customers' loyalty by involving satisfaction and image. Our empirical findings that indicate high ambience to moderate extraversion/agreeableness/neuroticism effect on guest satisfaction, and the influence of hotel image on overall loyalty further enrich the physical environment and servicescape literature in the hospitality field.

5.2. Practical implications

This paper sheds light on how hoteliers can capitalize on guest's personality, hotel ambience, and marketing strategies to enhance guest satisfaction and improve overall hotel image with the aim of producing loyal guests. Since satisfaction is an aspect of affect (Oliver, 1997), the positive and negative effects of extraversion and neuroticism, respectively, on satisfaction tally with Mooradian and Olver's (1997) findings. The ranking of the effects of personality on satisfaction in absolute value is agreeableness, neuroticism, and extraversion. This indicates the differential magnitude of personality traits on guest satisfaction that need to be known by hoteliers. By using marketing communication to attract individuals with higher scores on agreeableness and extraversion, the hoteliers can be assured of higher guest satisfaction *ceteri peribus*. For instance, the hotel communication can use pictorial and narrative communications that depict an agreeable person (sympathizing with others, respecting others, and concerned with others) that will create related expectations and thus having a higher chance of satisfying the guests. Despite neuroticism being a negative influence on guest satisfaction, the hoteliers should and cannot prevent potential guests from entering their premises. What the hoteliers can do is to create an environment that has a chance of evoking positive responses by, for example, reducing potential environmental factors that can aggravate worry and stress in the hotel for those guests high in neuroticisms.

Lin (2010a), in researching the influence of the Big Five Factors of personality, noted that openness to experience has a significant positive effect on loyalty, while this study found a non-significant effect. This disparity may emanate from differences in the products focused on by Lin (2010a), which were toys and video games. To be competitive, video games and toys need to be innovative and remain state-of-the-art at a faster rate compared to hotels, where rapid innovations may taint their image and thus negatively influence loyalty. Innovativeness is a quality preferred by those more open to experience and thus their loyalty in Lin's (2010a) study. Implying that hoteliers should innovate in line with image-building marketing strategies at moderate levels in order to maintain or increase levels of guest loyalty. The impact of agreeableness on both guest satisfaction and loyalty has valuable implications for hoteliers. By being aware of such a relationship, hoteliers may select and train employees who can behave appropriately and evince agreeableness (e.g., being sympathetic, being concerned about others [both customers and other employees], and respecting others). Employee-related management practices also should include training employees to minimize the negative impacts of neuroticism on satisfaction and loyalty by learning to pacify guests.

Study results clarify the relationships among satisfaction, image, and loyalty by indicating that guest satisfaction has a greater direct influence than hotel image on guest loyalty. This supports Kandampully and Hu's (2007) and Helgesen and Nesset's (2007) findings and implies that hoteliers must concentrate their efforts on satisfying guests in order to create loyalty and improve hotel image for their guests. The satisfaction aspect should be a continuous priority to enhance image and thereby loyalty since image and loyalty are cumulative aspects of satisfaction.

Further, study results indicate that ambience has a moderating role on the influence of extraversion, agreeableness, and neuroticism on satisfaction. Such a finding implies that hoteliers should give due regards not only to ambience or personality of the guests but both in a concomitant fashion as a means of enhancing guest satisfaction. For example, a Five-star hotel chain in fostering guest loyalty can consider targeting high extraverts and high agreeableness individuals at the same time elevating their hotel ambience with the assurance of satisfying the guests leading into loyalty. Such a strategy has been advocated by Lin (2010a) in the toy and game context. Moreover, hoteliers may train their employees in the appropriate ways to handle different guests with different personalities in order to enhance their satisfaction and thus their loyalty. The moderation of ambience on hotel image-overall loyalty relationship implies that the hoteliers should always strive for conducive ambience even if their hotel is having a good image to the guests as the current guest experience will alter their loyalty. A grand strategy might entail the hotelier to go an extra mile to determine and keep records of their guest's personality scores and availing to them the appropriate ambience like lobby. This implies the hotel to have more than one lobby to cater for the different personality, meaning the hotel (in this case the Five-star) should be having the resources to operationalize the strategy.

5.3. Limitations and direction for future studies

Like any other study, this study has limitations that must be taken into account when applying and generalizing its findings. The study focused on hotel ambience rather than the entire serviscape—a broader view would provide additional, valuable information. Despite focusing on overall image, which is cumulative and thus post-consumption-based, the study did not include

Author's personal copy

image as it pertains to the elemental base of the overall image—in other words, a broader view would offer a picture of how those elemental images create synergy in their totality. Logically, the study focused only on five-star hotels, which may appear to bias the study toward status—consequently, extending the study to other types of hotels and accommodations would offer new perspectives on this topic. By focusing on hotel facilities in Korea, this study limited itself spatially meaning the findings might not perfectly apply in a different context thus calling for extension of this study. Future studies could enhance knowledge on loyalty by employing a longitudinal approach that could trace the proposed developmental loyalty stages (Evanschitzky and Wunderlich, 2006; Oliver, 1999) rather than the cross-sectional one adopted in this study. Beyond considering the development of four stages of loyalty, a longitudinal approach would offer additional insight into hotel guests' image creation process, and specifically on the influences of induced and organic image development (Gartner, 1993). In addition, this study did not segregate respondents into consumption categories such as reasons for hotel stay that could offer insights into their influences on satisfaction levels and thus on hotel image and guest loyalty. Finally, a cross-cultural aspect of hotel guests' purchasing behavior was not considered in the present study. For future research, conducting a cross-cultural study using the proposed theoretical framework will be an interesting extension of this study.

Appendix.

Constructs	Measurement items (means, SD)
Personality Factors	*Openness*
	I get excited by new ideas (3.92, .77).
	I enjoy thinking about things (3.74, .88).
	I enjoy hearing new ideas (4.04, .736).
	I enjoy looking for a deeper meaning (3.72, .87).
	I have a vivid imagination (3.58, .94).[a]
	Conscientiousness
	I carry out my plans (3.65, .85).
	I pay attention to detail (3.59, .89).
	I am always prepared (3.52, .95).
	I make plans and stick to them (3.49, .92).
	I am exact in my work (3.71, .86).
	Extraversion
	I talk to a lot of different people at parties (3.61, .89).
	I feel comfortable around people (3.62, .92).
	I start conversations (3.47, .98).
	I make friends easily (3.59, .89).
	I do not mind being the center of attention (3.19, .98).
	Agreeableness
	I sympathize with others' feelings (3.96, .70).
	I am concerned about others (3.85, .75).
	I respect others (4.04, .70).
	I believe that others have good intentions (3.65, .81).[a]
	I trust what people say to me (3.51, .82).[a]
	Neuroticism
	I get stressed out easily (2.78, 1.05).
	I worry about things (2.92, 1.05).
	I fear the worst (2.41, 1.04).
	I am filled with doubts (2.48, 1.00).
	I panic easily. (2.11, .95).
Satisfaction	My overall experiences at this hotel are satisfactory (3.77, .73).
	Overall, I am highly satisfied with this hotel (3.70, .77).
	Overall, compared to other hotels, I am satisfied with this hotel (3.71, .76).
Hotel image	The reputation of this hotel is good (3.83, .73).
	The overall image of this hotel is good (3.91, .72).
	Compared to other hotels with the same classification, this hotel has a good image (3.78, .73).
Appraisal of hotel ambience	The air quality in this hotel is appropriate (3.46, .83).
	The temperature in this hotel is comfortable (3.73, .75).
	The odor in this hotel is pleasant (3.69, .76).
	The background music played overhead makes the hotel a more enjoyable place (3.32, .85).
	The sound level in this hotel is not too loud (3.59, .79).
Overall loyalty	This hotel will be my first choice whenever it comes to choosing a hotel in this area (3.59, .82).
	I am willing to revisit this hotel in the future (3.73, .84).
	I will recommend this hotel to my friends and associates (3.76, .81).
	This hotel deserves my loyalty (3.51, .90).

Note: All measurement items were evaluated using a seven-point Likert type scale from "strongly disagree" (1) to "strongly agree" (7).

[a] These items were excluded from the data analysis.

References

Andreassen, T.W., Lindestad, B., 1998. Customer loyalty and complex services: the impact of corporate image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. International Journal of Service Industry Management 9 (1), 7–23.

Assael, H., 1984. Consumer Behavior and Market Action. Kent Publishing Company, Boston, Massachusetts.

Bagozzi, R.P., Yi, Y., 1989. The degree of intention formation as a moderator of the attitude–behavior relationship. Social Psychology Quarterly 52 (4), 266–279.

Baker, J., Grewal, D., Parasuraman, A., 1994. The influence of store environment on quality inferences and store image. Journal of the Academy of Marketing Science 22 (4), 328–339.

Baloglu, S., Brinberg, D., 1997. Affective images of tourism destinations. Journal of Travel Research 35 (4), 11–15.

Baudin, N., Aluja, A., Rolland, J.P., Blanch, A., 2011. The role of personality in satisfaction with life and sport. Behavioral Psychology 19 (2), 333–345.

Beerli, A., Martin, J.D., 2004. Factors influencing destination image. Annals of Tourism Research 31 (3), 657–681.

Bitner, M.J., 1990. Evaluating service encounters: The effects of physical surroundings and employee responses. Journal of Marketing 54, 69–82.

Bitner, M.J., 1992. Serviscapes: the impact of physical surroundings on customers and employees. Journal of Marketing 56 (2), 57–71.

Bloemer, J., Ruyter, K., 1998. On the relationship between store image, store satisfaction and store loyalty. European Journal of Marketing 32 (5/6), 499–513.

Brunner, T.A., Stocklin, M., Opwis, K., 2008. Satisfaction, image and loyalty: new versus experienced customers. European Journal of Marketing 42 (9/10), 1095–1105.

Clemes, M.D., Wu, J.H.C., Hu, B.D., Gan, C., 2009. An empirical study of behavioral intentions in the Taiwan hotel industry. Innovative Marketing 5 (3), 30–50.

Countryman, C.C., Jang, S.C., 2006. The effects of atmospheric elements on customer impression: the case of hotel lobbies. International Journal of Contemporary Hospitality Management 18 (7), 534–545.

Durukan, T., Bozaci, I., 2011. The role of individual characteristics on customer loyalty. International Journal of Business and Social Science 2 (23), 213–218.

Eroglu, S.A., Machleit, K.A., 2008. Theory in consumer-environment research. In: Haugtvedt, C.P., Herr, P.M., Kardes, F.R. (Eds.), Handbook of Consumer Psychology. Psychology Press – Taylor and Francis Group, New York, NY, pp. 823–836.

Evanschitzky, H., Wunderlich, M., 2006. An examination of moderator effects in the four-stage loyalty model. Journal of Service Research 8 (4), 330–345.

Faullant, R., Matzler, K., Mooradian, T.A., 2011. Personality, basic emotions, and satisfaction: primary emotions in the mountaineering experience. Tourism Management 32 (6), 1423–1430.

Ford, J.K., MacCallum, R.C., Tait, M., 1986. The application of exploratory factor analysis in applied psychology: a critical review and analysis. Personnel Psychology 39 (2), 291–314.

Fornell, C., Larcker, D.F., 1981. Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research 18, 39–50.

Gartner, W.C., 1993. Image formation process. Journal of Travel and Tourism Marketing 2 (2/3), 191–215.

Gountas, J., Gountas, S., 2007. Personality orientations, emotional states, customer satisfaction, and intention to repurchase. Journal of Business Research 60, 72–75.

Han, H., Kim, Y., Kim, E., 2011. Cognitive, affective, conative, and action loyalty: testing the impact of inertia. International Journal of Hospitality Management 30, 1008–1019.

Han, H., Ryu, K., 2009. The roles of the physical environment, price perception, and customer satisfaction in determining customer loyalty in the restaurant industry. Journal of Hospitality and Tourism Research 33 (4), 487–510.

Helgesen, O., Nesset, E., 2007. Images, satisfaction and antecedents: drivers of student loyalty? A case study of a Norwegian university college. Corporate Reputation Review 10 (1), 38–59.

Author's personal copy

Hunt, K., 1977. Overview and future research direction. In: Hunt, K. (Ed.), Conceptualizing and Measurement of Customer Satisfaction and Dissatisfaction. Marketing Science Institute, Cambridge, MA.
Jani, D., Han, H., 2011. Investigating the key factors affecting behavioral intentions: Evidence from a full-service restaurant setting. International Journal of Contemporary Hospitality Management 23 (7), 1000–1018.
Jiang, Y., Wang, C.L., 2006. The impact of affect on service quality and satisfaction: the moderation of service context. Journal of Service Marketing 20 (4), 211–218.
Kandampully, J., Suhartanto, D., 2000. Customer loyalty in the hotel industry: the role of customer satisfaction and image. International Journal of Contemporary Hospitality Management 12 (6), 346–351.
Kandampully, J., Hu, H.H., 2007. Do hoteliers need to manage image to retain loyal customers? International Journal of Contemporary Hospitality Management 19 (6), 435–443.
Ladhari, R., Brun, I., Morales, M., 2008. Determinants of dining satisfaction and post-dining behavioral intentions. International Journal of Hospitality Management 27, 563–573.
Lai, F., Griffin, M., Babin, B.J., 2009. How quality, value, image, and satisfaction create loyalty at a Chinese telecom. Journal of Business Research 62, 980–986.
Lee, Y.K., Back, K.J., Kim, J.Y., 2009. Family restaurant brand personality and its impact on customer's emotion, satisfaction, and brand loyalty. Journal of Hospitality and Tourism Research 33 (3), 305–328.
Lin, Y.L., 2010a. The relationship of consumer personality trait, brand personality and brand loyalty: an empirical study of toys and video games buyers. Journal of Product and Brand Management 19 (1), 4–17.
Lin, Y.I., 2010b. The interactive effect of Gestalt situations and arousal seeking tendency on customers' emotional responses: matching color and music to specific servicescapes. Journal of Services Marketing 24 (4), 294–304.
Lin, I.Y., Worthley, R., 2012. Serviscape moderation on personality traits, emotions, satisfaction, and behaviors. International Journal of Hospitality Management 31, 31–42.
Matzler, K., Faullant, R., Renzl, B., Leiter, V., 2005. The relationship between personality traits 9extraversion and neuroticism), emotions and customer self-satisfaction. Innovative Marketing 1 (2), 32–39.
Matzler, K., Krauter, S.G., Bidmon, S., 2006. Individual determinants of brand affect: The role of the personality traits and extraversion and openness to experience. Journal of Product and Brand Management 15 (7), 427–434.
Maxham, J.G., Netemeyer, R.G., 2002. Modeling customer perceptions of compliant handling over time: The effects of perceived justice on satisfaction and intent. Journal of Retailing 78, 239–252.
Mehrabian, A., Russell, J.A., 1974. An Approach to Environmental Psychology. MIT Press, Cambridge, MA.
Milfelner, B., Korda, A.P., 2011. Hotel image and guest satisfaction as a source of sustainable competitive advantage. International Journal of Sustainable Economy 3 (1), 92–106.
Mooradian, T.A., 1996. Personality and ad-evoked feelings: the case for extraversion and neuroticism. Journal of the Academy of Marketing Science 24 (2), 99–109.
Mooradian, T.A., Olver, J.M., 1994. Neuroticism, affect and post-purchase processes. Advance in Consumer Research 21, 595–600.
Mooradian, T.A., Olver, J.M., 1997. I cant' get no satisfaction: the impact of personality and emotion on postpurchase processes. Psychology & Marketing 14 (4), 379–393.
Morrison, M., Gan, S., Dubelaar, C., Oppewal, H., 2011. In-store music and aroma influences on shopper behavior and satisfaction. Journal of Business Research 64, 558–564.
Mowen, J.C., 2000. The 3M Model of Motivation and Personality: Theory and Empirical Applications to Consumer Behavior. Kluwer Academic Publishers, New York, NY.
Namasivayam, K., Lin, I.Y., 2004. Accounting for temporality in servicescape effects on consumers' service evaluations. Journal of Foodservice Business Research 7 (1), 5–22.
Pervin, L.A., Cervone, D., 2010. Personality: Theory and Research, 11th ed. Wiley, Hoboken, NJ.
Prayag, G., 2008. Image, satisfaction and loyalty-the case of Cape Town. Anatolia: An International Journal of Tourism and Hospitality Research 19 (2), 205–224.
Roubi, S., Littlejohn, D., 2006. The accommodation subsector. In: Beech, J., Chadwick, S. (Eds.), The Business of Tourism Management. Prentice Hall-Financial Times, Essex, England, pp. 377–396.
Oliver, R.L., 1997. Satisfaction: A Behavioral Perspective on the Consumer. The McGraw-Hill, New York, NY.
Oliver, R.L., 1999. Whence consumer loyalty? Journal of Marketing 63, 33–44.
Orth, U.R., Limon, Y., Rose, G., 2010. Store-evoked affect, personalities, and consumer emotional attachment to brands. Journal of Business Research 63, 1202–1208.
Schiffman, L., Kanuk, L.L., 2005. Consumer Behavior, 8th ed. Prentice-Hall of India Private Ltd., New Delhi, India.
Simpeh, K.N., Simpeh, M., Abdul-Nasiru, I., 2011. Serviscape and customer patronage of three star hotels in Ghana's metropolitan city of Accra. European Journal of Business and Management 3 (4), 119–131.
Turley, L.W., Milliman, R.E., 2000. Atmospheric effects on shopping behavior: a review of the experimental evidence. Journal of Business Research 49, 193–211.
Vazquez-Carrasco, R., Foxall, G.R., 2006. Influence of personality on satisfaction, perception of relational benefits, and loyalty in a personal service context. Journal of Retailing and Consumer Services 13, 205–219.
Wakefield, K.L., Baker, J., 1998. Excitement at the mall determinants and effects on shopping response. Journal of Retailing 74 (4), 515–539.
Yang, Z., Peterson, R.T., 2004. Customer perceived value, satisfaction, and loyalty: the role of switching costs. Psychology and Marketing 21 (10), 799–822.
Yoo, K.H., Gretzel, U., 2011. Influence of personality on travel-related consumer-generated media creation. Computers in Human Behavior 27 (2), 609–621.
Zhang, J.J., Mao, Z., 2012. Image of all hotels scales on travel blogs: its impact on customer loyalty. Journal of Hospitality Marketing and Management 21, 131-131.