Competencies of health tourism logistics service providers and their impact on elderly tourists' decision-making and satisfaction: A structural equation modeling analysis

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ABSTRACT

This study aimed to identify the key competencies of health tourism logistics service providers that influence the decision-making and satisfaction of elderly tourists. The research involved 400 elderly tourists who visited Bangkok and the central region of Thailand. Data were collected through a structured questionnaire designed to measure the service providers' competencies in six areas: work-related skills, interpersonal skills, management abilities, personal attributes, leadership, and experience in elderly care. It also assessed the tourists' satisfaction and their decision-making related to the services received. Structural Equation Modeling (SEM) was used for data analysis. The findings showed that the competencies of service providers had a significant impact on both the decision-making and satisfaction of elderly tourists. Additionally, decision-making played a mediating role, indirectly influencing satisfaction. One key contribution of this study is the development of a competency framework for health tourism logistics service providers tailored to the needs of elderly tourists in Thailand. The inclusion of the decision-making process as a factor influencing satisfaction is another important aspect. Overall, the study presents a comprehensive model for improving tourism services to better meet the needs of elderly tourists in the future.

1. Introduction

Health tourism has become an increasing trend in the present day, especially among people of the elderly age group who, in addition to relaxation, are also giving importance to health care. The elderly have different needs from general tourists, with an emphasis on convenience, safety, and services available that can meet specific health needs (Hwang and Lee, 2019; Lättman et al., 2019; Joo et al., 2019). So, effective logistic services such as proper route design, providing medical services at the destination, and assistance in traveling are the basis of a good experience for older tourists. However, the selection of services and the satisfaction of this tourist group are dependent on several factors, including the competencies of providers of the given services. Hence, health tourism logistics providers need to utilize a wide range of competencies across multiple dimensions, including work achievement competencies such as the ability to provide timely and high-quality services; relationship competencies that foster trust and comprehension of the tourists' requirements; management competencies to ensure planning and operational smoothness; personal characteristics competencies like friendliness and caring; and lastly, leadership competencies that facilitate effective problem solving and decision-making (Şeremet et al., 2021). A review of many studies shows that these competencies have a direct impact on the elderly individual's decision to select services and their satisfaction with the travel experience (Hwang and Lee, 2019; Lee, 2016).

Types of travel decisions made by the elderly are a complex process operated based on information and codes that are congruent with the individual's needs. According to the theory of planned behavior (TPB), individual actions are determined by attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). As per the TPB,

individual behavior is determined by attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). In the last few years, TPB has been tailored to the tourism context with increasing precision. For instance, Setiawan et al. (2024) built on TPB to explore littering behavior among tourists, adding experiential and instrumental attitudes and descriptive and injunctive norms. Meanwhile, Karim et al. (2025) investigated tourists' environmentally sustainable behaviors using a theoretical integration of TPB and TAM mediated by digital technologies such as blockchain. The flexibility and the modern relevance of the TPB to model the behavior of tourists demonstrated by these studies, reinforce its use as the conceptual framework for this study. The study proposed the following hypothesis: service provider competencies have an impact on decision-making, and decision-making has an impact on elderly satisfaction. However, in practice, logistics service providers in Thailand still face many problems, such as not providing enough support for elderly tourists, not having specific service standards, and not having personnel with skills of different dimensions, such as achievement and leadership (Chaisomboon et al., 2020; Teerawichitchainan et al., 2015). Moreover, the earlier related studies are mostly limited to the dimension of health service that studies the direct treatment, including the role of logistics in the tourism process, which has not been studied thoroughly in the context of health tourism in Thailand. The present study is initiated to address this gap.

Most studies examine the direct effects of health services such as quality in hospitals, clinics, and health resorts (Heung et al., 2011; Joo et al., 2019; Lee, 2016; Löffler et al., 2018), yet do not consider logistics factors, essential parts of health tourism for the elderly. The integration of logistic services is also an important part of creating a smooth and satisfying experience for elderly tourists, especially for those with health or mobility limitations, through the right travel arrangements, including ordering local transport, time management, and facility management during travel. However, there is still limited research linking logistics service provider competencies and the selection decision-making service and satisfaction of elderly tourists in the Thai tourism context.

At this stage, due to the importance and gap we mentioned, the researcher is motivated to examine the competency of health tourism logistics service providers and its effect on elderly tourists' decisions and satisfaction in general by means of structural equation analysis that can determine the role of competency from different dimensions: achievement orientation, interpersonal relationships, management, personal characteristics, and leadership, affecting the elderly's decisions as well as their satisfaction in place. The findings of this study will be subsequently utilized for improving the logistics service standard in accordance with elderly tourists' requirements and ultimately enhancing the competitive potential of the Thai tourism industry in the long run.

2. Literature reviews

2.1. Competency of health tourism logistics service providers

Competency of health tourism logistics service providers is the knowledge, skills, abilities, and other personal characteristics that are required to provide effective, high-quality services to elderly travelers who are interested in health tourism (Testa and Sipe, 2012; Poulos et al., 2021). These competencies interact on several levels to shape service excellence in this specific industry (Ellinger et al., 2008; Nielsen et al., 2009). Previous studies indicate important specific areas of competence in health tourism logistics providers with elderly clients (Fredriksen-Goldsen et al., 2014; Harrison et al., 2019). These consist of professional competencies centered on health knowledge, technical skills in logistics administration, and soft skills in customer practices (Liang et al., 2013; Donelan et al., 2019). A full literature review identifies the main relevant competencies that affect the quality of service in the field of health tourism logistics for elderly travelers, namely achievement orientation, management, interpersonal relationships, leadership, and elderly care, which enable relatively safe services to satisfy the specific needs of elderly tourists (Fredriksen-Goldsen et al., 2014; Poulos et al., 2021; Sie et al., 2021). Health tourism logistics companies must be able to meet the needs of the elderly who need special care. So, for good services, knowledge, skills, and personal characteristics are needed (Liang et al., 2013; Poulos et al., 2021). Managing and maintaining relationships with the elderly are viewed as significant factors (Ellinger et al., 2008; Nielsen et al., 2009); additionally, knowledge of their culture and acceptance of diversity are highlighted as crucial aspects to offer proper services (Fredriksen-Goldsen et al., 2014). When it comes to service provider performance, planning, goal setting, and execution can be defined as steps to a quality result. Distinctive goals elevate elderly people's satisfaction (Ellinger et al., 2008; Goldberg et al., 2012). Also, reducing travel barriers and building trust in relationships through effective communication (Hwang and Lee, 2019) is essential. From a management perspective, service providers need to be able to allocate resources and plan appropriate routes to minimize risks (Abdelrazek et al., 2010; Donelan et al., 2019). Positive personality traits, such as being compassionate, patient, and responsible, have a considerable impact on older people's confidence. Leadership competencies foster a motivated team and cause an organizational culture geared towards service quality (Nielsen et al., 2009; Testa and Sipe, 2012; Owens and Batchelor, 1996). Direct care competencies for the older person, including medical knowledge and health advice, are vital (Harrison et al., 2019; Poulos et al., 2021). These

competencies from healthcare tourism logistics providers lead directly to service quality and satisfaction among elderly tourists, while also ensuring the sustainability of the healthcare tourism industry by fostering trust and loyalty among the tourists. In the context of a post-2020 world, tourism service providers must enhance gender-responsive competencies that touch on both the physical and mental health needs of the elderly tourist sector. However, as Stanimir and Przybysz (2024) point out, it is through the preparation of staff in terms of knowledge around mobility restrictions, health sensitivity, and technology access, key components for the care of the elderly, that determines whether the tourism sector can be prepared for the upcoming elderly population. On the other hand, successful providers are also able to translate these competencies into personalized services that are differentiated through careful design and empathetic interaction (Yeh and Yang, 2025). This includes not only route planning and resource allocation but also the creation of culturally meaningful experiences that foster emotional fulfillment, reinforcing the notion that competency extends beyond logistics into deeply human-centered service delivery. While these global contexts have aligned competencies and best practices, research on how these competencies are carried out in Thailand's unique cultural and healthcare context is limited. The unique context of Thailand, which combines traditional medicine, cultural aspects of elderly care, and the integration of Western medical standards with local practices, has not been widely explored in available literature. Comprehending these Thailand-specific competency requirements is a prerequisite for the design of effective health tourism logistics services that are targeted to the Thai market (Jungprawate et al., 2021; Thongruang, 2014; Mayakul et al., 2018).

2.2. Elderly tourists' decision to choose health tourism

The factors that influence the elderly's decision to choose health tourism are complex and multifaceted. The focus of these types of individuals is more on researching things beforehand, getting to know where it is they covet to observe how reliable information is, how complete it is, and weighing the pros and cons of the places that interest them. Satisfaction with such information is a significant factor affecting the travel decision and travel frequency of the elderly, as noted in the study by Lee (2016). Moreover, service quality, such as cleanliness, safety, and reliability, is also helping to increase confidence when selecting a destination, most specifically health tourism for promoting physical and mental health. According to Hwang and Lee (2019), the adequacy of knowledge, building rapport, and trust in tour guides and staff at tourist attractions affects the total satisfaction and delight of senior citizens. Besides the factors of service quality, other effective venue management methods, such as route planning, environmental management, and on-

site convenience, can also improve the satisfaction of the elderly (Lättman et al., 2019). The accessibility, convenience, and continuity of services are major elements influencing the quality of life of the elderly who choose traveling. Moreover, Lee and King (2019) suggested that the degree to which factors that make tourist attractions suitable for the elderly should be taken into consideration hierarchically, stressing the availability of facilities, as well as the safety and diversity of activities suitable for the senescence stage of the senior population. Recent research reveals that the travel motivations of elderly tourists are increasingly in line with aspects of active aging and emotional wellness. For example, Chen (2024) highlighted that positive behavior, social environments, and mental engagement are key motivation factors that influenced an older traveler's tourism decision, thus indicating that tourism packages must combine not only physical comfort but also psychological stimulation. Seniors who still travel, however, may skip that option because they are uncomfortable with the platforms and due to health issues (Stanimir and Przybysz, 2024), which suggests service structures need to be more accessible and inclusive. This adaptive decision-making framework highlights the reasons why post-pandemic marketing strategies should consider building trust and interactivity and provide personalized planning instead of focusing on traditional decision-making criteria to effectively touch elderly tourists. In international studies, such decision variables do exist; however, these research contexts do not necessarily represent the unique contexts for elderly tourists in Thailand. The absence of practical studies investigating the decision-making patterns of elderly tourists in Thailand indicates a fundamental knowledge gap in this area, especially given Thailand's unique cultural factors surrounding views of age, family participation in healthcare choices, and traditional wellness practices, all of which could shape health tourism preferences in a manner distinct from that observed in a Western context (Phuanpoh and Ketsomboon, 2023; Prommahaa, 2015; Khotchasit, 2021).

2.3. Satisfaction of elderly health tourists

Satisfaction of elderly health tourists is one of the most important factors that can affect the quality of the experience as well as the likelihood of repeat visits. It is the measure of the degree of happiness registering through service delivery that meets expectations. Perceived accessibility, including the presence of appropriate walking routes, transportation services, and wheelchair-friendly pathways that enable the elder population to travel around safely and comfortably, is an important aspect of the elder population feeling satisfied with their daily life (Lättman et al., 2019). In addition to that, qualified staff (for example, tour guides) who can create a sense of trust as well as provide accurate information can help to serve tourists better; as a result, tourists have more extraordinary

experiences and potential recommendations (Hwang and Lee, 2019; Lee, 2016).

Another central factor in developing a good feeling about a place includes cleanliness, security, friendliness of personnel, and other supportive services that meet expectations (Testa and Sipe, 2012). Such facilities for the elderly include special restrooms, safe sidewalks, and appropriate waiting areas that help resolve concerns and increase happiness when traveling (Lee and King, 2019). Indeed, well-designed and well-organized activities prepared based on the elderly's physical and mental conditions can improve and promote valuable experiences and leave good memories (Sie et al., 2021).

These types of satisfaction would result in refinements and recommendations to friends or family members. Indeed, long-term acceptance can also be ensured through effective management and proper service design (Testa and Sipe, 2012). So, this increases the possibility of a place being revisited when the needs of the older generation are fulfilled, including their convenience, hospitality, and physical capacity, and therefore improves their mental health and life satisfaction. Elderly healthy tourists show growing satisfaction as it caters to their higher quality of cognitive and emotional experiences while traveling.

According to Yeh and Yang (2025), active seniors ranked cultural immersion, knowledge gain, and personal meaning as the top qualities of valued travel, with empathetic tour guides and sensory-rich environments enhancing these outcomes. As corroborated by Chen (2024), a supportive social and organizational environment strengthens their perceived well-being, which, in turn, increases their emotional attachment and repeat visitation. This wise advice indicates that senior happiness is no longer based just on being comfy and safe but ensuring their day is filled with rich, meaningful moments that resonate with their beliefs and desires. Even though satisfaction-restricting factors have been well-researched at a global level, there is little research finding out the satisfaction-limiting determinants of elderly health tourists in Thailand. This gap is particularly significant considering Thailand is one of the top health tourism spots with its offering of tailor-made medical services, traditional cures, and hospitality. The research indicated that not only are elderly tourists of Asian origins driven by different types of factors compared to Europeans and North Americans, but trust, warmth of human relations, and the extent of alignment with traditional healing also affect the decision-making process (Pathomsirikul, 2019; Jotikasthira, 2010; Jungprawate et al., 2021). Despite a growing demand for quality health tourism in the region, little research has focused on the underlying factors that generate satisfaction in the Thai context, which could provide a relevant basis for local providers to further enhance their services to meet the needs of both domestic and international health tourists of older age.

2.4. Hypothesis development and conceptual framework

Based on the comprehensive literature review presented above, the study can now develop hypotheses that connect service provider competencies, decision-making processes, and satisfaction of elderly tourists in a coherent theoretical framework. These logistics service providers of health tourism have significant competencies that affect elderly tourists' satisfaction and their decision-making. Competencies such as management, socialization, and cultural awareness contribute to the enhancement of the quality of care and trust among service users (Fredriksen-Goldsen et al., 2014; Goldberg et al., 2012). Specifically, the right resources, coordination, and planning to fit the specific needs of the elderly (Liang et al., 2013) could ease stress and increase satisfaction. Therefore, the first hypothesis (H1) is articulated as follows: The competencies of health tourism logistics services affect elder tourists' satisfaction in traveling to health tourism attractions. In addition, effective communication and management competencies (e.g., program design and emergency preparedness) are problematic in the decision-making of the elderly (Hwang and Lee, 2019; Abdelrazek et al., 2010) as they reduce risk but increase decision-making confidence. Therefore, the following second hypothesis (H2) was developed: The competencies of health tourism logistics affect elder tourists' decisions to travel to health tourism attractions. Furthermore, the choice of a service and location that fits one's needs also affects satisfaction with the traveling experience. According to earlier studies, making well-informed decisions can help mitigate health risks and build trust in the service (Hwang and Lee, 2019). H3: Elder tourist decisions influence elder tourist satisfaction in traveling to health tourism attractions. Finally, in the competence-decision-satisfaction path, the relationship is indirect, in which decision-making plays the role of mediator. Competence of service providers aids in making the right decisions, which influences satisfaction directly (Fredriksen-Goldsen et al., 2014; Poulos et al., 2021). H4: The competencies of health tourism logistics services impact the satisfaction of elder tourists' travel decisions related to health tourism attractions. From this, the conceptual framework can be defined as shown in Fig. 1.

3. Methodology

This research is quantitative research, and the population is elderly tourists aged 60 years and over who travel for health tourism. The sample group used in the study comprised elderly tourists aged 60 years and over who traveled to Bangkok and the central region, which includes Bangkok, Ratchaburi, Nakhon Pathom, Phetchaburi, and Prachuap Khiri Khan, totaling 400 people. This is because these provinces have a variety of tourist attractions, such as natural relaxation spots, spas, and health centers

that focus on treatment and health rehabilitation. In addition, these provinces are convenient for the elderly who want to travel to relax and restore their health. Finally, Ratchaburi, Phetchaburi, and Prachuap Khiri Khan have beautiful natural attractions and a peaceful atmosphere, suitable for relaxation and mental rehabilitation, which are important for the elderly to maintain their mental and physical health.
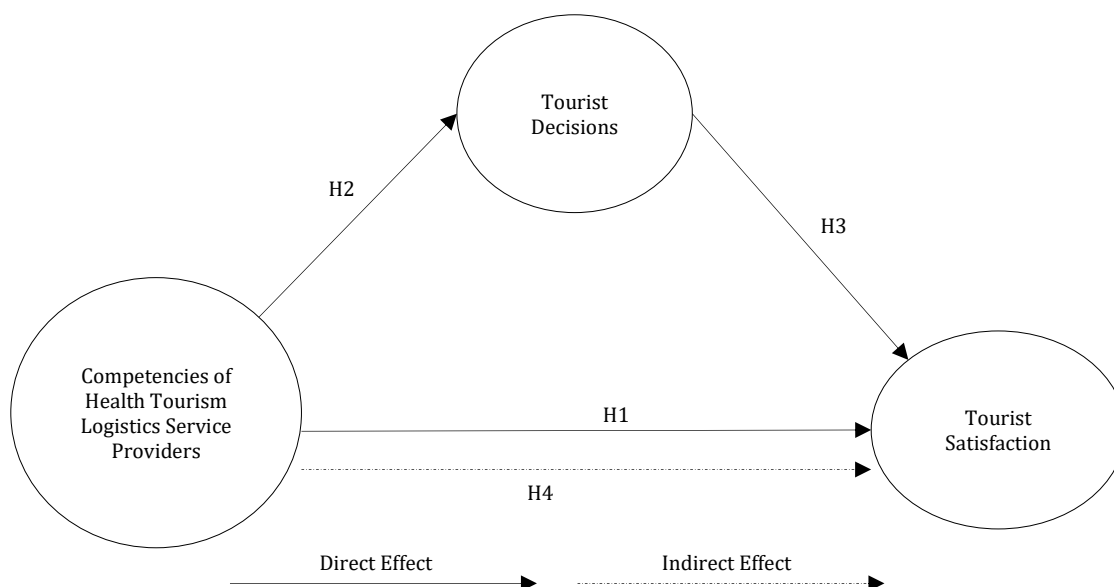

Fig. 1: Conceptual model

In this study, the researcher used convenience sampling. Convenience sampling was used in this study, as elderly tourists could be easily accessed and were willing to take part in the study at different tourist attractions within the targeted provinces. Convenience sampling is useful for introducing this target demographic, specifically for elderly populations, when it is impractical to sample from the entire population (Etikan et al., 2016); however, it is recognized that there is potential selection bias due to the possibility of participants holding relevant relations that may drive the results of the findings (Sedgwick, 2013). To reduce this bias, data collection was implemented on different days of the week and at different times to enhance representativeness in convenience samples (Jager et al., 2017). The tool used for data collection was a questionnaire, which was divided into 4 parts: 1) personal information such as gender, age, education level, career before retirement, and saving after retirement; 2) competencies of health tourism logistics service providers: work achievement competence, relationship competence, management competence, personal characteristics competence, leadership competence, and elderly care competence; 3) tourist decisions in travelling to a health tourism attraction; and 4) tourist satisfaction in travelling to a health tourism attraction using a 5-point Likert scale ranging from 1 (least agree) to 5 (extremely agree).

The procedure of development of the questionnaire was done in various stages to ensure the validity and reliability of the questionnaire. Initially, the research team com-pleted a comprehensive literature review to determine significant dimensions and variables affecting health tourism logistics for older adults. Following this review, the first draft of the questionnaire items was created and submitted for content validity assessment to a panel of five experts in tourism management, healthcare service, and gerontology. Using a content validity index (CVI), the experts judge each item for relevancy, clarity, and appropriateness. Polit and Beck (2006) recommended revising or excluding items with CVIs less than 0.80. The finalized instruments were pilot tested with 30 elderly tourists, who met the target population inclusion criteria but who were not included in the final sample, after expert validation. A pilot test was conducted to evaluate the understandability of the instructions, question wording, response format, and the time participants took to complete the questionnaire. Two pilot tests were conducted to receive feedback on the clarity of questions and completion time, resulting in minor changes. The initial reliability analysis of the pilot data indicated that Cronbach's alpha coefficients ranged from 0.78 to 0.92 across various scales, demonstrating acceptable to excellent internal consistency based on Taber's (2018) criteria for reliable measures. Furthermore, face validity was verified by conducting cognitive interviews with five older tourists, and they were instructed to think aloud while completing the questionnaire, which helped to discover any misinterpretations or difficulties in understanding. Construct validity was also assessed through exploratory factor analysis (EFA) of the pilot data, which confirmed the expected factor structure, with item factor loading generally exceeding 0.60 on their respective factors and minimal cross-loadings (Hair et al., 2019). The finalized questionnaire incorporated all these validation processes to ensure a robust

measurement instrument for the main study. The following are the items used in the study, as shown in Table 1. Data analysis employed descriptive and inferential statistics. In the descriptive analysis of three groups of variables, consisting of competencies of health tourism logistics service providers, tourist decisions, and tourist satisfaction in traveling to health tourism attractions, the researcher used the mean, standard deviation (SD), coefficient of variation (CV), kurtosis, and skewness. For inferential statistics, the researchers used partial least squares structural equation modeling (PLS-SEM). In using this, the researchers assessed the reliability of the analytical variables by considering various indices such as loading, which indicates the relationship between the observed variables and the latent variables, composite reliability (rho_c), and Dijkstra-Henseler's rho (rho_a) to measure the internal consistency of the variables, average variance extracted (AVE), which reflects the amount of variance in the variables explained by the latent variables, and Cronbach's Alpha (α), which is a measure of reliability in terms of consistency within the group of variables.

Table 1: Measurements used in the study

Variables	Items	Reference
Achievement orientation	COM_A1. Able to plan, set goals, analyze, and synthesize tasks COM_A2. Understand and adapt to the needs and importance of the elderly group COM_A3. Commit to performing duties with quality, accuracy, and completeness COM_A4. Able to monitor and evaluate work performance COM_A5. Continuously develop work performance for success	Augustin and Freshman (2016), Fredriksen-Goldsen et al. (2014), Liang et al. (2013), and Poulos et al. (2021)
Interpersonal relationships	COM_R1. Understand and sympathize with the needs and limitations related to the elderly. COM_R2. Be mindful and consider the comfort and safety of the elderly in travel and tourism activities. COM_R3. Communicate using easy-to-understand language and using appropriate communication media to build confidence and understanding in traveling among the elderly. COM_R4. Have knowledge and expertise in health and self-care of the elderly to be able to provide appropriate advice. COM_R5. Be able to adapt and improve services to suit the needs and situations of the elderly. COM_R6. Be able to build good relationships with customers and partners to build confidence and cooperation in providing good services to the elderly.	Dawes and Topp (2021), Donelan et al. (2019), Joo et al. (2019), Lee (2016), Poulos et al. (2021), and Sie et al. (2021)
Management	COM_M1. Plan and manage appropriate resources, such as backup planning, available for the elderly. COM_M2. Organize appropriate activity programs for the elderly. COM_M3. Provide advice on suitable tourist attractions for the elderly and coordinate with relevant networks. COM_M4. Understand and provide services that are linked to the culture and values of the elderly, so that they feel satisfied and happy while traveling. COM_M5. Have flexibility and the ability to adapt to the situation and needs of the elderly, in order to provide appropriate services and respond to changing needs. COM_M6. Continuously evaluate to improve services according to the needs of the elderly and develop services to meet the needs and be satisfactory to the target group.	Donelan et al. (2019), Joo et al. (2019), Liang et al. (2013), and Poulos et al. (2021)
Personal characteristics	COM_P1. Have compassion and understanding of the needs and requirements of the elderly and can adapt appropriately to the situation. COM_P2. Have patience in dealing with complex or uncomfortable situations and have gentleness in adapting to the needs of the elderly. COM_P3. Be able to build good relationships and trust with the elderly and can create a friendly and positive atmosphere. COM_P4. Be responsible for providing quality services and satisfaction to the elderly. COM_P5. Be able to build trust and comfort for the elderly by providing safe and quality services.	Augustin and Freshman (2016), Fredriksen-Goldsen et al. (2014), Poulos et al. (2021), and Sie et al. (2021)
Leadership	COM_L1. Be able to create an organizational culture that is proactive in providing services and focuses on customer satisfaction. COM_L2. Be able to continuously develop skills and knowledge of oneself and the team in the areas of service and care for the elderly. COM_L3. Be able to solve problems and make decisions in complex or uncertain situations with stability and focus. COM_L4. Be able to build a team that is capable and competent in providing good services to the elderly. COM_L5. Be able to be a role model and be responsible for the team's performance.	Dawes and Topp (2021), Donelan et al. (2019), Goldberg et al. (2012), Lee and King (2019), and Poulos et al. (2021)
Elderly care	COM_E1. Having knowledge and skills in medicine and health care is necessary for caring for the elderly. COM_E2. Be able to give advice and help in performing daily activities that are difficult for the elderly. COM_E3. Be considerate and attentive in caring for the elderly to ensure their convenience and satisfaction while traveling. COM_E4. Provide health care services that meet the needs of the elderly. COM_E5. Be able to effectively handle emergency situations that occur to the elderly. COM_E6. Know that taking care of the safety of the elderly is important.	Donelan et al. (2019), Harrison et al. (2019), Joo et al. (2019), Lättman et al. (2019), and Poulos et al. (2021)
Tourist decisions	DECI1. I searched for information about this tourist attraction before I decided to travel. DECI2. I evaluate information about this tourist attraction before I decide to travel. DECI3. I decided to travel to this tourist attraction because of the good service and quality. DECI4. I decided to travel to this tourist attraction because of the good management of the tourist attraction. DECI5. The competence of tourism personnel, such as information/service providers, affects the decision to travel to this tourist attraction. DECI6. Overall, I am willing to decide to travel to this tourist attraction.	Haug and Ory (1987), Hwang and Lee (2019), Lättman et al. (2019), and Lee and King (2019)
Tourist satisfaction	SAT1. Overall, I am satisfied with the accessibility of this attraction. SAT2. The service provided by this attraction meets my expectations. SAT3. The facilities designed for senior tourists are very satisfying to me. SAT4. The variety and quality of services for senior tourists are important to my overall satisfaction. SAT5. The convenience of transportation designed for senior tourists is important to my overall satisfaction. SAT6. In the future, I will visit this attraction again. SAT7. I would be happy to recommend this attraction to my friends.	Hwang and Lee (2019), Lättman et al. (2019), Lee and King (2019), and Testa and Sipe (2012)

In addition, the discriminant validity was assessed separately. Discriminant validity using the Fornell-Larcker Criterion, which considers that the square root of the AVE in each variable must be higher than the correlation value with other variables. If this criterion is met, it will confirm that each dimension of measurement is clearly different and not too correlated (Fornell and Larcker, 1981; Hair et al., 2013).

4. Methodology

4.1. Profile of respondents

The researcher studied the personal data of the respondents, including information on gender, age, education level, occupation before retirement, and savings after retirement. The result found that most of the respondents were female, 263 people, or 65.75 percent, while 137 people, or 34.25 percent, were male. In terms of age, the largest group was between 60-69 years old, 314 people, or 78.50 percent, followed by the 70-79 age group, 69 people, or 17.25 percent, then the 80 and over age group, 17 people, or 4.25 percent. In terms of education level, it was found that most of the respondents had lower educational attainment than a bachelor's degree, 317 people, or 79.25 percent, while there were 75 people (18.75 percent) and 8 people (2.00 percent) with bachelor's degrees and higher degrees, respectively. In terms of occupation before retirement, most respondents had worked as general laborers or freelancers, 297 people or 74.25 percent, followed by 49 private company employees (12.25 percent) and 28 government officials (7.00 percent). In terms of financial status after retirement, it was found that most respondents had savings of less than 500,000 baht, 313 people or 78.25 percent, while those who had savings of more than 500,000 baht were 87 people or 21.75 percent.

4.2. Descriptive statistics and measurement validation

From Table 2, it was found that each variable studied, namely achievement orientation, interpersonal relationships, management, personal characteristics, leadership, elderly care, tourist decisions, and tourist satisfaction, had statistical significance values that were appropriate for analysis. The mean of each variable was between 3.980 – 4.223, reflecting a relatively high level of acceptance or opinion of all variables. The SD was between 0.742 – 0.905, indicating a relatively narrow distribution of responses. In addition, the CV value of less than 0.30 indicated that the distribution of the data was uniform. As for the kurtosis and skewness values that were in the appropriate range, it reflected that the data were not abnormally distributed or excessively skewed. In addition, in terms of examining the measurement model, it was found that the loading of most indicators was in the

range of 0.722 – 0.891, which was higher than the minimum criterion of 0.70, indicating a good relationship between the indicators and the latent variables. The composite reliability (rho_c) and Cronbach's Alpha (α) values were higher than 0.80 in all variables, indicating the reliability of the measurement, while the AVE values were higher than 0.50 in all variables, confirming the internal consistency of the indicators. However, in the measurement refinement process, five items (COM_A1, DECI1, DECI6, SAT5, SAT7) were eliminated from the analysis. COM_A1 was removed due to its low communality and potential conceptual redundancy with other achievement orientation items, which could affect discriminant validity. DECI1 and DECI6 were eliminated because they demonstrated significant cross-loadings with satisfaction constructs, potentially confounding the distinct effects between decision-making and satisfaction variables. Similarly, SAT5 and SAT7 were removed as their measurement properties did not meet the threshold criteria for inclusion, with lower item reliability values compared to other satisfaction indicators. These modifications follow standard procedures in structural equation modeling to improve model fitness and construct validity (Hair et al., 2013). The results of this analysis indicated that the variables and indicators used were appropriate for use in explaining or analyzing relationships in the context of research on the performance of health tourism logistics service providers, and could support further analysis in the next step, such as structural equation modeling.

From Table 3, it was found that the main variable competencies of health tourism logistics service providers (COM) which consisted of sub-components: achievement orientation (COM_A), interpersonal relationships (COM_R), management (COM_M), personal characteristics (COM_P), leadership (COM_L) and elderly care (COM_E) had a mean value in the range of 4.080 – 4.191 reflecting a high level of opinion in all dimensions. The SD was in the range of 0.647–0.683, indicating a narrow and consistent distribution of data. The lowest CV value of 0.156 confirmed that the answer was stable. The kurtosis and skewness values indicated that the distribution of data was not skewed or too narrow in terms of factor analysis. The loading of each dimension was found to be in the range of 0.884–0.931, indicating a good relationship between the indicators and the latent variables. The composite reliability (rho_c) value was as high as 0.980, and the AVE value was 0.598, confirming the reliability and internal consistency of the model. This data reflects that the indicators can appropriately and accurately describe the performance of health tourism logistics service providers. From Table 4, it was found that the competencies of health tourism logistics service providers had a square root AVE value of 0.773, which was higher than the correlation values with the tourist decisions and tourist satisfaction, which were 0.747 and 0.768, respectively, reflecting a clear distinction between the competencies of health

tourism logistics service providers and other variables.

Similarly, the tourist decisions and tourist satisfaction had square root AVE values higher than the correlation values between the variables, which were tourist decisions at 0.861 and tourist satisfaction at 0.837, indicating the ability of each variable to explain its own data without overlapping with other variables. Therefore, this model has appropriate properties of discriminant validity.

Table 2: Descriptive statistics and first-order confirmatory factor analysis

Measure	Mean	SD	CV	Kurtosis	Skewness	Loading	rho_c	rho_a	AVE	α
COM_A1	4.090	0.776	0.190	-0.238	-0.512	Deleted				
COM_A2	4.150	0.733	0.177	-0.432	-0.434	0.722				
COM_A3	4.173	0.776	0.186	-0.609	-0.503	0.837	0.914	0.884	0.680	0.882
COM_A4	4.117	0.780	0.189	-0.422	-0.494	0.841				
COM_A5	4.157	0.750	0.180	-0.304	-0.517	0.856				
COM_R1	4.202	0.753	0.179	-0.104	-0.636	0.803				
COM_R2	4.170	0.769	0.184	-0.324	-0.566	0.820				
COM_R3	4.155	0.813	0.196	-0.522	-0.572	0.837	0.931	0.912	0.694	0.911
COM_R4	4.037	0.881	0.218	0.262	-0.712	0.827				
COM_R5	4.143	0.801	0.193	0.314	-0.702	0.864				
COM_R6	4.143	0.804	0.194	-0.387	-0.582	0.845				
COM_M1	4.093	0.784	0.192	-0.402	-0.477	0.840				
COM_M2	4.090	0.807	0.197	-0.439	-0.509	0.826				
COM_M3	4.037	0.846	0.210	-0.459	-0.519	0.877	0.939	0.922	0.719	0.922
COM_M4	4.067	0.802	0.197	-0.687	-0.386	0.861				
COM_M5	4.065	0.804	0.198	-0.705	-0.380	0.844				
COM_M6	4.130	0.783	0.190	-0.523	-0.484	0.840				
COM_P1	4.178	0.769	0.184	-0.308	-0.581	0.871				
COM_P2	4.188	0.766	0.183	-0.507	-0.534	0.866				
COM_P3	4.223	0.744	0.176	-0.254	-0.604	0.859	0.933	0.911	0.737	0.911
COM_P4	4.162	0.742	0.178	-0.754	-0.381	0.838				
COM_P5	4.202	0.782	0.186	-0.708	-0.530	0.857				
COM_L1	4.100	0.762	0.186	-0.503	-0.409	0.854				
COM_L2	4.138	0.761	0.184	-0.548	-0.442	0.857				
COM_L3	4.120	0.794	0.193	-0.345	-0.549	0.856	0.935	0.913	0.741	0.913
COM_L4	4.098	0.786	0.192	-0.415	-0.484	0.862				
COM_L5	4.157	0.789	0.190	0.515	-0.747	0.875				
COM_E1	4.048	0.800	0.198	-0.463	-0.439	0.864				
COM_E2	4.105	0.780	0.190	-0.645	-0.408	0.864				
COM_E3	4.170	0.766	0.184	-0.770	-0.434	0.831	0.944	0.929	0.737	0.929
COM_E4	4.120	0.762	0.185	-1.144	-0.240	0.857				
COM_E5	4.150	0.779	0.188	-0.670	-0.459	0.891				
COM_E6	4.213	0.766	0.182	-0.960	-0.449	0.844				
DECI1	4.010	0.903	0.225	0.311	-0.736	Deleted				
DECI2	4.035	0.868	0.215	-0.039	-0.597	0.864				
DECI3	4.048	0.875	0.216	-0.179	-0.610	0.859	0.920	0.883	0.741	0.883
DECI4	4.062	0.805	0.198	-0.334	-0.460	0.871				
DECI5	4.003	0.841	0.210	-0.189	-0.536	0.849				
DECI6	4.005	0.880	0.220	0.425	-0.716	Deleted				
SAT*1*	4.100	0.809	0.197	0.047	-0.639	0.838				
SAT2	4.005	0.819	0.204	-0.351	-0.421	0.828				
SAT3	4.050	0.817	0.202	-0.525	-0.451	0.822				
SAT4	3.982	0.864	0.217	0.078	-0.596	0.851	0.921	0.894	0.701	0.893
SAT5	3.975	0.905	0.228	0.172	-0.661	Deleted				
SAT6	3.980	0.827	0.208	-0.485	-0.415	0.847				
SAT7	4.060	0.807	0.199	-0.338	-0.511	Deleted				

Table 3: Descriptive statistics and second-order confirmatory factor analysis

Measure	Mean	SD	CV	Kurtosis	Skewness	Loading	rho_c	rho_a	AVE	α
COM_A	4.149	0.647	0.156	-0.189	-0.518	0.884				
COM_R	4.142	0.670	0.162	-0.344	-0.563	0.930				
COM_M	4.080	0.683	0.167	-0.391	-0.408	0.931	0.980	0.979	0.598	0.979
COM_P	4.191	0.654	0.156	-0.499	-0.463	0.893				
COM_L	4.123	0.671	0.163	-0.352	-0.479	0.924				
COM_E	4.134	0.667	0.161	-0.788	-0.364	0.908				

Table 4: Discriminant validity by Fornell-Larcker criterion

Variables	COM	DECI	SAT
COM	**0.773**		
DECI	0.747	**0.861**	
SAT	0.768	0.831	**0.837**

Bold values in diagonal line display the square root of AVE, and the others are the correlation matrix

4.3. Finalized model and hypothesis analysis

From Table 5 and Fig. 2, it was found that all hypotheses were accepted with statistical significance. Hypothesis H1 states that competencies of health tourism logistics service influence elderly tourist satisfaction in travelling to health tourism attractions, has a standardized coefficient value, which is equal to 0.332, t-value = 6.406, and p-value = 0.000, indicating a significant influence of competency on the satisfaction of elderly tourists. For H2, which stated that competencies of health tourism logistics influence elderly tourist decisions in travelling to health tourism attractions, there was a standardized coefficient of 0.747, t-value = 25.208, and p-value = 0.000, indicating a very strong positive influence of competency on decision-making. In addition, for H3, which stated that elderly tourist

decisions influence elderly tourist satisfaction in travelling to health tourism attractions, there was a standardized coefficient of 0.584, t-value = 12.216, and p-value = 0.000, reflecting a significant link between decision-making and satisfaction. For H4, which indirectly tested those competencies of health tourism logistics service influenced elderly tourist

satisfaction through elderly tourist decisions in travelling to health tourism attractions, there was an indirect coefficient of 0.436, t-value = 10.436, and p-value = 0.000, confirming the importance of the decision-making process as a mediating variable in enhancing satisfaction.

Table 5: Hypothesis testing

Hypothesis testing	Standardized estimates	t-value	P-values	Result
H1: COM -> SAT	0.332	6.406	0.000	Accepted
H2: COM -> DECI	0.747	25.208	0.000	Accepted
H3: DECI -> SAT	0.584	12.216	0.000	Accepted
H4: COM -> DECI -> SAT	0.436	10.436	0.000	Accepted
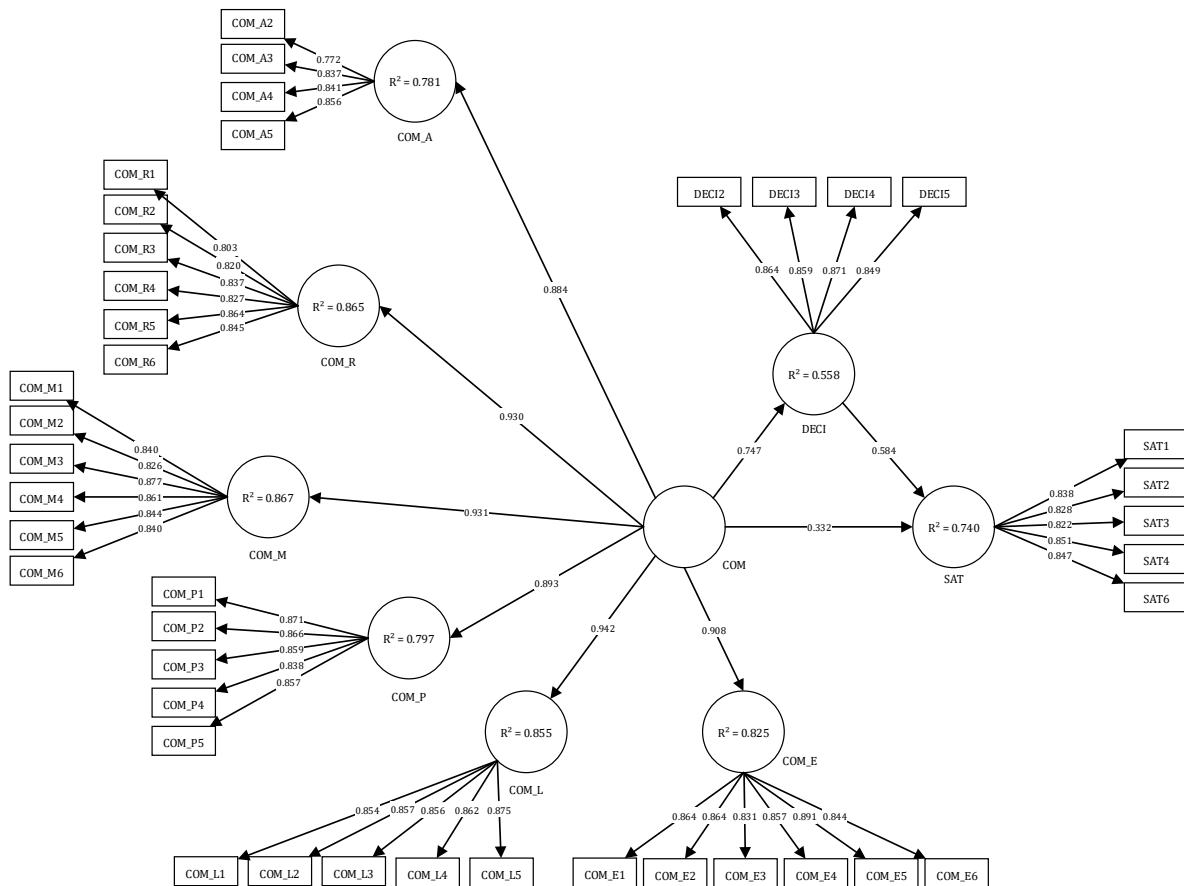
The numbers on the paths outside parentheses represent path coefficients, the numbers on the paths inside parentheses represent t-values, and the numbers inside the circles represent R^2 or coefficient of determination

Fig. 2: Finalized model

From Table 6, it was found that the competency of health tourism logistics service providers had a direct effect on elderly tourists decision (DE = 0.747) and the total effect (TE = 0.747) without an indirect effect, while the competency of health tourism logistics service providers had a direct effect on elderly tourists' satisfaction (DE = 0.332) and an

indirect effect through decision making (IE = 0.436), resulting in the total effect (TE = 0.768), reflecting the comprehensive influence of competency on satisfaction. In addition, the tourist decision had a direct effect on satisfaction (DE = 0.584), reflecting the important role of decision-making in enhancing elderly tourists' satisfaction.

Table 6: Direct effect, indirect effect, and total effect

Variables	DECI			SAT		
	DE	IE	TE	DE	IE	TE
COM	0.747***	-	0.747***	0.332***	0.436***	0.768***
DECI	-	-	-	0.584***	-	0.584***

***: Statistically significant level of 0.001

5. Discussion and recommendation

The result of the study on the H1 hypothesis revealed that elder tourists' satisfaction levels with

health tourism logistics service providers are impacted by the competencies they possess, and a significant correlation exists in achievement competencies, which are required to assess specific

situations and overcome complex health constraints through effective planning, goal setting, and implementation (Ellinger et al., 2008; Fredriksen-Goldsen et al., 2014). In the relationship, the ability to communicate clearly, to build trust (Hwang and Lee, 2019), and to generally care for the well-being of the elderly (in terms of physical freedom of movement) also play major roles in alleviating such concerns and in improving the overall experience of travel. On the other hand, management competencies, such as effective planning of tourism programs, efficient allocation of resources, and the ability to respond flexibly to emergency health crises, are crucial for safety and providing quality service (Abdelrazek et al., 2010; Donelan et al., 2019). In addition, the beneficial effects attributed to personal characteristics of service providers, such as kindness and patience, and an understanding that elder tourists may not be as spry as other generations, help create a friendly atmosphere and enhance satisfaction (Goldberg et al., 2012; Fredriksen-Goldsen et al., 2014). Regarding service quality, to exemplify the literature concerning the customer-centric culture in leadership, Nielsen et al. (2009) argued that in the role of leadership, inspiring the team to work towards service quality and motivating an environment of customer-focused elements are important aspects of providing a seamless travel experience (Testa and Sipe, 2012). However, these research findings demonstrate significant differences compared to previous studies in global contexts. In the Thai context, the ability to understand and apply traditional health wisdom is more important than found in Ellinger et al.'s (2008) research, which focused specifically on Western achievement competencies. The integration between modern medicine and traditional Thai medicine, and building trust through Thai cultural dimensions, are issues that Jungprawate et al. (2021) and Thongruang (2014) identified as significant gaps in studies related to health tourism in Thailand. This study, therefore, helps fill these gaps by confirming that culturally specific competencies in providing services to the elderly have a significant influence on satisfaction in the Thai context.

Having established the direct impact of service provider competencies on elderly tourist satisfaction, it is equally important to examine how these competencies influence the decision-making process. Based on the empirical findings of the H2 hypothesis test, this showed that shaping the competencies of health tourism logistics service providers is very significant quantitatively in terms of influencing the elderly towards tourist destinations. Standards for achievement-related competencies such as effective planning, clear goal setting, and operations tailored to the health limitations of the elderly are especially important in determining whether the service truly benefits elderly clients as intended (Ellinger et al., 2008; Fredriksen-Goldsen et al., 2014; Poulos et al., 2021). Effective communication and building trust, as well as understanding health limits, are integral for

elderly tourists to be confident in traveling. By listening to their concerns and being transparently simple with advice, this can lessen their concerns while also encouraging confidence in their choices (Hwang and Lee, 2019). Furthermore, management abilities such as tour program design, resource allocation, and risk management have direct repercussions on the elder tourists' mentality in terms of safety and comfort of travel experience (Abdelrazek et al., 2010; Liang et al., 2013). Personal characteristics, including kindness and patience, as well as an awareness of the physical constraints of the older visitors, are important factors leading to guest contentment and cordial mood (Goldberg et al., 2012; Fredriksen-Goldsen et al., 2014). Leadership of the service provider, such as motivating the team and making decisions in complex situations, is important to ensure that service delivery runs smoothly and the needs of the elderly are effectively addressed (Nielsen et al., 2009; Testa and Sipe, 2012). Competencies related to the elderly, such as medical knowledge, emergency management, etc., enhance the confidence of elderly tourists traveling in the sense that they make the elderly tourists have a safer, higher-quality travel experience (Harrison et al., 2019; Poulos et al., 2021). When compared to previous research by Mayakul et al. (2018), which studied factors affecting health tourism service selection in Thailand, this research shows consistency in terms of the importance of medical knowledge and emergency care. However, a significant new finding is the influence of competency in integrating traditional Thai medicine with modern medicine. Conversely, a relevant novel discovery involves the immense impact of competency in integrating traditional Thai medicine and modern medicine, which matches the gap pointed out by Pathomsirikul (2019) regarding requirements in the Thai cultural context. Furthermore, the results indicate that in the Thai context, the focus on the expression of relational warmth and friendly service according to Thai cultural norms has a more significant impact than in Hwang and Lee's (2018) study in Western contexts. In addition, more recent studies have better adapted the TPB to tourism contexts, making this study's use of TPB as a theoretical lens even more applicable. Setiawan et al. (2024) narrowed down the attitude and norm constructs of TPB by conceptualizing the experiential and instrumental nature of attitude, for the first time providing empirical evidence of the integral role of attitude in predicting tourist behavior. Such granularity in understanding the psychology of tourists supports the applicability of exploring an aged population's decision-making (and subsequent behaviors) through a TPB-based framework. Additionally, Karim et al. (2025) showed perceived behavioral control (PBC) and environmental perception, as key constructs of TPB, as an interactive relationship with digital tools such as blockchain to change sustainable decision-making for tourists. For example, these contemporary representations of TPB are evidence of its ongoing

utility and demonstrate how external enablers, such as digital infrastructure or cultural familiarity, can enhance internal behavioral intentions, particularly in older populations with unique needs.

While the influence of service provider competencies on decision-making is evident, the relationship between these decisions and overall satisfaction represents another critical linkage in understanding elderly tourist behavior. For hypothesis (H3), the result suggested that elderly tourists' health travel satisfaction is significantly influenced by their decision-making processes. This starts with a search for advanced information, which strengthens their confidence and trust in the destination. Thoroughly informing on service quality and convenience forms experiences relative to expectations, which improves overall satisfaction (Lee, 2016). Factors such as service quality, cleanliness, safety, and skilled personnel are significant aspects of travel experience in dispelling concerns about health and enhancing travel confidence (Hwang and Lee, 2019). Also, good environmental management includes better route plans, accessible venue designs, and around-the-clock services, which contribute to positive tourism experiences (Lättman et al., 2019). Quality of facilities and activities designed for the elderly, such as safe walkways, accessible toilets, and programs to support their physical and mental well-being, are essential for elderly tourists' satisfaction (Lee and King, 2019). These factors contribute to the ease and enjoyment of the trip. Simultaneously, professional services provided by skilled tour guides and specially trained staff (e.g., emergency assistance and guidance on how to access services) are vital for establishing trust and feelings of safety (Hwang and Lee, 2019). In addition, forming ties between service providers and tourists through great care and generating a warm atmosphere results in a memorable and fulfilling travel experience (Lee, 2016). Therefore, the importance of adequate facilities, tailored activities, and the knowledge of service personnel are core components influencing elderly travelers' decision-making and overall travel comfort. This result contrasts with Lee (2016), who found that decision-making in Thai elderly tourists is associated more with emotional and cultural factors, specifically in matters that Khotchasit (2021) and Phuanpoh and Ketsomboon (2023) emphasized regarding how family plays a role in health decision-making, in which Khotchasit (2021) stated that family and holistic care become vital for the elderly, which integrates traditional beliefs. This study thus adds to the literature by revealing that in the Thai context, confidence in integrating local wisdom with modern medicine is more prevalent than international research had suggested, ultimately being influential on decision-making.

The preceding analysis of direct relationships between variables leads us to consider the more complex mediating pathway through which service provider competencies ultimately affect satisfaction. The results of testing Hypothesis (H4) indicate that the competencies of health tourism logistics service providers are of utmost importance when discussing the satisfaction of older tourists, which directly affect their decision-making processes. With careful planning and organizing, as well as customization of services and trips based on the necessity of the elderly tourists, they can make wise decisions at their destinations without hesitation, which will lead to enhancing their overall satisfaction with the tours (Ellinger et al., 2008; Fredriksen-Goldsen et al., 2014). Moreover, interpersonal relationships, which consist of communication and trust, may mitigate decision-making anxiety and enhance confidence in a destination (Hwang and Lee, 2019). Management skills also help to smooth decision-making, minimize stress, and improve service satisfaction, such as planning suitable travel programs, managing efficient resources, and responding to emergencies (Abdelrazek et al., 2010; Donelan et al., 2019). It empowers the elderly tourists' choice more efficiently. Moreover, specific characteristics of service providers (patience, kindness, and responsibility) make elderly tourists feel less worried and create a cozy atmosphere, which in turn positively affects their satisfaction with the travel experience (Goldberg et al., 2012; Fredriksen-Goldsen et al., 2014). When it comes to leadership, team management skills/adequate decision-making aids enable the provision of quality services and the fulfillment of the requirements of the senior tourists in all respects (Testa and Sipe, 2012; Nielsen et al., 2009). Elderly care competencies, such as medical knowledge and health guidance, can reduce the tourists' worry and enable a safe traveling experience (Harrison et al., 2019; Poulos et al., 2021). As such, this study builds on the findings of Jotikasthira's (2010) and Jungprawate et al.'s (2021) studies, which highlighted the role of cultural variables in determining satisfaction among older travelers in Thailand. This study confirmed Sie et al.'s (2021) findings on the dissimilarity of satisfaction elements between Asian and Western older visitors. Moreover, this research contributes to bridging the gap by Thongruang (2014), who raised the need to bring about an exploration to develop competence that is culturally specific in service providers of the health tourism industry in Thailand, by highlighting that the integration of traditional Thai medicine, traditional beliefs, and international medical standards stands as one of the significant elements of competence that has a direct influence on the satisfaction and decision-making of elderly tourists.

These findings provide an integrated perspective on how competencies influence decision-making and, in turn, satisfaction in the health tourism experience among elderly tourists, offering theoretical and practical contributions to the field. The study contributes to the existing body of knowledge by validating previous studies identifying competencies impacting tourism satisfaction and decision-making of elderly individuals, while advancing the body of knowledge through

understanding the recent signals of elderly tourist motivations and expectations for the year after the Covid-19 pandemic onwards, when the framework of tourist attraction behaviors experienced disruptions. Recent studies illustrate the increasing significance of emotional wellness, active aging, and inclusive service design with older travelers (Chen, 2024; Yeh and Yang, 2025; Stanimir and Przybysz, 2024), which this work captures and contextualizes within the Thai setting. This convergence of more up-to-date insight reinforces the validity of the findings here, especially since much of the extant literature, such as Ellinger et al. (2008) and Fredriksen-Goldsen et al. (2014), was based on Westernized models that minimize cultural, emotional, and traditional aspects. This study fills the methodological and contextual gaps identified by previous scholars, such as Pathomsirikul (2019) and Jungprawate et al. (2021), but especially in aspects like culturally specific competencies, traditional health beliefs, and intergenerational decision-making dynamics. Notably, studies differ, and the novelty factor of this study lies in demonstrating the importance of Thai cultural contexts on the competencies possessed by health tourism logistics service providers. This study fills critical gaps in Pathomsirikul (2019), Jungprawate et al. (2021), and Thongruang (2014), who had noted concerns about the scarcity of empirical studies relative to the Thai context that highlight the importance of service warmth, the integration of traditional wisdom into modern medicine, and understanding cultural dimensions in contributing to the satisfaction of elderly tourists and their decision-making in the Thai context to a greater extent than existing international research had suggested. These results would be an important factor in developing health tourism in Thailand to meet the needs of elderly tourists who are both domestic and international.

6. Future research suggestion

Future research on the competencies of healthcare tourism logistics service providers and their impact on the decision-making and satisfaction of the elderly tourists could explore more meaningful directions by expanding across geographic and cultural contexts to compare differences in healthcare tourism development in each country. It should include examining how culture influences the expectations and satisfaction of senior citizens. Longitudinal research could also be useful in tracking changes in service provider competence over time. Additionally, factors such as the integration of technology into services and the role of digital communication tools in building trust among senior citizens should be explored, along with related aspects, such as risk perception, mental health, and support networks. It is also essential that future studies consider the perspectives of stakeholders, such as family members or medical professionals involved in service delivery. Cross-sector collaborations, such as partnerships between tourism service providers and medical institutions, should also be examined, along with emerging trends in healthcare tourism, such as recreational health tourism or post-pandemic recovery. Competency development through experiments or case studies should also be examined to reveal the impact of training on the satisfaction and decision-making of elderly tourists.

7. Conclusion

The purpose of this study was to examine the competencies of logistics service providers in the health tourism industry as well as the effect of such competencies on senior tourist decision-making and satisfaction in Thailand. The results demonstrate that management skills, relationship building, leadership, and elder care are critical to enhancing service quality and core competencies to aid the decision-making process of elderly tourists, as trust and confidence in services was a key motivation for successful elderly destination choice due to the need to accommodate specific needs of elderly tourists, such as designing tours that are safe, effectively managing resources, and clear communication. The Tourists' decision-making process has a positive relationship with their satisfaction levels as well. On the ground, service providers might want to do more to build their capacity to plan, establish goals, and get ready for emergencies. It should also be noted that they are able to adjust their services to the older ones, such as choosing tourist attractions that are compliant and suitable in facilities. There is also a need to improve interpersonal skills as well as knowledge about health in order to instill greater confidence in tourists. From an academic perspective, this research provides a novel framework on competency theory and consumer behavior in health tourism for the elderly, emphasizing the significance of communication and empathy in the decision-making process. The analysis is undertaken to develop management and leadership concepts that include decent teams and teams, which can be directly facilitated and answer the needs of senior tourists, which should affect the quality of service and the overall, long-term satisfaction of use by elderly tourists.

List of abbreviations

AVE	Average variance extracted
COM	Competencies of health tourism logistics service providers
CV	Coefficient of variation
CVI	Content validity index
DE	Direct effect
DECI	Tourist decisions
EFA	Exploratory factor analysis
IE	Indirect effect
PLS-SEM	Partial least square structural equation modeling
SD	Standard deviation
SAT	Tourist satisfaction
SEM	Structural equation modeling

| TE | Total effect |
| TPB | Theory of planned behavior |

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Compliance with ethical standards

Ethical considerations

Ethical considerations were carefully addressed throughout this research. All participants provided informed consent prior to survey completion. The study involved minimal risk, collecting only anonymous responses about tourism experiences without any personal identifying information. Participation was entirely voluntary, and participants could withdraw at any time. Data collection and handling procedures followed established ethical guidelines for human subjects research.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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