# PREFERENCES OF THAI SENIOR HOUSING: A STUDY ON THAI SENIOR CITIZENS



A THEMATIC PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MANAGEMENT COLLEGE OF MANAGEMENT MAHIDOL UNIVERSITY 2016

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# Thematic paper entitled

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was submitted to the College of Management, Mahidol University for the degree of Master of Management on April 22, 2016



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#### **ACKNOWLEDGEMENTS**

I would like to express my sincerity and utmost gratitude to Dr. Prattana Punnakitikashem, my advisor. Her constructive guidance and suggestions have been very helpful and valuable. She has devoted her time and effort providing valuable comments and how to conduct the research questionnaires. I have completed my research because of her kind support and guidance.

Furthermore, I wish to express my appreciation to the interviewees. They have given time to answer the questionnaires and provided me with valuable answers and comments, without their kind contribution, the research questionnaire would not have been completed and I will not be able to finish my study. I also want to give my regards to my family and friends who helped distribute the questionnaires in their networks, which allow me to be able to collect the data from the appropriate sample size. Without their kind support, I could not have completed this research.

I would like to express my special thankfulness to all people who have given advices and encouraged me.

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PREFERENCES OF THAI SENIOR HOUSING: A STUDY ON THAI SENIOR **CITIZENS** 

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#### **ABSTRACT**

As Thailand is approaching the old aged population era, there is an increasing number of senior housing business in the market to respond to the increasing demand. The requirements and expectation from the elderly toward the senior housing business of what they want and their perspective toward senior housing are still needed to be explored. The research objectives were to study preference of facility of Thai elderly towards senior housing in Thailand, study the factors which influence the decision making when choosing senior housing, and lastly to provide recommendation from the results of questionnaire and key findings learned from the study..

This paper will give information about insights of Thai elderly people towards the senior housing business, their potential to stay in senior housing and also their expectation and perspective. This study will be very helpful especially for the business developer who has plan to build a senior housing in Thailand. The developer will understand their prospected customer target group, their preference, perspective, concerns and the factors which obstruct their decision to stay in senior housing in order to develop and find solutions to tackle those concerns from the research findings

KEY WORDS: Senior Housing / Thai Elderly / Preference of Senior Housing

62 pages

# **CONTENTS**

	Page
ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
LIST OF TABLES	vi
LIST OF FIGURES	vii
CHAPTER I INTRODUCTION	1
1.1 Senior Housing Market	4
1.2 Challenges of Senior Housing Business	6
1.3 Problem Statement	6
1.4 Research Questions	7
1.5 Objective of This Study	7
1.6 Scope of the Study	7
1.7 Definition	7
CHAPTER II LITERATURE REVIEW	9
2.1 The Customer Buying Decision Process Theory	9
2.2 Preferences of Thai Senior Housing	11
2.2.1 Preference to stay in senior housing	11
2.2.2 The preference towards senior housing:	11
2.3 Collectivism and Individualism	14
2.4 Culture and Housing Norms in Thailand	14
2.5 The Changing Economy	15
2.6 Retirement Housing in Thailand	16
2.7 The Demand of Senior Housing	16
2.8 The Framework of Study	17
CHAPTER III RESEARCH METHODOLOGY	18
3.1 Research Design	18
3.2 Sample Selection	18
3.2.1 Sample characteristics	18

# **CONTENTS** (cont.)

	Page
3.2.2 Population and Sample size	18
3.3 Instrument & Measurement	20
3.3.1 Research Questionnaire	20
3.3.2 Measurement	21
3.3 Data Collection	21
3.4 Data Analysis	22
CHAPTER IV DATA ANALYSIS AND RESULTS	23
4.1 Result of Data Analysis	23
4.1.1 Respondents profile	23
4.1.2 Financial information	24
4.1.3 Information about insurance	25
4.1.4 Living condition	25
4.1.5 Tendency to stay in senior housing	26
4.2 Survey Result Analysis	32
CHAPTER V DISCUSSION AND RECOMMENDATION	36
5.1 Demographic Profile Summary	36
5.2 Discussions and Conclusion	36
5.3 Recommendation and Practical Implementation	37
5.4 Recommendation for Further Research	38
REFERENCES	40
APPENDICES	42
Appendix A: QUESTIONNAIRE	43
Appendix B : SPSS Result	49
BIOGRAPHY	62

# LIST OF TABLES

<b>Table</b>		Page
1.1	10 residences for long-term senior living in Thailand in all regions	5
4.1	Demographic information of respondents	23
4.2	Income and source of income information	24
4.3	Information about insurance	25
4.4	Living condition	25
4.5	Tendency to stay in senior housing	26
4.6	Perspective about senior housing and feeling about staying in	
	senior housing	26
4.7	Medical service need (if have to stay in senior housing)	27
4.8	Reasons that would decide to stay in senior housing	27
4.9	Preferred ownership type of senior housing (if stay in senior housing)	28
4.10	Total amount of expense which is acceptable for staying in senior	
	housing (whole length of stay)	28
4.11	Reasons that make you feel unsure or don't want to stay in senior housing	29
4.12	Factors which influence the decision to stay in senior housing classified	
	by demographic information	29
4.13	Factors which affects the decision to buy or stay in the senior housing	31
4.14	Expected facilities at senior housing	31
4.15	Tendency to stay in senior housing VS age	32
4.16	Tendency to stay in senior housing VS education	33
4.17	Tendency to stay in senior housing VS marital status	33
4.18	Tendency to stay in senior housing VS working status	34
4.19	Reliability of an organization which run the senior housing VS occupation	34
4.20	Acceptable expense to stay in senior housing VS monthly income	35

# LIST OF FIGURES

Figure	e	Page
1.1	Older people as a percentage of the total ASEAN population	1
1.2	Thailand's population structure projection by 2025	2
1.3	Senior care business type	4
2.1	The study framework of Preference of Thai Senior Housing	17



# CHAPTER I INTRODUCTION

Population ageing happens in all regions at various levels of development. It is progressing fastest in developing countries, including in those that also have a large population of young people. According to the Figure 1.1 "Older people as a percentage of the total ASEAN population" UN Department of Economic and Social Affairs, 2008, the elderly population (60 years old or more) is expected to increase to 23.3% by 2050 which is 13% more than year 2015.

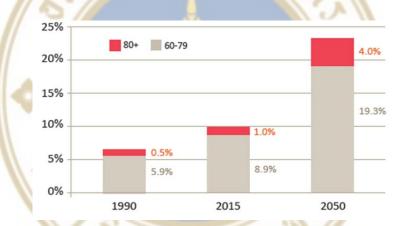


Figure 1.1 Older people as a percentage of the total ASEAN population

Source: UN Department of Economic and Social Affairs, 2008

According to the Figure 1.2, the "Thailand's population structure projection by 2025" US Census Bureau, Thailand now has 840,000 citizens aged 65 or more, comprising 9% of the total population. The older population is therefore expected to be 18 million in 2050, 27% of the total population, putting Thailand entirely within the aging society category and will fully enter into aging society in 2025.

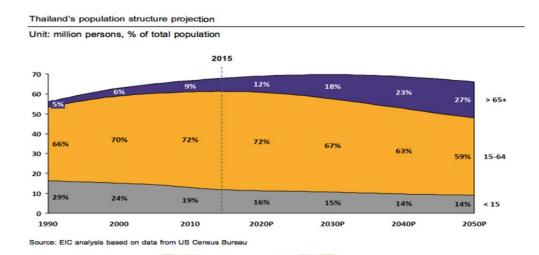


Figure 1.2 Thailand's population structure projection by 2025

Source: EIC analysis, SCB based in data from US Census Bureau

While Thai culture places great importance on caring for older family members, the time spent by the young on taking care of older relatives has fallen as they face more demanding work. Despite the great importance placed on family care in Thai culture, care services are in high demand as an aging population grows and the working age shrinks. Young generations now have to work harder, limiting the time they have to care for elderly family members.

China is an interesting case in that it is a society that shares the values of caring for older family members as Thailand. The growing economy provides incentives to those of working age who move to other cities for work and sometimes leave elderly parents behind. As a result, the Elderly Rights Law was enacted to persuade the young to visit their parents back in their hometown. As for Thailand, The National Committee on the Elderly has found that 38% of elderly Thais are unable to access healthcare services due to commuting and time constraints and a lack of assistance. These reasons reflect an opportunity to expand elderly care businesses in the future, although young Thais traditionally care for their senior relatives within family. Elderly care businesses will prosper despite the existing small market. Most current businesses provide short-term services, but the market should expand following an aging population where the number of elderly will grow by more than 50% over the next decade (Table 1.2: Thailand's population structure projection by 2025, US Census Bureau) The currently low demand for care businesses is due to the small share of the elderly relative to the total

population. In 5-10 years, however, the population aged 65-74 years old will grow rapidly. In the long term, those aged more than 75 years old will increase most quickly (Table 1.2: Thailand's population structure projection by 2025, US Census Bureau). This is probably because advanced medical technology will extend life expectancies. Therefore, short-term care businesses will experience high growth in the next 5-10 years as these elderly people mostly live with and still depend on their families. After that, long-term care businesses will steadily develop as an aging population increases and the old tend to increasingly live alone. Based on statistics from the American Seniors Housing Association, room prices for the elderly have largely increased since 2000. This is in accordance with the rapidly increasing ratio of older persons to the total population. Therefore, the demand for long-term residential facilities in Thailand will swiftly increase as the fraction of elderly persons to total population soars by more than 20% over the next 10 years. (Akaraphanth, 2015)

With the rapid change in the number of Thai elderly, there are significant challenges for Thai young generation. Changing economic and social contexts resulting from an aging population have raised demand for care businesses. Taking care of older relatives is of great importance in Thai culture. However, an increasing number of elderly and a smaller working age population are putting increasing pressure on the young to work more, and some struggle to find the time to care for elderly family members. Modern lifestyles are becoming more independent and work has become more pressing, more and more grown up children are leaving the family to live by themselves. Family units are becoming smaller. With this changing trend and increasing size of senior population in the coming years, there will be an increasing demand for suitable accommodation and environment that is catered specifically for senior living. Low fertility rates also make matters worse as those without children will be living alone when they get older.

Care businesses top the list of opportunities arising from an aging population. The first wave of opportunities will be short-term care such as daycare and rehabilitation centers. Due to the currently small fraction of older cohorts, elder communities and retirement centers will be unlikely to grow in the short-term. On the other hand, demand for long-term residential facilities like this will rise from both Thai and foreign senior citizens. Business opportunities will be up for grab as the Thai population ages, and

Thai businesses should start adjusting to accommodate changing market demand. (Akaraphanth, 2015). Even though there are business opportunities in senior housing to respond to the needs of Thai elderly, there are challenges that business developers have to take into consideration as mentioned in the next section.

## 1.1 Senior Housing Market

Currently in Thai market, there are both senior housing managed by government and by the private organizations. This research will focus only on the ones, which run by private organizations. The senior housing types can be group as shown in Senior care business type from SCB analysis in Figure 1.3 depending on the characteristics of service provided and the target market, which are 4 types in total: Active adult, Independent living, Assisted Living and Skilled nursing

	Active Adult	Independent Living	Assisted Living	Skilled Nursing
Target Age Group	55-65	65-75	75+	85+ / As needed
Assisting Service	None	Medium	High	High
Nursing Service	None	None	Medium	High
<b>Business Structure</b>	Real Estate / Service	Real Estate / Service	Service	Service

Figure 1.3 Senior care business type

Source: EIC analysis, SCB based on data from American Senior Housing Association

According to the research information from Foundation of Thai Gerontology Research and Development Institute, the information shows the increasing number of long-term residence for elderly and hospital business for 400 locations in Bangkok area in year 2010 which accounts for 48.29 percents more than the previous years means that the elderly in Bangkok are becoming more dependent than in other areas and relatives also have to work outside and have to time to take care of them during working hours.

In Thailand, there are about 10 residences for long-term senior living in Thailand in all regions including in Chiangmai, Saraburi, Phra Nakorn Si Ayutthaya, Pathum Thani, Samut Prakan, Bangkok, Chon Buri (Jarutach, 2014). Each of the

senior housing has unique strengths serving at different price range due to its location, decoration, facilities, activity and service provided as described below

Table 1.1 10 residences for long-term senior living in Thailand in all regions

Project Name	Province	Units	Price (Thai Baht)	Project Theme
Villa Meesuk Residence	Chiangmai	28	3.4-5.5 Millions	Luxury and private
Jeerung Residences	Chiangmai	53	6.3-11 millions	Health village, meditation, private
Mission Health Promotion Center	Saraburi	34	1,200-2,800 baht per night	Hospital-semi hotel room
Bussayanivet	Ayutthaya	48	1,500-2,500 baht per night	Long-stay condominium
Wellnesscity	Ayutthaya	23 Rais of land	1.8-2.4 millions	Private home
Paiyika	Pathum Thani	62	20,000-30,000 per month	Nurse service condominium
Sawangkanives	Samut Prakan	468	~6.5 millions	Nurse care condominium
Riei Lumpini Residence	Bangkok	38	Not provided	Long-stay Service Apartment
Wattana District Project	Bangkok	607	150,000-95,000 baht per month	Condominium
Wellness City	Ayuttaya		800,000- 3.5million	Nursing home with variety of accommodation type (condo, resort, house)
Scandinavian Village	Chon Buri	Not available	5-19 millions	A long stay apartment

Source: Assoc. Prof Trirat J, Chulalongkorn University, 2014

#### 1.2 Challenges of Senior Housing Business

Perspective about senior nursing home: Traditionally in ASEAN nations, the responsibility for older people who require care has fallen on their family members. Multiple generations generally cohabitated in their hometown, allowing younger family members to care for ageing relatives and allowing older people to contribute to the work of family life. Adult children often need to migrate to urban area to find work, the advent of the ASEAN Economic Community (AEC) in 2015 will increase migration for work even more and across border. Elderly would prefer to live with their child and be taken care by their children mostly their daughters (The 2011 Survey of the Older Population in Thailand by NSO, 2011) and the perception of most people towards senior housing in the past is not acceptable due to its quality of living and the social norm that viewed this as unacceptable. Moreover, Financial challenges also impact caregiving of older people on macro and micro levels. The 1997 financial crisis and the 2008 world economic crisis have both impacted the economic stability of older people in ASEAN. This would have an impact on the elderly to not be able to afford the cost of nursing home service.

#### 1.3 Problem Statement

As Thailand approaching the old aged population era, there is an increasing number of senior housing business in the market to respond to the increasing demand. It is the shift of the social behavior and this can determines the changing perception towards senior housing concept as compared to the past. On the other hand, the requirements and expectation from the elderly or adult children toward the senior housing business of what they want and their perspective about senior housing concept are not yet been explored since this business has just recently emerged in the market for less than 20 years in Thailand as for the private nursing home owned by private sector. In order to build a senior housing that for Thai senior preference, it is important to know decision maker points of view, customers' needs and requirements for the business development to be able to respond to the market needs.

# 1.4 Research Questions

To specify demand models for the range of seniors housing offerings, researchers must identify which residents want to live independently, what service they want, and what would motivate them to move to senior housing. To examine consumer opinions about senior nursing home market, this study conducts the survey of Thais whom would be the target market for the senior housing in the future.

## 1.5 Objective of This Study

This study will focus on the decision making criteria in choosing the senior living residence in Thailand in order to use this information for further research and development of senior living residence in the future. The objectives of are

- 1. To study perspective on preference of facility of Thai elderly towards senior housing in Thailand.
- 2. To study the factors which influence the decision making when choosing senior housing
- 3. To provide recommendation from the results of questionnaires and key findings learned from the study.

# 1.6 Scope of the Study

The targeted audience are Thai elderly at aged of 50 or more both men and women, who are living in Bangkok area.

#### 1.7 Definition

1. Nursing home is a privately operated establishment providing maintenance and personal or nursing care for persons (as the aged or the chronically ill) who are unable to care for themselves properly

2. Independent Living. A multi-unit senior housing development that may provide supportive services such as meals, housekeeping, social activities, and transportation. This alternative is available as part of Congregate Housing, Supportive Housing, and Retirement Communities.



# CHAPTER II LITERATURE REVIEW

This chapter presents literature review related to the study from the previous research which will be used to develop further study. The literature explores people's perspective towards living in senior housing and their need factors used when making decision to stay or not to stay in senior housing which are psychological needs, physiological needs, and also other factors which might affect the decision making.

## 2.1 The Customer Buying Decision Process Theory

Engel, Blackwell and Kollat have developed in 1968 a model of consumer buying decision process in five steps:

- 1. Problem/need recognition,
- 2. Information search,
- 3. Evaluation of alternatives to meet this need,
- 4. Purchase decision and post-purchase behavior.

The first stage of consumer purchase decision process, problem recognition, is a perceived difference between a person's ideal and actual situation big enough to trigger a decision. Problem recognition can be stimulated by a consumer's depleted assortment or by making efforts.

Next is the information search stage which serves to clarify the options open to the consumer and may involve two steps. First is an internal search which involves the scanning of one's memory to recall previous experiences or knowledge concerning solutions to the problem. An internal search is often sufficient for frequently purchased products. Second is an external search may be necessary particularly when past experience or knowledge is sufficient, the risk of making a wrong purchase decision is high, and the cost of gathering information is low. The primary sources of external

content include personal sources (friends and family), public sources (rating services like Consumer Reports), and marketer-dominated sources (advertising or sales people)

The alternative evaluation stage begins with the examination of a consumer's evaluative criteria- both the "objective" attributes of a brand and the "subjective" factors a consumer consider important. These criteria establish a consumer's evoked set- the group of brands that a consumer would consider buying from among all the brands in the product class of which he or she is aware.

The purchase decision involves judging the alternatives and is often influenced by seller characteristics and incentives provided by sellers at the point of purchase. The steps included in the purchase decision process are affected by consumer involvement, the personal, social and economic significance of the purchase to the consumer. Three general problem-solving variations exist in the consumer purchase decision process. Routine problem solving involves little or no effort to acquire external information or evaluate alternatives; typically used for frequently purchased or low unit value products. Limited problem solving involves the use of moderate information-seeking efforts, often used when the buyer has little time or desire to consider the purchase. Extended problem solving involves considerable time in each stage of the consumer purchase decision process.

The final stage is post purchase behavior that refers to the continuation of the consumer purchase decision process after the product choice has been made. Normally, there are 3 possible results of this stage. First is that the goods or service meet standard expectation leading to a neutral feeling. Next, the goods or service exceeds the standard expectation which leads to satisfaction. Finally, the performance is below expectation, causing dissatisfaction. Many companies do many things in order to increase customer satisfaction in an attempt to keep them loyal the higher the satisfaction, the more the brand loyalty.

# 2.2 Preferences of Thai Senior Housing

#### 2.2.1 Preference to stay in senior housing

The willingness to move into senior housing (Brecht, 2002) posited that one of the reason for an increased willingness to move is increases awareness. She reported that only 11 percent of seniors preferred to move to a retirement community in the 1980s. She conducted the same type of survey 10 years later and found out that 17 percent of seniors preferred to move to a retirement community. (Chou, 2010) studies Chinese older adults and found that only 20 percent (urban areas) and 17 percent (rural areas) are willing to live in some kind of seniors housing community and stated that living in a seniors housing community is often perceived as "losing status" for older adults and families in China and that the perspective toward senior housing are changing and becoming more acceptable.

#### 2.2.2 The preference towards senior housing:

The preference of elderly is different regarding to the nationality, culture of the people. Most of the people in Korea are familiar with the idea of senior housing. They probably formed opinions about seniors housing products and their benefits. As in other countries, senior housing is only appealing to a minority of the population. Just 37 percent say they want to live in seniors housing and 36 percents would prefer seniors housing to living with relatives (Euchun L.,2004). Majority of Montgomery citizens in the US. prefer to stay in their current residence and with those who plan to move plan to move to another residence within the area and that the reasons are economic, traffic congestion, better climate, want to be closer to children and lack of suitable housing. (Sharon S., 2005). Some international studies found that most of the focus group participants held a relatively negative image of retirement housing. Even residents of such facilities were only nominal more positive about their residences. (Gibler et al., 1997)

The marketing emphasis for lifecare communities is on the guaranteed availability of medical and nursing services that will allow residents to age in place; thus medical services and related costs become a focus for many potential residents (Tell et al., 1987; Parr et al., 1988; Kichen and Roche, 1990; Sheehan and Karasik,

1995; Krout et al., 2002) as well as supportive services to maintain independence (Kichen and Roche, 1990; Tell et al., 1987). Important in-unit attributes are safety features, such as an emergency call button and a kitchen (Gibler et al., 1998a; Parr et al., 1988). Parr et al. (1988) also find that potential residents want meal services, building security, housekeeping and transportation services, a shaded garden for walking, a receptionist, and planned social activities.

The behavioral model of health service usage (Andersen, R. & Newman JF, 1973) suggests that people's use of health services is a function of their predisposition to use service, factors which enable or impede use, and their need for care. The model suggests an explanatory process or casual ordering where the predisposing factors might be exogenous (especially the demographic and social structure), some enabling resources are necessary but not sufficient conditions for use, and some need must be defined for use to actually take place. Among the predisposing characteristics, demographic factors such as age and gender represent biological imperatives suggesting the likelihood that people will need health services. Social structure is measured by a broad array of factors that determine the status of a person in the community, his or her ability to cope with presenting problems and commanding resources to deal with these problems and how healthy or unhealthy the physical environment is likely to be. A major goal of the behavioral model was to provide measures of access to medical care. Potential access is simply defined as the presence of enabling resources. More enabling resources provide the means for use, and increase the likelihood that use will take place (Andersen, R. & Newman J.F., 1973)

Under this framework, the reasons people use health service is determined by three main factors; predisposing, enabling and need factors. Gibler et al. (1997) has called the negative predisposing factors as the inhibiting factors. However, they disregard some observed predisposing and inhibiting factors, including observed enabling factors which should take part in determining demand for retirement housing. Some of the attitude constructs have been developed based on the literature on attitudes toward long-term care facilities and living situations by Gibler et al. (1997, p. 124). More attitude constructs from the depth interviews have been added as additional unobserved variables as important factors in estimating the probability of staying in retirement housing compared to staying in the old home. Since almost all of the retirement

housing studied are nursing homes, the hypotheses have to be developed accordingly. Moreover, the decision of where to live is made between two choices: the old home and retirement housing. Therefore if there are factors encouraging the choice to stay in retirement housing, those same factors will discourage the choice to stay in their old homes. The factors effecting to preference of Thai senior housing include the following factors.

#### 2.2.2.1 Predisposing factors:

The predisposing factors tends to have an impact on the preference of senior housing for ex.

- Age: Increasing age has a positive relationship with demand for retirement housing.
- Gender: Women senior citizens tend to rely on retirement housing more than men. Marital status: Singles, divorced and widows prefer to stay in retirement housing more than the married ones.
- Occupation: Those who work in the private sector will be more inclined to not stay in retirement housing.
- Education: The higher the level of education, a lower probability to choose retirement housing.
- Family size: More family members, a lower probability to stay in retirement housing. (Ngarmyarn, A.; Panichpathom S., 2015)

#### 2.2.2.2 Enabling factors:

Income and insurance are believed to have an effect on the decision making to stay in senior housing. Less financial preparation (assets, income, savings, investments, life insurance, health insurance), a higher probability to choose retirement housing. (Ngarmyarn, A. & Panichpathom S.,2015)

#### 2.2.2.3 Need factors:

The need factors such as health condition are believed to have an impact on the decision making to stay in senior hosuing. Better current health condition, a lower probability to stay in retirement housing. Better future health status, a lower probability to stay in retirement housing. More expected health care costs, a higher probability to stay in retirement housing. (Ngarmyarn, A.; Panichpathom S., 2015)

#### 2.3 Collectivism and Individualism

Individualism is mostly seen in the cultures of Western Europe and North America, whereas collectivism is mostly seen in the cultures of Asia, Africa, and parts of Europe and Latin America (Triandis, 1993; Nelson & Fuvish, 2004). The emphasis on one or another starts in the family, even with the very structure of the family: a large, multigenerational one emphasizes collectivism, whereas a smaller, nuclear family emphasizes individualism (Triandis, 1993). Studies examining differences in collectivistic and individualistic cultures often use either Asian Americans or people from Asian cultures, such as Vietnamese or Filipino and compare them to Caucasians or Americans (Skillman, 2000; Desai, 2007).

Collectivistic societies value family cohesion, cooperation, solidarity, and conformity (Skillman, 2000), and thus people is these societies tend to make more references to others, emphasize group goals, and follow the expectations and regulations of the group (Desai, 2007).

Such cultural differences mean that people in different cultures have fundamentally different construal of the self and others. For more collectivistic societies, interdependent construal are the norm: The self is a part of a community, defined relative to others, concerned with belongingness, dependency, empathy, reciprocity and focused on small, selective in-groups at the expense of out-groups. The interdependent self exercises control to the interior, so that cognition and representation involve attentiveness to others, and personal attributes and actions are situationally bound. Autonomy becomes secondary, whereas relationships with others are emphasized, being ends in themselves.

## 2.4 Culture and Housing Norms in Thailand

Thailand is a collective society, characterized by a traditionally structured social framework. Thai individuals place a high value on self-discipline, accepting one's position in life, honoring parents and elders, and preserving one's public image (Tangtongtravy & Tomizawa, 1996). Most Thai citizens prefer to live in single-family detached house surrounded by fences or walls (National Statistical Office, Thailand, 1998). Young couples, adopting the western concepts of privacy and autonomy, are tending to leave their parents and the original family household to establish homes of

their own. As a result, the traditional practice of caring for the elderly within the family structure has been affected. To survive over the next decades, the new generation of seniors, particularly those who are unmarried, widowed, or divorced, will have to adapt to these social changes and prepare to live independently. Housing units specifically designed to meet their needs may enhance their quality of life. (Virajada, Carmen and Leslie 2005)

## 2.5 The Changing Economy

During the last 2 decades (1980-2000) changing socio-economic conditions, the shift toward modernization and urbanization, and changes in the age distribution of the Thai population have drastically affected traditional lifestyles. In addition, certain social and cultural values and behaviors have undergone changes. Increasing contact with western countries has brought far-reaching changes in lifestyles, perspective, and values of the Thai people (Limmanonda, 1995). Due to changing economic conditions, the number of elderly in Korea and Taiwan living independently apart from their families is increasing (Kwon, 2001) In Thailand, the changing economic structure from agriculture to industrialization has induced young females into the work force, thus reducing time they previously spent on care for elderly family members. This has the potential to lead to family problems. This situation is similar to what has already happened in Korea and Japan. From 1970 to 1998, Korean senior citizens who do not stay with their children increased to 40%. About 20% stay alone while about 22% stay with their spouses (Kwan, 2001 as cited in Euchun and Gibler, 2004). This may influence the decision for the elderly to stay alone. Although the percentage of Thai senior citizens living alone may not be as high as in Korea or Japan now, the increasing trend is definitely occurring.

# 2.6 Retirement Housing in Thailand

In the U.S., there are many housing options available to meet the needs of the senior population. if seniors are in good health, they can live independently in their own homes or move to a community specifically designed with amenities and services for the elderly. Those needing assistance have options as well, including a universal, elder cottage housing opportunity or "granny flats", skilled nursing homes, and continuing care retirement communities. (Virajada, Carmen and Leslie 2005). In Thailand, neither the government nor the private sector has shown much interest in building houses specifically for the elderly. Current housing policy emphasizes the need to provide affordable housing for the low-income and middle-income people (Campbell et al., 1993)

## 2.7 The Demand of Senior Housing

Because of the increasing health problems as senior citizens age, the homes they lived in when they were younger may no longer be appropriate and may more easily cause accidents. A suitable house for the elderly likely would be different from their former home and be appropriate for the type and level of their disabilities. Though there is a variety of retirement housing available, the type most Thais think of are nursing homes, especially those under government management. There is a long wait list to get into government nursing homes, thus not everyone who so desires gets the opportunity to live in them. Aging Thai baby boomers have higher incomes and more savings than the elderly of previous times. Changing the living place as they age to one more suitable for increasing disabilities and difficulty in performing daily activities, and less risky for accidents could be a wise decision. There is a potential for developers to invest in retirement housing for the middle and high income senior citizen groups, especially the baby boomers which will represent the majority of Thai senior citizens this decade. (Ngarmyarn, Panichpathom, 2012) The pattern of living in older person has changed since 1984-2011, the percentage of all elderly prefer to live alone more and more, from 3.6 to 8.6 percent which shows the tendency and also possibility that elderly people will stay in senior housing rather than living with spouse and children (Knodel and Chayovan, 2009)

# 2.8 The Framework of Study

The framework for this study is adapted from the behavioral model of health service usage (Andersen, R. & Newman J.F., 1973). The framework focus on the 3 main factors which are predisposing factors, enabling factors, and need factors.

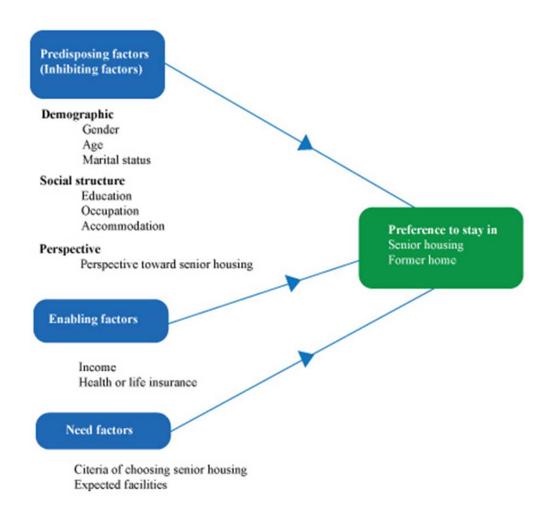


Figure 2.1 The study framework of Preference of Thai Senior Housing

Source: Adapted from Andersen, R. & Newman J.F. (1973)

# CHAPTER III RESEARCH METHODOLOGY

This chapter describes the research methodology used in this study. The aim of this chapter is to illustrate the methods and techniques used collect and analyze the data. It includes research design, sample selection, research questionnaire, data collection and data analysis.

## 3.1 Research Design

To explore the factors that influence Thai elderly when making decision to stay/buy senior housing in Thailand by using quantitative method to analyze the factors influencing their perspective and factors affecting their decision makings by questionnaire distributed to 160 Thai elderly regardless of their demographic information. The next step is to analyze the data using SPSS, and cross tabulations to find key findings, and results according from the research objectives.

# 3.2 Sample Selection

#### 3.2.1 Sample characteristics

Men and women, aged 50 years old or more who live in Bangkok Metropolitan area

#### 3.2.2 Population and Sample size

According to the overall population of Thai elderly in Thailand 2014 is equal to 10,014,705 (EIC analysis, data from CEIC). To find the appropriate size of population to conduct the research, this study will focus only Thai elderly in Bangkok area (year 2014) which is 942,586 (Official Statistics Registration System, 2014).

This research using the Yamane (1967) formula with allowable error (e<sup>2</sup>) at 0.5 or confidential level at 95%

$$n = \frac{N}{1 + Ne^2}$$

n = sample

N = population

 $e^2$  = allowable error = 0.5

$$n = \frac{942,586}{1+(942,586)(0.05)^2}$$
$$= 400$$

Therefore, the sample size is 400 samples for this research.

However, after distributing the questionnaires and face the difficulties that the number of elderly people are not able to do the online questionnaire, the researcher has to give out the questionnaire out to the sample group in person, which is time consuming. Due to time constraint, the researcher decided to change the allowable error from 5 percent to 10 percent as below

$$n = \frac{942,586}{1 + (942,586)(0.01)^2}$$
$$= 99.98$$

Therefore, the total number of the sample size for this study is 100 people

#### 3.3 Instrument & Measurement

#### 3.3.1 Research Questionnaire

A quantitative approach allows for the analysis of the relationship between potential variables and people's perspective towards senior housing. A survey is developed from the behavioral model of health service usage (Andersen, R & Newman J.F.,1973) provides a tool to a systematically collect data from a sample representative of the target population. The researcher also add open-ended question to study in-depth data on the preference and opinion of Thai elderly towards the senior housing. Data was collected using paper- based questionnaires, the questionnaire consisted of 3 parts demonstrated in Figure 1.4, the questionnaire was developed from the behavioral model of health service usage (Andersen, R. & Newman J.F., 1973)

The questionnaires has 3 parts and consist of 22 questions in total as follows:

Part A: Predisposing (inhabiting) factors, which include information about demographic (sex, age, and marital status), social structure (education, working status, occupation, people who they are living with, accommodation type, accommodation ownership type) and their perspective towards senior housing.

Part A described the respondents' profiles in terms of their Predisposing (inhabiting) factors which are demographic, age, education and study about their perspective and perspectives toward senior housing, how they see themselves living in senior housing to see the possibility and tendency to stay in senior housing.

**Part B: Enabling factors,** include information about monthly income, source of income and health or life insurance.

Part B analyzed their enabling factors which are income and health/life insurance to understand whether that has an effect in choosing senior housing or the decision to stay or not to stay in senior housing.

Part C: Need factors include criteria of choosing senior housing (Medical service needed, factors which affect the decision to stay in senior housing, preference about senior housing ownership type, acceptable cost of senior housing, factors which affect the decision not to stay in senior housing, criteria when choosing senior housing), Expected facilities in senior housing

Part C: measure what are the most influential factors when making decision to stay in senior housing. This section provide options for respondents to weight what are the important factors for them for making decision in terms of facilities needed and their rationale. Some questions in this section, respondents have to weight their answer by giving no. 1-5

#### 3.3.2 Measurement

The last 2 questions in the questionnaire which ask about Need factors (factors that influence their decision making when choosing to stay in senior housing, and expected facilities) that request all respondents to give their answer in number from 1-5 as for following details:

The most important factor (indicated as 1)

A very important factor (indicated as 2)

Moderate (indicated as 3)

A less important factor (indicated as 4)

The least important factor (indicated as 5)

represented by five points.

represented by four points.

represented by three points.

represented by two points.

represented by one point.

And then calculate the total score and find the average mean to reflect the reasons behind the rationale of choosing factors which affect their decision to stay in senior housing

PART A: Predisposing (inhabiting) factors

PART B: Enabling factors

PART C: Need factors

#### 3.3 Data Collection

This research studied preference and perspective of Thai elderly when making decision to stay in senior housing. The total of 154 questionnaires were completed in return which equal to 77% of response rate. The offline questionnaire is given out in person to the Thai elderly who are living in both Bangkok province and other provinces distributed and collected by the researcher and also from friends and relatives.

# 3.4 Data Analysis

Data were analyzed by using Statistical Package for Social Sciences (SPSS) to analyze statistics (percentage, means, SD), and cross tabulations to study relationship between factors.



# CHAPTER IV DATA ANALYSIS AND RESULTS

## 4.1 Result of Data Analysis

#### 4.1.1 Respondents profile

The response rate of the total 160 questionnaires is 100% but there are only 154 questionnaires which is completed to conduct the analysis. The selected group of 154 respondents are 93 females and 61 males. Majority of the group are between 55-64 years of age (40.91%) who are married and still living with their spouse (63.64%). Majority of the group has education lower than Bachelor degree level (57.14%) and still working with 31.43% having their-own business followed by private sector employee and freelance occupation at the same percentage of 20% as shown in Table 4.1 about demographic information of respondents.

Table 4.1 Demographic information of respondents

Demographic information	No. of people	Percentage
Sex	10	
Male	61	39.61
Female	93	60.39
Age		
50-54	57	37.01
55-64	63	40.91
65 years old or older	34	22.08
Working status		
Retired	49	31.82
Still working	105	68.18
Marriage status		
Single/divorced	43	27.92
Married and living with spouse	98	63.64
Married, not living with spouse	13	8.44

 Table 4.1 Demographic information of respondents (cont.)

Demographic information	No. of people	Percentage
Occupation		
Government sector	17	16.19
State enterprise	5	4.76
Private sector employee	21	20.00
Business/merchant	33	31.43
Specialized worker	6	5.71
Freelance	21	20.00
Others	2	1.90

# 4.1.2 Financial information

Majority of the group has income between 10,000-40,000 baht per month from self-working (77.92%). More than half of the group has life/health insurance (53.25%) as shown below in Table 4.2 about information on the income and source of income

Table 4.2 Income and source of income information

Income / Source of Income	No. of people	Percentage
Average monthly income (THB)		
No income	8	5.19
Below 10,000	13	8.44
10,001-25,000	37	24.03
25,001-40,000	37	24.03
40,001-55,000	10	6.49
55,001-70,000	14	9.09
70,001-85,000	10	6.49
85,001-100,000	5	3.25
More than 100,000	20	12.99
No. of source of income		
1 source of income	116	75.32
2 or more source of income	38	24.68
Source of income		
Self-working	120	77.92
Spouse	9	5.84
Own children	18	11.69
Rental/interest	7	4.55

#### 4.1.3 Information about insurance

Table 4.3 displayed information about insurance of respondents. Majority of the respondents which is 53% has health or life insurance and 25% has no insurance at all.

**Table 4.3 Information about insurance** 

Health Insurance	No. of people	Percentage
None	38	24.68
Have Health/ life insurance	82	53.25
Have social security	23	14.94
Others as below	11	7.14
- Reimbursement of medical expenses from pension	5	3.25
- Health Insurance (30 baht)	4	2.60
- Civil servant	2	1.30
Total	154	100.00

#### 4.1.4 Living condition

Majority of the group are staying with their family (86.36%) in their own accommodation (82.47%) mostly in house (75.97%) and townhouse (20.78%) as shown in Table 4.4 about the information about living condition of the respondents profile.

Table 4.4 Living condition	1210	
Living Condition	No. of people	Percentage
Stay with		
Family (spouse, children, grandchildren, relatives)	133	86.36
Others (maid, care taker, friends, etc)	7	4.55
Alone	14	9.09
Residence type		
Condominium	5	3.25
Townhouse/apartment	32	20.78
House	117	75.97
Residence ownership type	10	6.49
Rental		
Owner	127	82.47
Stay with others (no expense)	17	11.04

#### 4.1.5 Tendency to stay in senior housing

Majority of the group do not have tendency to stay in senior housing (62.99%) according to the Table 4.5 about the tendency of the respondents to stay in senior housing.

Table 4.5 Tendency to stay in senior housing

Preference to stay in senior housing	No. of people	Percentage
Have tendency to stay in senior housing	57	37.01
Do not have tendency to stay in senior housing	97	62.99
Total	154	100.00

Table 4.6 shows the perspective towards senior housing and feeling about staying in senior housing. The result shows the majority (56.1%) of the perspective of the respondents have positive opinion towards senior housing and the feeling of living in the senior housing whereas 44% do not want to stay in senior housing as they think it reflects lonelineness, no privacy, and do not trust in the quality of the service.

Table 4.6 Perspective about senior housing and feeling about staying in senior housing

Perspective towards senior housing	No. of	Percentage
and feeling about staying in senior housing	people	rercentage
Availability of continuous care and preliminary health care	25	30.49
for elderly people, and high security		
Give opportunity for elderly people to have new	10	12.20
community and not feeling lonely		
Fit with current situation that most children and	11	13.41
grandchildren do not have much time to take care of elderly		
people		
No privacy and have to stay with lots of people	3	3.66
Do not trust in quality of service	24	29.27
Senior housing reflects a place of loneliness, emptiness, and	4	4.88
neglected by families		
Will never stay in senior housing	5	6.10
Total	82.00	100.00

As shown in Table 4.7 regarding the preference of the respondents on the medical service at senior housing, almost all respondents need medical service in senior housing (98%).

Table 4.7 Medical service need (if have to stay in senior housing)

Medical service need	No. of people	Percentage
Need medical service	151	98.05
Don't need medical service	3	1.95
Total	154	100.00

According to the Table 4.8, which explained about the reasons that people will make a decision to stay in senior housing is because 1. They want continuous care (66.23%) 2. They want to join new activities/community (44.16%) and 3. They want more security (38.96%).

Table 4.8 Reasons that would decide to stay in senior housing

Reasons to stay	No. of people	Percentage
Want continuous care	102	66.23
Want to join new activities/community	68	44.16
Security	60	38.96
Freedom and self-reliance	42	27.27
Reduce housing expense	35	22.73
Not able to or don't want to do house chores	30	19.48
Lost of spouse	26	16.88
To get close to children or grandchildren	14	9.09
Others such as lose family members and not	5	3.25
able to live by themselves		

As shown in Table 4.9 regarding the ownership type preference, 43.51% want to buy and 32.47% want to rent (monthly) followed by yearly rental of 18.83%.

Table 4.9 Preferred ownership type of senior housing (if stay in senior housing)

Ownership type	No. of people	Percentage
Buy	67	43.51
Monthly rental	50	32.47
Yearly rental	29	18.83
Others	8	5.19
Government sector should support this cost as citizen's welfare	3	1.95
Residents pay as much as they could and	3	1.95
government/community pay the rest		
Trial session before making decision to buy or rent	2	1.30
Total	154	100.00

According to the information from the Table 4.10 about the total amount expense which is acceptable for staying in senior housing (whole length of stay) The acceptable expense for the whole length of stay is below 1 million baht (74%), between 1-3 million baht (22.73%) as shown in Table 4.11.

Table 4.10 Total amount of expense which is acceptable for staying in senior housing (whole length of stay)

Expense	Number of people	Percentage
Below 1,000,000 baht	114	74.03
1,000,001-3,000,000 baht	35	22.73
300,000,001-5,000,000 baht	2	1.30
5,000,001-7,000,000 baht	1	0.65
More than 7,000,000 baht	2	1.30
Total	154	100.00

The main reasons of why Thai elderly do not want to stay in senior housing is because they want to live with family (64.94%), feeling that living in senior housing has no privacy (47.4%), followed by other reasons as shown in Table 4.11 below.

Table 4.11 Reasons that make you feel unsure or don't want to stay in senior housing

Reasons for not staying in senior housing	No. of people	Percentage
Want to stay with family	100	64.94
No privacy at senior housing	73	47.40
Not ready/can't afford for more expense	53	34.42
Social norms about senior housing (not lively)	53	34.42
Other reasons such as not confident in quality,	7	4.55
cleanliness, and security		

Table 4.12 shows factors which influence the decision to stay in senior housing classified by demographic information. The sample group choose price as the most important factor, second factor is reliability of an organization, location, facilities, number of existing residents respectively. They weight the price as the most important factor when choosing senior housing which is 42.62% and 40.86% respectively. The second most important factor for men is location while for women is reliability of an organization which run the senior housing. Moreover, female give higher weight to facilities compared to men. The graph also shows that people who have educational level lower than bachelor degree give higher weight to price than other factors. In terms of marital status, People who are married and living with spouse give highest weight to location when compare with people who are single/divorced and people who are not living with spouse. In terms of age, the people who are 55-64 years of age and the group of 65 years or more give higher weight to the reliability of an organization while the group 50-54 years old group gives higher weight to location.

Table 4.12 Factors which influence the decision to stay in senior housing classified by demographic information

Demographic information	]	Price	Lo	ocation		libility of mization	Existin	g residents	Fac	cilities
Sex	No. of people	Percentage	No. of people	Percentage	No. of people	Percentage	No. of people	Percentage	No. of people	Percentage
Male	26	42.62	16	26.23	14	22.95	2	3.28	3	4.92
Female	38	40.86	17	18.28	27	29.03	1	1.08	10	10.75
Age										
50-54	25	43.86	14	24.56	12	21.05	2	3.51	4	7.02
55-64	25	39.68	13	20.63	17	26.98	1	1.59	7	11.11
65 years or more	14	41.18	6	17.65	12	35.29	0	0.00	2	5.88

Table 4.12 Factors which influence the decision to stay in senior housing classified by demographic information (cont.)

Demographic information		Price	I	ocation		edibility of ganization	Existing residents Facility		cilities	
Educational level										
Below bachelor degree	47	53.41	16	18.18	16	18.18	2	2.27	7	7.95
Bachelor degree	11	25.00	11	25.00	19	43.18	0	0.00	3	6.82
Master degree	5	26.32	4	21.05	6	31.58	1	5.26	3	15.79
Doctorate	1	33.33	2	66.67	0	0.00	0	0.00	0	0.00
Marital status										
Single/divorced	21	48.84	7	16.28	9	20.93	2	4.65	4	9.30
Married and still living with spouse	37	37.76	24	24.49	28	28.57	1	1.02	8	8.16
Married but not living with spouse	6	46.15	2	15.38	4	30.77	0	0.00	1	7.69
Working		1 00								
status		200					1			
Retired	16	32.65	7	14.29	20	40.82	0	0.00	6	12.24
Still working	48	45.71	26	24.76	21	20.00	3	2.86	7	6.67
Average income/month				ä			10	11		
No income	5	62.50	0	0.00	2	25.00	0	0.00	1	12.50
Below 10,000	7	53.85	2	15.38	4	30.77	0	0.00	0	0.00
10,001-25,000	15	40.54	8	21.62	9	24.32	1	2.70	4	10.81
25,001-40,000	17	45.95	8	21.62	9	24.32	0	0.00	3	8.11
40,001-55,000	4	40.00	3	30.00	3	30.00	0	0.00	0	0.00
55,001-70,000	7	50.00	4	28.57	2	14.29	0	0.00	1	7.14
70,001-85,000	5	50.00	1	10.00	3	30.00	0	0.00	1	10.00
85,001-100,000	1	20.00	1	20.00	2	40.00	0	0.00	1	20.00
More than 100,000	3	15.00	6	30.00	7	35.00	2	10.00	2	10.00

According to the Table 4.13 regarding the factors which affects the decision to buy or stay in senior housing, the most influential factor that affect the decision making when choosing senior housing is "price", which scored 3.54 points and the second factor is "location" which scored 3.42 points and the third factor is the reliability of organization which runs the senior housing which scored 3.39 points. The factors that has the least affect to the sample group in making decision is about the facilities provided in senior housing with 1.69 points. The information received from this survey reflects that the sample group make decision based on the price as first priority and others factors are secondary.

Table 4.13 Factors which affects the decision to buy or stay in the senior housing

Eastars which affect the designer making	Weighted Arithmetic
Factors which affect the decision making	Mean
Price	3.54
Location	3.42
The reliability of and organization which run the senior housing	3.39
The number of existing residents	2.96
Facilities	1.69

According to the Table 4.14 about the expected facilities at senior housing, the sample group set 24 hour medical service as first priority when comes to facilities expected to be available at senior housing which is the most significant factor with 4.06 score out of 5) followed by recreation activities, park, and other facilities as below.

Table 4.14 Expected facilities at senior housing

Expected service/facility	Weighted score
24 hour medical service	4.06
Recreation activities	1.74
Park	1.66
Meditation room	1.37
Gym/ exercise space	1.25
Convenient store	1.18
Massage	0.98
Salon	0.83
Karaoke	0.51
Swimming pool	0.36
Restaurant	0.34
Computer room	0.32
Laundry	0.18
Nearby attractions visit	0.14
Handicraft activities	0.09

According to the Table 4.15 about tendency to stay in senior housing when compare with the age. People who are between 50-54 years old has the highest tendency to stay in senior housing. The second and third group are 65 years or more and 55-64 years old respectively.

Table 4.15 Tendency to stay in senior housing VS age

	Tendency to stay	y in senior housing	
	Have tendency	Do not have	Total
	to stay	tendency to stay	
50-54 years old	25 (43.9%)	32 (56.1%)	57 (100%)
55-64 years old	20 (31.7%)	43 (68.3%)	63 (100%)
65 years old or more	12 (35.5%)	22 (64.7%)	34 (100%)
Total	57 (37%)	97 (63%)	154 (100%)

## 4.2 Survey Result Analysis

After receiving the data above from SPSS, there are some set of data which can be related to each other, therefore some sets of data were selected to do Crosstabulations to see the result if there are significant connection between some aspects and here are the results classified by following categories.

**Education:** According to the Table 4.16 about the tendency to stay in senior housing classified by education, each group make decision based on different factors. The group which has education below bachelor degree level are the most price sensitive and concern about the price the most (53.41%) while the group of bachelor degree and master degree out higher weight to the reliability of organization (41.18% and 31.58% respectively). The doctorate group put the highest weight on the location factor (66.67%).

Table 4.16 Tendency to stay in senior housing VS education

	Tendency to s	to stay in senior housing			
	Have tendency	endency Do not have tendency			
	to stay	to stay			
Below bachelor degree	29 (33%)	59 (67%)	88 (100%)		
Bachelor degree	20 (45.5%)	24 (54.5%)	44 (100%)		
Master degree	8 (42.1%)	11 (57.9%)	19 (100%)		
Doctorate	0 (0%)	3 (100%)	3 (100%)		
Total	57 (37%)	97 (63%)	154 (100%)		

Marital status: According to the Table 4.17 about the tendency to stay in senior housing classified by marital status, every group of marital status have the same direction of answer towards the factor which affect their decision making. The group of married people who are not staying with spouse has the highest tendency not to stay in senior housing when compared among each groups itself according to the Table 4.17 that shows information about

Table 4.17 Tendency to stay in senior housing VS marital status

1	Tendency to stay	in s <mark>eni</mark> or housi <mark>n</mark> g	
	Have tendency	Do not have	Total
	to stay	tendency to stay	
Single/divorced	15 (34.9%)	28 (65.1%)	43 (100%)
Married and living with	39 (39.8%)	59 (60.2%)	98 (100%)
spouse	7 11		
Married and not living with	3 (23.1%)	10 (76.9%)	13 (100%)
spouse			
Total	57 (37%)	97 (63%)	154 (100%)

**Working status**: According to the Table 4.18 about the tendency to stay in senior housing classified by working status, the retired group put the highest weight to the reliability of an organization (40.82%) while the group of people who are still working will consider about the price as the most important factor (45.75%). However majority of both groups do not have tendency to stay in senior housing according to

the Table 4.18 that shows details about tendency to stay in senior housing when focusing on the working status factor.

**Table 4.18** Tendency to stay in senior housing VS working status

	Tendency to st	ay in senior housing	
	Have tendency to	Do not have tendency to	<b>Total</b>
	stay	stay	
Retired	19 (38.8%)	30 (61.2%)	49 (100%)
Still working	38 (36.2%)	67 (63.8%)	105 (100%)
Total	57 (37%)	97 (63%)	154 (100%)

Occupation: According to the Table 4.19 about Reliability of an organization which run the senior housing classified by occupation, state enterprise employee put the "reliability of an organization" as the highest weight when considering the senior housing compared to other occupations according to the Table 4.19 that compare the answers towards reliability of an organization which run the senior housing by occupation factor.

Table 4.19 Reliability of an organization which run the senior housing VS occupation

	Reliability	of an organiz	ation which	run the senio	r housing	
Occupation	Least important	Not really important	Important	Very important	Most important	Total
Government	2	4	3	6	2	17
sector	(11.8%)	(23.5%)	(17.6%)	(35.3%)	(11.8%)	(100%)
State enterprise	0	0	0	1	4	5
	(0%)	(0%)	(0%)	(20%)	(80%)	(100%)
Private company	3	1	6	6	5	21
employee	(14.3%)	(4.8%)	(28.6%)	(28.6%)	(23.8%)	(100%)
Business/merchant	4	5	13	6	5	33
	(12.1%)	(15.2%)	(39.4%)	(18.2%)	(15.2%)	(100%)
Specialized	2	2	2	0	0	6
worker	(33.3%)	(33.3%)	(33.3%)	(0%)	(0%)	(100%)
Freelance	0	5	8	5	3	21
	(0%)	(23.8%)	(38.1%)	(23.8%)	(14.3%)	(100%)
Others	0	0	0	0	2	2
	(0%)	(0%)	(0%)	(0%)	(100%)	(100%)
Total	11	17	32	24	21	105
	(10.5%)	(16.2%)	(30.5%)	(22.9%)	(20%)	(100%)

Monthly income: According to the Table 4.20 about the acceptable expense to stay in senior housing classified by monthly income, the sample group which has monthly income lower than 85,000 baht put the highest weight on the price especially the group that has no income, while the group that has monthly income more than 85,000 baht put the highest weight on the reliability of an organization. All groups of monthly income range do not have distinguished difference towards decision stay or not to stay in senior housing. Majority of all income levels views the acceptable price (highest amount they are willing to pay) for staying in senior housing below 1 million baht, however the groups that has monthly income more than 55,000 baht starting to see variety of price range chosen according to the Table 4.20 which shows comparison of the acceptable expense to stay in senior housing versus monthly income.

Table 4.20 Acceptable expense to stay in senior housing VS monthly income

4/ 1	7 / 45					
///	Acc	eptable expe	ense to stay i	n senior hous	ing	
Monthly income	Below 1 million baht	1-3 Millions	3-5 Millions	5-7 Millions	More than 7 millions	Total
No income	7	1	0	0	0	8
	(87.5%)	(12.5%)	(0%)	(0%)	(0%)	(100%)
Below 10,000	13	0	0	0	0	13
	(100%)	(0%)	(0%)	(0%)	(0%)	(100%)
10,001-25,000	31	6	0	0	0	37
	(83.8%)	(16.2%)	(0%)	(0%)	(0%)	(100%)
25,001-40,000	27	10	0	0	0	37
	(73%)	(27%)	(0%)	(0%)	(0%)	(100%)
40,001-55,000	9	1	0	0	0	10
	(90%)	(10%)	(0%)	(0%)	(0%)	(100%)
55,001-70,000	8	5	0	1	0	14
	(57.1%)	(35.7%)	(0%)	(7.1%)	(0%)	(100%)
70,001-85,000	6	3	1	0	0	10
	(60%)	(30%)	(10%)	(0%)	(0%)	(100%)
85,001-100,000	3	1	0	0	1	5
	(60%)	(20%)	(0%)	(0%)	(20%)	(100%)
more than	10	8	1	0	1	20
100,000	(50%)	(40%)	(5%)	(0%)	(5%)	(100%)
Total	114	35	2	1	2	154
1 Otal	(74%)	(22.7%)	(1.3%)	(6%)	(1.3%)	(100%)

The survey result about the influential factors based on demographic information reflects the differences in the factors in determining to buy or stay in senior housing of people with different age, gender, educational level, and average income. This information will be very useful to the senior housing management team to understand the needs and to be able to truly meet the needs of the clients onwards.

# CHAPTER V DISCUSSION AND RECOMMENDATION

This chapter discusses the research findings and is composed of 4 sections. First is demographic profile summary. Second section is discussion and conclusion of the research. Third is recommendation and practical implementation and the final section contains the recommendation for further research

## 5.1 Demographic Profile Summary

The data was collected though paper-based questionnaire. The total sample size in this study is 154 which 60.4% female and 39.6% of male. 41% of the respondents aged between 55-64 years old, 50-54 years old (37%), and 65 years or older (22%). Majority of the respondents (68.2%) are still working, retired (31.8%). Most respondents are married and still living with spouse (63.6%).

After analyzing specifically for the group that has tendency to stay in senior housing (37%), turned out that people who are married and still living with spouse are the group that has the highest tendency to stay in senior housing (39.8%) when comparing with other groups (39.8%). The service which is the most important for senior housing is 24 medical service, preferred by 66% (102 people), this is because the reason that people want to stay in senior housing is because they need continuous care (66%).

#### **5.2 Discussions and Conclusion**

The results of the analysis indicates that even the majority of the respondents (62.99) do not have tendency to stay in senior housing but the perspective towards the concept of living in senior housing is not negative, as most of the opinion about the senior housing shows people realize the benefits and advantages of living in senior housing. However the main reason that even though they see the benefit and advantage of living

in the senior housing but do not have tendency to stay is because they want to stay close to their families and do not want to move to live separately. The result reflects the character of Asian people whose mainly are collectivist that Collectivistic societies value family cohesion, cooperation, solidarity, and conformity (Skillman, 2000), The results about factors which influence their decision making most if they were to stay in senior housing turn are price, location and reliability of the organization that run the senior housing mainly respectively. All groups of sample in all income range choose price as the most important factor when making decision to stay in senior housing except people who has monthly income above 85,000 baht. The reason that people view price is the most important factor and indicated the acceptable total expense that they are willing to pay is below 1 million baht for the whole length of stay in both rental or buying terms of payment (74% of the respondents choice), could be because most of the respondents do not have plan to stay in senior housing and also want to live with their family, therefore, they could perceive this as an additional expense and as unexpected expense.

When compare with previous research on the perspective of elderly towards senior housing of Chou (2010) studies, which stated that only 20 percent (urban areas) and 17 percent (rural areas) Chinese are willing to live in some kind of seniors housing community and is often perceived as "losing status" for older adults and families in China and that the perspective toward senior housing are changing and becoming more acceptable. This paper has found that the perspective of Thai elderly is different than the Chinese as most of the respondent's answer has shown positive comments and perception towards the concept of living in senior housing as majority of the respondents (59% of total comments about the perspective towards senior housing) reveals Thai elderly see the benefit of senior housing such as continuous care availability and see it as the service that fit with the current social aging trend.

### **5.3** Recommendation and Practical Implementation

From the result, the targeted customer for senior housing is the group who are between 50-54 years old with bachelor degree education level and are married and living with their spouse. Their acceptable cost for senior housing is below 1 million

baht for one time payment for the whole length of stay. The senior housing must provide medical service as it is the most needed facilities and a private space for their family visit as most of them are concerned about staying with their family.

The main reasons why people do not want to stay in senior housing is mainly because they want to stay with their family and think that staying in senior housing has no privacy. Therefore, the senior housing developer must make sure that each unit has a space of their own, not congested and also offer a space for families of the residents to visit, or stay for a short period so that they would not feel lonely. Moreover 30% of the people who responded do not trust about the quality of the service, therefore if the business owner has a strong partnership with the high reputation organization/brand such as well-known hospitals, this would increase the reliability of its senior housing and able to attract the potential customers. Moreover it can also help reduce the medical service cost that the business developer has to be responsible.

As most of the people prefer to buy senior housing unit not to rent or have partial ownership. This is because of their preference of payment that they prefer to have one-time payment for the amount that they know they can afford and do not have to worry about monthly/ongoing payment afterwards. Therefore an organization who wish to run senior housing project should sell the units and also have two types of senior housing which are.

- 1. Independent living type (no 24 medical service or facility on property) for people who want to stay with their family and a smaller unit of this type for people who live with their spouse only or live by themselves.
- 2. Assisted living for people who need medical service OR in a condition that in need of close care.

#### 5.4 Recommendation for Further Research

Further research is needed to accurately estimate the size and timing of market demand. Preferences do not always accurately predict the actual purchase of housing services. Cultural norms, financial constraints, and lack of supply may continue to prevent aging Thais from obtaining the living arrangement and type of housing they prefer. In addition, since the senior housing market in Thailand is very new, the elderly

Thais experience with such service is limited and might not be able to portray the reality of the market.



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# **Appendix A: QUESTIONNAIRE**

## Questionnaire about opinion towards senior housing



This questionnaire is for a partial fulfillment of the requirements for the degree of Master in Management, College of Mahidol University. The objective of this questionnaire is to collect information about perception and requirements for senior housing. Please mark the answer which you think is true or close to your thought or opinion the most.

Question part 1: Personal information
1. Sex
Male Female
2. Age
☐ 50-54 yrs ☐ 55-64 yrs ☐ 65 yrs or more
3. Education
Below Bachelor Degree Bachelor's Degree Master's Degree
☐ Doctor's degree
4. Marital Status
☐ Single/divorced ☐ Married and living with spouse
☐ Married and not living with spouse
5. Employment status
Retired (Skip to question no. 7)
6. Occupation
☐ Government officer ☐ State enterprise officer ☐ Private company employee
☐ Business owner/sellers ☐ Specialized worker ☐ Freelance
Other (Please specify)
7. Average monthly income (THB)
no income Below 10,000 10,001-25,000 25,001-40.00
40,001-55,000 55,001-70,000 70,001-85,000 85,001-100,000
☐ More than100,000

8. Source of income (can answer more than 1)			
Self working Spouse Children/grandchildren			
Rental fee/interest Others			
9. Who do you currently live with (can answer more than 1)			
Family (spouse/children/grandchildren/relatives)			
Others such as care taker, friends, etc.   By yourself			
10. Accommodation type  Condominium Townhouse/apartment House House Other			
11. Residence ownership type			
☐ Rental ☐ Owner ☐ Stay with others (no expense)			
12. Which type of insurance do you have?			
☐ Health/life insurance ☐ Social security ☐ None			
☐ Other			
Question part 2: Perspective towards staying in senior housing			
13. Do you have tendency to stay in senior housing?  per no no			
14. Perspective towards senior housing and the concept of living in senior housing			
15. If you were to stay in senior housing, you would want prefer the one:			
With medical services			
16. If you were to stay in senior housing, which is the factor(s) that are important for your decision making (can choose more than 1)  Want continuous care  Lost of spouse  Want to join new activities/community  Want to join new activities/community  To get close to children or grandchildren  Others (please identify)			

17. Preferred ownership type of senior housing (if stay in senior housing)  Buy  Monthly rental  Yearly rental  Other
18. Acceptable expense to stay in senior housing VS monthly income (inclusive of entrance fee and monthly rental through the end of Below1,000,000
19. What is the reason that would make you feel unsure and not interested to stay in senior housing (can choose more than 1 answer)
No privacy at senior housing
20. Factors to consider when choosing senior housing (Please indicate the factor that is the most important from 1-5, 1 is the most important factor and 5 is the least important factor)
Price
<b>21. Expected facilities at senior housing:</b> Give 1-5, 1 is the facility you need the most and 5 is the facility you want least
☐ 24 hour medical service ☐ recreation activities ☐ Park
☐ Meditation room ☐ Gym/ exercise space ☐ convenient store
☐ Massage ☐ Salon ☐ Karaoke ☐ Swimming Pool
Restaurant Computer room Laundry
Nearby attractions visit Handicraft activities

Thank you so much for your time and useful information



# แบบสำรวจความกิดเห็นเกี่ยวกับสถานพักอาศัยสำหรับผู้สูงอายุ

แบบสอบถามชุดนี้เป็นส่วนหนึ่งของโครงการสาระนิพนธ์ของนักศึกษาปริญญาโท สาขาวิชาการจัดการสุขภาพแบบองค์รวม (หลักสูตร นานาชาติ) มหาวิทยาลัยมหิดล โดยมีวัตถุประสงค์เพื่อศึกษาความคิดเห็นและความต้องการเกี่ยวกับสถานพักอาศัยสำหรับ ผู้สูงอายุ คำขี้แจง โปรดทำเครื่องหมาย (ใส่เครื่องหมายถูก) ในช่องที่ตรงกับความเป็นจริงหรือความคิดเห็นท่านมากที่สุด

ส่วนที่ 1 ข้อมูลส่วนบุคคล
1. เพศ
ชาย หญิง 2. อายุ
□ 50-54 ปี □ 55-64 ปี □ 65 ปี หรือมากกว่า
3. การศึกษา
🗆 ต่ำกว่าระดับ ปริญญาตรี 🗆 ปริญญาตรี 🗆 ปริญญาโท 🗀 ปริญญาเอก
4. สถานภาพสมรส
<ul> <li>โสด / หย่าร้าง</li> <li>สมรส และยังอยู่กับคู่ สมรส</li> <li>สมรส – ไม่ได้อยู่กับคู่สมรส</li> </ul>
5. สถานะการทำงานปัจจุบัน
<ul> <li>แกษียณ (ข้ามไปข้อ 7)</li> <li>ยังทำงานอยู่</li> </ul>
6. ปัจจุบันท่านประกอบอาชีพ  เจ้าหน้าที่ของรัฐ พนักงานรัฐวิสาหกิจ พนักงานเอกชน  ค้าขาย/ธุรกิจส่วนตัว ผู้ประกอบวิชาชีพเฉพาะ รับจ้าง  อื่นๆ (โปรดระบุ)
7. รายได้เฉลี่ยต่อเดือนของท่าน
🗌 ไม่มีรายได้ 🗀 ต่ำกว่า 10,000 🗀 ต่ำกว่า 10,001-25,000 🗀 25,001-40.000
☐ 40,001-55,000 ☐ 55,001-70,000 ☐ 70,001-85,000 ☐ 85,001-100,000
🔲 มากกว่า 100,000
8. แหล่งที่มาของรายได้ (ตอบได้มากกว่า 1 ข้อ)  □ จากการทำงานของตนเอง □ สามี/ภรรยา □ ถูก/หลาน □ ค่าเช่า/ดอกเบี้ย

9. ปัจจุบันท่านพักอาศัยอยู่กับใคร (ตอบได้มากกว่า 1 ข้อ)	
🔲 กรอบครัว สามี/ภรรยา/ลูก/หลาน/ญาติ 🔠 บุคกลอื่น แม่บ้าน / คนดูแล เพื่อน อื่นๆ	
อยู่คนเดียว	
10. ถักษณะที่อยู่อาศัย	
<ul><li>□ คอนโดมิเนียม</li><li>□ ทาวเฮ้าส์/ตึกแถว</li><li>□ บ้าน</li><li>□ อื่นๆ</li></ul>	
11. ลักษณะการเป็นเจ้าของ	
🗌 เช่า 👚 เป็นเจ้าของ 👝 อาศัยอยู่กับผู้อื่น (ไม่มีค่าใช้จ่าย)	
12. ท่านมีประกันสุขภาพแบบใดบ้าง	
<ul><li>ประกันสุขภาพ/ชีวิต</li><li>ประกันสังคม</li><li>ที่ส่</li></ul>	
่ ไม่มี □ อื่นๆ	
13. ท่านมีแนวโน้มที่จะเข้าพักสถานพักอาศัยผู้สูงอายุ หรือไม่	
<ul> <li>15. หากท่านต้องเลือกสถานพักอาศัยผู้สูงอายุ ท่านจะเลือกสถานพักอาศัยผู้สูงอายุที่</li> <li>มีบริการพยาบาล</li> <li>ไม่มีบริการพยาบาล</li> </ul>	
16. หากท่านต้องพักอยู่ในสถานพักอาศัยผู้สูงอายุ เหตุผลใดที่จะทำท่านตัดสินใจในการเข้าพัก (ตอบได้มากกว่า 1 ข้อ)	)
🛘 ต้องการการดูแถที่ต่อเนื่อง 🕒 ไม่สามารถ/ไม่ต้องการ ทำงานบ้าน	
🗆 สูญเสียภรรยา/สามี 🕒 ต้องการทำกิจกรรมหรือพบปะสังคมใหม่ๆ	
🔲 ความอิสระเสรี และการพึ่งพาตนเอง 🔲 อดก่าใช้จ่ายที่อยู่อาศัย	
🗌 เพื่อใกล้ชิดลูก/หลานมากขึ้น 🔲 ความปลอดภัย	
🗆 อื่นๆ	
17. รูปแบบของการเป็นเจ้าของสถานพักอาศัยผู้สูงอายุหากท่านต้องการพักในสถานพักอาศัยผู้สูงอายุ	
☐ ซื้อขาด ☐ เช่ารายเดือน ☐ เช่ารายปี ☐ อื่นๆ (โปรดระบุ)	

18. หากท่านตัดสินใจที่จะเข้าพักในสถานพักอาศัยผู้สูงอายุ รากาที่ท่านกิดว่าพร้อมที่จะจ่ายคือจำนวนเท่าใด (รวมถึง
เงินแรกเข้าและก่าใช้จ่ายรายเดือนตลอดการเข้าอยู่)
ุ ทำกว่า 1,000,000
5,000,001-7,000,000 มากกว่า 7,000,000
19. เหตุผลในข้อใดที่อาจทำให้ท่านไม่สนใจหรือไม่แน่ใจในการเลือกพักในสถานพักอาศัยผู้สูงอายุ
(ตอบได้มากกว่า 1 ข้อ)
🗖 รู้สึกไม่มีความเป็นส่วนตัว 👚 ต้องการพักอาศัยร่วมกันกับลูก/หลาน
🗆 ไม่พร้อม/ไม่ต้องการเสียก่าใช้จ่าย 🕒 ค่านิยมทางสังคมเกี่ยวกับบ้านพักคนสูงอายุ (ไม่น่าอยู่)
🗆 อื่นๆ โปรดระบุ
<ul> <li>20. ปัจจัยในการเลือกเข้าพักหรือเถือกซื้อสถานพักอาศัยผู้สูงอายุ (กรุณาระบุเถขตามระดับกวามต้องการของท่านจาย โ ถึง 5 โดย 1 คือปัจจัยที่ให้ความสำคัญมากที่สุด และ 5 คือปัจจัยที่ให้ความสำคัญน้อยที่สุด)</li> <li>ราคา สถานที่ ความน่าเชื่อถือขององค์กรที่ทำหน้าที่บริหาร</li> <li>จำนวนผู้พักอาศัยของโครงการที่อาศัยอยู่แล้ว</li></ul>
21. บริการใดที่ท่านกาดหวังจากสถานพักอาศัยผู้สูงอายุ กรุณาเลือกเพียง 5 ถำดับเท่านั้น (เรียงถำดับตามระดับความ
ต้องการ 1-5 โดย 1 แสดงถึงบริการที่ท่านต้องการมากที่ฮุด และ 5 คือบริการที่ท่านต้องการน้อยที่ฮุด
🔲 บริการพยาบาล 24 ชม. 🔲 กิจกรรมสันทนาการ 🔲 สวนหย่อม 🔲 ห้องพระ/ทำสมาธิ
🔲 สถานที่ออกกำลังกาย 🔲 ร้านสะดวกซื้อ 🔲 นวดผ่อนคลาย 🔲 ร้านทำผม/ทำเล็บ
🗌 ห้องการาโอเกะ 🔲 สระว่ายน้ำ 🔲 ร้านอาหาร 🔲 ห้องกอมพิวเตอร์
🗌 บริการซัก อบ รีด 👚 ท่องเที่ยวสถานที่ใกล้เคียง 🔲 กิจกรรมงานฝีมือ

ขอขอบพระกุณเป็นอย่างสูง

# **Appendix B: SPSS Result**

Table 1 Demographic information of sample group (n=154)

Demographic	No. of people	Percentage
Sex		
Male	61	39.61
Female	93	60.39
Age	-	
50-54 yrs	57	37.01
55-64 yrs	63	40.91
65 yrs or more	34	22.08
Marital status		
Single/divorced	43	27.92
Married and living with spouse	98	63.64
Married and not living with spouse	13	8.44

Table 2: Income and source of income data (Enabling factors: Income)

Social Structure	No. of people	Percentage
Education	13	
Below Bachelor Degree	88	57.14
Bachelor's Degree	44	28.57
Master's Degree	19	12.34
Doctor's degree	3	1.95
<b>Employment status</b>		
Retired	49	31.82
Still working	105	68.18
Occupation		
Government officer	17	16.19
State enterprise officer	5	4.76
Private company employee	21	20.00

Social Structure	No. of people	Percentage
Business owner/sellers	33	31.43
Specialized worker	6	5.71
Freelance	21	20.00
Other (International Organization officers)	2	1.90

Income / Sourceof Income Monthly	No. of	Percentage
income (Baht)	people	rercentage
No income	8	5.19
Below 10,000 baht	13	8.44
baht 25,000-10,001	37	24.03
baht 40,000-25,001	37	24.03
baht 55,000-40,001	10	6.49
baht 70,000-55,001	14	9.09
baht 85,000-70,001	10	6.49
baht 10 <mark>0,000-85,001</mark>	5	3.25
More than 100,000 baht	20	12.99
No.of source of income	// R	.//
1 6	116	75.32
≥2	38	24.68
Source of income	14	
Self working	120	77.92
Spouse	9	5.84
Children/grandchildren	18	11.69
Rental fee/interest	7	4.55

**Table 3 Enabling Factor (Insurance)** 

Health Insurance	No. of people	Percentage
None	38	24.68
Health/ Life insurance	82	53.25
Social security	23	14.94
Others	11	7.14
Pension (Governemnt officers)	5	3.25
The 30 Baht Health Care Scheme	4	2.60
Government officer wellfare	2	1.30
Total	154	100.00

Table 4 information about accommodation type and structure of living (Need factors: Living Condition)

Living Condition	No. of people	Percentage
Living condition		
Family (spouse/children/grandchildren/relatives)	133	86.36
Others such as care taker, friends, etc.	7	4.55
By themselves	14	9.09
Type of accommodation	9//	
Condominium	5	3.25
Townhouse/apartment	32	20.78
House	117	75.97
Residence ownership type	10	6.49
Rental		
Owner	127	82.47
Live with others (no expense)	17	11.04

Table 5 Tendency to stay in senior housing (Preference to stay in senior housing)

eference to stay in senior housingPr	No. of people	Percentage
Have tendency to stay	57	37.01
Do not have tendency to stay	97	62.99
Total	154	100.00

Table 6 Medical service need if were to stay in senior housing

Medical service need	No. of people	Percentage
Need medical service	151	98.05
Do not need medical service	3	1.95
Total	154	100.00

Table 7 Preferred ownership type if were to stay in senior housing

Ownership type	No. of	Percentage
	people	g.
Buy	67	43.51
Monthly rental	50	32.47
arly rentalYe	29	18.83
Other	8	5.19
- Government should support for the cost as social	3	1.95
welfare		
- Residents pay as much as they could and	3	1.95
government/community pay the rest		
- Trial session before making decision to buy or rent	2	1.30
Total	154	100.00

Table 8 Acceptable cost of living in senior housing (throughout the total length of stay, inclusive of entrance fee and monthly rental)

Amount (Baht)	No. of people	Percentage
Below 1,000,000	114	74.03
1,000,001-3,000,000	35	22.73
300,000,001-5,000,000	2	1.30
5,000,001-7,000,000	1	0.65
More than 7,000,000	2	1.30
Total	154	100.00

Table 9: Factors that would make decision to stay in senior housing

Factor	No. of people	Percentage
Want continuous care	102	66.23
Want to join new activities/community	68	44.16
Security	60	38.96
Freedom and self-reliance	42	27.27
Reduce housing expense	35	22.73
Not able to or don't want to do house chores	30	19.48
Lost of spouse	26	16.88
To get close to children or grandchildren	14	9.09
Others such as lose family members and not	5	3.25
able to live by themselves	7 9	

Table 10: Factors that would make them feel unsure or not want to stay in senior housing

Factor	No. of people	Percentage
Want to stay with family	100	64.94
No privacy at senior housing	73	47.40
Not ready/can't afford for more expense	53	34.42
Social norms about senior housing (not lively)	53	34.42
Other reasons such as not confident in quality,	7	4.55
cleanliness, and security		

Table 11 Data about health/life insurance classified by demographic information

Demographic info	N	lone	Healtl insur		Social s	security	Ot	ther
Sex	.No	%	.No	%	.No	%	.No	%
Male	13	21.31	35	57.38	7	11.48	6	9.84
Female	25	26.88	47	50.54	16	17.20	5	5.38
Age								
50-54	13	22.81	28	49.12	11	19.30	5	8.77
55-64	16	25.40	38	60.32	7	11.11	2	3.17
65 or more	9	26.47	16	47.06	5	14.71	4	11.76
Educational level	1.0	121	7,0	W				
Below bachelor	25	28.41	41	46.59	1.5	17.05	7	7.05
degree	25	28.41	41	46.39	15	17.05	/	7.95
Bachelor degree	10	22.73	25	56.82	7	15.91	2	4.55
Master degree	2	10.53	14	73.68	1	5.26	2	10.53
Doctorate	1	33.33	2	66.67	0	0.00	0	0.00
Marital status		(Š	0000	Ž)				
Single/divorced	15	34.88	18	41.86	7	16.28	3	6.98
Married and living	19	19.39	58	59.18	15	15.31	6	6.12
with spouse		17.37	30	37.10		13.51		0.12
Married and not	4	30.77	6	46.15	1	7.69	2	15.38
living with spouse	)	2 0.77		10.10	~ 1	7.03	_	10.50
Working status	0	200 0	V	41	3'//			
Retired	12	24.49	28	57.14	4	8.16	5	10.20
Still working	26	24.76	54	51.43	19	18.10	6	5.71
Monthly income								
(THB)								
No income	2	25.00	6	75.00	0	0.00	0	0.00
Below 10,000	8	61.54	2	15.38	3	23.08	0	0.00
10,001-25,000	17	45.95	10	27.03	7	18.92	3	8.11
25,001-40,000	3	8.11	21	56.76	6	16.22	7	18.92
40,001-55,000	2	20.00	6	60.00	2	20.00	0	0.00
55,001-70,000	0	0.00	12	85.71	2	14.29	0	0.00
70,001-85,000	1	10.00	7	70.00	2	20.00	0	0.00
85,001-100,000	2	40.00	2	40.00	0	0.00	1	20.00
More than 100,000	3	15.00	16	80.00	1	5.00	0	0.00

Table 12 Tendency to stay in senior housing classified by Predisposing factors (Demographic)

Predisposing factors (Demographic)	Have to	endency	Do not have tendency		
Sex	.No	%	.No	%	
Male	22	36.07	39	63.93	
Female	35	37.63	58	62.37	
Age					
50-54	25	43.86	32	56.14	
55-64	20	31.75	43	68.25	
65 or more	12	35.29	22	64.71	
Marital status					
Single/divorced	15	34.88	28	65.12	
Married and living with spouse	39	39.80	59	60.20	
Married and not living with spouse	3	23.08	10	76.92	

Table 13 Tendency to stay in senior housing classified by Predisposing factors (Social structure)

Predisposing factors (Social Structure)		sing factors Structure)	Have tendency		
Educational level	.No	%	.No	%	
Below bachelor degree	29	32.95	59	67.05	
Bachelor degree	20	45.45	24	54.55	
Master degree	8	42.11	11	57.89	
Doctorate	0	0.00	3	100.00	
Working status					
Retired	19	38.78	30	61.22	
Still working	38	36.19	67	63.81	
Occupation					
Government officer	6	35.29	11	64.71	
State enterprise officer	3	60.00	2	40.00	
Private company employee	11	52.38	10	47.62	
Business owner/sellers	8	24.24	25	75.76	
Specialized worker	1	16.67	5	83.33	
Freelance	9	42.86	12	57.14	
(ernational Organization officersOther (Int	0	0.00	2	100.00	

Table 14 Tendency to stay in senior housing classified by Enabling factors

Enabling factors	Have tendency		Do not have tendency		
Monthly income (THB)	No.	%	No.	%	
No income	3	37.50	5	62.50	
Below 10,000	5	38.46	8	61.54	
10,001-25,000	13	35.14	24	64.86	
25,001-40,000	17	45.95	20	54.05	
40,001-55,000	3	30.00	7	70.00	
55,001-70,000	6	42.86	8	57.14	
70,001-85,000	3	30.00	7	70.00	
85,001-100,000	2	40.00	3	60.00	
More than 100,000	5	25.00	15	75.00	
ranceInsu	à l		- 11		
Health/life insurance	28	34.15	54	65.85	
Social security	11	47.83	12	52.17	
None	13	34.21	25	65.79	
Others	5	45.45	6	54.55	

Table 15 Tendency to stay in senior housing classified by Need factor

Need Factors	Have to	endency	Do not have		
11000 2 001020	Have tendency		tendency		
Living condition	No.	%	No.	%	
Family	50	37.59	83	62.41	
(spouse/children/grandchildren/relatives)					
.Others such as care taker, friends, etc	3	42.86	4	57.14	
By themselves	4	28.57	10	71.43	

Table 16 Preferred ownership type of senior housing classified by Predisposing factors (Demographic)

Demographic info	Bı	uy	Monthl	y rental	Yearly	rental Other		ier
Sex	No.	%	No.	%	No.	%	No.	%
Male	31	50.82	17	27.87	11	18.03	2	3.28
Female	36	38.71	33	35.48	18	19.35	6	6.45
Age								
50-54	27	47.37	15	26.32	13	22.81	2	3.51
55-64	26	41.27	24	38.10	9	14.29	4	6.35
65 or more	14	41.18	11	32.35	7	20.59	2	5.88
Educational level			0 7	11				
Below bachelor	40	45.45	30	34.09	12	13.64	6	6.82
degree	61.				4			
Bachelor degree	14	31.82	15	34.09	13	29.55	2	4.55
Master degree	10	52.63	5	26.32	4	21.05	0	0.00
Doctorate	3	100.00	0	0.00	0	0.00	0	0.00
Marital status	f	3	200			- //		
Single/divorced	20	46.51	14	32.56	5	11.63	4	9.30
Married and living	40	40.82	32	32.65	22	22.45	4	4.08
with spouse		- 57		1		- 11		
Married and not	7	53.85	4	30.77	2	15.38	0	0.00
living with spouse		100	M (C)	2		_ //		
Working status				1 2	7/.5	-//		
Retired	19	38.78	18	36.73	9	18.37	3	6.12
Still working	48	45.71	32	30.48	20	19.05	5	4.76
Monthly income	1	00	U	4 2				
(THB)		7 8	10	0				
No income	10	58.82	3	17.65	3	17.65	1	5.88
Below 10,000	1	20.00	2	40.00	1	20.00	1	20.00
10,001-25,000	7	33.33	9	42.86	4	19.05	1	4.76
25,001-40,000	19	57.58	8	24.24	6	18.18	0	0.00
40,001-55,000	3	50.00	1	16.67	2	33.33	0	0.00
55,001-70,000	8	38.10	7	33.33	4	19.05	2	9.52
70,001-85,000	0	0.00	2	100.00	0	0.00	0	0.00
85,001-100,000	3	60.00	0	0.00	1	20.00	1	20.00
More than 100,000	9	45.00	6	30.00	5	25.00	0	0.00

Table 17 Tendency to stay in senior housing classified by Predisposing factors (Social Structure)

Predisposing factors	Have tendency		Do no	t have
(Social Structure)			tendency	
<b>Educational level</b>	No.	%	No.	%
Below bachelor degree	29	32.95	59	67.05
Bachelor degree	20	45.45	24	54.55
Master degree	8	42.11	11	57.89
Doctorate	0	0.00	3	100.00
Working status	902			
Retired	19	38.78	30	61.22
Still working	38	36.19	67	63.81
Occupation	4			
Government officer	6	35.29	11	64.71
State enterprise officer	3	60.00	2	40.00
Private company employee	11	52.38	10	47.62
Business owner/sellers	8	24.24	25	75.76
Specialized worker	1	16.67	5	83.33
Freelance	9	42.86	12	57.14
Other (International Organization	0	0.00	2	100.00
officers)	でい	H		

Table 18 Tendency to stay in senior housing classified by Enabling factors

Enabling factors	Have tendency		Do not have tendency		
Monthly income (THB)	No.	%	No.	%	
No income	3	37.50	5	62.50	
Below 10,000	5	38.46	8	61.54	
10,001-25,000	13	35.14	24	64.86	
25,001-40,000	17	45.95	20	54.05	
40,001-55,000	3	30.00	7	70.00	
55,001-70,000	6	42.86	8	57.14	

Enabling factors	Have tendency		Do not have tendend	
70,001-85,000	3	30.00	7	70.00
85,001-100,000	2	40.00	3	60.00
More than 100,000	5	25.00	15	75.00
Insurance				
Health/life insurance	28	34.15	54	65.85
Social security	11	47.83	12	52.17
None	13	34.21	25	65.79
Others	5	45.45	6	54.55

Table 19: Tendency to stay in senior housing classified by Need factor

Need Factors	ve tend	lency <mark>H</mark> a	Do not have tendency		
Stay with	No.	%	No.	%	
Family (spouse, children,	50	37.59	83	62.41	
grandchildren, relatives)	N		//		
Others (maid, care taker, friends, etc)	3	42.86	4	57.14	
Alone	4	28.57	10	71.43	

Table 20 Preferred ownership type of senior housing classified by Predisposing factors (demographic)

Demographic	B	uy	Monthl	y rental	Yearly	rental	Oth	er
Sex	.No	%	.No	%	.No	%	.No	%
Male	31	50.82	17	27.87	11	18.03	2	3.28
Female	36	38.71	33	35.48	18	19.35	6	6.45
Age								
50-54	27	47.37	15	26.32	13	22.81	2	3.51
55-64	26	41.27	24	38.10	9	14.29	4	6.35
65 or more	14	41.18	11	32.35	7	20.59	2	5.88
Educational level								
Below bachelor	40	45.45	30	34.09	12	13.64	6	6.82
degree								

Demographic	Bı	uy	Monthl	y rental	Yearly	rental	Ot	her
Bachelor degree	14	31.82	15	34.09	13	29.55	2	4.55
Master degree	10	52.63	5	26.32	4	21.05	0	0.00
Doctorate	3	100.00	0	0.00	0	0.00	0	0.00
Marital status								
Single/divorced	20	46.51	14	32.56	5	11.63	4	9.30
Married and living	40	40.82	32	32.65	22	22.45	4	4.08
with spouse								
Married and not	7	53.85	4	30.77	2	15.38	0	0.00
living with spouse								
Working status			21 11	.0				
Retired	19	38.78	18	36.73	9	18.37	3	6.12
Still working	48	45.71	32	30.48	20	19.05	5	4.76
Monthly income	1./		71		1			
(THB)			A.		11.5	11		
No income	10	58.82	3	17.65	3	17.65	1	5.88
Below 10,000	1	20.00	2	40.00	1	20.00	1	20.00
10,001-25,000	7	33.33	9	42.86	4	19.05	1	4.76
25,001-40,000	19	57.58	8	24.24	6	18.18	0	0.00
40,001-55,000	3	50.00	رار الله	16.67	2	33.33	0	0.00
55,001-70,000	8	38.10	7	33.33	4	19.05	2	9.52
70,001-85,000	0	0.00	2	100.00	0	0.00	0	0.00
85,001-100,000	3	60.00	0	0.00	1	20.00	1	20.00
More than 100,000	9	45.00	6	30.00	5	25.00	0	0.00

Table 21 Expected facilities at senior housing

Expected facility	Weighted score
24 hour medical service	4.06
Recreation activities	1.74
Park	1.66
Meditation room	1.37
Gym/ exercise space	1.25
Convenient store	1.18
Massage	0.98
Salon	0.83

Expected facility	Weighted score
Karaoke	0.51
Swimming pool	0.36
Restaurant	0.34
Computer room	0.32
Laundry	0.18
Nearby attractions visit	0.14
Handicraft activities	0.09

Table 22 Perspective towards senior housing and the concept of staying in senior housing

Perspective about senior housing and feeling about staying in senior housing	No. of people	Percentage
Availability of continuous care and preliminary health	25	30.49
care for elderly people, and high security		
Give opportunity for elderly people to have new	10	12.20
community and not feeling lonely	/ //	
Fit with current situation that most children and	<u>11//</u>	13.41
grandchildren do not have much time to take care of		
elderly people		
No privacy and have to stay with lots of people	3	3.66
Do not trust in quality of service	24	29.27
Senior housing reflects a place of loneliness, emptiness,	4	4.88
and neglected by families		
Will never stay in senior housing	5	6.10
Total	82.00	100.00