



Factors Associated with the Opinion on Self-Care of Elderly in Southernmost Provinces, Thailand

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Abstract

Background and Aims: Self-care is crucial for the elderly since it allows everyone to have a healthy life, boost immunity, prevent sickness, care for themselves when unwell, and continue to perform everyday duties in their own homes. This study aimed to investigate the factors influencing the elderly's opinions on self-care in the southernmost provinces of Thailand.

Methodology: This quantitative study used data collected by the Deep South Coordination Center from 271 elderly people in Pattani. The independent variable included demographic factors and health conditions. The outcome variable was a 4-point rating scale opinion on the self-care of the elderly. Descriptive statistics were employed to illustrate the sample's characteristics. Factor analysis was used to reduce the number of outcome variables. Multiple linear regression was used to examine the relationship between the outcome variables and the independent variables.

Results: Eighteen outcome variables were categorized into three factors consisting of positive self-management, health preparation, and doing things for great pleasure. Elderly people who could walk with their spouse or family were more likely to have positive self-management and health preparation than those who lived alone or were separated and could not walk. Elderly people who did not engage in health-risk activities and could use public transportation independently were more likely to enjoy themselves than those who could not.

Conclusion: The findings might improve the quality of self-care among the elderly to live better in their current societal situation. This can encourage care healthcare providers to promote daily living practices among the elderly.

Keywords: Opinion; Elderly; Self-care; Southernmost of Thailand



ปัจจัยที่มีความสัมพันธ์กับความคิดเห็นต่อการดูแลตัวเองของผู้สูงอายุ จังหวัดชายแดนใต้ ประเทศไทย

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บทคัดย่อ

ภูมิหลังและวัตถุประสงค์: การดูแลตนเองของผู้สูงอายุมีความสำคัญ ช่วยให้ผู้สูงอายุสามารถดำเนินชีวิตที่ดี ต่อสุขภาพ เสริมสร้างภูมิคุ้มกัน ป้องกันโรคภัยไข้เจ็บ ดูแลร่างกายเมื่อเจ็บป่วยได้ และดำเนินชีวิตประจำวันในบ้านของตนเองได้ การศึกษานี้มีวัตถุประสงค์เพื่อศึกษาปัจจัยที่มีความสัมพันธ์กับความคิดเห็นต่อการดูแลตัวเองของผู้สูงวัย จังหวัดชายแดนใต้

ระเบียบวิธีการศึกษา: การศึกษาเชิงปริมาณนี้ใช้ข้อมูลที่เก็บรวบรวมโดยศูนย์ประสานงานวิชาการให้ความช่วยเหลือผู้ได้รับผลกระทบจากเหตุจังหวัดชายแดนภาคใต้ จากผู้สูงอายุจำนวน 271 คน จังหวัดปัตตานี ตัวแปรอิสระประกอบด้วยคุณลักษณะทางประชากรศาสตร์ และ ภาวะสุขภาพของกลุ่มตัวอย่าง ตัวแปรตามคือ ความคิดเห็น 4 ระดับ ต่อการดูแลตนเองของผู้สูงอายุ สถิติเชิงพรรณนาใช้วิเคราะห์เบื้องต้นของตัวแปรต่าง ๆ การวิเคราะห์ปัจจัยเชิงลดจำนวนของตัวแปรตาม และใช้การทดสอบเชิงเส้นพหุคุณวิเคราะห์ความสัมพันธ์ระหว่างตัวแปรตามและตัวแปรอิสระ

ผลการศึกษา: ตัวแปรตามจำนวนเป็น 3 กลุ่ม ประกอบ ความคิดเห็นเชิงบวกในการจัดการตนเอง การเตรียมความพร้อมเกี่ยวกับสุขภาพ และ การทำในสิ่งที่มีความสุข ผู้สูงอายุที่สามารถเดินได้และอาศัยอยู่กับคู่สมรส หรือครอบครัว มีแนวโน้มจัดการตนเองเชิงบวกและการเตรียมสุขภาพที่ดีมากกว่าผู้ที่อยู่คนเดียวหรือแยกกันอยู่และไม่สามารถเดินได้ ผู้สูงอายุที่ไม่ได้ทำกิจกรรมเรียงต่อสุขภาพและสามารถใช้ระบบขนส่งสาธารณะได้อย่างอิสระมีแนวโน้มที่จะทำสิ่งที่มีความสุขได้มากกว่าผู้ที่ไม่สามารถทำได้

สรุปผล: ผู้สูงอายุที่อาศัยอยู่กับครอบครัว สามารถเดินทางได้อย่างอิสระมีทักษะคติที่ดีต่อการดูแลสุขภาพตนเอง ซึ่งผลการศึกษานี้จะเป็นข้อมูลสำหรับการดูแลตนเองของผู้สูงอายุให้มีชีวิตที่ดีขึ้นในสถานการณ์สังคมในปัจจุบัน และเป็นข้อมูลให้ผู้ดูแลได้ส่งเสริมการดูแลสุขภาพตนเองในชีวิตประจำวันของผู้สูงอายุ

คำสำคัญ: ความคิดเห็น; ผู้สูงอายุ; การดูแลตนเอง; จังหวัดชายแดนใต้ ประเทศไทย

Introduction

The development of modern medical science, better public health services, economic expansion, and better education cause a population to live a longer life (Techataweewan & Prasertsin, 2018). The number of elderly people worldwide is expected to more than double over the next three decades, reaching more than 1.5 billion by 2050 (United Nations, 2020). Older people naturally have weaker bodies, and the aging process tends to reduce physical fitness and cause difficulties with daily life activities (Riebe et al., 2009; Tuna et al., 2009). The ability to care for the elderly is essential for managing their everyday activities. Aging reduces



elderly people's ability to care for themselves due to a range of factors, resulting in a decline in life satisfaction. Healthy aging is a growing concept in many societies that takes into consideration a wide range of aspects to ensure the healthy lives of elderly people (Yatniyom, 2004).

Self-care in physical and mental health are closely related and become more vital as we older. Self-care is defined as the activity of continually ensuring one's own well-being, health, and happiness. Preparation to cope and care are needed for the growing number of elderly with their physical, mental, and social needs. Health preparation before the elderly policy was found for people who are going to be elderly (Yansopon, 2021). The elderly are more concerned with excellent health and self-care practices due to attitude and knowledge. A key element that is connected to high self-rated health is a positive attitude toward aging (Cadmus et al., 2021). The opinions on self-care are affected by many factors surrounding it. Physical health status is important for elderly people, and it can be a predictor of life satisfaction (Backman and Hentinen, 2001), as well as mental health and social needs.

In Thailand, an aged society is one in which 10% of the population is over the age of 60. (Foundation of Thai Gerontology Research and Development Institute, 2019). Thailand has already become a society since 2021 with the proportion of the elderly is 17.57%. The research on the elderly conducted across four regions of Thailand by using focus groups and in-depth interviews found that to promote healthy aging, one must be constantly involved in psychological and social health promotion (Thanakwang et al., 2012).

In the southernmost provinces of Thailand, this region is unique and diverse, with a multicultural society that constantly faces unrest situations. The residents in southern regions generally feel happy, despite their exposure to the unrest (Ford, 2021). The elderly had daily lived practices toward healthy aging according to cultural and social norms, which integrated both modern medicine and traditional medical treatments. Therefore, this study investigates the factors related to the opinions on self-care of the elderly in the southernmost provinces of Thailand. The findings might improve the quality of self-care among the elderly to live better in their current societal situation. Furthermore, information and recommendations on relevant issues from this study will help make policy decisions for related departments.

Objectives

To investigate the factors related to the opinions on self-care of the elderly in the southernmost provinces of Thailand.





Literature Review

Zeleznik (2007) studied the self-care of home-dwelling older adults in Slovenia to describe their perceptions of their abilities to manage at home. The sample included 302 older people who lived at home. The elderly who can manage their daily activities and routines have a good functional capacity, good family relationships, accept their future health, and are satisfied with their lives because they can care for themselves, but their self-esteem is not high.

Räsänen et al. (2014) studied the self-care behaviors styles of 180 elderly people living at home in Finland. Factor analysis was used to identify three different self-care styles: responsible self-care, formally guided self-care, and independent self-care. A responsible self-care behavior style had a strong positive relationship with satisfaction with life, self-esteem, and functional capacity. A formally guided self-care behavior style had statistically significant relationships with life satisfaction and high self-esteem. Strong self-esteem and good functional capacity were associated with an independent self-care behavior style.

Sadegh et al. (2018) investigate the factors affecting the self-care abilities of elderly people in Tabriz, Iran. The results showed that the elderly had poor self-care abilities. Elderly people's self-care abilities were related to their educational level, life status, employment status, and marital status.

Thanakwang et al. (2014) studied the characteristics of active aging among elderly in Thailand. The data was gathered through focus groups and in-depth interviews with 64 elderly people from four Thai regions. The elderly's perspective on active aging included self-reliance, which represents independence in self-care and the ability to care for themselves.

Many factors, including living conditions, health, and adequate functional ability, have affected the self-care of elderly people. Living conditions such as the elderly's educational level, life status, employment status, marital status, and strong family relationships are related to self-care. This study focuses on factors related to the opinions of elderly people who live in the southernmost province of Thailand.

Conceptual Framework

This study investigates the relationship between demographic variables and outcome variables as shown in Figure 1.



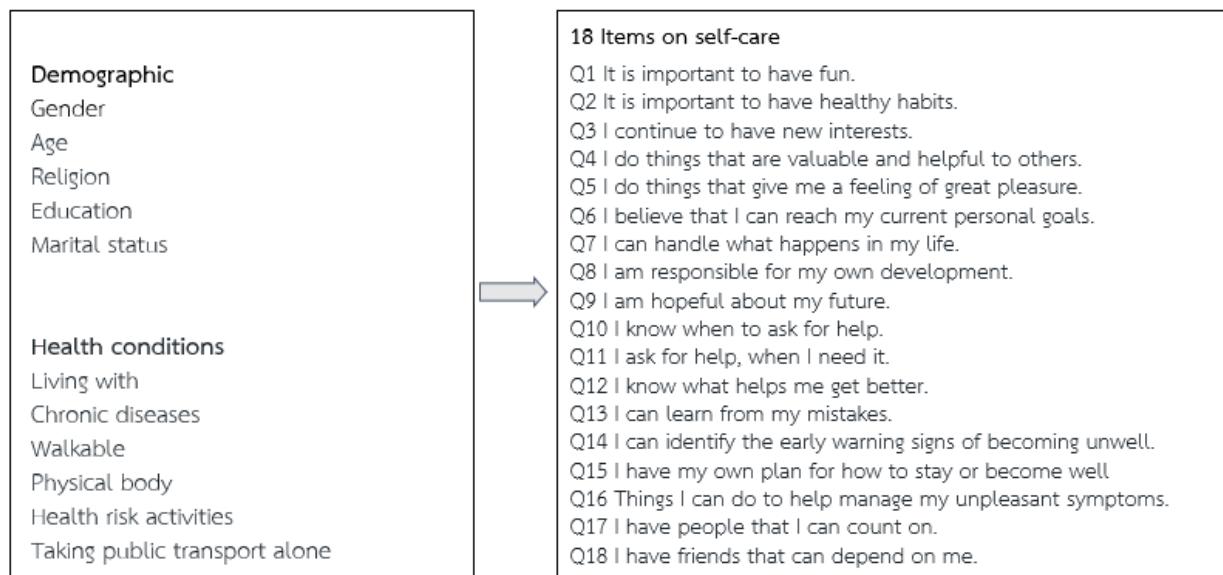


Figure 1 Path diagram of this study

Methodology

The secondary data was obtained from the Deep South Coordination Center (DSCC). The DSCC collected the data from the elderly in Pattani from the 10th of June 2020 to the 22nd of March 2021 using a questionnaire. The first section of the questionnaire is general information and demographics, the second section contains the opinion on self-care modified from RAS-DS (Recovery Assessment Scale – Domains and Stages) with a 4-point scale: “untrue”, “a bit true”, “mostly true”, and “completely true” (Hancock et al., 2019). The sample size of the elderly was 271 records, with an age range of 55 to 95 years old.

The demographic variables consisted of gender, religion, age group, educational background, and marital status. The health conditions variables consisted of living alone or with family, having a chronic disease, walkable, health risky activities, physical body, and self-transportation. Health risk activities include smoking, drinking alcohol, and not exercising. Self-transportation means that the elderly can go out independently or need someone to assist. The outcome variables were 18 items of opinion on elderly self-care, each with a 4-rating scale.

Descriptive statistics were employed to illustrate the sample's characteristics. Exploratory factor analysis using Promax rotation was used to reduce a large number of variables (18 items) into three factors. The factor model with p factors takes the form:

$$y_i = \mu_i + \sum_{k=1}^p \lambda_i^{(k)} \phi^{(k)}, \quad (1)$$

where μ_i is the mean for outcome variables item i , $\lambda_i^{(k)}$ are the loading factors of item i on the k^{th} factor, and $\phi^{(k)}$ are the common factors. Items that loaded higher than 0.3 on a factor were combined into that factor (Hair et al., 2009).



Multiple linear regression analysis was then used to determine the relationship between determinants and outcomes. The model takes the form

$$\hat{y} = b_0 + b_1 x_1 + b_2 x_2 + \dots + b_k x_k \quad (2)$$

where b_0 through b_k are the estimated regression coefficients, and x_1, x_2, \dots, x_k are the independent variables.

This study has been reviewed by the Human Research Ethics Committee in full compliance with the Declaration of Helsinki and the Belmont Report. The Research Ethics Committee for Science, Technology and Health Science Prince of Songkla University, Pattani Campus.

Results

A total of 271 elderly were included in the study; 54.6% were female, 90.04% of them were Muslims, 39.1% were aged between 60-69 years, 61.6% were together with a partner, and 12.55% were living alone. The elderly 36.9% had education from both the general and religious systems. In the health condition of this sample, 59.41% have chronic diseases, 88.19% are able to walk independently, 43.17% engage in health risk activity, and 54.98% do not require assistance with public transportation.

Table 1. Characteristics of sample

Demographic characteristics	number (n=271)	Percent
Gender		
Male	123	45.39
Female	148	54.61
Religion		
Islam	244	90.09
Non-Islam	27	9.96
Age group (year)		
< 60	63	23.25
60-69	106	39.11
70-79	59	21.77
≥80	43	15.87
Education		
No education	68	25.09
General education	93	34.32



Demographic characteristics	number (n=271)	Percent
Religious education	10	3.69
Both education	100	36.90
Marital status		
Separated	104	38.38
Together	167	61.62
Living		
Alone	34	12.55
With family	237	87.45
Chronic diseases		
Yes	161	59.41
No	110	40.59
Walkable		
Yes	239	88.19
No	32	11.81
Health risk activities		
Yes	117	43.17
No	154	56.83
Physical body		
Normal	239	88.19
Not normal	32	11.81
Self-transportation		
Yes	149	55.00
No	122	45.00

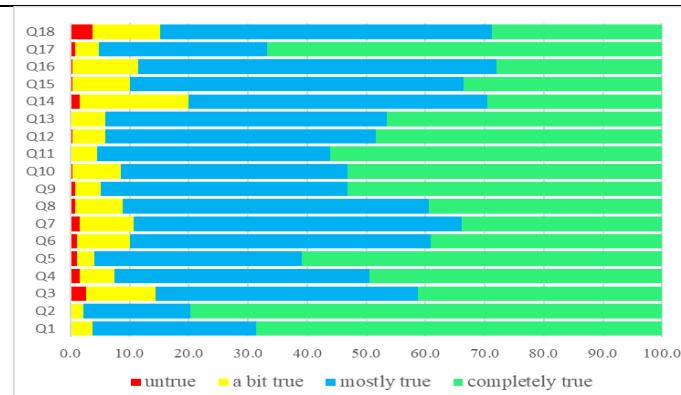


Figure 2. The distribution of 18 opinions on the self-care question



Figure 2 shows the distribution of all 18 variables, most of the answers were “mostly true” and “completely true”. The first three highest answers on “completely true” were item 2 (It is important to have healthy habits), item 1 (It is important to have fun), and item 17 (I have people that I can count on). The smallest of the answers on completely true was item 16 (There are things that I can do to help me deal with unwanted symptoms. There were about 20% through that they cannot identify the early warning signs of becoming unwell.

Table 2 presents the results from the factor analysis to reduce 18 items of variables into three factors. The first factor consisted of ten questions which were named ‘positive self-management’. The second factor consisted of five questions, which were named ‘health preparation’. The last factor consisted of three questions which were named "doing things for great pleasure".

The relationship between all the independent variables and each of the four outcome variables was investigated using multiple linear regression. The results are shown in Table 2-5.

Table 2. Factor loading of 18 items

items	Factor loading		
	Fac1	Fac2	Fac3
Q7. I can handle what happens in my life.	0.689		0.116
Q6. I believe that I can reach my current personal goals.	0.636	0.168	0.229
Q15. I have my own plan for how to stay or become well.	0.574	0.227	0.251
Q9. I am hopeful about my future.	0.534	0.335	0.122
Q14. I can identify the early warning signs of becoming unwell.	0.513	0.189	0.110
Q16. There are many things I can do to help manage my unpleasant symptoms.	0.502	0.227	0.152
Q13. I can learn from my mistakes.	0.440	0.324	0.225
Q12. I know what helps me get better.	0.414	0.395	0.156
Q8. I am responsible for my own development.	0.375	0.165	0.185
Q18. I have friends who can depend on me.	0.371		0.123
Q2. It is important to have healthy habits.		0.654	0.321
Q1. It is important to have fun.		0.569	0.348
Q10. I know when to ask for help.	0.297	0.540	
Q11. I ask for help when I need it.	0.218	0.510	0.109



Q17. I have people that I can count on.	0.250	0.395	
Q4. I do things that are valuable and helpful to others.	0.285		0.646
Q5. I do things that give me a feeling of great pleasure.	0.270	0.267	0.635
Q3. I continue to have new interests.	0.151	0.125	0.425

Tables 3-5, show the results from the model of each factor according to multiple regression analysis of factors related to the opinions on self-care of the elderly. Elderly people who lived with family had more positive self-management than those who lived alone. Elderly people who can walk or use public transportation independently have better self-management than those who cannot (Table 3). The health preparedness of elderly people who lived with a partner or who could walk was found to be better compared to those who did not (Table 4). Elderly people who did not engage in health-risk activities and could use public transportation independently were more likely to enjoy themselves than those who could not (Table 5). Figure 3. shows summaries of the overall findings.

Table 3. Factors associated with positive self-management among study subjects

variables	coefficients	SE	p-value
(Intercept)	3.047	0.072	<0.0005
Live			
alone			
with family	0.206	0.070	0.0037
Walkable			
Yes			
No	-0.308	0.076	<0.0005
Self-transportation			
No			
Yes	0.138	0.049	0.0052

Table 4. Factors associated with health preparation among study subjects

variables	coefficients	SE	p-value
(Intercept)	3.533	0.039	<0.0005
Marital status			
Separated			
Together	0.135	0.048	0.0051



Walkable

Yes

No

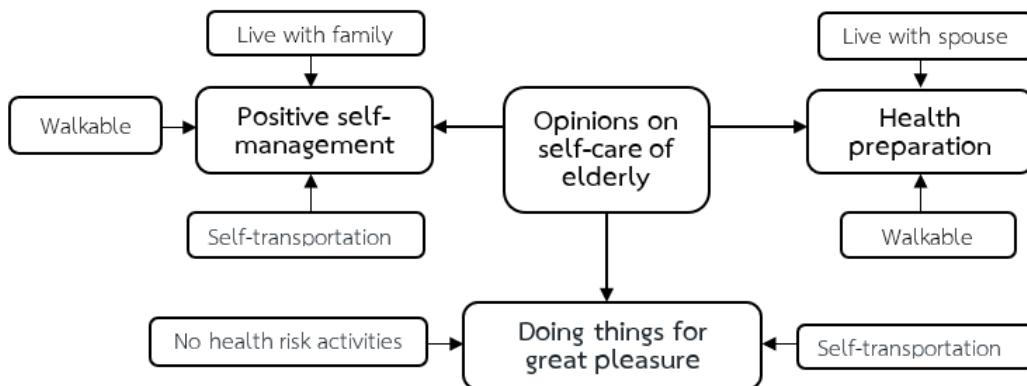
-0.149

0.072

0.0399

Table 5. Factors associated with doing things for great pleasure among study subjects

variables	coefficients	SE	p-value
(Intercept)	3.377	0.055	<0.0005
Health risk activities			
Yes			
No	-0.187	0.063	0.0032
Self-transportation			
No			
Yes	0.238	0.063	0.0002


Figure 3. Summarise the overall finding

Discussion

The overall demographic characteristics of the elderly people in this study showed that most of them were female, aged 60–79 years, and lived with family. Regarding chronic diseases, it was found that more than half had chronic diseases. It was in agreement with several studies that found that half of the subjects suffer from at least one disease (Sinirimana, 2003; National Statistical Office, 2007).

Regarding to the elderly opinion on self-care, the factor analysis was classified into 3 perspectives: positive self-management, health preparation, and doing things under great pressure. Elderly people who lived with their spouse or family had better positive self-management and health preparation than those who did not. This finding was agreed with a study



conducted by Thanakwang et al. (2012), in which the elderly defined healthy aging as the absence of diseases, functional independence, a positive psychological attitude, and social contribution.

Elderly people who can walk and take public transportation independently were significant determinants of positive self-management and doing things for great pleasure. Physical health conditions are very significant for many elderly people, and they could be a predictor of life satisfaction (Backman and Hentinen, 2001).

Recommendation

Thus, healthcare providers should promote self-care in daily living practices among the elderly, particularly a positive mindset, avoid involving health-risk activities to avoid disease and disability and encourage active engagement with healthy aging.

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