SERVICESCAPES IN HEALTHCARE: A QUALITATIVE STUDY ON THE ELDERLY’S PERCEPTION OF AN AGED CARE FACILITY

Ngoc Cindy Pham¹, Huan Henry Pham², Tofazzal Hossain³, Yuanqing Li⁴

1. CUNY – Brooklyn College, New York, USA
2. University of Houston – Victoria, Texas, USA
3. BRAC Business School, Dhaka, Bangladesh
4. Dominican University, Illinois, USA

Correspondence: ngoccindy.pham@brooklyn.cuny.edu

ABSTRACT

OBJECTIVE
The paper aims to understand how the elderly perceive the healthcare services of their aged care facilities. This paper explores different dimensions of servicescape elements, which ultimately affect the development of healthcare services.

DESIGN
Both naturalistic observations and in-depth interviews were conducted to discover the perceptions servicescape elements.

RESULTS
The authors discovered that servicescape elements rely not only on physical, social and socially symbolic dimensions but also on cultural dimensions.

CONCLUSIONS
This study uses the elderly home context in City of Harlingen, Rio Grande Valley, Texas, USA, and finds support to Rosenbaum and Massiah [1]'s multidimensional model and suggests improvements in servicescape elements. We found that factors such as ambience, signage, layout, and socially symbolic structure at the aged care facility, were highly appreciated by the elder residents. Other factors such as privacy, quiet environment, and social interactions among patients via group activities require improvements and further attention. Findings of the study can be generalized in other similar social contexts, particularly in improving Asia Pacific region’s healthcare services.

INTRODUCTION
The number of older Americans has increased steadily in accordance with global phenomena. By 2030, American senior citizens will make up 20% of the nation’s total population, up from 12.4% in 2000. By 2050, approximately 21 million Americans will reach an age of 85 and over. [2] Public funding for the healthcare of older citizens is now more critical than ever. In 2014, total expenditures were $549.1 billion under the Medicare Program, which provided health insurance for 48.7 million people. [3] These figures have now increased to $710 billion for 58.4 million American beneficiaries. [4]

The growing ageing population and public funding create business opportunities in the aged care industry, from medical support with minimal levels of care (e.g. in-home care) to medium levels (e.g. assisted living facilities) to full services (e.g. nursing homes). [5] Nursing homes for the elderly turn into a promising industry that will cater to various needs of the elderly people. Approximately 1 million elderly Americans were using nursing home services in 2015, and it is projected that about 2 million elderly Americans will use this service in 2030. [6] Considerable research has been conducted in nursing homes to improve their services as well as facilities. For example, Schüssler et al have [7]
noted current problems in nursing homes for dementia patients and recommend an increase in the patients’ independence with incontinence care.

To survive and thrive in the competitive aged care industry, servicescapes can be considered to positively influence patients’ perceptions of the care center. Servicescapes topics range from Bitner’s model [9] which analyzes the impact of physical surroundings in service development, to Rosenbaum and Massiah’s which goes beyond the physical element to analyze three more factors: social, socially symbolic and natural factors. [1] The concepts of servicescapes in Bitner [9] and in Rosenbaum MS, Massiah C [1] are the backbone for this research paper.

A servicescape is the physical surroundings including ambience; spatial layout and facilities; signs, symbols, and artifacts in which organizational activities occur. [9] Three main research groups are found in the servicescape literature: the classical group, the mutual-interaction group, and e-servicescape group. [10]

The classical group evaluates the impact of only one element of servicescapes on consumers’ perceptions or behavior. [11] For instance, consumer spending (money and time) at a store increases if music and the store environment are compatible. [12] Scent also affects the consumers’ favorable perception on the mall environment and product preference. [13] In addition, the appearance of gold coloring in a service atmosphere (such as restaurants) initiates consumers to tip more. [14]

The mutual-interaction group analyzes the mutual relationships between two cues and the impact of many cues on consumers’ perceptions and behaviours. [10] For instance, a consumer will find more enjoyment while shopping in a store during the Christmas season, if the store uses both Christmas music and Christmas scents (e.g., cinnamon). [11] If the music and scents are inconsistent, the scents may have no impact on consumers’ perceptions and behaviors, or even cause negative impact. [12]

The e-servicescape group focuses on new research in cyberscapes or the combination of bricks and clicks environments. [11] In e-servicescape, consumers’ trust and attitude towards a website impact four main factors: visual appearance, financial security, application and customization. [17] Visual appearance can also increase the percentage of customer interaction. [18] Therefore, if servicescapes are deliberately developed, they can help service organizations operate more effectively and efficiently. [19, 20]

Though many authors try to explore servicescapes from different points of view, servicescapes in aged care have not been rigorously examined. This research is particularly interested in exploring how elderly people in the aged care facility perceive servicescape elements. Hence, this research paper addresses the question below:

**HOW DOES THE ELDERLY IN AN AGED CARE FACILITY PERCEIVE THEIR HEALTHCARE SERVICESCAPES?**

Focused on the context of the US, we believe this study will add more insight in the servicescape elements and thus the whole healthcare service industry. Moreover, findings of this study have theoretical and practical implications in healthcare service literature and establishments, particularly in elderly care facilities. Importantly, we can understand the elderly care facilities from the perspectives of the users. Hence, this understanding helps healthcare service providers to design their offering in different social contexts.

This paper is organized as follows: we first discussed the importance of this study and try to find the research gap. We then described the theory that is used and rigorously examined healthcare servicescape literature. Methodology, findings and implications of this study are also delineated.

**THEORY USED**

1.Rosenbaum and Massiah theory on servicescapes is the main theory applied for this research paper. [1] This theory is comprised of four main elements including: physical, social, socially symbolic, and natural/environmental. Similar to Bitner [9]’s concept, the physical element has several main components: ambience, spatial layout and functionality, and signage, symbols, and artifacts. The social factor includes four elements: customers, employees, social density, and displayed emotion of others. The socially symbolic dimension consists of three main elements: ethnic signs and symbols; and ethnic subjects and artifacts. The fourth dimension – natural/environmental - includes three elements: being away, fascination, and compatibility. Rosenbaum and Massiah work contributes to the effective management of natural settings on consumers’ health and well-being enhancement [1] multidimensional model has been applied in many hospitals to enhance the living...
conditions, but its application in the health care context is still rare, especially in the aged care field.

HEALTHCARE SERVICESCAPES LITERATURE

When evaluating and choosing a service, consumers depend more on intangible attributes for a high-class level, and more on tangible attributes for a lower-class level. [21] Sag, Zengul and Landry [22] finds that servicescapes affect significantly in healthcare services, including both intangible and tangible attributes (e.g. satisfaction, emotions, and perceptions). Consumers may even evaluate a service organization’s capacity by just assessing tangible factors. [23] For instance, patients feel comfortable, sitting and relaxing in gardens, which are situated inside hospitals. [24] In addition, staff, physical surroundings, atmospheric environment and wayfinding positively affect consumers’ experience, loyalty and willingness to spend more for healthcare services. [25] Likewise, social interaction also plays an important role in healthcare services. [26, 27] Social activities can help cancer patients distract themselves from their disease [26] or allow elderly people to resolve their illnesses or negative feelings (i.e. lonely or isolated feelings).

METHODOLOGY

Ethnographic research method is popularly used in marketing research methodology. [31][37] We chose to use this methodology in this study. Ethnography research method entails in-depth interviews, observation, narrative textual analysis, to derive individual opinions, emotions. [38] Naturalistic observation also helps to understand the normal activities of the respondents. [39]

PROCEDURES

To explore servicescape elements at an aged care facility, a purposive sampling technique is used. One specific nursing home is chosen in Harlingen City, RGV (the Valley), Texas, US. The researchers set up two meetings with the informants over the one-week period: the first meeting was a relatively short appointment to make initial contact, get demographic information, brief the informants, and help them feel at ease. Moreover, the elderly was told that we would take photos of them in the daily activities for the first three days. Also, we observed the daily activities of these participants and their interactions with the facilities, healthcare staffs and other housemates.

From the fourth day to the seventh day, after making the informants comfortable, the interview (second meeting) began with the researcher presenting the photographs (which had been printed in the interim) one at a time in chronological order to the informant and prompting them with broad, non-directive statements such as "Describe this photograph to me" or "What do you see here?" "What did you think at this moment!". Follow-up questions were used to clarify meaning, for example, if an informant used the word "home" we would ask what that word meant to them. Before the interviewers move on to the next photograph, we ask "Is there anything else you would like to tell me about this photograph?" The interviewers avoided leading the informant as much as possible and did not suggest ideas or favor a particular line of thinking. Questions consisting of "What do you think about it (i.e. a facility, an equipment, an activity) right now?" were included. These participants were interviewed while the observations were still taking place.

Each interview lasted around 30-45 minutes. We recorded audio and video interviews with participants’ consent, preserving anonymity. We also achieved triangulation when different authors checked the recorded texts and accored on the same meaning.

This aged care has a total of 16 patients, with two males and 14 females, all who live there full-time. Eight participants (two males and six females) agreed to join this research.

THE SETTING

The aged care facility in this study is one story tall, with one kitchen, one large dining room, 16-bedrooms, eight full bathrooms (either shared or private), two half bathrooms, one office, one activity room, and one laundry room. The kitchen has three large two-door refrigerators, four connected dining tables, and three floor-to-ceiling windows facing the backyard. The kitchen provides enough space for more than 18 people to dine simultaneously. The dining room and the kitchen look bright, sunny, and full of natural light, thanks to the floor-to-ceiling windows.

Within the 16-bedrooms, there are two suites. The suites have one small living room, one bedroom, and one private built-in bathroom. The other 14-bedrooms provide either single room or double room occupancy; double rooms are divided by a room divider or mingle. The patient’s room arrangements are based on availability, financial ability,
This aged care facility provides long-term shelter, food and personal care services for low-income individuals. The residents of this facility are mostly Medicaid and Social Security recipients who are unable to complete the tasks of transferring, eating or toileting, etc.

**NARRATIVE TEXTUAL ANALYSIS**

The audio and video recordings of the interviews were transcribed by two graduate students from the University of Texas Rio Grande Valley. Narrative textual analysis provided in-depth understanding of the way participants ‘mean and interpret the world around them’. [31][40][36] We first listened and observed the recorded interviews to make sense of the participants’ responses and then interpreted what the participants meant. Finally, authors accorded participants’ concerns about different servicescape elements. Then the narrative textual analysis was conducted by three researchers.

We asked participants “what” they liked and “how” they create meanings from different elements in the aged care facility. By asking “what” questions, we try to learn about the different facilities in the aged care facility. “How” question tries to capture how participants’ create different symbolic meanings in the physical setting. While doing this, we also cross-checked different interview transcripts and made sure meaning similarities across participants.

**FINDINGS**

This research explores how elderly people perceive the servicescape elements in the context of nursing home. While presenting the findings, we discussed the participants’ quotes. Findings are presented below:

**CULTURAL DIMENSION**

The participants claimed that they wanted to live independently at home. Since they could not take care of themselves, they had to move into this nursing home. This decision was made by the participants’ family or their physicians based on the participants’ health situations, availability of local healthcare services, and their family’s financial conditions. For example, Angela commented:

“One of the loneliest places is nursing home or hospital.”

(Angela)

The participants also claimed that the medical team gave them sleeping pills, so they are likely to sleep more than usual and be inactive, although they sometimes walk or participate in games.

We found this dimension closely related to the cultural traditions of the elderly. Many Hispanic families are reluctant to use the aged care services as shown in this study, which is similar with Asian-Americans. [28] Results of this study is congruent with the findings from Australia [29] and Vietnam [28] which show that elders would prefer to stay in their own homes rather than stay in aged care facilities. However, the ageing population forced some communities to establish assisted living facilities and nursing homes. [28]. The conflict between the willingness of the elders and the increasing need for the aged care services raised an interesting cultural dimension for further investigation, in addition to the four dimensions mentioned by Rosenbaum and Massiah. [1]

**PHYSICAL DIMENSION**

The agreed participants were long-term residents, bringing more in-depth contributions to the study. Participants share an area that includes a large living room, a multifunctional dining room and an activity room, where the residents can read, watch TV, and socialize with one another. They expressed mixed feelings regarding the shared room. Ms. Linda, a regular reader in the common area, commented that dim lighting in the activity room reminded her of her childhood house.

“The light is good. Seems peaceful. Reminds me of the old time.” (Linda)

Other seniors also expressed a positive feeling when talking about the peace, warmth, and safety of the nursing home. For instance, the shared area is brightened up by natural light going through large windows and glass panel doors. The combination of natural light with the interior wall and ceiling paint creates a cozy atmosphere.

Nonetheless, some residents shared a different thought; especially those who lived independently before. Among those is Marlyn who constantly complained about the noise during the night.
“Lots of noise at night. Yelling... One patient yelled all night last night” (Marlyn)

More importantly, the nursing home has a very practical spatial layout, which results in the easy execution of daily activities and social interactions between patients and staffs. The living room provides traditional decorations and furniture and is the most popular gathering place in the house. The walls are painted in dark orange, a popular color of many houses in the RGV area in Texas and Mexico. This creates a familiar environment for the residents, as well as visitors. In addition, Marlyn stated that her room, like other bedrooms at the residence, has easy access to a restroom, shower, other parts of the house, and provides a view outside through a large window.

“I can see the sun, cars, people outside from my room window... I can just sit on my bed and see outside via this window” (Marlyn) (pointed at the large ceiling window in her own room)

Additionally, the emergency system provided here is well designed and maintained on the regular basis, ensuring the safety of the residents. Signage is also located everywhere in this facility. For example, exit signs are placed directly on the doors to the backyard will light up in case of emergency. Emergency lights will flash, indicating evacuation routes. Most importantly, systematic speakers will be used to notify everyone everywhere in the home in case of emergency.

SOCIAL DIMENSION

Residents have varying opinions of the staff working at the nursing home. Some claimed that healthcare and support workers are active, caring, and thoughtful. Flora said she received immediate attention every time she rang her bell. Marlyn also agreed that the healthcare staff in this facility is willing to meet the residents’ individual requirements or needs.

“The girls [staffs] are wonderful. They know what I like, what I don’t like. They go out of their way to make sure I have what I like. They know I like bananas. If there is no banana in the kitchen, they would bring bananas from their home for me.” (Marlyn)

However, other participants thought that the support services in this facility could be improved. Ms. Nancy had previous negative experiences and complained:

“No. They don’t give me care all the times... They don’t come whenever I need... I have to wait. Wait until they get to me.” (Nancy)

Similar situations happen in patient-to-patient interactions. Ms. Linda complimented the friendliness and kindness shared among the residents, while others gave examples of disputes that occur amongst themselves.

“We sing and enjoy each other’s company... We have a really good time... Everyone here is like family.” (Linda)

“She [roommate] is telling others about me and so she has her say and I have my say.” (Nancy)

“I don’t have any friends here. The lady next door does not want to talk about anything. We are very quiet. That is the only problem; too quiet. They are too old. See, that’s why I am not happy here. I don’t have anybody my age.” (Flora)

SOCIALLY SYMBOLIC DIMENSION

The iconic architecture of RGV is interwoven within the design of the facility. A backyard provides a relaxing environment with flowers, plants, and a lawn, all in good care. A brick patio and small stone pathways are lined with several southern-style benches, which provide a great place for the residents to rest. All windows facing the backyard are mostly made of glass and provide residents with the feeling of being close to nature. These windows also make it convenient for the staff to take care of several patients simultaneously.

The socially symbolic dimension within this facility was also evident with the various artifacts observed within this facility. Some residents are Catholic, and some are Baptist. Christian beliefs of the residents are indicated by the Catholic crosses and Anglican statues found in participant bedrooms.

NATURAL/ENVIRONMENTAL DIMENSION

The nature elements of the nursing home receive great support and appreciation from the residents. All participants believe that the best part of this place is its well-cared front and back yards along with several large oak trees.

“I go outside when the weather is good. Outside is good.” (Flora)
Marilyn, who is too weak to go outside, loves to sit next to the floor-to-ceiling glass window, enjoying the beauty of the nature.

“I love to watch the birds and squirrels from my window...I like watching the green grass, the sun... When I don’t have a headache, I open the blinders and sit next to the window to see outside...Before I came here, I was worried that I could not go outside...I am an outdoor person....but here I can go to the backyard and walk around. I am happy.”
(Marilyn)

DISCUSSION

The results from this study support [1]’s multi-dimensional servicescapes model and extends it with a cultural dimension. Here, the participants expressed that they would prefer to stay at home and consider the nursing home a commercial place rather than home. Their family or physicians made this decision, elements of e-servicescapes such as visual appearance, financial security, application and customization mentioned in the studies of [18] and [17] uninteresting to them.

Older people have little control over their placement decisions. Most of the older people could be considered as being forced to go and live in nursing homes. Since it is the culture advocacy and traditional virtue in some society that children, when grown up, should take the responsibility of taking care of their parents. This may lead to a result why older people have almost no opportunity to participate in the admission decision-making process. [32] Moreover, when the parent(s) becomes widowed or suffers from mental or physical health problems, they will be more likely to be placed in the nursing home. [33][34]

For the second dimension – physical features (ambience, spatial layout and facilities, and signs, symbols, and artifacts), the participants highly appreciated the physical surroundings of this nursing home. This facility effectively manages the ambience when the healthcare staff keeps the noise level carefully low, the light comfortably dimmed, and a pleasant temperature maintained. This combination of multiple factors creates positive effects on participants’ feelings, which support the congruity theory. [15, 16] This suggests that a consumer finds the servicescapes more favorable if multiple elements are consistent, less favorable, or even negative if it contains contrasting elements. The spatial layout and functionality within this nursing home also practically and efficiently facilitate social interactions among the participants, and between the participants and the healthcare staffs. Hence, the layout facility in healthcare facility assists the nursing home, which is congruent with the servicescapes literature. [19, 20]

For the third dimension – social factor (e.g., employees, social density), the participants expressed that the care and attention from the healthcare staffs play an important role in healthcare experience. This finding is consistent with Rosenbaum, Sweeney, Windhorst [27] research which suggests that social elements can assist the elderly with their diseases and manage negative feelings such as loneliness and isolation. However, this study also finds that some residents in this nursing home are unhappy with the services provided by the healthcare staffs and cannot get along with other patients. This in turn makes them feel unhappy and lonelier; hence, these unhappy patients need more responsive care and special attention.

For the fourth dimension - socially symbolic (e.g., ethnic signs and symbols), this nursing home was built in the endemic style in Texas with many different cultural signs, symbols and artifacts. Letting elderly to use different cultural signs and symbols gives the nursing home a feeling of homely environment. It is observed that the participants like these mixed socially symbolic features in this facility. For the final dimension – natural/environmental (e.g., being away, fascination, compatibility), the participants enjoy the beauty of the natural environment from the backyard and the front yard of this nursing home. The backyard is also used for relaxation. Participants described that the nature helps them get away from the nursing home, relax, and find peace. This finding is also consistent with Rosenbaum, Sweeney and Windhorst research [27] and that of 24 Bengtsson and Grahn [24] study.

THEORETICAL IMPLICATIONS

The findings of this research are consistent with Bitner [9] and Rosenbaum and Massiah [1] findings on the impact of servicescapes on consumers’ perceptions and behaviours. This research contributes to healthcare servicescape literature not only in illustrating the consistency with existing literature, but also in extending the previous research findings by proposing the culture dimension.

The five dimensions (physical, social, socially symbolic, natural, and cultural) provide facility managers in the
healthcare industry an insight of the elderly’s perceptions, behaviors and overall satisfaction on a nursing home’s servicescapes. In the nursing home in the RGV, the managers should balance the residents’ needs for social interaction and privacy, as well as enhance the care and attention that the healthcare staff provides to unhappy patients.

Furthermore, cultural diets and religions play an importance role in elderly’s decision of nursing room placements. The findings here are consistent with [35] which particularly focuses on South Asian elderly. This study also claims that the elderly perceives a living in nursing home is being abandoned by their children instead of a place that they could been better taken care of. They then attribute the reason of staying in the aged facility as being a widowed, never get married, divorced or they are having some mental issues. In their perspective, staying at the nursing room is more of a “forced” choice than a voluntary option. Thus, this study confirmed the findings of Gupta, R. [35]

**PRACTICAL IMPLICATIONS**

The findings of this study can also be generalized to other social and cultural contexts, particularly Asia Pacific region where the populations in countries such as, Japan, Korea, Singapore are ageing. In Asian culture, elderly used to live with children in their old home. However, many Asian young now leave home and find jobs elsewhere. It forces many elderly people to start thinking about living in nursing home since they have none to care in their home. This phenomenon emphasizes the aged care service agencies to find a way of providing family-oriented atmosphere for the elders under various cultural backgrounds.

In addition, most of the current aged cares could not meet older people’s needs based on their varied cultural backgrounds and religious practices. For instance, in Vietnam, faiths include Buddhism, Catholicism, Islam, Christianity, Taoism, each with fundamentally different religious practice. Specifically, elderly Buddhists in Vietnam tend to spend hours at the temples every night to pray. They are generally vegetarians. Therefore, it is difficult for them to keep such customs while being in nursing homes where the majority of the residents are non-vegetarians. Similarly, service providers could face challenges when dealing with those different cultural values and practices in operation.

**LIMITATIONS**

This study provides a foundation to understand healthcare servicescape elements. Based on the observation and interview techniques, authors try to identify servicescape elements. Future researchers can do more in-depth analysis and examine more servicescape elements. Future can also examine the perceptions of the elderly people in different cultural contexts. Moreover, researchers can also periodically check how the perceptions of the elderly changed.

The limitations also lie in our sample size. The naturalistic observation method enables us to study the participants’ behaviors in their daily surroundings, but the small sample size of this study may make it difficult to generalize the findings and replicate the results for future research [30]. Similarly, the in-depth interviews allow us to collect specific data, which detail the participants’ perceptions and behaviors on the servicescapes. Results of this study may be improved by future study conducting other empirical research method with a larger sample size.

**References**


5. Low LF, Yap M, Brodaty H. A systematic review of different models of home and community care services for older persons. BMC health services research. 2011 Dec;11(1):93.

Servicescapes in Healthcare: A qualitative study on the elderly's perception of an aged care facility


22. Rosenbaum MS, Sweeney JC, Windhorst C. The Restorative Qualities of an Activity-Based, Third Place Café for Seniors: Restoration, Social Support, and Place Attachment at Mather’s--More Than a Café. Seniors Housing & Care Journal. 2009 Sep 1;17(1).


