FACTORS THAT INFLUENCE THE USAGE OF OUT-OF-HOME ELDERLY PERSONAL ASSISTANT SERVICES IN THAILAND



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Thematic paper entitled

FACTORS THAT INFLUENCE USAGE OF OUT-OF-HOME ELDERLY PERSONAL ASSISTANT SERVICE IN THAILAND

was submitted to the College of Management, Mahidol University for the degree of Master of Management on July 3, 2018

Miss Wipawee Chaiyaphruk
Candidate

Asst. Prof. Randall Shannon,

Ph.D. Advisor

Duangporn Arbhasil,

Ph.D. Dean

College of Management Mahidol University Asst. Prof. Chanin Yoopetch,

Ph.D.

Chairperson

Asst. Prof. Wilert Puriwat,

Ph.D.

Committee member

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Wipawee Chaiyaphruk

THIS THEMATIC PAPER TITLE FACTORS THAT INFLUENCE THE USAGE OF OUT-OF-HOME ELDERLY PERSONAL ASSISTANT SERVICES IN THAILAND

WIPAWEE CHAIYAPHRUK 5849123

M.M. (MARKETING AND MANAGEMENT)

THEMATIC PAPER ADVISORY COMMITTEE: ASST.PROF. WILERT PURIWAT, Ph.D., ASST.PROF. RANDALL SHANNON, Ph.D., ASST.PROF. CHANIN YOOPETCH, Ph.D.

ABSTRACT

The purpose of this thematic paper is to explore unmet needs in ageing parent care, investigate variables that influence usage of Out-of-Home Elderly Personal Assistant Services (EPA), and test the service concept. In-depth interviews and mini focus groups were conducted on 30 respondents between November 2017 and February 2018 to gather information on factors that would influence the usage of the out-of-home elderly personal assistant services, and the likelihood of this service concept being adopted. Data were collected from two groups in the population, 30-60 years old (caretaker) and greater than 60 years (elderly) in Bangkok area.

The study suggested that there are unmet needs in ageing parent care in terms of transportation and in assistance; however, the respondents stated that the degree of the unmet needs is not substantial. Factors that would drive the usage of assistant service are convenience, alternative choice, companionship and elderly empowerment — with adult children being the key decision maker and buyer. The dominant substitution of this service are family members as the sense of filial duty is deeply rooted in Thai culture. This study serves as a preliminary step for future researchers to measure the degree that each factors impact the usage decision. The study can also be expanded through dissecting the age groups of adult children into smaller ones, in order to uncover insights by subgroup.

KEY WORDS: Thailand ageing / elderly care services / elderly personal assistant / elderly personal assistant concept test / usage of elderly assistant

56 pages

CONTENTS

		Page
ACKNOWLE	DGEMENTS	ii
ABSTRACT		iii
LIST OF TAB	BLES	vi
LIST OF FIG	URES	vii
CHAPTER I	INTRODUCTION	1
1.1	Background	1
1.2	Elderly Personal Assistant Service Concept	3
1.3	Rationale for the Study	4
1.4	The Objectives of the Research	5
1.5	Scope of the Study	5
1.6	The Contribution of the Study	6
CHAPTER II	L <mark>ITERATURE REVIEW</mark>	7
2.1	Part One: Background of Ageing Population in Thailand	7
2.2	Importance of Mobility and Transportation to Elderly	11
2.3	Part Two: A Review of Concepts Used in the Research	13
CHAPTER II	METHODOLOGY	17
3.1	Population	17
3.2	Sampling Method	18
3.3	Data Collection	18
3.4	Functional Status Assessment	18
CHAPTER IV	RESULTS	20
4.1	Elderly Daily Life	20
4.2	Unmet Needs	21
4.3	Concept Test and Value of Elderly Personal Assistant Service (El	PA) 27
CHAPTER V	DISCUSSION	41
5.1	Interpretive Summary	41
5.2	Practical Implications and Managerial Implications For Future	
Bus	siness Managers	45

CONTENTS (cont.)

5.3 Limitations and Opportunities	46
5.4 Conclusion	47
APPENDICES	48
Appendix A Population's Demography	49
Appendix B Interview Question Guide	50
REFERENCES	54
BIOGRAPHY	56



LIST OF TABLES

Table		Page
4.1	Top elderly activities at home and out of home	21
4.2	Elderly Self-rated Ability To Perform Daily Routines	26
4.3	Perceived Value of EPA Service	29
4.4	Concerns About EPA	31
4.5	How Much Do You Estimate That The EPA Service Will Cost (Per	33
	Half-Day, Approximately 4 Hours)?	
4.6	How Much Do You Estimate That The EPA Service Will Cost (Per	34
	Half-day, Approximately 4 Hours)? (Thai Baht)	
4.7	Purchaser of EPA Service	35
4.8	What Media/Who Can Influence You To Use The Service	37
4.9	After hearing about the concept (disregard the price at this moment),	39
	if this service was available, how likely are you to use it in the next 6	
	months?	

LIST OF FIGURES

Figure		Page
4.1	Elderly Transport Choices When They Travel Out of Home	23
4.2	Elderly self-rated ability to perform daily routines	26
4.3	Perceived Value of EPA Service	29
4.4	Concerns About EPA	32
4.5	How Much Do You Estimate That The EPA Service Will Cost (Per	33
	Half-day, Approximately 4 Hours)? (Thai Baht)	
4.6	Decision Maker to Purchase EPA Service	34
4.7	Purchaser of EPA Service	35
4.8	What media/who can influence you to use the service	38
4.9	After hearing about the concept (disregard the price at this moment),	39
	if this service was available, how likely are you to use it in the next 6	
	months	
5.1	Key Summary Point of The Study	44

CHAPTER I BACKGROUND

1.1 Background

In recent years, the topic of ageing society is actively being studied from many angles as the post-World War II population boom has begun are now reaching retirement age. To appreciate the significance of the study, "Factors That Influence the Usage of Out-of-Home Elderly Personal Assistant Services in Thailand", it is important to consider the essence of the ageing population phenomenon and elderly living circumstances.

1.1.1 Ageing Society

Becoming an ageing society is a global phenomenon, as many countries are seeing the distribution of age rapidly shifting to a greater proportion of older people in the past several decades. A 'demographic transition' involves a country or society passing from a state of high fertility and high mortality, to a state of low fertility and low mortality (Lee, 2003). According to World Health Organization (2002), the transition is characterized by growing life expectancy, growing population, and shifting in age distribution, from predominately children and young adult, to the one "in which all age groups are represented more equally up to the age of 70-80 years" (p.1). The implication of this new distribution in age group is that the population of older adults has become larger than young adults and children.

While changes in life expectancy and age distribution are the most obvious characteristics of an ageing society, there are other changes that occur simultaneously. According to Lee (2003), "[The changes in age distribution] set in motion in family structure, health, institutions for saving and supporting retirement and even in international flows of people and capital" (p.185). In other words, ageing population transformation does not only reshape population structure, but it also causes changes in

multi-generation livelihood; as well as, changes in resource allocation to labor, healthcare and finance.

The change in population structure are present differently depending on the stage of economic development a country is already in. More economically developed countries have already gone through a significant change in the population over the past century. Developing countries and middle-income countries are experiencing, or about to experience, these demographic transitions in the coming decades (World Health Organization, 2002).

Thailand, a middle-income country, will have aged considerably by 2030, according to World Population Ageing 2015 (2016). The share of population aged 60 years and over in Thailand is projected to "rise from 16 percent to 27 percent between 2015 and 2030" (p.29). This projection highlights a greater importance in preparation to accommodate social change, especially in the family system.

In terms of families, ageing population means longer years of shared lives between generations, the increasing importance of grandparents and other kin in fulfilling family functions (Bengtson, 2001). As the ageing population continues to increase in proportion, the country will soon face a high demand for supporting systems to accommodate health and well-being of the elderly.

1.1.2 Life as an Elderly and the Benefit of an Early Elderly Care Service

Several significant changes happen in the life of a person after they advance into their sixties. For example, elderly after their sixties witness more evidence of ageing than in their previous decade. Downturn in health could be anything from visible aspect (appearance), stamina decline, to chronic health problem (Timmermann, 2016). Many also retire, bringing changes to their social networks and even their social status, which can result in a sense of personal sadness and loss (Timmermann, 2016). They find themselves missing the routine of going places and the social life that being a part of the workforce provides. The changes in lifestyle after leaving the workforce causes them to travel less and can cause stress or depression (Timmermann, 2016).

Loss of physical strength in the elderly limits the distance and extent of willingness to travel. To most people, mobility and convenience of movement contribute

greatly to their quality of life; however, driving or taking public transportation in old age is not always feasible or safe. As a result, the elderly often become more dependent and may request a person accompany them when they need to gain access to local services or go socializing. Services designed to support the elderly should address and accommodate the needs being encountered in this life stage – giving particular attention to the physical and social changes they are certain to experience.

According to studies available and observations by the researcher, the majority of services are designed specifically to assist the elderly after they are already unable to accomplish day-to-day tasks on their own. Many long-term care services are being undertaken in several countries, such as: housekeeping, home-based care, nursing home and day care services. A common trigger point for the usage of these long-term care solutions is the sharp decline in health. However, it may be worthwhile to consider a preventive mechanism that can prolong the social and physical activities of the elderly, and potentially postpone the need for long-term care.

Promoting social engagement in elderly can provide several benefits. For example, in one well-being study from China, engaging frequently in social and entertainment activities is likely to help the elderly have a positive assessment of their own wellbeing. Emotional loneliness has been found to drive the elderly to deteriorating subjective well-being or even suicide in rural areas (Chen, Li, & Chen, 2015).

Taking into account the information presented, the researcher identifies that there could be a need for elderly care services to assist the elderly, in particular services which can help them maintain their out-of-home activities prior to the rapid health decline stage that can leave them bedridden, even possibly delaying the onset of the more severe aspects of this stage.

1.2 Elderly Personal Assistant Service Concept

One service concept being explored is to provide an out-of-home personal assistant service, where the elderly are empowered to maintain their social life and take care of their important engagements. A staff accompanies the elderly along their journey for companionship, assistance, and safety. For example, when the adult children are at

work, the elderly can use the service to go a doctor's appointment, visit relatives and friends, shop, or pick up grandchildren from school. The service would also allow the elderly's adult children feel as though they are providing a better care for their parents, thus helping satisfy their need to fulfill the filial caretaking role.

1.3 Rationale for the Study

As mentioned in the previous section, there is growing social tension due to the strain on resources that will be needed to support the large number of elderly in Thailand in the near future. As elderly continue to age, their lifestyle will dramatically change, as well as, their physical and psychological wellness. From the researcher's observation, many care services offered nowadays are designed for in-home or long-term care. Particularly in Thailand, elderly care is considered a filial duty, which means the role of ageing-parental care falls within a family. However, globalization has driven changes in the workforce and adult children's lifestyle. As both male and female are now present in the workforce, the elderly care either falls upon the spouse or gets left unfulfilled when the children do not reside with them (Knodel & Chayovan, Intergenerational family care for and by older people in Thailand, 2012). The supporting services from non-hospital healthcare institutions is not well-developed, which leaves room for supplementary services to fulfill an unmet need for both elderly and adult children.

From the researcher's perspective, there are very few services in Thailand which are designed specifically to strengthen wellness and improve quality of life in the elderly by means of empowering them to stay productive outside their home. Nor are there easily found services that encourage interactions before an elderly person's health significantly declines. Past studies have shown that social engagement can also help improve quality of life in the elderly. Therefore, there is potential need for an Elderly Personal Assistant service, where the elderly are empowered to remain an active part of society, and the adult children can fulfill their filial duty with minimal interference to their daily lives.

According to the reasons above, the researcher conducted a study on "Factors That Influence the Usage of Out-of-Home Elderly Personal Assistant Services in Thailand" to examine the unmet need in potential users of the service, and factors that influence the usage if the service is launched.

1.4 The Objectives of the Research

- To explore unmet needs in ageing parent care in Thailand
- To investigate variables that influence usage of Out-of-Home Elderly Personal Assistant Services in Thailand
- To test the concept of Out-of-Home Elderly Personal Assistant Services

1.5 Scope of the Study

Through the use of qualitative research, this study explores the factors that influence, or prevent, the usage of an elderly assistant service in Thailand. In addition, the study provides feedback on how potential users perceive the service concept. For the purposes of this research, elderly is defined as being 60 years old or above.

The first group identified for study through this research are people between the ages of 30 years old to 60 years old, with one, or more, living elderly in their family (potential buyers). The rationale being, respondents that fall into this group are expected to already be in the workforce and are likely to have ageing parents. Moreover, studies have shown adult children are the main care-takers of the elderly; therefore, this group represents potential decision makers for this type of service for their family. Additionally, later in life, many of the people falling into this first group will become potential users of this service.

The second group in this study are the elderly, aged above 60 years old, residing in Bangkok. The focus for this group is to explore their current living conditions as elderly, and to review their attitude toward this type of service. The research surveys the possibility of them to self-subscribe to the service, and attempts to identify if there

are any differences in answers between the two groups in terms of who the decision maker and payer of the service is.

1.6 The Contribution of the Study

1.6.1 Government and non-profit institutions

This study offers information about the unmet needs in elderly care found in Thailand, in particular the out-of-home aspect. Therefore, the finding may be useful for government or non-profit institutions for use as a basis to design elderly care programs with features that are desired by the society.

1.6.2 Future elderly care service provider

The results of this study will shed light on the positive and negative variables that influence usage of Elderly Personal Assistant Services. Such insight, combined with how consumers make decisions, will be valuable for future personal assistance service providers in designing their services.

1.6.3 Future Research

The variables found in this study can be beneficial to future researchers for the design of studies to further examine each variable via quantitative methods. Further study will allow future researchers to quantify the degree each variable has on satisfying needs, and lead to acceptance and usage of Out-of-Home Elderly Personal Assistant Services.

CHAPTER II LITERATURE REVIEW

This chapter consists of two parts. Part one provides a background of aging population, potential unmet needs, and the role of inter-generational family care in Thailand. Part two introduces the concept of consumer behavior and the selected qualitative research methodology used in this study. The concept of consumer behavior in this paper focuses on the buying decision process – a broad picture of what influences consumers' purchasing decisions on the adoption of Elderly Personal Assistant services.

2.1 Part One: Background of Ageing Population in Thailand

2.1.1 Ageing Population on the Rise

Thailand has been ageing rapidly. Information from the NSO in recent years reveals the share of population who are older, especially those who are above sixty years old, is rising. To describe the degree of transformation of ageing population in Thailand, the research refers to the UN World Population Statistics and Thailand Development Research Institute Foundation (TDRI). *UN World Population Prospects (2015 Revision)* states that Thailand's median age is predicted to rise from 38 years in 2015 to 44.8 years in 2030. An average number of children (per family) is expected to decline by 6.5% during the same period. In addition, in the past four decades, the increase in life expectancy at birth has risen from 70 to 77 years old (between 1990 - 2030) (p.42-54).

The number of elderly in Thailand is estimated at 11 million people, or 15.8% of Thailand's population (TDRI). By 2035 the proportion of elderly is predicted to double in size; to about 30.4% of Thailand's population (Bhaopichitr, 2017). The survey also shows that women will be holding the majority of the population share, as they tend to have a longer life expectancy (United Nations, 2015). These predictions

imply that in 2035, approximately one out of three people you meet on the street will be an elderly person, and highly likely a woman.

A growing proportion of the population ageing is often considered a challenge, as the social structure shifts and different resources are needed to accommodate it. Nevertheless, this change presents many upcoming opportunities as well. One such opportunity is to tap this consumer segment that is growing in numbers, has leisure time and potential spending power.

This maturing population group contains approximately two million elderly that earn greater than 8,000 baht per month, and one million elderly that have greater than 1 million baht savings (Bhaopichitr, 2017, p.5). The statistics also show that the elderly in Thailand have other sources of income as well. According to Bhaopichitr (2017), "More than a third of elderly's income comes from their children, followed by from work, elderly allowance from government, and pension (Bhaopichitr, 2017, p.8). Though income from other sources are available, in various amounts, this information sheds light on the heavy reliance the elderly have on their adult children.

Another demographic group worth mentioning is referred to as "pre-elderly" (45-59 years old) who will soon become potential users of elderly care services. Unlike the elderly group, the pre-elderly group has a higher portion of singles (unmarried), have fewer children than the previous generation, and many do not own a house. According to Bhaopichitr (2017), "As these households have few children, will rely less on their children, and have increasing number of singles (especially women), non-family daily care and surveillance will be an attractive services when they are old" [sic.](p.23). Family members of the pre-elderly group are not shy to use social media and perform on-line purchases. As Bhaopichitr (2017) added, "Marketing and selling on-line to this group is possible, even when they are older" (Bhaopichitr, 2017, p.23). Therefore, as the number of elderly consumers rises, there will be an increase in demand for products and services that cater to their needs and wants. This is an opportunity for business to capture elderly unmet needs through this age group.

2.1.2 Previous Research on Elderly Daily Living Problems

Prior studies focusing on the out-of-home unmet needs for the elderly are limited. However, there are a few studies that provide information regarding unmet needs. These unmet needs range from insufficient elderly care provided by family members, to the effect on caregivers. The researcher reviewed literature regarding similar services and transportation. The findings on the elderly daily living problems and potential demand for products and services are summarized in the following paragraphs.

To improve the lives of the elderly, it is important to identify their needs, such as: health, safety, independence, mobility and participation. It is also important to recognize the differences between two subgroups within the elderly group; the young-elderly and the elder-elderly (Schultz, André, & Sjøvold, 2016).

The needs for the young-elderly and the elder-elderly are notably different. The young-elderly are mostly concerned "with maintaining their independent lifestyle, having transportation available, needing assistance with groceries, and maintaining their social activities. The type of assistance the young-elderly need is best classified as non-professional assistance" (Schultz, André, & Sjøvold, 2016). Elder-elderly, who are not self-sufficient, require significant assistance given their specific condition and treatments, thus elder-elderly would likely need professional assistance. There presents an opportunity to develop services or technology that assists young-elderly in maintaining their independent lifestyle through transportation.

Thailand National Statistics Organization Thailand's Elderly Survey (2014) identified physical abilities that have become problems to Thai elderly, such as lifting objects (5 kilograms), walking 200-300 meters, taking stairs, taking public transportation alone (e.g., buses and boats), taking medicine correctly and completely, and fallen down incidents. Many respondents, who reported difficulties in performing daily tasks in NSO's survey, stated that such tasks could be completed with an assistance. These findings of unmet needs reinforce the demand for assistance services for elderly, particularly in supporting those activities that fulfill their ability to maintain independence and social activity outside their residence.

Given the previously stated research findings, there appears to be unmet needs in terms of transportation for elderly, assistance in maintaining social activities, and assistance in performing daily tasks out of home. In order to meet the requirements of the growing elderly population, as well as, the demand for assistance, elderly assistance services must gain increased support from across institutions.

2.1.3 The Insufficiency of Family Institution as Caregivers

One model that addresses key institutions that contribute to caregiving is referred to as the "Care Diamond" model. A care diamond consists of families, markets, state, and not-for-profits (Razavi, 2007). According to Knodel & Chayovan (2012) "Thai government has become increasingly proactive in developing plans and programs to deal with health and material needs of older persons, but under the assumption that primary responsibility for long-term care will remain within the family" (p.683). Thus family remains a key part of the overall caretaking of elderly in Thailand.

Similar to many Asian countries, the responsibility for elderly care in Thailand is a filial duty by social contract. Knodel & Chayovan (2012) state that the traditional role was for the youngest child, or the daughter, to start providing care once there was a need for personal care with daily activities (p.685). The level of "assistance depends on the availability of family members, especially those who live in the same household." (Knodel & Chayovan, Inter-generational family care for and by older people in Thailand, 2012, p. 685). The role of familial caretakers falls predominantly on both the adult children and the spouse.

Though the expectation of the institutions for elderly care remains with family members, coresidence with children fell from 77 per cent in 1986 to 59 per cent by 2007 (Knodel & Chayovan, 2012, p. 684-685). This fact indicates that lower percentage of adult children sharing the residence could indicate the lack of assistance that some elderly may need.

The number of adult children influences whether the caretaking role falls more heavily on the adult children themselves, or on the spouse. "For those with only one or two adult children compared to those with four or more, spouses are considerably more likely and children less likely to be the main care provider" (Knodel & Chayovan,

2012, p. 682). Demographic trends place important challenges on Thai society, as the average size of a family continues to decline.

In addition, the distance the nearest adult child lives from the elderly parent also influences the level of need for the assistance service. The higher chance of unmet needs of the elderly shows high correlation with elderly who do not live with an adult child, or have the "nearest child outside the locality" (Knodel & Chayovan, Intergenerational family care for and by older people in Thailand, 2012). The greater the distance of the adult child, the higher dependency the elderly have on their spouse (as high as 48 per cent), as well as, a higher risk of lack of care.

Not only that, ageing parents now live much longer than in the past, but the disruption of traditional forms of caregiving arrangements is also happening through globalization, as well. In previous research by Kittay et. al.(2007), it was found that in a more globalized world such as today, many women are now in the paid workforce, household size declines, and adult children move away from home for employment. Given these facts, there is undoubtedly going to be challenges for family members to fulfill elderly care in the future. According to Kittay et. al. (2007), "Obligations of familial caregivers increasingly need to be supplemented by non-familial caring" (Kittay, Jennings, & Wasunna, 2007). This movement of globalization all affect the demand for service provided by other institution beyond family.

2.2 Importance of Mobility and Transportation to Elderly

Achieving a good quality of life is commonly desired regardless of life stage. According to the study of Quality of Life (QofL) of Elderly: the Transport Dimension (2004), Baniste & Bowling discovered that travel appears to play a significant part in QofL for older people. The QofL for the elderly "can be reconstructed into six main 'Building Blocks' ... 1. Peoples' standards of social comparison and expectations of life; 2. A sense of optimism and belief that 'all will be well in the end'; 3. Having good health and physical functioning; 4. Engaging in a large number of social activities and feeling supported; 5. Living in a neighborhood with good community facilities and services (**including transport**); 6. Feeling safe in one's neighborhood" (Baniste & Bowling,

2004). The emphasis is on the transportation due to "elderly travel more frequently than the past, and access to car/van correlates with more positive result in elderly quality of life" (Baniste & Bowling, 2004).

Baniste & Bowling further elaborated the results from their research:

Transport is vital particularly in terms of getting access to local services and facilities (Building Block 5), and in engaging in social activities (Building Block 4). An increasing amount of this travel is being undertaken by car, and will increase further given the growth in elderly car ownership, health and license ownership. Moreover, transport is reinforced by importance of locality, neighborhood, and social network. These elements support positive quality of life of elderly in terms of availability, trust and engagement and act as barriers to vulnerability and isolation. Three other Building Blocks of QofL relates more to expectation of QofL for individuals, yet should not be underestimated as they provide context within which decisions about when, where and how to travel are taken (p.114).

Another study which supports Baniste & Bowling is Quality of Life and Mobility by Metz (2000). He found that the mobility and elderly quality of life are positively related. Qualitative observations on the benefits of mobility are:

1. Achieve access to desired people and places... 2. Psychological benefits of movement—of "getting out and about..." 3. Exercise benefits..., 4. Involvement in the local community—yielding benefits from informal local support networks. Social activities involving mobility reduce mortality in older people (Glass et al., 1999), 5. Potential travel—knowing that a trip could be made even if not actually undertaken. (Metz, 2000)

In summary, the studies indicate that "mobility and transportation" is an important building block. Mobility leads to positive quality of life and yields positive physical and psychological benefits to the elderly. Even though Metz and Baniste & Bowling did not directly frame their study using the exact term of "transportation need,"

there is enough evidence that this research paper will conclude their findings to support the existence of transportation need in elderly.

2.3 Part Two: A Review of Concepts Used in the Research

2.2.1 Consumer Behavior: How Buyers Make Choices

In order to investigate variables that influence the usage of Out-of-Home Elderly Personal Assistant Services in Thailand, the researcher reviewed the concept of how buyers make choices. The following paragraph is quoted from Strategic Marketing 7th Edition by Cravens & Piercy (2003) to show the process leading to a purchase decision:

Buyers normally follow a decision process. They begin by recognizing a need (Problem Recognition); next, they seek information; then they identify and evaluate alternative products; and purchasing situation. Decisions that are repetitive and for which a buyer has past experience tend to be routine. One part of studying buyers' decision process is finding out what criteria people use in making decisions. For example, how important is the brand name of a product in the purchase decision (p. 93).



Figure 2.1 Diagram of Buying Decision Process

The review revealed that need recognition is only the first step of the purchasing process. There are four more elements that go through the buyers' mind before satisfying buyer's needs. This study will focus on discovering factors which consumers investigate during the pre-purchase period (Fig. 2.1), namely consumer need (problem recognition), source of information for Elderly Personal Assistance Services, and alternative evaluation. The consumer need, the source of information, the perceived value of the service, and alternatives found during the qualitative research will be summarized as factors that influence the usage of out-of-home elderly personal assistant services.

2.2.2 Qualitative Research Methodology

The strength of selecting qualitative research as a methodology is that it enables the researcher to obtain information about intangible factors. Since, this research is designed to discover the needs, or unmet needs, the potential Elderly Personal Assistant Service (EPA) will need to meet, and the factors that influence the acceptance of the service in an in-depth, descriptive manner, qualitative research is the most suitable methodology to answer the set objectives.

There are several common Qualitative Sampling Strategies. According to Qualitative Research: Sampling & Sample Size Considerations, "Whereas quantitative studies strive for random sampling, qualitative studies often use purposeful or criterion-based sampling, that is, a sample that has the characteristics relevant to the research question(s)" (Nastasi). Based on Nastasi's summary, some of the strategies are listed here:

Extreme or Deviant Case Sampling selects outliers of the phenomenon or exotic events or crisis that would contain the most information to answer research question; Intensity Sampling selects by the intensity of the case, rather than the extremity; Maximum Variation Sampling selects a wide diverse range of interests to discovered shared dimensions; Homogeneous Sampling samples from a group of similar backgrounds and experiences – often used to normalize variation, simplify analysis and ease facilitation in a group; Snowball Sampling – identifies the information-rich interview

participant based on nomination of relevant people; Opportunistic Sampling – follows new leads during data collection process, taking advantage of data that is revealing and open to include new useful group into a sampling pool; Purposeful Random Sampling – a type of random sampling, using small sample size from a group that is still too large to handle, aim to achieve credibility not representativeness; Convenience Sampling – selects case based on ease of access; and Combination or Mixed Purposeful Sampling – combines two or more strategies listed above. (Natasi, r.d. 2017)

For this research on *Factors That Influence the Usage of Out-of-Home Elderly Personal Assistant Services in Thailand*, the researcher used "Purposeful Random Sampling." Participants were picked randomly from two categories within the Thai population, working age (30-60 years old) with at least one elderly parent(s) and elderly (over 60+ years old).

While Maximum Variation Sampling would be an alternative sampling method – to identify common patterns among the diverse representation in terms of geography, gender, and income – it is not suitable for this stage of the research. The objective is to first understand the underlying factors in general groups, and testing the EPA service concept, rather than addressing similarities and differences of all the possible variables in the matrix.

2.2.3 Functional Status Measurement

To measure functional status, the question that was asked for both long-term care studies and elderly health assessment studies is "Can you perform these activities on your own?" After that the researcher of previous studies identified variables to be measured. Activities from two previous works, one from Haseen et al. (2010), another from National Statistics Organization Thailand, are cited as examples. Haseen et al. (2010), asked about the following activities in their research:

Four activities of daily lining (ADLs) (eating, getting dressed, bathing/going to the toilet, and sitting) and five instrumental activities of daily living (IADLs) (ability to carry things weighing 5 kilograms, walk 200-300 meters, walk up 2-3 flights of stairs, take a bus/ship alone; and

calculate and use money correctly). (Haseen, Adhikari, & Soonthorndhada, 2010)

Thailand National Statistics Organization Thailand's Elderly Survey (2014) also used a similar measure as Haseen, "lifting objects (5 kilograms), walking 200-300 meters, taking stairs, taking public transportation alone such as buses/boats alone, taking medicine correctly and completely, and fallen down incidents." The measurements from both sources are similar and can be modified for the questionnaire in this research to measure whether the elderly need assistance or not.



CHAPTER III METHODOLOGY

To achieve the objectives stated previously, a description of the research methodology of this study includes research design, population, sampling method, data collection and details of functional assessment modification.

3.1 Population

This research focuses on potential shoppers of Out-of-Home Elderly Personal Assistant services. The sample was divided into two groups with ratio 70:30, based on priority.

The first group, the priority group, focuses on people who are between 30 years old and 60 years old, with at least one living elderly parent (at least 60 years old) at the time of survey administration. The rational for choosing this group are because presumably they are in the workforce and likely to have a parent that is 60 years or older in their care. In many families, adult children are the main caretakers and key decision makers for their parents, and would be the potential buyers of the service. Not only are they the potential service buyers for their parents, this group also has the possibility of using the service themselves as they become older. The first group (30-60 years old) comprises of 22 respondents or 73 percent of the total respondents.

The second group are the elderly, aged above 60 years old, at the time of survey administration in Bangkok. The inclusion of this group is to assess the current need of elderly persons and the possibility of them to self-subscribe to the service. This group is rated a secondary priority, because they are not the key targeted buyer of this EPA service concept. This group comprises of 8 respondents or 27 percent of the total respondents.

In conclusion, the total number of respondents studied in this research is 30 people (n = 30).

3.2 Sampling Method

The researcher used the purposeful random sampling method, in which potential participants were screened by age criteria and asked if they would be willing to complete an interview. The researcher recruited interviewees in public places throughout Bangkok, including: parks, commercial areas, office areas, and colleges.

3.3 Data Collection

Twenty four in depth interview sessions and two mini focus groups (3 people in each group) were conducted in order to gather results between November 2017 and February 2018. Each interview session took approximately 25-40 minutes depending on how much each respondents were willing to share the details. Some of the in depth interviews were conducted via telephone, by appointment, because at the time of recruitment the interviewees did not have the required time to complete an interview session.

The session started with topic and objective of the research, then followed a semi-structured topic guide (Appendix B) which was used as guidance to help structure the overall flow of the interview session. However, the interviewer also allowed respondents to describe the situation or express feelings on the subject that may be out of order without interruptions, to enable a smooth interview session.

3.4 Functional Status Assessment

The guideline includes one question designed to explore unmet needs based on reviewed literature on elderly functionality – diminished functionality could be the variable that drives the need for assistance. In the reviewed literature (topic **2.2.3** Functional status measurement), Haseen et al.(2010)'s work includes a list that is comprised of four activities of daily living and five instrumental activities of daily living that are more extensive. Using Haseen et al.(2010)'s list, the researcher developed the question by combining the list into five distinct activity areas: a.) Walk up and down

stairs, b.) Walk more than 400 meters, c.) Prepare own meals, d.) Do household chores, e.) Take care of own personal hygiene needs, such as bathing and cutting toenails.

The modifications made to Haseen et al.(2010)'s list by the researcher still preserve the essential elements that are needed when travelling out of home, namely the ability to walk up and down stairs and the ability to walk more than 300 meters (adjusted to 400 meters for ease of comparison to a track around a football field). Measurements from Haseen et al.(2010)'s list that were omitted from this question are "ability to take a bus/ship alone," and "calculate and use money correctly." The reason for omitting "ability to take a bus/ship alone" was because the topic of means of transportation is addressed in a separate question, and "calculate and use money correctly" was excluded to keep the list concise.



CHAPTER IV RESULTS

This chapter presents the results of the research in two areas. First, the research clarifies the unmet needs among Thai elderly based on the interview about elderly and caretakers daily life. Second, it attempts to identify factors which could influence the acceptance of Out-of-Home Elderly Personal Assistance and the response on the Elderly Personal Assistant (EPA) concept test.

4.1 Elderly Daily Life

Elderly day in life is expected to be slower-paced than younger generations, yet there are still desires to be social. A typical day in life of surveyed elderly followed this assumption and is summarized in the following paragraphs.

Elderly typically wake up early, prepare a meal, and do small leisure activities, such as spending time with pets or tending the garden in the morning. Then they do small household chores, garden chores or run errands. Some may go out of home to get a newspaper or to get breakfast, and chat with people in the community.

During the day, they find ways to connect with the world in their own way. Majority of the time is spent at home, being active around the house for a period of time. When resting, they watch TV (Soap operas, Korean series, and some hourly news) and take a nap. They send pictures through social media (Line) and watch video clips on YouTube. The elderly in 21 out of 30 interviewed families are active Line users (social media), using them to connect with old friends from high school and college, as well as, to keep in touch with family members.

Elderly do go out of the house during the day. Social elderly would go have lunch with friends and hang out regularly once or twice a month. The surveyed elderly commonly report themselves to do grocery shopping, prepare dinner and chat with spouse or chat with friends. Two of them still work part time during the day, a few times a week. Two of them report that they still help caring for the grandparent generation who are in their late eighties.

Table 4.1 Top elderly activities at home and out of home

Top 5 Activities At Home	Top 5 Activities Out of Home		
Watch TV (entertainment and some news)	Errands i.e. grocery shopping, bank		
Taking care of / play with pets	Visiting friends and relatives		
Gardening	Exercise i.e. running, walking		
Household small chores	Doctor's visit (monthly or bi monthly)		
Prepare meals	Take a trip with friends		

Remark: The information in the table does not specify the percentage of each activities, because the data is aggregated from respondent's answers "Tell me about your elderly day-in-life", which each activities are not meant to be measured in percentage.

On the weekend, the elderly keep a similar routine as weekdays. The weekend activities involving adult children happen weekly or monthly depending on the visitation of adult children, such as going to doctor's appointment or going to the mall. The respondents in both group 30-60 and group 60+ also stated that the elderly in their care (group 30-60) or the elderly themselves (group 60+) "do not need to be taken care of that much yet."

Contrast to many elderly research that were reviewed, elderly who are the subjects of this survey are *perceived* to be independent and still lead many of the decisions in the family. Respondent #2 said, "I feel like elderly are still taking charge, rather than letting the kids take charge in the family." This could be from slowing down in ageing and overall better health compared to elderly in the past, or it could be derived from bias.

4.2 Unmet Needs

4.2.1 Lack of Time to See Elderly

In exploring unmet need, the research surveyed a typical day in life of a caretaker and their living condition. It is expected that the caretaker -- respondent's age between 30-60 years old (Group 30-60) -- would be concerned about not spending enough time with their elderly due to other demands in life. Another assumption is the unmet need in terms of transportation would arise as Group 30-60 are occupied with work and may not be able to fulfill the transportation need of their elderly.

According to the interview session result, group 30-60 can be described as being consumed by work life and family, with little time to spend with their elderly. Most respondents work outside the house in an office or in shops. Those who are single, may work and spend time outside the house meeting friends or exercise after work. For those who are married with kids, their morning consists of dropping the kids off and picking them up in the evening. Family time is limited to a small window in the evening before bed time and weekends. "I get to say hi to my mother in the morning, and my father in the evening, that's it. The rest has to wait until weekends when I can take them to run errands," said respondent #21.

Forty-five percent of the interviewees live in a separate household from their elderly (Table 4), but still care for them by calling and visiting them regularly. The visit routine varies from weekly to monthly depending on the family. "I would like to see them more often. Now I do not visit them every weekend. I must clean and look after my kids on the weekend as well," said respondent #18.

The interview result confirmed that there is an unmet need in terms of frequency of visitation from adult children. This unmet need weighs more as an emotional strain rather than an actual physical strain, as the respondents report elderly to be strong and require little or no assistance, based on the interview question on the ability to perform daily task measurement.

The interview result disconfirmed the need of transportation at this stage as the respondents report themselves to be able to drive or able to get a ride from someone in the family or the community (See Chart 4.2).



Remark: One person can have more than one answer

Figure 4.1 Elderly Transport Choices When They Travel Out of Home

4.2.1.1 Siblings and Family Members Lessen the Unmet Need

Filial duty to care for ageing parents and in-laws is demonstrated strongly in this research's finding, reaffirming the findings from the literature review. However, it is worth mentioning that the responsibility as an elderly caretaker is neither restricted nor is it absolute to one person in a family. The expected result from the interview is that the presence of siblings and spouse, will be a negative factor that restricts the usage of EPA.

Ten out of Twenty-two respondents (45%) reported sharing elderly care responsibilities with other siblings or spouses. Sharing elderly care responsibilities is common among family members to fulfill needs, as they can take turns helping out, such as taking elderly to doctor's appointments.

Contrary to the expectation of the elderly in current generation, respondents in group 30-60, who were single at the time of the interview, reported that they may consider a type of living assistance and elderly personal assistance service. They saw the service's potential to assist them in fulfilling their social needs, as well as, helping

they stay engaged with the community, when they reach their golden age. Given the trend of smaller family sizes, and the rise of unmarried individuals in society, this result confirms the likelihood of this group to use the EPA service in the future.

4.2.2 Transportation

Prior to beginning the qualitative research, the hypothesis was that there is a strong unmet need in terms of transportation. Nevertheless, only a few people in the sessions raised transportation as an issue, unless they were probed further by the interviewer. Four out of thirty respondents (13%) mentioned transportation as an unmet need that they would like to overcome if they had the power to do so. In other words, transportation is not a top-of-mind problem for the elderly or their caretakers.

In terms of transportation preference, the elderly preferred cars (32 responses out of 36 responses) to mass public transportation (4 responses out of 36 responses). Within the group that use cars to travel, the responses were comprised of: elderly drive alone 13 responses, take a taxi alone 6 responses, and drive or ride with companion 13 responses. Most companions (10 responses) are family and friends who gave them a ride, 2 responses for companion riding in the car ride with the elderly as the elderly drives, and 1 response for elderly riding with companion in a taxi.

The elderly prefer driving, because it is convenient to go places by themselves. When asked what their preference is if their primary means of transport is not available, they said to be picked up and dropped off by a friend or adult child. This reinforces that their preference for transportation is riding in a car. Further, respondents stated that buses, and other forms of public transportation, are not convenient and difficult to use. Some examples provided to support this were, long wait times and steps are high, making it difficult to board and exit.

Even though the unmet need of transportation was not robust in the responses, there are indirect benefits that having convenient transportation can unlock. A couple respondents mentioned an unmet need in relation to the elderly's social life, and wish for a social group for elderly within a commutable distance.

Respondent #23 said, "I would want an exercise community or social group (for elderly) that he could go to, since lots of elderly would like to spend time exercising and staying active."

Respondent #8 said, "It would be nice if there was a place (something like a community center) located in a convenient location for him to go to... As a daughter I don't want to have my dad travel the way he does it now... He currently uses multiple public transportation and travels very far to his appointments."

4.2.3 Assistance (Ability to Perform Daily Tasks)

In determining the degree of assistance that the elderly may need, the respondents were asked to rate the ability to perform daily tasks (1 = Able to perform the task with no difficulties, 2 = able to perform with some difficulties, 3 = Need assistance in performing the task, 4 = Unable to do it). The assumption is that the elderly who rate 3 and 4 would be in-need of assistance and more incline to use the elderly personal assistant service. The elderly in the survey rate themselves as 1.5 points on average across all activities. This implies that the majority of the elderly in the interviewed group can perform daily tasks with little or no difficulties. The qualitative result contradicts the expectation of the researcher that there would be a higher number of elderly falling into a rating of 2 or higher.

The percent of respondents rating themselves or their elderly 2 or more are, 36% for walking up and down stairs, 31% for walking 400 m., 35% for household chores, 29% for prepare own meals, and 15% taking care of personal hygiene. It is worth highlighting that the majority of the elderly who have started having difficulties (rating of 2 in their answers), find it difficult particularly walking up and down stairs, or walking 400 m., which are activities that are important for traveling out of home.

The study found the number of activities that require a degree of assistance (rating of 3 or 4 points) to be very small at this stage. The results revealed that the elderly today are quite strong, and though there are some difficulties in performing the daily tasks, they do not have an urgent need for assistance yet.

Table 4.2 Elderly self-rated ability to perform daily routines

Average Score	and down			Prepare own meals	Personal Hygiana
Rated by adult children 30-60	1.50	1.50	1.50	1.56	1.39
Rated by self 60+	1.43	1.25	1.88	1.63	1.13
Total	1.46	1.42	1.59	1.56	1.30

No. of people in each criteria		Walk more than one 400 meters	HH Chores	Prepare own meals	Personal Hygiene
1 = able to do with no difficulties	16	18	17	17	22
2 = able to do with some difficulties	7	6	4	2	1
3 = need assistance in doing the task	1	1	3	3	2
4 = unable to do it (someone else has to do it for them	1	1	2	2	1
Total *not total up to 30 due to N/A	25	26	26	24	26
# of people rate criteria 2 and above	9	8	9	7	4
% of people rate criteria 2 and above	36%	31%	35%	29%	15%



Figure 4.2 Elderly self-rated ability to perform daily routines

4.2.4 Summary of Unmet Needs

To summarize the first part of this chapter regarding unmet needs, the interview revealed that elderly live simply, yet they still require social activities and travel regularly. Unmet needs and factors that could potentially influence the use of elderly assistance can be observed from the interview. The predominant unmet need

recalled by caretakers is lacking time to see their elderly family member, which is more related to emotional caring. An unmet need is transportation exists, but is weak and only recalled when probed by interviewer, since most of them can conveniently access transportation. Traveling in a car is the preferred means of transportation, compared to mass public transportation, which is achieved by driving themselves or getting rides from friends and family. Self-rated ability to perform daily tasks is low, indicating only slight difficulties, if any, and for an overwhelming majority, not to the point of needing assistance to perform them.

4.3 Concept Test and Value of Elderly Personal Assistant Service (EPA)

The EPA service aims to provide value to both caretakers and the elderly alike. The concept (found below) was read to respondents and followed by open ended questions to assess how they felt about the service, both positively and negatively.

Elderly Personal Assistance (EPA) Concept:

"Elderly Personal Assistant Service (EPA) is a service that helps you and your parents increase quality of life and have less worries. The service offers an out-of-home companion with transportation service. Make an appointment through a call center, website or app, and our well trained assistant will pick your parent up right at your front door and bring them home after the errands.

How does it work: Start by creating an account with us, with information about your elderly (gender, allergies, special requirements, wheel chair), then select the time slot you would like to use the service during 24 hours in advance, get confirmed via SMS. Then on the appointment date, we will pick your parent up, send you a notification through smartphone with staff contact phone no., name, and ID. Then we share location once we have arrived at each area, so you can follow where we are. Now, you never have to worry that mom or dad will be bored at home or miss a doctor appointment because you are not available. Don't worry about them falling while no

one is around. Or have to carry all the groceries when shopping alone. Leave it to us to help them stay social and active in society."

The responses can be grouped into six values: elderly empowerment, having another option/alternative, convenience, companionship, emergency and safety.

Elderly Empowerment - grouped comments of elderly who like the fact that they or other elderly in the society are enabled to use it to travel out of home. For example, Respondent #26 reported that, he likes everything about this concept, because it enables the elderly to do what they cannot do themselves.

Having Another Option/Alternative – grouped comments of those who value the service, because it gives them more options of transportation (more choices are better than fewer choices). This can be linked to the psychological effect of *Potential Travel* — knowing the trip could be taken even if not actually taken (Baniste & Bowling, 2004).

<u>Convenience</u> – grouped respondents who appreciated the ability to complete the trip without waiting until their adult children or relatives are available to take them. Respondent #22 reported that it would assist him in caring for his parents, and making it more convenient to plan things if he is unavailable.

<u>Companionship</u> – grouped respondents who appreciate companionship aspect when traveling outside the house.

<u>Emergency</u> – respondents value the service, because they foresee the usage in case of emergency or unplanned event that cause caretakers to be unable to travel to appointments with the elderly.

<u>Safety</u> – respondents value the safety aspect of having someone taking elderly out of home and traveling together with them.

The results are shown in the table below.

Table 4.3 Perceived Value of EPA Service

	30-60 (22)	60+ (8)
Elderly Empowerment	N/A	3
Serve as Another Option/Alternative	7	N/A
Convenience	8	1
Companionship	6	2
Emergency	1	N/A
Safety	N/A	1

Remark: The percentages do not add up to 100% due to some respondents declining the possibility of using the service, and could not name a value.

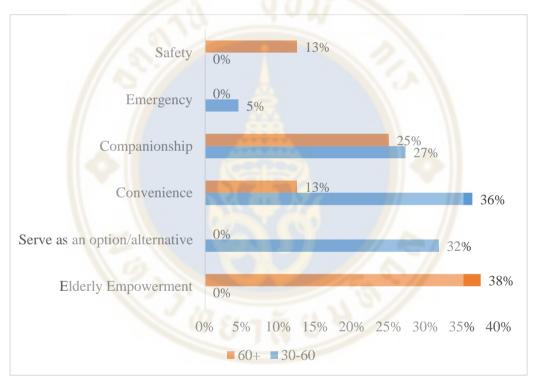


Figure 4.3 Perceived Value of EPA Service

The top three positive feedback from 30-60 group are convenience, 36%; option/alternative, 32%; and companionship, 27%. Group 60+ value EPA service for empowering them to travel as they need, 38%; companionship, 25%; and the convenience of using the service and safety, 13% each.

The results show that the younger group (30-60) value convenience and gaining an additional choice to care for their elderly. The elderly themselves value the empowerment this service provides the most. The companionship is ranked among the

top 3 for both 30-60 and 60+ group, indicating that having someone to travel with the elderly is also crucial for this service, and helps differentiate from other existing means of transportation.

4.3.1 Concerns

In addition to the value that the respondents see in the EPA service, they also have a high level of concern, namely: cost of the service, quality of service, hurting the elderly's feelings, safety and trustworthiness of the service.

<u>Cost of the Service</u> – respondents perceived the service to be priced very high.

<u>Quality of Service</u>- respondents worry that the service provider will not be able to provide the same quality of care compared to the family. For example:

<u>Respondent #15</u>: Although (adult children) aren't professionally trained for this type of care, I still feel worried that the service provider cannot do a good job compared to the adult children.

<u>Respondent #19</u>: It is difficult to trust (that they can do a good job). It's like leaving your child at a nursery. If the elderly need to use the restroom, can they (EPA) do the job as well as the adult kids?

<u>Respondent #22</u>: As elderly physical and mental health conditions vary, I am not certain that EPA can serve elderly at the right condition. When there are many people using the service, is there enough staff training? Would the quality still be good?

<u>Respondent #17</u>: We know best how our parents are (both health condition and personality). Some elderly can control themselves better than others. Some are more difficult – *limited edition*, I may say. I am worried for the service provider that they cannot handle challenging elderly.

<u>Hurting Elderly's Feeling</u> – respondents worry that the elderly would feel hurt, if the caretaker uses the EPA service. On the opposite end of feeling empowered, some elderly could perceive that the caretaker does not want to care for them, and feel abandoned.

<u>Safety</u> – respondents are concerned about the safety of the elderly, if a person they do not know comes and picks the elderly up, as well as, the safety of elderly along the journey outside the house.

<u>Respondent #7</u> – How can I be confident that the person who takes care of him is mature enough to take care of my parent, especially out of home? It's not someone in the family...I'd rather wait and take care of him myself...I have a baby myself. Even as a mom, I was in a near miss situation many times. (If the service is) in home I feel that I have more control. There is more risk factors out of home, i.e. there is more risk to be approached by bad guys. If someone knows of EPA service, it could be a target because they know we can afford the service. Someone could distract EPA person and take the elderly.

<u>Respondent #22</u> – There must be a background check. I worry if they would get robbed instead (by an EPA staff or an imitator).

<u>Trustworthiness of the Service</u> – respondents are concerned about trustworthiness in terms of reliability and credibility of the service.

<u>Respondent #14</u> – I don't know if it is reliable, if it is a different assistant every time. I would not want to change the staff if I found one my parents like and can be trusted.

<u>Respondent #28</u> – Fame of the company and trustworthiness of the provider is what I am concerned with. The company and brand must be recognized by respectable institutions and well known to make me trust the service.

Table 4.4 Concerns about EPA

	30-60	60+
Cost (perceived to be good and expensive)	8	2
Quality of Service	6	3
Hurt Elderly's Feeling	4	1
Safety (worried about being harmed)*	4	2
Trustworthiness (worried about being tricked)*	2	2

Remark: Each respondent was allowed more than one answer

^{*} Researcher's comment: Low in percentage but appear very important to respondents

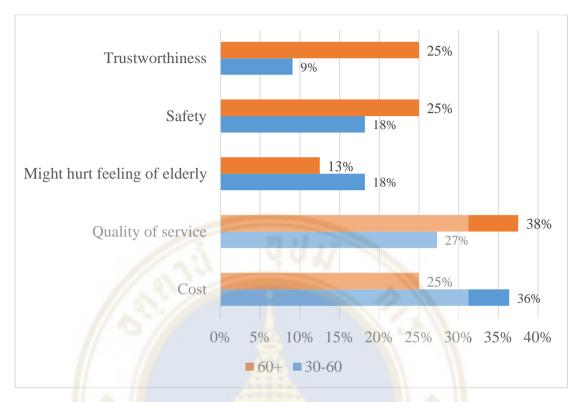


Figure 4.4 Concerns About EPA

Top concerns for age 30-60 are cost 8 responses and quality of service 6 responses. Many respondents expressed their concern that "elderly can be difficult to handle at times. How can I be sure that the person can take care of my parent(s) the way they like and need?" In both 30-60 and 60+ group, the majority of the respondents expressed doubt that this service would become a necessity, which matched with the high answers that they liked it for the "convenience," but are concerned about the high cost of service.

4.3.2 Price Perception of the Service

Based on the read concept, the respondents were asked to estimate how much the EPA service will cost. This cost would be for the entire service per one usage, including both transportation and the assistant. To normalize the answers for comparison, the researcher asked respondents to judge it based on a use per day (8 hours) or half-day (4 hours) basis. If the respondents gave a price per day, the researcher divided in half. Responses summarized in the table below.

Table 4.5 How Much Do You Estimate That The EPA Service Will Cost (Per Half-Day, Approximately 4 Hours)?

	No. of respondent		
Cost of Service (Thai Baht)	30-60 (21) 60+ (7)		
500-1,499	7	7	
1,500-3,000	13	0	
More than 3,000	1	0	

Remark: There are 2 respondents (1 person from each group) who were not interested and not willing to estimate the range of price, and are excluded from the total of each group.

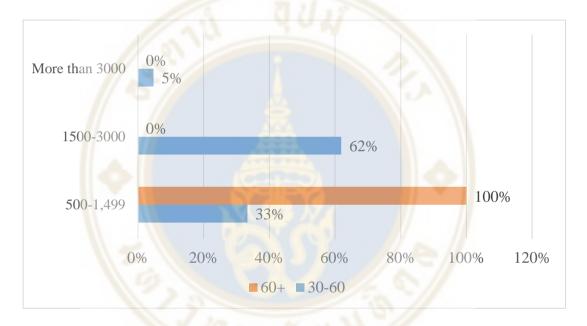


Figure 4.5 How Much Do You Estimate That The EPA Service Will Cost (Per Half-day, Approximately 4 Hours)? (Thai Baht)

There is a difference between the two groups. Sixty-two percent of the 30-60 group expected the service to cost between 1,500-3,000 Baht, and thirty-three percent estimated it would cost between 500-1,499 Baht. The elderly in the 60+ group had a much lower price perception. Everyone who estimated the price in the 60+ group expected to pay <u>less</u> than 1,500 Baht (six out of seven people did not expect the price to exceed 800 Baht).

4.3.3 Decision maker and buyer of the service

As part of the concept test, the respondents were asked who would be the decision maker and who would be the payer of the service.

Table 4.6 Decision Maker to Purchase EPA Service

	No. of an	No. of answer		
Who decides?	30-60	60+		
Adult Children	14	4		
Elderly	7	2		
Discuss and decide together	1	2		

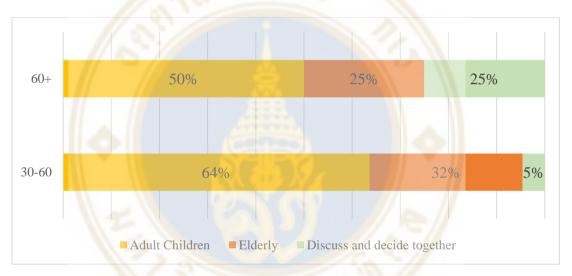


Figure 4.6 Decision Maker to Purchase EPA Service

The results show that both the 30-60 group and the 60+ group lean towards the adult children (64% in the 30-60 group, and 50% in 60+ group) as the decision maker to use this service. The reason given for the adult children as decision makers is that if the adult children cannot take the parents out-of-home, they should be the one initiating the use of this service, because they are the ones knowing they are unavailable. Another important detail worth mentioning is that though many respondents report that the adult children should take the lead in making the decision, having the parent's consent would be necessary in some families.

Table 4.7 Purchaser of I	EPA Service
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Purchaser of this service				
	Perce	entage	No. of	answer
Who pays?	30-60	60+	30-60	60+
Adult Children	82%	63%	18	5
Elderly	14%	0%	3	0
The person who booked the service pays for it	0%	25%	0	2
Both help each other	4%	13%	1	1

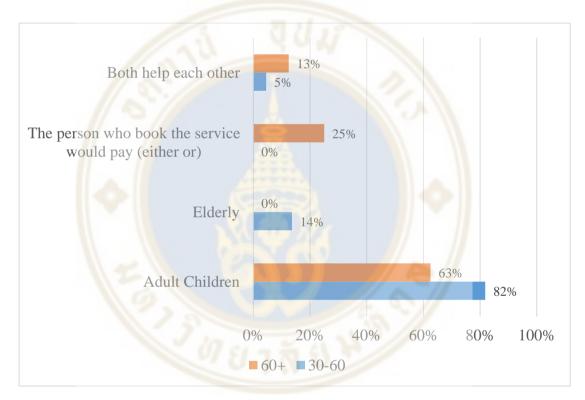


Figure 4.7 Purchaser of EPA Service

The purchaser of the service can be categorized into four types: adult children, the elderly, the person who booked the service, and both elderly and caretaker contribute together. The majority of respondents in both the 30-60 and the 60+ groups believed the adult children should be responsible for payment of the service.

The difference between people in the 30-60 group and the 60+ is that there are 14% of the respondents who feel that the elderly should pay for the service, whereas none of the elderly (60+) think that they should pay for EPA service themselves. One

fourth of the 60+ group believed that the person who booked the service should be the one responsible for the expense, and 13% are open to helping the adult children pay for the service.

In summary, adult children and elderly both have potential to be the decision maker of using the EPA service. The majority of respondents in both groups believed that the adult children would be the main decision maker, and the main payer, of the EPA service. The tendency that the elderly participated in the decision making process is smaller in both groups. The elderly do not expect to be the key buyer of the service, but some would be willing to pay for the service if they booked it themselves. Some of the respondents also stated that both the elderly and the adult children would be contributing to paying for the service together.

4.3.4 Factors that influence awareness and acceptance of the service

Referring to the purchase decision process, after the need is recognized, the crucial next step is information searching. The respondents were asked to think about how they would find out about EPA. Who or what might be able to influence them to use the service and why?

The majority of respondents in both groups reported "word-of-mouth" to be the strongest source of influence in knowing about and accepting the EPA service. Knowing of this service from friends and family whom they trust came out strongly as a key source of information. Second, the certification and endorsement from a respectable organization was indicated as a source of information that could help them become aware and trust the service. Hospitals are a vital institution that respondents named as a trusted organization, and very relevant to the groups, because they have the need to visit them often.

Advertisements on TV can both negatively and positively impact the acceptance of EPA. Respondents in the group 60+ still view TV advertisements as a source of information that they can trust; however, respondents in the 30-60 group voice out strongly (without being probed) that they do not trust TV advertisements. The sample size for TV ads – both positive and negative – is low, and it is worth exploring

the level of impact TV ads have on these two groups in future research, especially the distrust among the main target group (30-60).

Table 4.8 What Media/Who Can Influence You To Use The Service

Media	No. of answers		
Meuia	30-60	60+	Total
Word-of-Mouth from friends or family	15	7	22
Certified by respectable organization (e.g. Government, hospital, police)	9	0	9
See someone use it (influencer)	5	0	5
Free Trial	2	2	4
Trust TV Commercial	0	2	2
Distrust TV Commercial	2	0	2

Remark: Each respondent was allowed more than one answer.

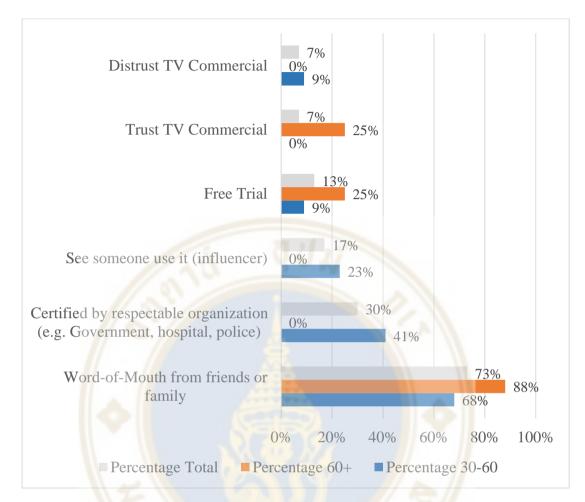


Figure 4.8 What Media/who Can Influence You To Use The Service

4.3.5 Substitution

After a need is recognized and the information is searched, buyers will also go through a list of substitutions before making a purchase decision. In this research, possible substitutions are the existing options that the caretakers and elderly have for the elderly to travel out of home (Table 4.2).

Family members are the first, and the strongest option, for substituting the elderly personal assistant service. One of the respondents shared that, "My mom has 11 siblings, and I have 2 siblings. It is likely that the relatives will serve that role instead of 'other people.'" A few other respondents also shared a similar story. Some indicated that their parents would feel that nothing could substitute the traveling assistance provided by sons and daughters, and would forego the trip just to wait for the children

to be available. Respondent #18 shared the hierarchy of options as follows: 1) go alone, 2) with son, 3) with daughter, 4) taxi, 5) with EPA and 6) not going out.

Despite the strong negative factors that would influence the subjects to not use EPA, approximately one-third of respondents in the 30-60 group could see themselves using it in the future. Given recent demographic trends and the current marriage status of respondents, most of them may not have a family to care for them when they reach old age.

4.3.6 Acceptance of EPA Service

The respondents were asked whether they would purchase this service in the next six months. The hypothesis of the researcher was that there would be a high number of respondents who want to use this service. However, three-fourths of the respondents declined the service.

Table 4.10 After hearing about the concept (disregard the price at this moment), if this service was available, how likely are you to use it in the next 6 months?

	No. of respondent		
	30-60	60+	
Yes	6	2	
No	16	6	
Total	22	8	

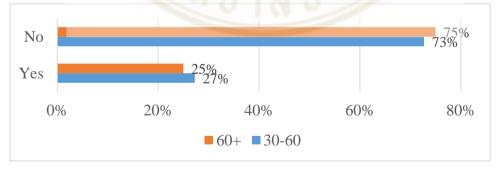


Figure 4.9 After hearing about the concept (disregard the price at this moment), if this service was available, how likely are you to use it in the next 6 months?

The key reason for not using the EPA service within 6 months if it was available, is that the service is viewed as a convenience, not a necessity. The good news is that

about half of the 30-60 group that said "no," would consider using the service for themselves as they get older.



CHAPTER V DISCUSSION

5.1 Interpretive Summary

The results show that Thailand is facing unmet need in elderly care. In regard to caretakers, being unable to be present for the elderly due to their busy working life and having families of their own, has put an emotional strain on them. For the elderly, there are unmet needs in transportation and assistance; however, the degree of the unmet needs is not substantial. The research found through a self-rate survey that the elderly studied in this research have the ability to perform daily tasks quite well at an average score of 1.5 out of 4 (1 = Able to perform the task with no difficulties, 4 = Unable to perform the tasks). It was also found that the elderly who have children or siblings are less likely to be in need of transportation.

The elderly in this research appear to have adapted to the current available transportation options well. Many elderly still drive themselves or take a taxi, while many receive a ride from friends or family members, as it is a comfortable means of transportation. Only a few of the elderly in the research take mass public transportation to get to their appointments.

The EPA concept was presented to the respondents to gain feedback on a service concept – the out-of-home elderly care via personal assistant service. The key focus of the research is the group aged 30-60, who are the key decision makers, and potential users of the service in the future. The group aged 60+ was interviewed to gain insights on today's elderly.

To adult children, group 30-60, the EPA service answered their need for convenience. The service grants the adult children ease of planning and managing their schedules without feeling guilty about an inability to take the elderly to their desired places. Another two values to group 30-60 are, additional choices of elderly care for them to choose from and companionship that the assistant provides to the elderly.

To the elderly group 60+, EPA grants them transportation empowerment, companionship and convenience. The elderly stated that they like the concept, because they can use the service on demand without having to wait for someone to take them. They also value having an assistant travel together with them, giving them a sense of companionship.

EPA presents a great amount of concerns to respondents, as well. The cost of service ranks as the largest concern for the group aged 30-60, which coincides with the expectation of this group being the potential payer for the service. The other main concern is in regard to the quality of service. Some of the respondents doubt the quality of service performed by the EPA service provider, comparing the EPA service to the care the elderly would have received from their family members. The experience of the caretaker, and the knowledge of the elderly's preferences, are crucial to the quality of service in the adult children's opinion. The adult children, who are currently caretakers, compare the feeling of using the EPA service to sending a child to a nursery, where the parents would always worry about the quality of care and safety. Another concern of the adult children is in regards to how their elderly parents will react if they use the EPA service. Some of the current caretakers believe that if they use this service, it could hurt their elderly's feelings, because the elderly could feel abandoned.

Furthermore, some caretakers in group 30-60 extended concern for the service provider. These concerns stem from the knowledge as caretakers that the elderly can be challenging to handle. Possibly, causing the assistants so much trouble that the service provider could have trouble retaining the assistants. Another scenario would be when the elderly and the assistant get along well. In such case, the customer would request the same assistant regularly. This in turn, could cause lower service satisfaction if the assistant is not available, or the service user could stop using the service if the assistant leaves the company.

The older group 60+'s concerns are similar to the younger group, with the highest percentage on the quality of the service. Cost, safety and trustworthiness were also mentioned equally frequently as their concerns, though it is from a limited sample size. As for the cost, the elderly 60+ viewed it as a barrier, and would only use it if they

had a need. One respondent mentioned that she thought this service would be a perfect fit for her ex-boss, who is a retired CEO and could afford it.

Affordability is one of the major factors that would drive usage of the EPA service. The cost of service estimated by the respondents, based on the information presented about the service as a concept, varied from 500 Baht to more than 3,000 Baht. There are differences between the two groups for the estimated cost of the EPA service. 62% of the 30-60 group estimated it to be between 1,500-3,000 Baht. While 100% of the group 60+, that provided a response, perceived the cost to be between 500-1,499 Baht. In fact, six out of seven people from the group 60+, estimated it to be less than 800 Baht. It is possible that the estimated price for elderly respondents were lower due to their price reference may be dated, and not kept up with the inflations. These results provide valuable implications to how the services will need to be marketed and will be discussed in detail further below in the practical implications section.

In terms of the decision making process, the research tracked who would be the key person to identify the unmet needs, seek information and compare among substitutes. Based on the interviews of both groups, the lead decision maker, and payer for the service, would be the adult children. The likelihood that the elderly participated in the decision making process is minor. The elderly do not expect to be the key buyer of the service; however, some elderly would be willing to pay for service they initiated themselves. Some families that have both elderly and adult children contributing to expenses in the house together, would also pay for the service together.

Once adult children recognize an unmet need in elderly transportation, they would seek information, and listen to recommendations, through their network of trusted friends and family. Certifications and free trials would also help influence the usage of the service. A free trial would increase confidence from having experienced the service, and lessen the concerns related to safety and quality. Hospitals are significant in terms of relevance to the elderly's day-in-life, and as such, a trusted institution for information and recommendations. The research also found that the group 30-60 do not trust TV advertisements, suggesting that they would not seek for or trust information from this source during their decision making process.

With all the values and concerns recognized, about 75% of the respondents indicated that they would not use the EPA service within the next 6 months. As previously mentioned, the key value in group 30-60 is convenience, which presumably could be outweighed by concerns in quality and affordability.

An additional point of view from the interviewee group 60+ is worth discussing. One respondent stated that elderly who are old, and not very healthy, would not want to go anywhere unless it is necessary. They would ask themselves whether this "going out of the house" or "going shopping" is that important. They have to "save" themselves [from a chance of accidents]. In other words, she felt that some elderly would choose to forgo a trip out of the house rather than seeking options to go out. Another dilemma is that if the elderly are strong, they would want to commute by themselves; however, if the elderly are not strong, they would want their family to assist them rather than other people. This view presents a challenge for the EPA service due to a small window for need. If the elderly are in good health, they tend to be independent and have less need (only a convenience rather than a need). However, once the elderly are in need of assistance, and become more dependent, their need to travel would also diminish.

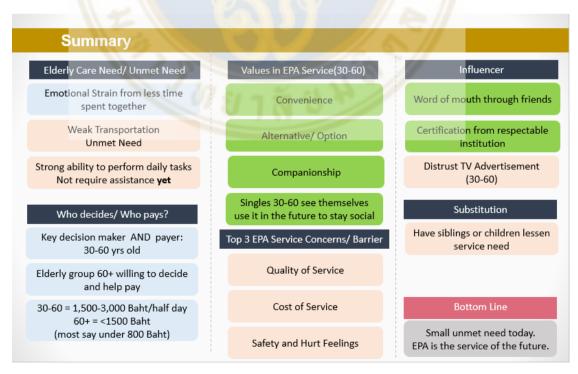


Figure 5.1 Key Summary Point of The Study

5.2 Practical Implications and Managerial Implications For Future Business Managers

This research on out-of-home assistant service for elderly shows unmet needs that could be fulfilled by institutions or the private sector as Thailand continues to age. It provides some initial indicators of key target groups, benefits, concerns to overcome, media preferences and potential substitutions.

The outcome suggests that, to be successful the EPA service will need to be marketed to the adult children as the key decision makers and payers of the service. Their filial role is clearly defined as care takers, yet there are some gaps in terms of expectation to fulfill this duty that EPA could enable. If the service is presented as an alternative choice to better fulfill adult children's filial role, in a more convenient and professional manner, it can allow them to handle their own daily demands while not having to worry about not caring for or meeting the needs of their elderly parents.

The touch point that would influence the usage would be through word-of-mouth, via their family and friends. The service should be very cautious to advertise on mass media, like television, as it could yield a less trustworthy message to potential users.

The key concern for the respondents in this study is that the service would be priced beyond their affordability. The outcome of the study shows that the majority estimate the price level to be less than 3,000 Baht per half day trip. It is important to note though, this does not mean the willingness to pay or that affordability would be the same as that amount.

One option that the service provider could take into consideration, is to lower the price to shoppers. One recommendation to achieve this would be for the service provider to find a partner to help support the discount. Insurance providers could potentially be a good partner, since having an assistant go with the elderly would help them remain an active member of society and delay becoming bed-ridden. In addition, it could lower the probability of them getting into an accident or suffering a fall incident. Another partnership that the EPA service provider could establish is the partnership with a hospital group, as the elderly often need to visit hospitals on a regular basis.

The EPA service could also be seen as a valuable benefit to top management of a company, who own busy schedules. The company could support them by including this service in their benefit package. This way, the employee can feel as though they are still fulfilling some/most of their filial duty to their ageing parent, even though they sacrifice much of their family time to be at work.

Another option that the service provider could explore is to design the EPA service into multiple packages, based on the elderly level of need and the skill of the assistant required. For example, one of the respondents said that the package could start from basic assistants who are patient, understand elderly psychology, have professional elderly care training and first aid knowledge; and then advanced assistants would be able to take care for more special needs conditions, as well as, being able to provide suggestions for the places that they can take the elderly to. This way the service is optimized based on the requirement of the customer and can offer lower prices for people with fewer needs. Furthermore, it would also help in recruiting and training assistants to have specializations that match elderly needs.

5.3 Limitations and Opportunities

The primary purpose of this study was to discover factors that influence the acceptance of an out-of-home elderly personal assistant service, so the researcher chose to use the qualitative method to find consumer insights rather than attempt to quantify the significance of each factor. Future researchers could strive to clarify to what degree each factor has in the decision making process. One such method could be to conduct quantitative research using scaled questions to measure the importance of each value to respondents. For example, based on a scale from 1 to 4, how significant is each variable to your decision.

Another area that future researchers could improve upon this research is to break down age group into smaller ranges. For example, between 30-39, 40-49 and 50-59. By dissecting population into smaller groups, there may be unique insights from each group which could be useful in developing the product or communication based on different needs in each life-stage.

One limitation of this research that is worth noting is that it may have urban and healthy bias, because the researcher recruited respondents in Bangkok. Their responses may not reflect the views of the rural population, or overall population, very well. Future researchers could collect samples in different regions of the country to represent the population in other provinces. In addition, since respondents were sought in public places, this means the elderly encountered were healthy enough to be out and active. Future studies could use other methods to find participants, so not to exclude elderly that are less active or healthy, for example, teaming with a clinic to survey during routine/annual check-ups.

5.4 Conclusion

There are unmet needs in ageing parent care in terms of transportation and in assistance in Thailand, which can be addressed through an out-of-home elderly personal assistant service (EPA). This research identified that the value of EPA service i.e. convenience, alternative choice, companionship and elderly empowerment are the main factors that can influence the usage of this service. The potential development of this service should target adult children, who are the main buyers and decision makers in most families. The need for the EPA service (through a concept test) was not a strong one, measuring from the respondents' low intention to use the service. Cost of the service is one of the key barriers that must be overcome, because it is what most respondents are concerned about. It is worth exploring a different tier of service and charge at different prices, or exploring a partnership with health institution such as hospitals.

Nonetheless, this is just one approach to examining this problem; there may be other, much better approaches that can be undertaken to explore unmet need and ways to fulfill the out-of-home elderly care in Thailand. The researcher hope that this research serves as a starting point for other relevant studies to explore out-of-home services for elderly in Thailand.



APPENDIX A POPULATION'S DEMOGRAPHY

Respondent Demography by Gender and Group

Respondent Gender	30-60	60+	Total
M	9	3	12
F	13	5	18
Total	22	8	30

Respondent Demography by Marital Status

	AVA 110		
Marital Status	30-60	60+	Total
Single	14	1	15
Married with Kids	5	5	10
Married	3	0	3
Widowed/Divorced with Kids	0	2	2
Widowed/Divorced no Kids	0	0	0
Total	22	8	30

Average Age of Respondents

Average Age	30-60	60+
Respondent's Age	37	67
30-60's Elderly Age	68	

Elderly Living in the Same Household as Adult Children

Living in the same household as elderly?	30-60	% of Column
YES	10	45%
NO	12	55%

APPENDIX B INTERVIEW QUESTION GUIDE

ชื่อ	อายุ
สัญขาติไร	ทย () ใช่ () ไม่ใช่
มีผู้สูงอายุ	ในบ้านที่อายุมากกว่า 60 ปี+ () ใช่ () ไม่ใช่
ความสัมา	พันธ์ของผู้สูงอายุ ()
Interviev	v Questions Guidelines
Part1 Re	spondent General Information
1.	เพศ ()ชาย()หญิง
2.	อายุ <mark>อยู่</mark> ในช่วง () <mark>30-6</mark> 0ปี, ()มากกว่า 60
3.	การ <mark>ศึ</mark> กษา: () ม <mark>ัธยม</mark> หรือต่ำกว่า () ปริญญา <mark>ตรี, () สูงกว่</mark> าปริญญาตรี
4.	สถานะ: () โสด () แต่งงานแล้วไม่มีบุ <mark>ตร () แต่งงานแล</mark> ะมีบุตร () อื่นๆ
5.	จำนวนพี่น้อง (ไม่ <mark>ร</mark> วมตัวเอง)
Part2 Int	t <mark>erv</mark> iew Questions Gu <mark>ide</mark>
1.	ช่วยเล่ <mark>าว่า</mark> ตอ <mark>นนี้ทำงานอะไร (ทำงาน / เกษียณ/ งานพิเศษ)</mark>
2.	ช่วยเล่าเกี่ <mark>ยวกับชีวิตประจำวัน ตื่นมาเช้าถึงยี่นท<mark>ำอะ</mark>ไร<mark>บ้าง</mark></mark>
3.	ครอบครัวที่มีกี่คนอยู่บ้านเดียวกันกี่คน
4.	ในบ้านเดียวกันมีใครบ้าง
5.	ใครเป็นผู้ดูแลผู้สูงอายุเป็นหลัก
[จากข้อ <i>ร</i>] กิจวัตรของ <u>ผู้ดูแล/ลูก/หลาน</u> ในแต่ละวันเป็นอย่างไรบ้าง
	ันบ่ายเย็น
	ตย์

7. ท่านมีกิจกรรมเข้าสังคมอะไรบ้าง (เช่นไปทานข้าวกับเพื่อน ออกกำลังกาย ไปเที่ยว)? กิจกรรมอะไร ทำกับใคร และบ่อย

แค่ใหน

8.	ท่านใช้โซเชียลมีเคีย (Social Media) หรือไม่		
	ใช้แอพอะไร บ่อยแค่ไหน		
9.	ท่านมีกิจวัตร <u>นอกข้าน</u> ที่ต้องไป เป็นประจำหรือไม่ (เช่น โรงพยาบาล)		
	ทำอะไรบ่อยแก่ไหน		
	เดินทางอย่างไร		
10.	ท่านเดินทางอย่างไรหากไม่สามารถเดินทางโดยวิธีดังข้อ 9 ได้		
11.	เวล <mark>า</mark> เดินทางท่านเดิ <mark>น</mark> ทางไปคนเดียวหรือไม่		
12.	ท่าน <mark>ด้</mark> องไปหาหม <mark>อเพื่อตรวจสุขภาพเป็นประจำหรือไม่</mark>		
13.	ท่านขับรถได้หรือไม่		
	ถ้าใค้ ท่านยังขับรถเป็นประจำหรือไม่ เพราะอะไร		
14.	ท่านสามารถทำกิจกรรมตามข้อด้านล่างได้เป็นอย่างไร (1 ทำได้ไม่มีความยากลำบากใดๆ, 2 ได้ แต่อาจมีติดขัด หรือไม่		
	สะควกเล็กน้อย, 3 ทำได้เมื่อมีคนช่วย, 4 ทำไม่ได้) เดินขึ้นลงบันไดบ้าน หรือสำนักงาน		
	เคนขนลงบน เคบาน หรอสานกงาน เคินมากกว่า 400 เมตร		
	เพนม เกา ว่า 400 เมหา ดูแลเรื่องการเตรียมอาหารเอง		
	ดูแลบ้าน ทำงานบ้าน		
	·		
	ดูแลความสะอาดตัวเอง (เช่น อาบน้ำ ก้มตัดเลี้บ)		

15. ถ้าท่านสามารถนำเสนอโครงการหรือบริการหนึ่งอย่าง เพื่อพัฒนาคุณภาพผู้สูงอายุในประเทศไทย ท่านจะเสนออะไร กรุณาอธิบายรายละเอียดโดยสังเขป

ต่อไป จะเป็นตัวอย่างแนวคิดโครงการบริการผู้สูงอายุ กรุณาอ่านข้อความรายละเอียดแนวคิดโครงการแล้วตอบคำถาม ด้านล่าง

"บริการเพื่อนผู้สูงอายุนอกบ้าน (EPA) เป็นโครงการเพื่อพัฒนาคุณภาพชีวิตของผู้สูงอายุให้สามารถใช้ชีวิต มีอิสระใน การเดินทางได้ โดยไม่ต้องกังวล. โดยเรามีบริการเพื่อนผู้สูงอายุที่ไปเป็นเพื่อน พร้อมไปรับไปส่งถึงที่ ในยามที่ท่าน หรือผู้สูงอายุที่ท่านดูแลอยู่จำเป็นต้องไปทำธุระนอกบ้าน แต่ไม่มีเพื่อนไปด้วย มีความกังวลว่าจะล้ม หรือหลงทาง หรือ กังวลความไม่แน่นอนของบริการสาธารณะ เพียงโทรนัคหมายผ่านคอลเซ็นเตอร์ website หรือ แอพ แล้วพนักงานผู้ ได้รับการอบรมอย่างดียิ่งจะมารับท่านถึงหน้าบ้าน และพามาส่งถึงที่เมื่อทำธุระเสร็จ

เริ่มต้นโดยการลงทะเบียนกับเรา พร้อมบอกรายละเอียดของผู้สูงอายุ ทั้งข้อมูลทั่วไป และข้อมูลเฉพาะ เช่นเรื่อการแพ้ หรือ ยาที่ต้องทาน หรือต้องการให้มารับพร้อมรถเข็น, จากนั้นเลือกวันเวลาที่ท่านต้องการใช้บริการล่วงหน้าอย่างน้อย 24 ชั่วโมง , ท่านจะได้รับ SMS ยืนยัน จากนั้นเมื่อถึงเวลานัดหมาย พนักงานผู้ได้รับการอบรมอย่างดียิ่งจะมารับ โดย ส่งข้อกวามยืนยันเช็กอินผ่านแอพเมื่อมาถึง พร้อมรายละเอียดพนักงานที่มารับ (รูปชื่อ เบอร์ติดต่อ รหัสพนักงาน) เพื่อให้ท่านอุ่นใจ. เรามีการแชร์locationตลอดเพื่อให้สามารถติดตามได้ว่าอยู่ที่ไหน เพียงเท่านี้ก็หมดกังวลว่าจะต้องผิด นัดหมอ หรือทนเบื่ออยู่บ้าน เพียงเพราะไม่มีกนพาไป หมดกังวลเรื่องการล้มนอกบ้านโดยไม่มีใครอยู่ หรือต้องแบก ของหนักเองเวลาออกไปซื้อของ. ไว้ใจบริการนี้ให้ช่วยให้ผู้สูงอายุสนุกกับการใช้ชีวิตในสังคม มีอิสระและคุณภาพชีวิต ที่ดีขึ้น"

- หลังอ่านแนวคิดนี้ ท่านชอบด้านไหนของบริการที่สุด
- หลังอ่านแนวคิดนี้ ท่านกังวลเรื่องใดที่สุด?
- 18. หลังอ่านแนวคิดนี้ ท่านให้คุณค่ารายละเอียดบริการเรื่องใดที่สุด? (เช่น มีคนไปเป็นเพื่อน, สามารถติดตามlocationได้, การ ของล่วงหน้าได้ เป็นต้น)
- 19. ใคร หรือ อะไรจะส่งผลให้ท่านอยากลองใช้บริการนี้ (เช่น เพื่อนแนะนำมา, บริการลองใช้ฟรี, มีโฆษณาทางทีวี เป็นต้น)
- 20. หากมีบริการนี้ ใครเป็นผู้ตัดสินใจใช้บริการ (ตัวผู้สูงอายุเรียกใช้เองยามต้องการ หรือผู้ดูแลเรียกใช้ยามต้องการ)?
- 21. ใครเป็นผู้จ่ายค่าบริการ (ตัวผู้สูงอายุหรือผู้ดูแล)?
- 22. คิดว่าบริการดังข้างต้นจะราคาประมาณเท่าไหร่ต่อครั้ง (ครั้งละสี่ชั่วโมง ราคารวมค่าบริการพนักงานแลรถรับส่ง)
- 23. กิดว่าบริการดังข้างต้นเป็นรายเดือนจะราคาประมาณเท่าใหร่ต่อเดือน (เดือนนึงได้ครั้งละสี่ครั้ง ราคารวมค่าบริการ พนักงานแลรถรับส่ง)

- 24. โดยไม่คำนึงถึงปัจจัยด้านราคา ท่านคิดว่า, ถ้ามีบริการนี้เกิดขึ้น ท่านจะใช้หรือไม่ใน6เดือนข้างหน้า เพราะอะไร
- 25. ปัจจัยหลักที่ทำให้ท่านเชื่อถือ หรือไม่เชื่อถือบริการเพื่อผู้สูงอายุนี้คืออะไร กรุณาอธิบายรายละเอียคโดยสังเขป?



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