The Design of Servicescape Based on Benefit Sought in Hotel Facilities: A Survey Study of Hotel Consumers in Seoul

Seung Hee Lee and Hyunsoo Lee*

1Ph.D., Department of Interior Architecture and Built Environment, Yonsei University, Korea
2Professor, Department of Interior Architecture and Built Environment, Yonsei University, Korea

Abstract
The physical environment, servicescape, could serve as a differentiator in intended market segment positioning. It needs to define for facility managers their market positioning, segmentation, and target market by creating a servicescape that will meet the target customer's needs, wants and expectations. The purpose of this study is to segment users by employing a cluster analysis based on benefit sought and to suggest a strategy for designing servicescape in hotel facilities adopting Bitner's (1992) conceptual framework. This research conducted a questionnaire survey to identify the benefit sought by various market segments, and to investigate demand on servicescape in hotel facilities. Based on the results of the survey, servicescape design for the segment groups was developed. The customized design of the servicescape by benefit segmentation, proposed that this research could support particular positioning and segmentation strategies and enhance ultimate marketing objectives. By application of the proposed strategy, various hotel facilities can be developed for target consumers.

Keywords: servicescape; benefit sought; hotel facilities; consumer behavior; designing

1. Introduction
With the increase of GDP and leisure time, consumers have focused on emotional consumption catered to individual needs and wants, rather than mass consumption. As a result, users consider hotels not only as places to sleep but also as spaces for community, culture, and experience and increasingly value atmosphere in the entire experience of hotels (Klumbis, 2005).

Service quality and customer satisfaction are inarguably the two concepts in marketing and practice (Spreng and Mackoy, 1996). In today's world of intense competition, the key to sustainable competitive advantage lies in the delivery of high quality service (Shemwell et al., 1998). Services are often intangible and difficult to evaluate prior to purchase and consumption. Generally, consumers commonly evaluate service quality through the related facilities, equipment, employees, brochures, and other customers' evaluations. Scholars have used different terms to define service environments which induce an attitude or behavior from a customer: 'atmospherics', 'physical evidence', 'situation', 'physical environment', and 'servicescape'. A number of studies have found that customer reaction to the physical environment can be more important, particularly in hedonic consumption such as restaurants, retail stores, hotels and casinos (Lucas, 2003; Ryu and Jang, 2007, Wakefield and Blogett, 1996). The influence of physical environment on behavior has been examined in architecture, environmental psychology, marketing, and retailing (Turley and Milliman, 2000).

Since 2000, Korean tourist's demands for tourism facilities have been increasing due to factors such as a higher disposable income, changing tastes and preferences and increased leisure time resulting from the introduction of the 5-day work-week system in Korea (Park and Yoon, 2009). However, only 10.1 percent of domestic travelers choose hotels over other lodging types (Ministry of Culture, Sports and Tourism, 2012). These statistics mean hotels' lack proper facilities for providing satisfactory services. It is highly probable that service facilities should be differentiated in accordance with their different needs and wants.

Servicescape refers to the comprehensive physical environment perceived by users, and is composed of physical elements such as facilities, interior, arrangements, furniture, signs, temperature, noise, and cleanliness (Bitner, 1992). The physical property of a
hotel is very influential in driving the hotel purchase decision (Dube et al., 2000) and could serve as a differentiator in intended market segment positioning (Bitner, 1992). Hence, service providers have to define their target customer prior to determining the overall layout and the design of servicescape (Lin, 2004). Therefore, for successful hotel operation, it is important to distinguish different market segments according to different customer needs. Facility service should be focused on customers, and facilities should be able to offer high-quality service to support facility users (Rondeau et al., 2006; Lee and Kim, 2014). Accordingly, facility managers need to define their market positioning, segmentation, and target market by creating a physical environment, servicescape, that will meet the target customer's needs, wants and expectations.

The purpose of this study is to segment the users' benefits sought and suggest a strategy for designing a servicescape in hotel facilities based on the benefit segmentation. The result of this study could identify and provide appropriate service facilities in hotels in order to provide the desired environment to a particular consumer segment or target market and to create a distinct image.

2. Related Work
2.1 Benefit Segmentation

A market segment consists of a group of consumers who share a similar set of needs and wants (Kotler, 1956). In the hospitality industry, emphasis has been placed on research dealing with segmentation to classify consumers' consumption behavior. However, studies of benefit segmentation for hotel customers are scarce. Most studies have focused on hotel selection and guest satisfaction attributes (Lewis, 1983).

Generally, traditional segmentation variables such as geographic, demographic and psychographic have been used. In general, lifestyle evaluation tools have been developed, targeting all generations in the areas of hotel and tourism management, architecture and housing planning (Wee-kean Fong et al., 2007; Park et al., 2013). However, these traditional variables tended to be based on an ex-post-descriptive analysis of consumers and their main limitation was reliance on descriptive rather than casual factors (Frochot, 2000). Haley (1968) proposed benefit segmentation as a tool for identifying market segments by casual factor. He emphasized that marketers should focus on the benefits sought considered as a deeper insight consumption motivation.

According to Frochot and Morrison (2001), the advantage of benefit segmentation is its capacity not only to classify consumers by the benefit sought, but also to profile each classified segment using descriptive variables. Recently, benefit segmentation has been regarded as a more effective basis for understanding consumer behavior than previous methods (Rondan and Rosa, 2014). Overall, benefit segmentation can play an important role for consumers by presenting the primary source of purchasing behavior. Further, understanding the benefit sought by each group leads to more effective design of products and services.

2.2 Servicescape

Based on the previous research in environmental psychology, Kotler (1973) stressed the atmospheric influence on consumer behavior and purchase decision. Bitner (1992) developed atmospherics further by suggesting a conceptual framework for service setting, as shown in Fig.1. The framework included the physical environmental features and internal responses of the consumer as antecedents of approach and avoidance (Bitner, 1992; Finlay et al., 2010). Among various service organizations, the physical complexity of the servicescape should be considered in compliance with the various needs of elaborate environments such as hotels and hospitals (Bitner, 1992; Lee and Kim, 2014).

The term 'servicescape' was introduced to describe the physical environment in service consumption. Specifically, servicescape is the built environment, not the natural or social environment of a facility (Bitner, 1992). Servicescape has been considered as a critical determinant of user's emotions and behavior. Bitner (1992) identified three primary dimensions of the servicescape and their subsequent internal response (i.e. satisfaction with the servicescape) and external response (i.e. approach/avoidance, staying and revisiting). She classified three distinct dimensions of the servicescape, (1) ambient conditions, (2) spatial layout and functionality and (3) signs, symbols, and artifacts as follows. In addition to the conceptual framework of Bitner, numerous theoretical and empirical studies have identified the main factors of servicescape that influence customer satisfaction and predict purchase behaviors. Baker (1986) investigated the influence of a store environment on inferences and categorized three groups: ambient factors (background condition), design factors (aesthetic attractiveness), and social factors (people within a store's environment). Wakefield and Blodgett (1994) empirically examined the effect of servicescape in
a leisure service setting. He classified servicescape in terms of 'layout accessibility', 'facility aesthetics', 'seating comfort', 'electric equipment and displays', and 'cleanliness'. He added the cleanliness of the facility as an important part of servicescape and that it is important for leisure services such as hotels, resorts and amusement parks. Turley and Milliman (2000) inspected the atmospheric effects on shopping behavior and suggested atmospheric variables such as 'external variables', 'general interior variables', 'layout and design variables', 'point of purchase and decoration variables', and 'human variables'. Lucas (2003) found five factors affecting satisfaction rating with the physical environment of the casino context in terms of 'ambience', 'casino navigation', 'cleanliness', 'interior décor', and 'seating comfort'. Lee and Kim (2014) identified the main factors (attractiveness, cleanliness, layout, and comfort) and investigated the effects of servicescape on perceived service quality and behavioral intention in public service facilities. From the previous research, servicescape could influence consumer behavior and satisfaction. Based on a review of the literature, 23 items were developed to measure servicescape demand on hotel facilities.

3. Methodology

This research conducted a questionnaire survey to investigate user's benefit sought and demand on servicescape in hotel facilities. A structured questionnaire was developed based on the literature reviews concerning benefit segmentation and servicescape in the hospitality industry. Subjects for the survey were limited to users who visited tourist hotels located in Seoul. A pretest was conducted with about 50 graduate students in Seoul to refine the scale development and to verify the appropriateness of the questions. In the customized questionnaire, a more detailed explanation was provided to aid in subject understanding. Additionally, a site investigation was conducted to analyze the physical environment of hotels with respect to factors necessary for hotel servicescape design.

3.1 Identifying Measurement Items

The questionnaire contained 48 items and comprised two sections. The first section asked respondents to rate the degree of benefit sought in hotel use (25 items). After a review of many studies on benefit segmentation in the tourism and hospitality sector, five factors were derived. The benefit sought scale was captured using Frochot and Morrison's (2000) 20-item benefit segmentation scale for identifying specific needs in the hospitality industry. The efficiency scale (5 items) was added in this study, in accordance with Shoemaker (1994) and Andreas (1998). Value for money, in particular, is a critical attribute positively related to consumers' intent to revisit in the hotel sector (Ramanathan, 2011; Supitchayngkool, 2012). The benefit sought items and their definition developed based on prior studies, are summarized in Table 1. To investigate the reliability and validity of the items in the questionnaire, in-depth interviews were conducted. These 25 items were measured via a 5-point Likert-type rating scale with 1 being the least important and 5 being the most important.

Table 1. Benefit Sought Measurement Items

| Dimensions   | Measurement Items                                      |
|--------------|--------------------------------------------------------|
| Efficiency   | Provide sufficient value for money                     |
|              | Reasonable price                                        |
|              | Overall service experience for price                    |
|              | Convenience of service facility                         |
|              | Self-esteem                                             |
| Experience   | Adventure                                               |
|              | Experience new culture and place                        |
|              | Unique experience                                       |
|              | Satisfy curiosity                                       |
|              | Having fun                                              |
| Relaxation   | Experience tranquility                                  |
|              | Relieve tension (stress)                                |
|              | Being in nature                                         |
|              | Relax away from the ordinary                           |
|              | Do nothing                                              |
| Knowledge    | Interest in history                                     |
|              | Learn about nature                                      |
|              | Social recognition                                      |
|              | Develop knowledge (capability)                          |
|              | Escape everyday life                                    |
| Interaction  | Interact with new people                                |
|              | Being with others                                       |
|              | Meeting new people                                      |
|              | Engage in physical activities                           |
|              | Being with family                                       |

The second section included demand on servicescape (23 items) from hotel facilities. Servicescape needs were assessed using the 5-point scale applied in previous research, as follows: Bitner (1992), Wakefield and Blodgett (1996), Turley and Milliman (2000), Lucas (2003), Ryu and Jang (2008), Kim and Moon (2009), and Lee and Kim (2014). The scale was reviewed by four hotel facility managers and two hotel spatial designers to determine the key variables affecting servicescape in hotel facilities. The scale consisted of 23 items on a 5-point Likert scale, ranging from 1 (least important need) to 5 (most important need). Cronbach’s alpha for servicescape needs indicated good reliability (α=.82).

Four dimensions were developed based on previous research related to servicescape factors in hospitality industries, such as restaurants, hotels, airports and casinos: (1) cleanliness, (2) layout (3) facility aesthetics (4) ambience, as shown in Table 2.

Specifically, to measure 'cleanliness' regarded as an indicator of intention to use, the authors adopted Wakefield and Blodgett's (1996) scale, Lucas's (2003) scale, and Lee and Kim's (2014) scale. Cleanliness is especially important for user's satisfaction in the leisure service (Wakefield and Blodgett, 1996). The 'layout
accessibility’ refers to the way machinery, equipment and furnishings are arranged within an environment as well as the spatial relationships among these elements (Bitner, 1992). Ten items related to layout accessibility were adapted from Bitner’s (1992) scale, Wakefield and Blodgett’s (1996) scale, and Lee and Kim’s (2014) scale. The ‘facility aesthetics’, related to architectural design as well as interior design contributing to the attractiveness of the servicescape was adapted from Wakefield and Blodgett’s (1996) scale and Ryu and Jang’s (2008) scale. The items consist of architectural design, interior design, decoration, color, furniture, and lighting. The ‘ambience’ regarded as an intangible background characteristic was adapted from Bitner’s (1992) scale and Ryu and Jang’s (2008) scale. The scale items were overall quality of air, temperature, and lighting.

Table 2. Servicescape Needs Measurement Items

| Dimension          | Measurement items                                      | Authors                                    |
|--------------------|--------------------------------------------------------|--------------------------------------------|
| Cleanliness (α=.903) | Cleanliness of guestroom                              | Wakefield and Blodgett (1996); Lucas (2003); Lee and Kim (2014) |
|                    | Cleanliness of guest bathroom                         |                                            |
|                    | Cleanliness of public space                           |                                            |
|                    | Cleanliness of entrance                                |                                            |
| Layout (accessibility) (α=.840) | Accessibility of public space                        | Lee and Kim (2014); Newman (2007)          |
|                    | Accessibility of bathroom                              |                                            |
|                    | Accessibility of entrance (exit)                        |                                            |
|                    | Accessibility of signage                               |                                            |
|                    | Parking accessibility                                  |                                            |
| Facility Aesthetics (α=.825) | Exterior design style                                 | Bitner (1992); Wakefield and Blodgett (1996); Ryu and Jang (2008) |
|                    | Interior design style                                  |                                            |
|                    | Color                                                   |                                            |
|                    | Finishing material                                     |                                            |
|                    | Decoration                                              |                                            |
| Ambience (α=.735)  | Temperature                                             | Bitner (1992); Ryu and Jang (2008)         |
|                    | Lighting                                                |                                            |
|                    | Air quality                                             |                                            |

3.2 Data Collection and Analysis

Prior to the survey, a pilot test was conducted to ensure the reliability of the scale and understanding of the questionnaire. A total of 202 questionnaires were collected and analyzed using a 5-point Likert scale. The responses to the questionnaires were analyzed using SPSS 18 and the analysis as follows. Firstly, reliability of the coefficient alphas of the questionnaire were evaluated. The Cronbach’s alpha for the variables’ internal consistency was more than 0.7, which was higher than the minimum level of 0.6 suggested by Peterson (1994). Secondly, the behavioral and demographic characteristics of respondents were analyzed. Of 203 respondents, 144 (71.3%) were men and 58 (28.7%) were women. There were many more male (71.3%) than female (28.7%) respondents. In terms of age range, 57 were in their 30s (28.2%), 53 in their 50s (26.2%), 47 in their 40s (23.3%) and 45 were over 20 (22.3%). The occupations were varied: 92 (45.5%) office jobs, 37 (18.3%) professionals, and 19 (9.4%) self-employed. A large majority (86.2%) of respondents graduated from Universities. More than three-quarters (76.7%) of respondents earned more than 4 million won per month. Thirdly, factor analysis was used to deduce variables of benefit sought and servicescape needs. Fourthly, cluster analysis was conducted to classify the benefits sought. Further, the servicescape needs of end users in hotel facilities were investigated. Finally, the design strategy for hotel facilities was developed based on the demand on servicescape according to benefits sought.

4. Result

4.1 Factor Analysis and Reliability Tests

The responses to the questionnaire of the participants regarding the benefit sought measurement items were used as data for the analysis. Factor analysis was used to test the construct validity of the measurement tool, employing principal component analysis by varimax rotation. Results of factor analysis were significant as follows. The KMO measure yielded 0.837, showing that the distribution of values in the initial measure of benefit dimensions was adequate for factor analysis. In the Bartlett sphericity test, the p-value came out as 0.00, which was suitable for the factor analysis. The ratio of explanatory (60.8%) for the overall factors was acceptable. Excluding 3 of the variables, a high proportion (60.8%) of the overall factors was also acceptable. Excluding 3 of the variables, a high proportion (60.8%) of the overall factors was also acceptable.
loading of 0.5 or more was found for the variables, indicating validity. The reliability of the questionnaire was evaluated. The Cronbach's alphas were more than 26 variables, 23 variables with a factor loading of 0.5 or higher and a communality of 0.4 or higher were classified into 5 factors as shown in Table 3.

### 4.2 Cluster Analysis

To enhance understanding of the factor structure, cluster analysis was conducted to classify hotel users based on benefits sought. The primary use of cluster analysis in marketing has been for market segmentation because cluster analysis was most frequently employed as a classification tool (Punj and Stewart, 1983). The cluster analysis in this research aimed to identify groups of hotel users with similarities, and to provide an appropriate servicescape design strategy for each segment group. Out of the non-hierarchical cluster analysis methods, this research used a K-means cluster analysis as shown in Table 4. Specifically, the K-means cluster method, which is commonly used in the hospitality industry (Cha et al., 1995; Formica and Uysal, 1998; Kau and Lee, 1999).

The post-test results showed a p-value of .000 for all, indicating a reliability of 99%. The results of the cluster analysis according to the benefits sought by the hotel users were as follows.

Cluster 1, 'effectiveness-oriented,' was interested in 'value based pricing' factors not 'experience', 'relaxation', 'local culture', and 'communication'. Compared to other clusters, cluster 1 exhibited low benefit sought in other factors (see Table 4.). The cluster analysis found that there were a high proportion of unmarried users with a business purpose in respondents belonging to this cluster. Cluster 2, 'knowledge-seeking', represented the largest segment of respondents whose primary interest for visiting hotels is to seek a more classic benefit, such as relaxing in nature and experiencing local history and culture. Besides seeking knowledge, this cluster also had an interest in 'communication', 'value based pricing' and 'relaxation'. Users in their 50s accounted for the largest percentage within this cluster, requiring more practical benefits than other groups. The 'multi-benefit-seeking' cluster valued both 'experience' and 'relaxation'. However, this cluster was less conscious of benefit related to two factors 'local culture' and 'communication'. This group comprised more in their 20-30s than the other cluster. It appears that they may require more hedonic services. Cluster 4, 'interaction-oriented', is interested in 'communication', and out of the four clusters, is much less interested in benefits related to 'value based pricing' and 'relaxation' factors. Considering the result of the cluster analysis, more were higher professional and self-employed. It is likely that they were more interested in being with their family and friends.

### 5. Designing Servicescape in Hotel Facilities Based on Benefit Sought

The findings suggest that the market can be divided into four segments based on consumer's benefit sought: the 'effectiveness-oriented' group, the 'knowledge-seeking' group, the 'multi-benefit-seeking' group, and the 'interaction-oriented' group. The proposed hotel facility servicescape design reflects the concept from Bitner (1992) that servicescape influences consumer behavior. Therefore, a proposal taking the target market into account provides improved customer satisfaction and encourages the customers' intention to revisit, recommend the hotel and spend more than planned. The application of servicescape design based on target segments offers a strategy to promote differentiation and customer satisfaction within hotel facilities.

#### 5.1 Framing Servicescape Design for Hotel Facilities

The conceptual framework of hotel facility servicescape design emphasizes benefit segmentation, thus identifying the benefit sought by market segments and delivering such benefits more effectively in hotel facilities.
The following describes the stages of servicescape design for a hotel facility, as shown in Fig.2. First, a structured questionnaire survey was conducted to investigate the consumer benefit sought and hotel servicescape demands. Second, responses to the questionnaire were classified into exclusive groups through benefit segmentation, and relevant benefit sought was identified through factor and cluster analysis. Third, following a comprehensive review of service factors in the hospitality industry, the main factors of the hotel’s servicescape were proposed using factor analysis; the hotel facility servicescape needs of each group were then evaluated based on the results of the survey. Fourth, to suggest an effective servicescape design for each target group, the evaluations of each group’s servicescape demands were compared, as shown in Table 5. Further, demographic and behavioral characteristics were analyzed and interpreted to better profile each group by suitable analyses including ANOVA and chi-square. Finally, the hotel servicescape design strategy was developed based on benefit sought, considering servicescape needs, demographic characteristics, and behavioral characteristics.

5.2 A Servicescape Design for Benefit Segmentation in Hotel Facilities

Four representative benefit segmentations were constructed and identified based on the result of the servicescape needs of the group. The following describe a suggestion for servicescape design in the hotel facilities of target customers.

The servicescape needs of the 'effectiveness-oriented' group are listed in Table 5. From this, the 'effectiveness-oriented' group was more concerned about functionality than aesthetic qualities. For the 'effectiveness-oriented' group, functionality such as layout accessibility factor rather than facility aesthetic factor is considered. In terms of demographic and behavior characteristics, this group were unmarried male users in their 30s-40s and more than 70% of respondents use hotels for business purposes. Therefore, for this group, facility managers should focus on business-related attributes, namely, 'availability of secretarial service', 'availability of business-related meeting rooms' and 'availability of business-related facilities' (Choi and Chu, 2001). Further, for the business target group, it is important to provide conveniently located lighting and furniture in the guestroom as well as providing a convenient fitness center and parking lot in the public space (Lee, 2013).

The 'knowledge-seeking' cluster valued all servicescape needs (see Table 5.). Overall, this segment desired all kinds of servicescape. Therefore, a sophisticated servicescape quality is provided. Compared to the other groups, the needs of the ambience factor were the highest. Thus, careful planning regarding the size of windows and ventilation is considered.

According to Siguaw and Enz (1999), examination of some of the best practices in the hotel industry indicated that the architectural style of a hotel did have an impact on the profitability and success of the hotel. With respect to facility aesthetic factor, consider using an interior design and material which incorporates the characteristics and culture of the area in which the hotel is located. In addition, cultural facilities could be provided in the public space such as library, movie theater, and game room to seek opportunities to

Table 5. Servicescape Needs of Clusters

| Servicescape Needs                  | Effectiveness-oriented | Knowledge-seeking | Multi-benefit-seeking | Interaction-oriented | Mean   |
|------------------------------------|------------------------|-------------------|-----------------------|----------------------|--------|
| Exterior design style              | 3.55                   | 3.89              | 3.84                  | 3.61                 | 3.73   |
| Interior design style              | 3.88                   | 4.15              | 4.19                  | 3.70                 | 3.98   |
| Color                              | 3.63                   | 4.06              | 4.07                  | 3.61                 | 3.85   |
| Material                           | 3.93                   | 4.21              | 4.16                  | 3.61                 | 3.98   |
| Decoration                         | 4.10                   | 4.24              | 4.33                  | 3.60                 | 4.05   |
| Furniture and lighting             | 3.70                   | 4.08              | 4.02                  | 3.72                 | 3.89   |
| Layout of public space             | 4.08                   | 4.23              | 4.23                  | 3.60                 | 4.02   |
| Accessibility of public space      | 4.18                   | 4.13              | 3.95                  | 3.58                 | 3.95   |
| Accessibility of bathroom          | 4.10                   | 4.06              | 3.77                  | 3.58                 | 3.87   |
| Accessibility of entrance (exit)   | 4.23                   | 4.37              | 3.88                  | 3.58                 | 4.01   |
| Accessibility of signage           | 3.93                   | 3.94              | 3.77                  | 3.40                 | 3.75   |
| Layout of guestroom                | 4.43                   | 4.37              | 4.09                  | 3.86                 | 4.18   |
| Layout of guest bathroom           | 4.53                   | 4.44              | 4.23                  | 3.82                 | 4.24   |
| Layout of furniture                | 4.45                   | 4.44              | 4.37                  | 3.74                 | 4.23   |
| Convenience of passage             | 4.13                   | 4.18              | 4.00                  | 3.51                 | 3.94   |
| Parking accessibility              | 4.30                   | 4.42              | 4.26                  | 3.86                 | 4.20   |
| Temperature                        | 4.18                   | 4.16              | 4.00                  | 3.74                 | 4.01   |
| Lighting                           | 4.08                   | 4.23              | 4.14                  | 3.63                 | 4.01   |
| Quality of air                     | 4.55                   | 4.69              | 4.53                  | 3.93                 | 4.42   |
| Cleanliness of guestroom           | 4.75                   | 4.69              | 4.72                  | 4.12                 | 4.55   |
| Cleanliness of guest bathroom      | 4.75                   | 4.74              | 4.74                  | 4.09                 | 4.56   |
| Cleanliness of public space        | 4.40                   | 4.56              | 4.44                  | 3.88                 | 4.31   |
| Cleanliness of entrance & corridor | 4.30                   | 4.40              | 4.12                  | 3.77                 | 4.14   |
| Mean                               | 4.16                   | 4.30              | 4.15                  | 3.71                 | 4.07   |
broaden their knowledge and learn new things (Penner et al., 2001).

The 'multi-benefit-seeking' group desired both 'relaxation' factor and 'experience' factor. In terms of experience economy, hotels are becoming destinations in themselves and properties aim to become the ultimate experience (Freund, 2005). To satisfy this group, various facilities for relaxation and a unique experience can be adopted. For instance, hotels equipped with spas, saunas, and exercise facilities encourage user's demand for relaxation and experience (Penner et al., 2001).

Specifically, to support the 'layout accessibility' factor, sufficient parking is considered since the provision of sufficient parking space is a crucial element for hotel selection (Dolnicar, 2003). It is also necessary for facilities to program the parking requirements more carefully. This group showed the highest needs for aesthetic elements out of the four groups (see Table 5.). In this regard, environmental cues, servicescape, need to be given emphasis when designing hotel facilities. This will help them to attract new customers and gain market share (Leblanc and Nguyen, 1996).

As shown in Table 5., the servicescape needs of the 'interaction-oriented' cluster are comparatively low. In terms of behavior characteristics, this group usually uses hotels as places for a variety of meetings, banquets and receptions rather than for accommodation. Therefore, in order to capture this group, it is important to focus on providing facilities such as meeting rooms and conference rooms to hold gatherings or events. To encourage users interactions, meeting room planning must consider size, divisibility and complexity of services. Such meeting rooms can also be utilized as community spaces for local residents as well as for hotel users (Lee, 2014).

6. Discussion

The purpose of this study is to segment the users' benefits sought and suggest a strategy for design of the servicescape in hotel facilities. Both benefits sought and servicescape directly impact user behavior and allow for a deeper insight into consumption motivations. Accordingly, a servicescape design focused on the benefits sought is expected to serve as an effective marketing tool for segmented markets, as suggested in this study.

Despite the fact that there have been many studies on the impact of servicescape in service settings, previous studies on the relationship between servicescape and behavior have attempted servicescape as only one or a few particular environmental parameters. Therefore, there is a need to explore combined servicescape elements that consist of the servicescape in the hotel. This study differentiates itself from previous research by considering the servicescape elements demanded for hotel facilities from a holistic perspective. Moreover, it analyzes the degree of users' demands according to the benefits sought.

Most consumers associate a service quality with hygiene. Especially where functionality and health concerns matter, such as in hospitals, clinics and hotels, cleanliness is considered critical (Lee, 2014). In this study, the most significant servicescape need for hotel facilities was cleanliness. Therefore, facility managers must continuously manage the facilities and furniture (including tiles and carpets) to enhance and maintain cleanliness. In terms of layout accessibility, private areas in particular, such as the layout of guest bathrooms and furniture was the important indicator of servicescape. Generally, consumers who have difficulty reaching facilities will perceive low quality of the service. Perceived crowding has a negative influence on consumer satisfaction (Turley and Milliman, 2000). Furthermore, perceived spatial crowding was found to negatively influence consumer satisfaction and behavior (Lee et al., 2011). Therefore, facility managers should recognize the crowding issue. Ambience related to physical elements such as music, air, temperature and noise. Especially, ambience is probably one of the least expensive means to enhance user perception. It is important to recognize that ambience can be controlled to a large extent by facility management. In general, facility aesthetics play an important role as differentiators from competitors. However, in this research, users of hotel facilities are not concerned about it compared with other factors of servicescape such as cleanliness, layout accessibility and ambience related to more functionality.

The authors believe that customized physical servicescape could provide a variety of strategies in service marketing and hotel management. By providing a segmented servicescape, this research will help customers choose hotels that best satisfy their needs. Moreover, it will help hotels enhance their operation efficiency by cutting down costs through the application of a concentration strategy. Furthermore, the suggested servicescape design strategies are expected to improve the quality of surrounding environments if applied to motels or inns with relatively unfavorable facilities. This research has significance in proposing a service marketing strategy by satisfying target user's needs and wants by encouraging consumer behavior. Therefore, designers must consider the benefits sought and servicescape that promote the effective design and management of hotel facilities. Marketing managers should also pay attention to servicescape in their strategies. Much of the research is focused on the influence of servicescape and concept. While research has been carried out, previous researchers emphasized one element that consists of the physical environment. The current research differs from previous servicescape studies by positioning the target market and finding empirical support. Therefore, this research has significance in proposing a framework of servicescape design centered on consumer behavior. In future studies, considering the great diversity of service industries,
more research on schools, hospitals and banks not using hedonic consumption is needed to examine the demand for servicescape by users. Moreover, future studies should be conducted on the servicescape elements demanded by employees in facilities such as hospitals, where the interaction with employees is prominent. This study is not without limitation. The data were collected using the convenience-sampling method in four tourist hotels in Seoul. Thus there is a limitation concerning the generalizability of the result.

References

1) Baker, J. (1987) The role of the environment in marketing services: the consumer perspective. Chicago, IL: American Marketing Association, pp.79-84.
2) Bitner, M. (1992) Servicescapes: The impact of physical surroundings on customers and employees. Journal of Marketing, 56 (Apr), pp.57-71.
3) Choi, T. Y. and Chu, R. (2001) Determinants of hotel guests' satisfaction and repeat patronage in the Hong Kong hotel industry. International Journal of Hospitality Management, 20 (3), pp.277-297.
4) Chung, K., Oh, S., Kim, S. and Han, S. (2003) Three representative market segmentation methodologies for hotel guest room customers. Tourism Management, 25, pp.429-441.
5) Cronin, J. J. Brady, M. K. and Hult, G. T. (2000) Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. Journal of Retailing, 76(2), pp.193-218.
6) Donovan, R. J. and Rossiter, J. R. (1982) “Store atmosphere: an environmental psychology approach.” Journal of Retailing, 58(1), pp.34-57.
7) Dube, L. and Renaghan, L. M. (2000) Creating visible customer value. Cornell Hotel and Restaurant Administration Quarterly, 41(1), pp.62-72.
8) Fong, W-K., Matsumoto, H., Lun, Y-F. and Kimura, R. (2007) Influence of indirect Lifestyle Aspects and Climate on Household Energy Consumption. Journal of Asian Architecture and Building Engineering, 6(2), pp.395-402.
9) Freund, D. (2005) Seeking the “ultimate hotel experience”. Research paper, ESADE Escuela Universitaria de Turismo Sant Ignasi, Ramon Llull University.
10) Frochot, I. and Morrison, A. (2000) Benefit segmentation: A review of its applications to travel and tourism research. Journal of Travel & Tourism Marketing, 9(4), pp.21-45.
11) Haley, R. (1968) Benefit segmentation: A decision-orientated research tool. Journal of Marketing, 32 (July), pp.30-35.
12) Han, H. and Ryu, K. (2009) The roles of the physical environment, price perception, and customer satisfaction in determining customer loyalty in the family restaurant industry. Journal of Hospitality and Tourism Research, 33(4), pp.487-510.
13) Hoffman, K. D. and Turley, L. W. (2002) Atmospherics, service encounters and consumer decision making: an integrative perspective. Journal of Marketing Theory and Practice, 10(3), pp.33-47.
14) Jang, S. and Namkung, Y. (2009) Perceived quality, emotions, and behavioral intentions: application of an extended Mehrabian-Russell model to restaurants. Journal of Business Research, 62(4), pp.251-260.
15) Kim, W. G. and Moon Y. J. (2009) Customers' cognitive, emotional, and actionable response to the servicescape: A test of the moderating effect of the restaurant type. International Journal of Hospitality Management, 28(1), pp.144-156.
16) Kofler, P. (1973) Atmospherics as a marketing tool. Journal of Retailing, 49(4), pp.48-64.
17) LeBlanc, G. and Nguyen, N. (1996) Cues used by customers evaluating corporate image in service firms: An empirical study in financial institutions. International Journal of Service Industry Management, 7(2), pp.44-56.
18) Lee, S. Y., Kim, J. O. and Li, J. G. (2011) Impacts of Store Crowding on Shopping Behavior and Store Image. Journal of Asian Architecture and Building Engineering, 13(1), pp.133-140.
19) Lee, S. Y. and Kim, J. H. (2014) Effects of servicescape on service quality, satisfaction and behavioral outcomes in public service facilities. Journal of Asian Architecture and Building Engineering, 13(1), pp.125-131.
20) Lee, S. Y. (2010) Analysis on Characteristics of servicescape of public service facilities and evaluations. Journal of Architectural Institute of Korea, 26(1), pp.55-63.
21) Lee, S. H. (2014) A Characteristics of Servicescape Demand of Design Hotel according to Benefit Sought by Users. Journal of Society of Design Convergence, 13(6), pp.183-198.
22) Lucas, A. F. (2002) The determinants and effects of slot servicescape satisfaction in a Las Vegas hotel casino. UNLV Gaming Research & Review Journal, 7(1), pp.1-19.
23) Mehrabian, A. and Russell, J. A. (1974) An approach to environmental psychology. Cambridge, MA: MIT Press.
24) Park, D-B, Yoon Y-S. (2009) Segmentation by motivation in rural tourism: A Korean case study. Tourism Management, 30(1), pp.99-108.
25) Park, S. J., Lee, H. S. and Kim, M. J. (2013) Mixed-Use Facility Model for the Welfare of the Elderly Based on Lifestyle. Journal of Asian Architecture and Building Engineering, 12(2), pp.245-252.
26) Paul, P. and Olson, J. C. (1993) Consumer Behavior Marketing Strategies, Boston, MA: Irwin.
27) Peterson, R. (1994) A meta-analysis of Cronbach's coefficient alpha. Journal of Consumer Research, 21(2), pp.381-391.
28) Penner, R. H., Adams, L. and Robson, S. K. (2013) Hotel Design, Planning and development. W.W. Norton & Company, NY.
29) Punj, G. and Stewart, D. W. (1983) Cluster Analysis in Marketing Research: Review and Suggestions for Application. Journal of Marketing Research 20(2), pp.134-148.
30) Rondan-Cataluña, F. J. and Rosa-Diaz, I. M. (2014) Segmenting hotel clients by pricing variables and value for money. Current Issues in Tourism, 17(1), pp.60-71.
31) Rossiter, J. R. and Percy, L. (1987) Advertising and Promotion Management. McGraw-Hill.
32) Shemwell, D. J., Yavas, U., & Bilgin, Z. (1998). Customer-service provider relationships: an empirical test of a model of service quality, satisfaction and relationship oriented outcome. International Journal of Service Industry Management, 9(2), pp.155-168.
33) Siguaw, J.A. and Enz, C. A. (1999) Best practices in hotel architecture. The Cornell Hotel and Restaurant Administration Quarterly, 40(5), pp.44-49.
34) Smith, P. and Burns, D. J. (1996) Atmospherics and retail environments: the case of the power aisle. International Journal of Retail and Distribution Management, 24(1), pp.7-14.
35) Spreng, R. A., and Mackey, R. D. (1996). An empirical examination of a model of perceived serviced service quality and satisfaction. Journal of Retailing, 72(2), pp.201-214.
36) Turley, L. W. and Milliman, R. E. (2000) Atmospheric effects on shopping behavior: a review of the experimental evidence. Journal of Business Research 49(2), pp.193-211.
37) Tzeng, S.-Y. and Huang J-S. (2009) Spatial Forms and Signage in Wayfinding Decision Points for Hospital Outpatient Services. Journal of Asian Architecture and Building Engineering, 8(2), pp.193-200.
38) Wakefield, K. L. and Blodgett, J. G. (1994) The importance of servicescapes in leisure service setting. Journal of Services Marketing, 8(3), pp.66-76.
39) Wakefield, K. L. and Blodgett, J. G. (1996) The effect of the servicescape on customers' behavioral intentions in leisure service setting. Journal of Services Marketing, 10(6), pp.45-61.
40) Vilnai-Yavetz, I. and Gilboa, S. (2010) The effect of servicescape cleanliness on customer reactions. Service Marketing Quarterly, 31(2), pp.213-234.
41) Zeithaml, V. A., Parasuraman, A. and Berry L. L. (1996) The Behavioral Consequences of Service Quality. Journal of Marketing, 60(April), pp.31-46.