Factors in selecting the elderly nursing home for the in Mueang Khon Kaen District, Khon Kaen Province

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Abstract: This research investigates the attitude and marketing mix in the decision making of elderly nursing home selection and study of factors affecting the selection of elderly nursing home in Mueang Khon Kaen District, Khon Kaen Province. This research is quantitative research that used convenience sampling. The questionnaire was used as the tool to collect data from 400 respondents. The questionnaire had Cronbach's alpha at 0.948. The statistically were analyzed by mean, standard deviation and multiple linear regression.

The results demonstrated that: factors of attitude and marketing mix in deciding to choose an elderly nursing home in Mueang Khon Kaen District, Khon Kaen Province, found that attitudes towards using the services of an elderly nursing home were at the highest level of opinion. The marketing mix in deciding to choose an elderly nursing home was at the highest level of importance, and the decision to choose an elderly nursing home was at the highest level of opinion. Factors affecting the choice of elderly nursing homes in Mueang Khon Kaen District, Khon Kaen Province, found that attitude, in behavior, and understanding aspects had statistically significant influence on the choice of elderly nursing homes at a level of 0.05. Marketing mix factors in terms of product, place, and people had statistically significant influence on the choice of elderly nursing homes at a level of 0.05.

Keywords: Attitude, Marketing Mix Factors, Elderly Nursing Home

1. Introduction

An Aged Society is defined as a society in which the proportion of the population aged 60 years or older exceeds 10%, or where those aged 65 and older make up more than 7% of the total population (Ronnarong, 2023)[1]. According to the World Population Data Sheet 2023 by the Population Reference Bureau (PRB), the global population is steadily aging. The current world population of 8 billion is projected to reach 9.8 billion by 2050. Meanwhile in Southeast Asia, Thailand ranks as the second-largest aged society, with 14% of its population aged 65 or older, following Singapore at 17% (World Population Data Sheet, 2023)[2]. It is projected that by 2033, Thailand will become a super-aged society, with the proportion of people aged 60 and older expected to rise to 28% or nearly one-fourth of the total population. (Office of the National Economic and Social Development Council, 2023)[3].

The rapid emergence of an aged society significantly impacts both economic and social development. As elderly individuals often experience declining health, disabilities, or illnesses, they tend to rely heavily on government welfare and healthcare services. In many cases, family members are unable to provide the necessary care due to time, resources, or lack of medical knowledge. This has led to an increasing demand for professional healthcare services, particularly from private providers, which are often more accessible (Rupawichet, 2023)[4]. Consequently, there is a growing trend in healthcare services and business models that focus specifically on elderly care. This includes services that provide not only medical support but also affective and social engagement, especially for elderly individuals who are sick, isolated, or without guardians. These services often aim to reduce stress through recreational or therapeutic activities. In provinces like Khon Kaen, such facilities remain limited, creating a gap in the market and an opportunity for investment in elderly care businesses.

Khon Kaen province is the central of the northeastern region and has the third-highest population in Thailand. The province is also experiencing the transition into an aged society, as the proportion of people aged 60 or older has exceeded 10% of the total population. In 2024, the elderly population increased by 24.79%, rising from 282,266 to 352,231 individuals (The Bureau of Registration Administration, 2025)[5]. This trend is expected to continue increasing steadily in the coming years.

With the transition into an aging society, the elderly have become a group that requires increased assistance. Healthcare and medical services are provided by both the public sector (such as public hospitals and community health promotion hospitals) and the private sector (such as private hospitals and clinics), offering a variety of healthcare options. In addition, elderly nursing home that provide dedicated care for the elderly have become another type of healthcare service that is experiencing a continuous rise in demand.

From the preliminary data search on elderly nursing home in Khon Kaen province, it was found that there are a total of nine facilities, including: Khonkaen Nursing Home, KhonKaen Homecare, Baansanrak, Halfway House Nursing Home, Smile Care Nursing Home, Saint Joseph's Nursing Home, Ease Living Nursing Home, Lake House Homecare, and Ban Arromdee Homecare. This indicates a potential opportunity for new entrepreneurs to enter the elderly care business in the province. To support business development and improve medical and healthcare services for the elderly, a study on the factors influencing the selection of elderly nursing home should be conducted.

Based on the background and significance of the study, this research emphasizes the importance of examining the factors influencing the selection of elderly nursing home in Khon Kaen Province. The findings aim to support and enhance the development of healthcare and medical services that are suitable for elderly care in the future. Additionally, the research can serve as a foundation for business planning and investment opportunities in the elderly care sector.

2. Research objectives

1. To study the factors, attitudes, and marketing mix affecting the selection of elderly nursing home in Mueang Khon Kaen District, Khon Kaen Province.

2. To study factors influencing the selection of elderly nursing home in Mueang Khon Kaen district, Khon Kaen province.

3. Literature Review

The research is based on two main theories, which include: 1) attitude, 2) marketing mix factors, and 3) decision making process.

3.1 Attitude

Attitudes are evaluations of people, objects, or issues. Attitudes are stored in memory and are activated when an event or event occurs. Attitudes are evaluations that are based on feelings, emotions, and preferences rather than on information or benefits (Solomon, 2018)[6]. Structural model of attitudes had 3 components were behavioral, affective, and cognitive (Funk, Alexandris & McDonald, 2016)[7].

3.2 Marketing Mix Factors

The service marketing mix as a marketing variable that is internal to the organization and can be controlled by the organization. It is a marketing activity that is used as a common tool in developing the service marketing mix. The service marketing mix had 7 components were product, price, place, promotion, process, people, and physical evidence (Wilson, Zeithaml & Bitner, 2016)

3.3 Decision Making Process

Decision-making as choosing process to do something specific from among the available options. The decision-making process is a sequence of steps in consumer decision-making with a process sequence of 5 steps were problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior (Kotler & Keller, 2016)[9].
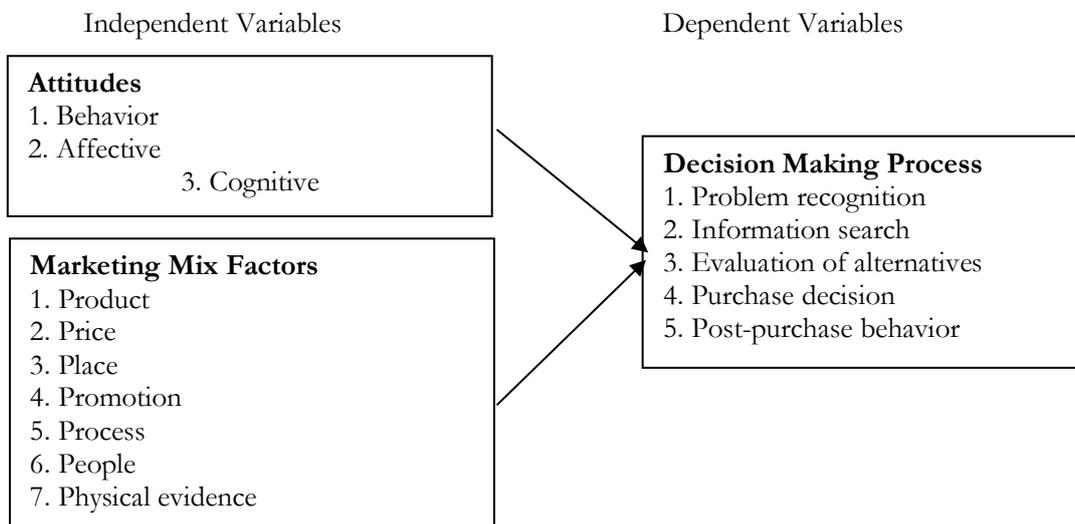
4. Framework

Independent Variables   Dependent Variables

Attitudes
1. Behavior
2. Affective
   3. Cognitive

Decision Making Process
1. Problem recognition
2. Information search
3. Evaluation of alternatives
4. Purchase decision
5. Post-purchase behavior

Marketing Mix Factors
1. Product
2. Price
3. Place
4. Promotion
5. Process
6. People
7. Physical evidence

Figure 1: **Framework**

5. Research Methodology

5.1 Population and Sample

The population consists of individuals residing in Mueang District, Khon Kaen Province, who have elderly family members aged 60 years or older. The exact population size is unknown.

Since the population size is unknown, the sample size was determined using Cochran's formula (Cochran, 1977)[10] with a 95% confidence level and a 5% margin of error, resulting in a sample size of 384. To prevent errors in calculation, data was collected from 400 participants. The sampling method used was convenience sampling.

5.2 Research Instruments

The researcher used a questionnaire as the research instrument. The questionnaire consisted of closed-ended questions divided into four sections as follows:

Section 1 General information about the respondents.

Section 2 Attitudes toward the use of elderly nursing home, containing 15 items covering behavioral, affective, and cognitive aspects.

Section 3 The marketing mix factors influencing the selection of elderly nursing home, including product, price, place, promotion, process, people, and physical evidence, with a total of 36 items.

Section 4 The decision-making process for the selection of elderly nursing home, including problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior, comprising 15 items.

The items in Sections 2 to 4 were measured using a 5-point rating scale indicating levels of opinion and importance: least, low, moderate, high, and highest. The rating scale was divided into 5 levels to the mean score form 4.21-5.00 as highest, 3.41-4.20 as high, 2.61-3.40 as moderate, 1.81-2.60 as low and 1.00-1.80 as lowest.

The questionnaire's reliability was tested using a tryout with 30 samples. The overall Cronbach's alpha coefficient for the entire questionnaire was 0.948, which is higher than the acceptable threshold of 0.8 (Sekaran & Bougie, 2020)[11]. This indicates that the questionnaire is of good quality and suitable for data collection in this study.

5.3 Data Collection

The researcher conducted the data collection process using the following steps:

The questionnaires were distributed to a sample group consisting of individuals residing in Mueang District, Khon Kaen Province, who had at least one elderly family member aged 60 years or older living in the same household. The researcher distributed printed questionnaires to 200 participants in person at markets and shopping malls within Mueang Khon Kaen District, allowing respondents to complete the questionnaires by themselves. In addition, 200 online questionnaires were distributed via Google Forms. Data collection was conducted during May 2025 and took place over a period of one month. The collected questionnaires were checked for accuracy and completeness. The validated data were then analyzed using statistical software.

5.4 Data Analysis

After completing the data collection process, the data were analyzed using the statistical software SPSS Version 29, licensed by Khon Kaen University. The analysis employed the following statistical methods: mean, standard deviation, and multiple regression analysis.

6. Result

6.1 The sample's general personal

General information from the respondents indicates that the majority were female, aged 41–50 years, held a bachelor's degree, and worked in private business or trade. Most had a monthly income between 30,001–40,000 baht, and their relationship to the elderly person was primarily that of a child of the elderly.

6.2 Attitudinal factors toward the selection of elderly nursing home

Attitudinal factors toward the selection of elderly nursing home in Mueang Khon Kaen District were found to be at a highest level of agreement (Table 1).

Table 1: The level of attitudinal factors toward the selection of elderly care facilities

Attitudinal	$\overline{X}$	S.D.	Interpretation
Behavior	4.34	0.51	highest
Affective	4.33	0.56	highest
Cognitive	4.29	0.56	highest
Total	**4.32**	**0.54**	**highest**

6.3 Marketing mix factors influencing the selection of elderly nursing home

Marketing mix factors influencing the selection of elderly nursing home in the same area were also rated at a highest level of importance by respondents (Table 2).

Table 2: The level of marketing mix factors influencing the selection of elderly care facilities

Marketing mix factors	$\overline{X}$	S.D.	Interpretation
Product	4.33	0.49	highest
Price	4.31	0.55	highest
Place	4.36	0.51	highest
Promotion	4.37	0.45	highest
Process	4.45	0.44	highest
People	4.42	0.44	highest
Physical evidence	4.40	0.41	highest
Total	**4.38**	**0.47**	**highest**

6.4 The decision-making regarding the selection of elderly nursing home

The level of decision-making regarding the selection of elderly nursing home in Mueang Khon Kaen District was likewise found to be at a highest level among respondents (Table 3).

Table 3: The level of decision-making regarding the selection of elderly care facilities

Decision Making Process	$\overline{X}$	S.D.	Interpretation
Problem recognition	4.31	0.59	highest
Information search	4.24	0.70	highest
Evaluation of alternatives	4.31	0.69	highest
Purchase decision	4.37	0.69	highest
Post-purchase behavior	4.44	0.67	highest
Total	**4.32**	**0.62**	highest

6.5 Factors influencing the selection of elderly nursing home

The factors influencing the selection of elderly nursing home in Mueang Khon Kaen District, Khon Kaen Province, are as follows (Tables 4 and 5).

Table 4: The attitude factors influencing the selection of elderly care facilities

Independent Variables	b	SE	β	t	Sig.	Tolerance	VIF
(Constant)	2.365	0.260		9.110	0.000		
Behavior (X_1)	0.287	0.091	0.237	3.145	0.002*	0.387	2.585
Affective (X_2)	-0.019	0.098	-0.017	-0.195	0.845	0.280	3.573
Cognitive (X_3)	0.186	0.085	0.168	2.200	0.028*	0.377	2.649

F	= 19.384		p-value	= 0.000*
R	= 0.716		Adjusted R^2	= 0.52
R^2	= 0.513		SE	= 0.57944
Durbin-Watson	= 1.854			

Note: * significant at 0.05 level

According to Table 4, the F-value was 19.384 (p-value < 0.001), indicating that at least one attitudinal factor significantly influences the selection of elderly nursing home. The independent variables were found to be correlated with the dependent variable, but did not exhibit multicollinearity, as the Variance Inflation Factor (VIF) values ranged from 2.585 to 3.573, which are below the critical threshold of 10. Therefore, multicollinearity was not a concern (Black, 2016: 157). Based on the multiple regression analysis using the Enter method, it was found that behavioral attitude (t = 3.145, p = 0.002) and understanding (t = 2.200, p = 0.028) had a statistically significant influence on the selection of elderly nursing home at the 0.05 significance level (p < 0.05). However, affective attitude (t = -0.195, p = 0.845) did not have a significant influence (p > 0.05). Therefore, the

unstandardized regression coefficients can be used to construct a predictive equation for the selection of elderly nursing home (Y), as follows.

$$Y = 2.365 + 0.287X_1{}^* - 0.019X_2 + 0.186\ X_3{}^*$$

Based on the unstandardized regression equation, it can be interpreted that behavioral attitude (X1) and understanding (X3) factors can predict the selection of elderly nursing home in Mueang Khon Kaen District, Khon Kaen Province, by 51.3% ($R^2 = 0.513$).

Table 5: The marketing mix factors influencing the selection of elderly care facilities

Independent Variables	b	SE	β	t	Sig.	Tolerance	VIF
(Constant)	2.656	0.375		7.080	0.000		
Product (P$_1$)	0.333	0.108	0.274	3.081	0.002*	0.347	2.885
Price (P$_2$)	-0.004	0.096	-0.004	-0.041	0.967	0.296	3.375
Place (P$_2$)	0.208	0.101	0.164	2.053	0.041*	0.280	3.574
Promotion (P$_4$)	-0.059	0.083	-0.043	-0.709	0.479	0.597	1.676
Process (P$_5$)	0.165	0.093	0.117	2.575	0.027*	0.506	1.977
People (P$_6$)	-0.008	0.110	-0.006	-0.077	0.939	0.364	2.745
Physical evidence (P$_7$)	0.083	0.100	0.056	0.828	0.408	0.488	2.050
F	= 32.117			p-value		= 0.000*	
R	= 0.726			Adjusted R²		= 0.511	
R²	= 0.527			SE		= 0.57674	
Durbin-Watson	= 1.880						

Note: * significant at 0.05 level

According to Table 5, the F-value was 32.117 (p-value < 0.001), indicating that at least one marketing mix factor significantly influences the selection of elderly nursing home. The independent variables were correlated with the dependent variable without exhibiting multicollinearity, as the Variance Inflation Factor (VIF) ranged from 1.676 to 3.574, which is below the acceptable threshold of 10. Therefore, multicollinearity was not an issue (Black, 2016: 157). Based on the multiple regression analysis using the Enter method, it was found that the marketing mix factors of product (t = 3.081, p = 0.002), place (t = 2.053, p = 0.041), and process (t = 2.575, p = 0.027) had a statistically significant influence on the selection of elderly nursing home at the 0.05 significance level. Meanwhile, the marketing mix factors of price (t = -0.041, p = 0.967), promotion (t = -0.709, p = 0.479), personnel (t = -0.077, p = 0.939), and physical evidence (t = 0.828, p = 0.408) were found to have no significant effect (p > 0.05). Therefore, the unstandardized regression coefficients can be used to construct a predictive equation for the selection of elderly nursing home (Y), as follows:

$$Y = 2.656 + 0.333P_1{}^* - 0.004P_2 + 0.208P_3{}^* - 0.059P_4 + 0.165P_5{}^* - 0.008P_6 + 0.083P_7$$

Based on the unstandardized regression equation, it can be interpreted that the marketing mix factors of product (P1), place (P3), and process (P5) can predict the selection of elderly nursing home in Mueang Khon Kaen District, Khon Kaen Province, by 52.7% ($R^2 = 0.527$).

7. Conclusion

The attitudes towards using the services of an elderly nursing home were at the highest level of opinion. The marketing mix in deciding to choose an elderly nursing home was at the highest level of importance, and the decision to choose an elderly nursing home was at the highest level of opinion.

Factors affecting the choice of elderly nursing homes in Mueang Khon Kaen District, Khon Kaen Province, found that attitude, in behavior, and understanding aspects had statistically significant influence on the choice of elderly nursing homes at a level of 0.05. Marketing mix factors in terms of product, place, and people had statistically significant influence on the choice of elderly nursing homes at a level of 0.05.

8. Discussion

The findings indicate that attitude, in behavior, and understanding aspects had statistically significant influence on the choice of elderly nursing homes at a level of 0.05. Marketing mix factors in terms of product, place, and people had statistically significant influence on the choice of elderly nursing homes at a level of 0.05. There are several key and noteworthy points that the researcher highlights in the discussion.

First, behavioral attitude and understanding were found to significantly influence the selection of elderly nursing home at the 0.05 significance level ($p < 0.05$). This may be because service users place importance on elderly nursing home that offer a friendly and warm atmosphere, attentive care, recreational activities, and proper nutritional support, all of which contribute to the physical and mental well-being of the elderly. These findings are consistent with the research of Saleeon, Tanachockchaivong and Inchon (2024)[12], who studied factors affecting the intention of working-age individuals in Mueang Samut Sakhon District to use private elderly nursing home in the future. They found that subjective understanding and behavioral attitudes influence the intention to use private elderly nursing home among both working-age individuals and the elderly. The findings also align with the research of Tantapakul (2019)[13,] who studied the attitudes of baby boomers and their caregivers toward elderly nursing home and their influence on service selection. The study found that respondents had a positive attitude toward elderly nursing home and were more likely to choose to use these services. Similarly, the study by Lindquist et al. (2021)[14], which examined reasons and study considerations for decision-making and implementation of care plans for elderly home or long-term care, found that understanding plays a significant role in long-term elderly nursing home selections.

Second, the marketing mix factors of product, place, and process were found to have a statistically significant influence on the selection of elderly nursing home at the 0.05 significance level, while the factors of price, promotion, personnel, and physical evidence showed no significant influence ($p > 0.05$). This is likely because service users prioritize high-quality, standardized, and reliable care, including both on-site and off-site elderly care provided by a team of skilled doctors and nurses. Recreational activities such as physical therapy, traditional Thai massage, and vocational training are also valued. Additionally, the location's convenience, proximity to hospitals, accessibility, suitability, and safety for the elderly are important. The care process is expected to be accurate, trustworthy, systematic, comprehensive, convenient, and efficient. These findings are consistent with the study by Chornsawat (2020)[15], which examined marketing mix, service quality, and consumer behavior in elderly nursing home selection and business management in Bangkok, finding that product and place significantly influenced the selection of elderly nursing home. Similarly, Chuenchoojit (2021)[16] found that process and location factors influenced selection elderly nursing home in the New Normal era. This aligns with Phumphuek (2021)[17] on Generation Y's decisions regarding elderly nursing home in Bangkok, which highlighted the impact of product, place, and process on service selection. Furthermore, Warotamakul and Teepapal (2024)[18] studied the 7Ps marketing mix factors influencing facilities selection at T&T Techcare Elderly Care Company, confirming that product, process, and place significantly affected consumer decisions at the 0.05 level. Similarly, Phonorthong (2024)[19] investigated factors affecting consumer selections on elderly nursing home in Nonthaburi Province and found that location and convenience were key determinants in the choice of elderly care services.

9. Recommendations

9.1 Recommendations Based on Research Findings

Based on the study findings, attitudinal factors, specifically behavior and understanding, were found to significantly influence the selection of elderly nursing home. In addition, elements of the marketing mix, namely product, place, and process, also played a crucial role in shaping the decision. Accordingly, the following recommendations are proposed:

1. For the behavioral aspect, emphasis should be placed on ensuring that service providers demonstrate friendliness, warmth, and attentive care. Elderly nursing home should prioritize safety and create a supportive environment through various activities such as recreation, physical exercise, and religious programs to promote residents' overall well-being.

2. For the understanding aspect, facilities should focus on building awareness that elderly nursing home are reliable places for the proper care of older adults. They should provide nutritious meals that support both physical and mental health. Additionally, the facilities must be legally registered and certified to ensure trust and transparency.

3. For the product aspect, the services provided should be high-quality, standardized, and trustworthy. Facilities should offer a variety of programs such as health check-ups, recreational therapy, physical rehabilitation, Thai traditional massage, and vocational training. Services should be delivered attentively by professional medical staff, both onsite and through outreach services when needed.

4. For the distribution channel aspect, the location of the elderly nursing home should be convenient and easily accessible, ideally close to hospitals. The environment should be quiet, green, and free from pollution, creating a peaceful atmosphere for the elderly. In addition, facilities should offer multiple communication channels such as telephone, email, LINE, and Facebook to enhance accessibility and customer support.

5. For the process aspect, service delivery should be systematic, reliable, and comprehensive. Operations should be efficient and user-friendly, with a well-maintained client database that allows for easy data retrieval. Regular reports on residents' health and well-being should be provided to their families to ensure transparency and engagement.

9.2 Recommendation for further research

1. Quantitative research using Structural Equation Modeling (SEM) should be considered for future studies to analyze the factors influencing the selection of elderly nursing home in Mueang Khon Kaen District, Khon Kaen Province.

2. Qualitative methods should be incorporated by conducting interviews with elderly care business operators and service users to gain deeper and more comprehensive insights.

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