



Factors Affecting the Quality of Life of the Elderly in the 4.0 Era: A Study Under the Sufficiency Economy Philosophy in Maha Sarakham Province

Suthinee Atthakorn¹, Sirikanya Seti^{2*}, Phichit Pliankum³, Kanokphatchara Raengkree⁴ and Subunn Ieamvijarn⁵

^{1,2*,3}Lecturer from the Faculty of Political Science and Public Administration Rajabhat Mahasarakam University

⁴Independent Scholar

⁵Lecturer from the Faculty of Business School Mahasarakam University

*Corresponding Author Email: Sirikanyakhai@gmail.com

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Abstract

This research consists purposes were 1. to study the factors that affect the improvement of the quality of life of the elderly in Nong Son, Chiang Yuen Mahasarakam and 2. to develop policy recommendations on improving the quality of life of the elderly. The sample was 120 elderly people by purposive sampling in Wai Kaew School in Chiang Yuen. The data collection tools used were questionnaires, interviews, and focus group discussions, The statistical analysis used in this research were mean, percentage, standard deviation, and multiple regression analysis (MRA). The Findings showed that factors affecting the quality of life of the elderly in the school consist of 5 factors (1) age (2) income (3) living in moderation (4) living with good immunity and (5) living according to knowledge conditions. From MRA, the variables were able to explain the factors that affect the elderly's quality of life at 57.50 percent ($R^2 = .575$, $F = 25.404$) with statistically significance at the level of $p < 0.05$. The following policy recommendations were made 1) The government and external agencies that are related government departments should pay attention and focus on promoting policies, projects, or activities which drive and improve the quality of life of the elderly under the philosophy of the Sufficiency Economy in the 4.0 era and 2) The public should focus on participating and driving projects/activities and contributing to the project/activity to improve the quality of life of the elderly under the Sufficiency Economy philosophy.

Keywords: Quality of Life, Elderly, Sufficiency Economy Philosophy



Introduction

Many Countries around the world have transformed into an aging society. The United Nations (UN) has set the criteria for the elderly as those who are 60 years old and above (United Nation, 2010: 26). As for the definitions by the World Health Organization (WHO), a person is considered to be an elderly if defines the elderly as those who are 60 years old and above, or those who have reached the age of retirement, which for the developed countries the criteria is people aged 65 years and above. For Thailand, the official definition of the elderly appears in the Older Persons Act B.E. 2546 (2003) which is 60 years and above.

From 2005 until 2022, Thailand has become a complete aged society, with more than 12.9 million people over the age of 60 or 20% of the total population (Chuanwan et al., 2022: 1) and it is predicted that within the next 15 years, Thailand will become a super aged society with the elderly population increase to 28% of its population. As a result of this trend, Thailand has formulated plans and policies to support the elderly. Currently, Thailand is implementing the second phase of the action plans for the Elderly based on the 20-year National Strategy on the Elderly and the 13th National Social and Economic Development Plan which focus on developing and promoting the elderly to have good quality of life in the 4.0 era. This has resulted in the urgency and prioritization of the development of the quality of life for the elderly in Thailand by all sectors, including the government and the private sector. The public must also be prepared to support the aging society as this will have an impact on many dimensions, including the economy and social dimension (Duangruang & Hasunsri., 2020). The Bureau of Elderly Health, which its main role and mission is on their health promotion and environmental health that is conducive to the elderly at all levels. has set a goal of "healthy elderly people who can take care of themselves and have a good quality of life".

For Mahasarakham, the number and percentage of the elderly increased from 19.7% in 2017 to 23.0% in 2021 (Mahasarakham Provincial Statistics Office, 2021). The research team provided community academic services during 2020-2022 to Kaew Senior Citizen School, an elderly school in Mahasarakam which has been established by a group of elderly people in the community. There are currently 150 elderly students managed by Mr. Then Khanthom, the school director and the Chairman of the local Senior Citizens' Club. The staff consists of 5 volunteer teachers receives partial budget support from the Nong Son Sub-district Administration Organization who supports 20,000 baht per year, but it is not enough to develop and organize all the activities for the elderly. Elderly people have low self-care capacity and need help from others.

From the situation mentioned above, the research team became interested in improving the quality of life of the elderly in the 4.0 era under the philosophy of self-sufficiency economy in Mahasarakham. Addition, lack of research on Sufficiency Economy Philosophy about role in Quality of life for elderly in this region. The



research team hopes that the results of this research will provide information and knowledge to develop into policy recommendations to help improving the quality of life for the elderly, allow them to be self-reliant, reduce their dependency and improve their socioeconomic status. This will have a positive impact on the overall development of the quality of life of the people in Mahasarakham Province and will also expand and update the research knowledge on the elderly in Mahasarakham Province.

The Purposes

1. To study the factors that affect the improvement of the quality of life of the elderly Nong Son Subdistrict Chiang Yuen District Maha Sarakham Province
2. To develop policy recommendations for improving the quality of life of the elderly in the 4.0 era under the philosophy of self-sufficiency economy.

Methodology

This research It is a combination of qualitative and quantitative research. The research method is as follows.

1. Population and sample groups in the research include:

- 1.1 Population included in this study were 171 elderly in Kaew Senior School in Mahasarakham
- 1.2 The sample size of 120 subjects from the school's population was calculated using Taro Yamane (1973) equation.
- 1.3 Cronbach's alpha for reliability in all aspects is at 0.85

Research tools include: 1. Questionnaire 2. In-depth Interview 3. Focus Group Discussion

2. Data collection includes collecting data from 1) primary data, which is data obtained from in - depth interviews with the target group. and the use of questionnaires with sample groups and 2) Secondary Data (Secondary Data) is information obtained from collecting information and various documents (Document Research) such as books, textbooks, academic documents, research and related electronic media, etc.

3. Data analysis includes data analysis: 1) Descriptive Analysis as Frequency distribution, percentage, Mean & measure variation (e.g. standard deviation) 2) Magnitude of independent variables and level of quality of life of the elderly were based on Likert scale score from the questionnaire, the following scales.

4.21 – 5.00	= Very high
3.41 – 4.20	= High
2.61 – 3.40	= Medium

1.81 – 2.60 = Low

1.00 – 1.80 = Very low

3) Pearson's Correlation Coefficient Analysis to analyze the associations between all the independent variables to elderly's quality of life, and interactions among the variables themselves. 4) Stepwise Multiple Regression Analysis (MRA)

Results

Most of the respondents were female (105 people, 87.5%), most of whom were between the age of 60 and 70 years (68 people, 56.7%). 52 people (43.3%) were divorced, separated or widowed. 101 people (84.2%) completed primary school as their highest education, while 88 people (73.3%) worked in the agriculture sector and 91 people (75.8%) received government elderly pension. Most of the respondents (71 people, 59.2%) had been members of the school for 1-5 years, in good health without chronic illnesses (62 people, 51.7%), but in debts (94 people, 78.3%).

This study employed a stepwise multiple linear regression to identify the variable(s) which had the most influence on the elderly's quality of life in Mahasarakham. The findings have been summarized in Table 1

Table 1 Selected independent variables

Selected independent variables	Regression coefficient (unadjusted)		Regression coefficient (adjusted)	t	Sig.
	b	Std. Error	Beta		
Constant	0.637	0.350	-	1.818	0.072
Age (X_2)	-0.183	0.053	-0.235	-3.469	0.001*
Income (X_6)	0.181	0.080	0.158	2.249	0.027*
Living in moderation (X_9)	0.391	0.060	0.466	6.530	0.000*
Living with good immunity (X_{11})	0.258	0.062	0.320	4.158	0.000*
Living according to knowledge condition (X_{12})	0.133	0.045	0.219	2.942	0.004*
S.E. = .308, R = .758, R ² = .575, F = 25.404					

From Table 1 the independent variables are imported into the predictive model. It was found that factors affecting the quality of life of the elderly were: 1) age, 2) income, 3) living with moderation, 4) living with good immunity, and 5) living according to knowledge conditions. The model was able to explain these factors at 57.5



percent ($R^2 = .575$, $F = 25.404$) at the statistically significant level of 0.05. The predictive model can be expressed as followed

Predictive model

$$\text{Total } Y = 0.637 - 0.183X2 + 0.181X6 + 0.391X9 + 0.258X11 + 0.133X12$$

$$\begin{aligned} \text{Elderly's Quality of Life} = & 0.637 - 0.183 \text{ (Age)} + 0.181 \text{ (Income)} + 0.391 \text{ (Moderation)} + 0.258 \text{ (Immunity)} \\ & + 0.133 \text{ (Knowledge)} \end{aligned}$$

Conclusion

This research combined both quantitative and qualitative approaches to examine the quality of life of the elderly in Kaew Senior School, Mahasarakham. The findings revealed that most respondents were female, aged between 60–70 years, with primary school education, mainly working in agriculture, and largely dependent on government pensions. Despite relatively good health, many were in debt.

The stepwise multiple regression analysis indicated that five key factors significantly influenced the elderly's quality of life: age, income, living in moderation, living with good immunity, and living according to knowledge conditions. Among these, "living in moderation" and "living with good immunity" had the strongest positive effects, while age showed a negative association. The predictive model explained 57.5% of the variance in quality of life, confirming the importance of both economic and lifestyle-related determinants.

In summary, promoting sustainable income, encouraging moderation in daily life, fostering health resilience, and enhancing knowledge-based living are essential strategies for improving the overall quality of life of the elderly in Mahasarakham.

Discussion

A study of Factors Affecting the Quality of Life of the Elderly in the 4.0 Era : A Study Under the Sufficiency Economy Philosophy in Maha Sarakham Province, found five factors: 1) age, 2) income, 3) living a moderate lifestyle, 4) living with good immunity, and 5) living according to knowledge. These variables accounted for 57.50 percent of the factors affecting the quality of life of the elderly in Nong Son Subdistrict, Chiang Yuen District, Maha Sarakham Province ($R^2 = .575$, $F = 25.404$), with statistical significance at the 0.05 level. This is consistent with the research findings of Nasamon Butwiset and Uparattha Inthasat, who studied factors affecting the quality of life of the elderly in Phra Nakhon Si Ayutthaya District, Phra Nakhon Si Ayutthaya Province. They found that factors affecting the quality of life of the elderly included physical strength, work concentration, satisfaction with making friends, and overall well-being, which influenced physical, mental, social, and

environmental aspects of quality of life. These factors are all consistent with the development of quality of life for the elderly under the Sufficiency Economy Philosophy.

However, the finding of this research were consistent with ARANYAKUL et al., (2022). Who studied Factors affecting the application of sufficiency economy innovation in improving the quality of life from the elderly. It was found that Factors affecting the application of sufficiency economy innovation in improving the quality of life from the elderly were listed in the following order: 1) human capital and 2) economic capital.

Discoveries or New Knowledge

Age has a negative impact on the quality of life of the elderly. Specifically, as people get older, their quality of life tends to decline, highlighting the need to implement measures or activities that focus on the elderly, especially those in older age groups.

Living a moderate life is a concept deeply rooted in Thai cultural and social values, which has a clear positive influence on the quality of life of the elderly.

Having good immunity is another important factor discovered, which highlights the significance of promoting preventive health and immunity, rather than solely focusing on disease treatment.

Living according to the conditions of knowledge reveals that continuous learning, awareness, and the application of knowledge in daily life contribute to increased self-reliance and life satisfaction in old age.

Suggestion

1. Suggestions for use

1.1 The development to Improve the quality of life of the elderly in Mahasarakham Province has not been able to promote rational lifestyle amongst the elderly. Therefore, the authorities of Mahasarakham Province should focus on developing and enhancing the rational lifestyle development of the elderly so that the elderly can make decisions about the level of self-sufficiency and based on good rationale so they can have the ability to consider the relevant factors and carefully consider the expected consequences of their actions.

1.2 The government agencies in Mahasarakham and the community must work together in pushing, uplifting and developing the lifestyle of the elderly with rationality through initiating effective activities and projects which can have a direct impact on the improvement and development of the lifestyle of the elderly, especially in promoting rational thinking. The relevance stakeholders should also ensure that there would be continuity in these initiatives.



1.3 Local authorities should develop programs that integrate Sufficiency Economy Philosophy principles into health campaigns, focusing on building 'self-immunity' through preventive care and nutrition.

1.4 Community centers should facilitate 'knowledge-sharing' workshops where younger elderly teach digital skills, and older elderly share traditional knowledge, fostering moderation and mutual support.

1.5 Financial literacy programs tailored for the elderly could help manage debt and maximize the utility of their 'income' from pensions and agriculture.

2. Suggestions for next research

2.1 The factors related to rational lifestyle of the elderly should be further investigated to study the rational lifestyle development model of the elderly so that they can live in the 4.0 era efficiently and effectively.

2.2 Research should be conducted to study the mechanism for improving the quality of life of the elderly in the 4.0 era in order to continuously drive the development of the quality of life of the elderly and achieve sustainability in such operations.

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