MEASURING FACTORS IMPORTANT TO CHOICE OF ASSISTED LIVING AND CARE FACILITIES IN THE THAI CONTEXT

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Abstract - This is an exploratory pilot study to identify the main factors that drive choice for assisted living and care facilities among potential residents and their families in Thailand. The research project was part of a client based learning module in a university senior business research course. The intention is for this project to lay the foundation for future research into measuring quality, satisfaction and behavioral intention in the assisted living and nursing care services industry. The client industry partner was a vineyard interested in building and operating an assisted living community, and what factors would be most important to consider in design and marketing to residents and their families. There are numerous studies and models on what factors contribute to resident and family satisfaction with health care services. There are also studies on what factors most influence choice and purchase intention in assisted living communities from a real estate perspective. This questionnaire was developed based on prior quantitative service quality and satisfaction research models, in combination with two rounds of qualitative focus group discussions with students on what factors they and their families consider important when choosing a care facility. In addition, the client was also interested in how important location and special dietary options are to choice, and whether those factors could be used to differentiate competing service offerings. As expected based on prior research, medical care and quality were the most important factors. However, technology and security were identified as second most important. Specific locations and dietary options were ranked highly by some segments and warrant consideration in follow up research.

Keywords - Aging Population, Assisted Living, Client Based Learning, Retirement Community

I. INTRODUCTION

Taking care of an aging population as birth rates decline presents a significant challenge for society, and an opportunity for the assisted living and elder care industry. If society and industry are to encourage more elderly and their families to adopt assisted living as an alternative to staying at home with family, or staying alone as the medical risks and care needs of old age increase, then it is important to understand what factors are most important to making that choice. This research can help guide the development of facility features and services that are most important to families and aging populations. In the Thai context, the adoption of assisted living among the aging population has been significantly slower than in many other countries. It is projected that the elderly will make up 30% of the population by 2035 [1]. Reading about this issue in Thai news media with insights from both government and industry leaders provided the inspiration for this project. Many countries face a similar set of issues as birthrates decline with fewer working age people as aging populations require more care from both society and their families. One of the principle challenges for Thailand is that it is getting old before it gets rich. One solution being explored is to increase community based programs like senior day care[2]. This allows the elderly to remain at home and age in place, but still puts significant strain on families and caregivers. The Commerce Ministry considers senior care services to be insufficient for the 13 million people over 60 in 2020, with that number expected to grow to 18 million by 2030. In order to address these challenges,the Ministry is offering incentives for investment in the sector [3]. The opportunity for industry to collaborate with government to address a long-term need for society led to the development of this idea for a client based project in a senior level business research class. We identified a vineyard interested in exploring the opportunity and worked with them to develop the research project and research objectives. The primary objective was to identify what factors would drive residents and their families to choose an assisted living facility. Adoption of the assisted living in Thailand and other Asian countries is lower than in many western countries for a variety of mainly cultural reasons. If the goal is to encourage more elderly to choose assisted living over staying at home with their families or living alone, more research is needed on what factors are most important to that choice. There is considerable research on the relationship between quality perception, satisfaction and behavioral intention[4]. For this project we chose to start with an instrument designed to measure resident satisfaction with assisted living and adapt it to explore factors important to choice [5].

II. METHODS AND MATERIALS

The research project was developed as part of a client based learning module for a senior business research class using a mixed methodology with quantitative and qualitative techniques. Conceptually, the dimensions of resident and family satisfaction derived from the characteristics of assisted living facilities are those most important to choice and behavioral intentions. The five factors in the Resident Satisfaction

Index (RSI)used as the starting point for this project are Health Care, Housekeeping Services, Physical Environment, Relationship with Staff, and Social Life/Activities. These factors are assumed to be valid and important to choice as well[5]. The items for each factor were framed in terms of importance instead of satisfaction in order to collect feedback from potential residents and their families instead of actual residents and their families as in the original study. One additional item was added for Health Care to measure the importance of having a medical clinic as part of the community. The second phase of the project was to extend the RSI instrument to explore what other factors might be important to choice, and incorporate some market research important to the client. Two rounds of focus group discussions were held in class with one week in between for students to consult their older family members to get feedback. As a result of these discussions and feedback an additional factor, Technology, was added to the survey with 4 indicator items. The students and the client were also interested in whether location and dietary choices are important to choice. For example, would a vineyard be an attractive location for an assisted living community? Would some residents make a choice based on having vegan or organic food options as part of the nutritional plan? To explore the answers to these questions, four location and four dietary preference questions were included in the instrument. The final questionnaire had 40 items with a 5-point Likert scale asking participants to rank each item from (1-Not Important at All) to (5-Very Important). The population of interest was identified as anyone over 40 living in Thailand. The logic was that those under 40 are not likely to be thinking about assisted living communities yet and can be excluded from the sample. Those over 40 would either be part of the target market for themselves, or consider for aging parents and relatives in the future. They would be able to give the most meaningful feedback on choice factors. The instructions in the questionnaire were: “Please respond to the following statements regarding their importance to you in choosing a retirement and/or assisted living community for yourself or a loved one at any point in the future.” The target population included both Thai and international residents of the Kingdom. The questionnaire was translated and back translated into Thai to make it suitable for English and Thai speakers. The questionnaire was sent out using an internet survey platform to all family and contacts for the students and university. The full questionnaire in English and Thai is available in Appendix I.

III. RESULT AND DISCUSSION

There were 73 valid responses to the questionnaire. The only demographic data collected from participants was to provide age range. The 40-49 age group was 41%, 50-59 was 33%, 60-69 was 18%, and 70+ was 8% of the sample. Table I details the combined mean importance for each of the factors measured in the instrument. As expected from prior research, Health Care had the highest combined importance among respondents. While 61 out of 73 considered having a clinic as part of the facility, it had the lowest mean item importance for this factor, and might not be needed in the final model in future research to capture this dimension for behavioral intention. Relationship with staff, housekeeping services, and physical environment rankings were consistent with expectations.

Table I - Importance Factors	Combined Mean Importance
Health Care - Medical staff, Care, and Clinic	4.41
Technology - Information Technology and Security	4.20
Relationship with Staff - Staff Attitude and Service	4.14
Housekeeping Services - Cleaning and Maintenance Services	4.10
Physical Environment - Living Space and Accommodations	4.09
Nutrition - Food and Nutritional Choices	3.54
Social Life/Activities	3.53

Unexpectedly, the social life/activities factor ranked very low in importance even compared to the technology and nutrition dimensions that were added to the questionnaire in response to focus group and client research interest. Why this factor from the RSI and other prior research was ranked so low in importance might be due to the age range of the sample being younger, or some other artifact. This can be explored in follow up research to build a more complete model. While the RSI model was used as the basis for this project because it was such a good fit for this client-based project for a business research class, the original study was done over 20 years ago. The findings that technology and nutritional choices are so important to satisfaction and choice today may lead to more research and a better understanding of the theoretical and practical model for satisfaction and behavioral intention among the elderly and their families.

Table II - Importance Factor: Technology	Mean Importance
Having high levels of security for residents.	4.36
Having technology to monitor health and alert care givers to emergencies.	4.21
Having access to communication, entertainment, and internet services.	4.16
Having access to banking, administrative and government assistance services in the community.	4.08

The importance of technology dimension in Table II developed from student focus groups includes security and health monitoring technology, which are ranked higher than information technology, and living assistance services. It is not clear if these items should be combined in this way or should be separate. Factor analysis using six factors did not support this theoretical framework. The overall and individual mean importance need further exploration into how a theoretical model can be constructed, but from a practical business perspective it is clear how much potential residents and their families care about security and modern technology when considering

assisted living communities and elder care services.

Table III - Importance Factor: Nutrition	Mean Importance
Liking the food provided to residents.	4.23
Having access to health organic food.	4.01
Being able to observe a vegan diet.	3.05
Being able to observe a paleo/keto diet.	2.88

Another research objective was to explore food and nutrition as it relates to choice and preference in assisted living. 63 out of 73 respondents ranked liking the food important or very important. Access to organic food was 56 out of 73. Similar to the changes that have taken place in technology since the original study was carried out, there is much greater awareness surrounding the importance of diet and nutrition to healthy aging. Vegan and Keto options were ranked important or very important by 30 and 24 out of 73 respectively. The inclusion of these items was mainly to explore opportunities to differentiate potential assisted living community services. While the overall importance is low, significant numbers of respondents found them important. There is potential to pursue additional market segmentation research in this area.

Table IV - Importance of Location	Mean Importance
Community located close to beaches nearby.	2.68
Community located close to a large city nearby.	3.00
Community located close to farms and agricultural areas.	2.70
Community located close to mountains and national parks.	2.88

The least important factor overall based on responses is location. This result was somewhat unexpected by the students and client in the project. The two locations with the highest ranking were to be close to mountains, or close to a big city, but only 23 out of 73 ranked these locations important or very important. Even for those who expressed a preference, the level of importance was relatively low compared to other factors.

IV. CONCLUSION

The challenge to provide quality care options for an aging society and managing the economic impact in Thailand can be addressed using a variety of approaches from communities, policy makers and industry. Assisted living will only be part of the solution. As an exploratory pilot study designed as a client based research module for undergraduate students, these results are primarily useful in setting the stage and informing continued research. A conceptual framework for what drives satisfaction, perceived quality, and purchase intention for assisted living in the Thai context can lead to a better understanding and approach to delivering long-term care services that fit Thailand's needs and preferences. A study in China investigated several models for the relationship between perceived service quality(SERVQUAL), customer satisfaction and loyalty in a long term care setting [4]. Studies from Vietnam and Turkey applied a culturally appropriate SERVPERF scale to try to develop a more complete contextualized model for satisfaction with health services [6],[7]. Further research to extend studies like these in the Thai context, and test some of the findings from this study about how the importance of security and technology fit into the conceptual framework could lead to significant insights. One implication is that quality, satisfaction and purchase intention in health related services are evolving due to the pandemic and higher levels of technology adoption by older people. The follow-ups to this study will try to build and test more complete conceptual models for long-term care services in Thailand. One of the weaknesses in this study pointed out by the client was a lack of more demographic data, particularly nationality and gender. Another approach to understanding choice could be to build on work done in a German study on what factors influence the kind of care preferred based on individual characteristics [8]. Assisted living will only be part of the solution for Thailand's aging society. Developing assisted living and other long term care services for both Thai and international residents will benefit from a deeper understanding of how their needs and preference are the same and different. This is especially important if Thailand wants to become an international health care and retirement services destination. In order to help manage the economic impact from an aging Thai population, other research could focus on what are the most cost effective solutions that lead to the highest quality care. A study from Japan shows that health care spending for an aging society need not increase out of control and can be managed through careful planning to deliver quality care for the elderly, but not have such a negative impact on the economy [9]. These studies and others offer avenues for future research on choices in the Thai context that can help guide communities, policy makers, and industry to plan a long-term care system that is right for the Kingdom.

REFERENCES

[1] PENCHAN CHAROENSUTHIPAN and KANANA KATHARANGSIPORN, "A society of seniors requires special treatment," Bangkok Post, Aug. 01, 2019.
[2] JON FERNQUEST, "Who will care for Thailand's elderly?," Bangkok Post, Jul. 06, 2016.
[3] PHUSADEE ARUNMAS, "Ministry to upgrade elderly care," Bangkok Post, Feb. 18, 2020.
[4] Ping Lei and A. Jolibert, "A three-model comparison of the relationship between quality, satisfaction and loyalty: an empirical study of the Chinese healthcare system," BMC Health Serv. Res., vol. 12, no. 1, pp. 436–446, Jan. 2012.
[5] E. Sikorska-simmons, "Development of an Instrument to Measure Resident Satisfaction With Assisted Living," J. Appl. Gerontol. Vol 20 No 1 March 2001 57-73.
[6] P. Tan Le and G. Fitzgerald, "Applying the SERVPERF Scale to Evaluate Quality of Care in Two Public Hospitals at Khanh Hoa Province, Vietnam," Asia Pac. J. Health Manag., vol. 9, no. 2, pp. 66–76, May 2014
[7] M. Akdere, M. Top, and S. Tekingündüz, "Examining patient perceptions of service quality in Turkish hospitals: The SERVPERF model," Total Qual. Manag. Bus. Excell., vol. 31, no. 3/4, pp. 342–352, Feb. 2020.

[8] Hajek, T. Lehnert, A. Wegener, S. G. Riedel-Heller, and H.-H. König, "Factors associated with preferences for long-term care settings in old age: evidence from a population-based survey in Germany," BMC Health Serv. Res., vol. 17, pp. 1–9, Feb. 2017.

[9] K. Okma and M. K. Gusmano, "Aging, Pensions and Long-term Care: What, Why, Who, How?: 'Financing Long-term Care: Lessons From Japan,'" Int. J. Health Policy Manag., vol. 9, no. 5, pp. 218–221, May 2020.

Appendix I

Retirement/Assisted Living Community Survey
1.Age
2.The staff making every effort to keep you as healthy as possible.
3.Receiving the medical attention you need.
4.The skills of doctors and nursing assistants.
5.Nursing assistants being nice and courteous.
6.Being comfortable talking to the staff if you have any health concerns.
7.Having a medical clinic in the community.
8.The cleaning of your home/apartment done well.
9.The skills of people who do the cleaning.
10.The facility being well-maintained and clean.
11.The people who do the cleaning being nice and courteous.
12.The amount of personal space.
13.Satisfaction with your apartment/home.
14.The community being a comfortable place to live.
15.Feeling at "home" in the community.
16.Community located close to beaches nearby.
17.Community located close to a large city nearby.
18.Community located close to farms and agricultural areas.
19.Community located close to mountains and national parks.
20.The staff being kind and caring.
21.The people who serve the food being nice and courteous.
22.Being happy with staff's attitude and/or behavior.
23.The staff being dependable taking care of you.
24.Having friends among staff members.
25.Satisfaction with personal assistance you get at the facility.
26.Staff not treating residents in a rude way.
27.The staff being quick to respond to your requests.
28.Enjoying the social activities here (are they interesting).
29.How often social activities are available.
30.Opportunities to participate in interesting activities.
31.Meeting residents with whom you share similar interests.
32.Being able to choose compatible roommates or live alone.
33.Opportunities to participate in activities outside the facility.
34.Liking the food provided to residents.
35.Having access to health organic food.
36.Being able to observe a vegan diet.
37.Being able to observe a paleo/keto diet.
38.Having high levels of security for residents.
39.Having technology to monitor health and alert care givers to emergencies.
40.Having access to communication, entertainment, and internet services.
41.Having access to banking, administrative and government assistance services in the community.

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