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**To Link this Article:** http://dx.doi.org/10.6007/IJARBSS/v10-i14/7688 DOI:10.6007/IJARBSS/v10-i14/7688

Received: 01 April 2020, Revised: 05 May 2020, Accepted: 13 June 2020

Published Online: 09 July 2020

In-Text Citation: (Ayuwat et al., 2020)

**To Cite this Article:** Ayuwat, D., Hong-ngam, J., Saranrittichai, K., Chumnanmak, R., Narongchai, W., & Auraiampai, N. (2020). The Determinant Factors of Life Happiness of Elderly in Rural Area, Northeast Thailand. *International Journal of Academic Research in Business and Social Sciences*, *10*(14), 190–199.

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Special Issue: WSTI2018 - Issues and Trends on Education, Science and Technology, 2020, Pg. 190 - 199

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# The Determinant Factors of Life Happiness of Elderly in Rural Area, Northeast Thailand

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## Abstract

This article examines the determinant factors of life happiness of elderly people in the rural of the northeast, Thailand. The quantitative approach was used. Data were collected in December 2016 by interview 268 elderly people in the rural area with a high proportion of the elderly people. Data were analyzed by descriptive statistics and multiple regression. The result found that 53.4 percent of samples have an overall happiness score at a high level. The determinant factors of the life happiness of the elderly are family living style, average monthly income, relationships with family, access to human capital, and the livelihoods. All variables have explained the life happiness of the elderly 36.7 percent (R2 = 0.367).

Keywords: Life Happiness of Elderly, Rural Area, Capitals, Livelihoods.

## **Background and Significance**

During the past decade, the national demographic structural change became evident (Human Resource Institute, Thammasat University, 2016). The continuous increase of the aged population has been observed, from 6.8 percent in 1994 to 10.7, 12.2, and 15.5 percent in 2007, 2012, and 2017, respectively. By the year 2040, the elderly population in Thailand is projected at 32.1 percent or roughly 21.0 million (National Social and Economic Development Bureau, 2018). Meanwhile, the national social and economic development plans during the recent years have brought about labor market growth, which in turn resulted in increased migration of rural able-bodied workers into the urban labor market. This means a proportion of the rural elderly having to spend their lives on their own, or live with grandchildren. A survey reveals an increase in the percentage of single-living elderly from 6.5 percent in 2000 to 14.2 percent in 2017 (National Statistics Bureau, 2017). Such change may bring impact on life happiness of the elderly, especially those living in the rural Northeast communities since this area accounts for the highest percentage of migrating laborers. Hence, it could cause certain

pressure on life happiness of the elderly, who are forced to live in a skipped-generation family or live alone. Nevertheless, the nature of rural Isan society where kinship relation dominates and where community supports are common, the elderly life happiness could be specific. Thus, the determinant factors of life happiness of the elderly in rural areas of the Northeast of Thailand should be investigated in order to obtain information for establishing a means towards life happiness building for the elderly. The outcomes would be beneficial for the development of rural elderly potentiality in the future.

#### **Research Objectives**

To study the determinant factors of life happiness of the elderly in rural areas of the Northeast of Thailand.

### **Related Documents and Research Studies**

**Concepts of Happiness:** Happiness is one type of feeling or emotion, and it ranges in many degrees from minute pleasure to delightfulness or enjoyment. Definitions of happiness often relate to physical and mental health (Miret et al, 2012) and frequently used with "well-being". In many studies, other terms have been used to replace "happiness". For example, in the 8th National Development Plan, "well-being" is used. Therefore, "happiness" is part of "well-being" and is also a social indicator (Sakdawekee-Isara, 2001). Department of Mental Health, Ministry of Public Health (2007) defined "elderly happiness" as "a happy life condition", which results from the ability to manage life problems, the potentiality to develop oneself for good quality of life. This covers happiness from comfort, enjoyment, grace, delight, and tranquility under the ever-changing social and environmental conditions.

Sompong (2016) and Thammajaroen (2016) conducted a study on determinant factors of life happiness of the elderly in Central Thailand and found that the number of family members and activities with the family and community influence the elderly's life happiness. This is consistent with the work of Chyi & Mao (2012), who found that living with children and the family relationship has an impact on the happiness of the elderly. Kramanon & Gray (2015) studied the difference of the elderly happiness during different stages of life and showed that family, socio-psychology, economy, and community relation influence the elderly's happiness. Besides, the lifestyle of the elderly and their struggling against illness also influence their happiness in life (Luchesi et al, 2018).

Our research defines "life happiness of elderly" as the fact that the elderly are leading a happy life resulting from the ability to manage problems in their living and potentiality to develop oneself for good quality of life. This condition covers 4 dimensions, namely: (1) good physical health dimension, (2) economic and housing stability dimension, (3) warm family dimension, and (4) social assistance dimension. These dimensions are derived from the qualitative study on the happiness perspective of the elderly. (Chumnanmak, Ayuwat, & Narongchai, 2018).

## **Research Methodology**

The Quantitative Research Methodology was applied to study the determinants of life happiness of the elderly in the rural area. The analytical unit at an individual level was the rural elderly, and the research population comprised the elderly in the rural areas of the Northeast Thailand whose living status in family varied. The sample group, composed of 268 elderly, was obtained through the stratified sampling method and the systematic sampling from the rural elderly

in the research site. The data was collected by means of interviewing using the interview form developed from the concepts, theories, and results of the preliminary qualitative study. The content validity was found at 0.892. The interview form was divided into 6 parts, namely, baseline data of the elderly, self-perception, access to 5 capitals (monetary capital, human capital, social capital, natural capital and physical capital), lifestyle, and life happiness. The data were collected from November to December 2017 in the rural areas of Khon Kaen and Chaiyaphum where the percentages of the elderly were the highest in the Northeast. The descriptive statistics and multi-variate analysis were applied based on the multiple regression analysis to determine the determinant factors of life happiness of the elderly in rural areas. The information was then tabulated and described.

#### **Research Results**

The research results cover 7 categories as follows:

**Characteristic of elderly in a rural area** – Most of the elderly in the sample group (75.0%) were females from the first elderly age range (60-69 years). The average age of 42.9 percent of the elderly was 70.6 years. As high as 91.4 percent completed elementary education. Most (49.2%) were married and lived with the spouse, whereas 32.6 percent lived with grandchildren. 48.5 percent had 1-2 living children. The majority lived in a brick and wooden house (64.9%). Most of the elderly (80.6%) had congenital diseases. 59.0 percent earned not higher than 3,000 baht per month and received the elderly pension from the state at the rate of 600 baht/month (Ministry of Social Development and Human Security, 2009). Some (11.5%) received the disability pension, which is another type of the state's welfare (Ministry of Social Development and Human Security, 2010). More than half of the elderly in the sample group did not have debt, while over 60.0% did not have any savings and only 22.0 percent had less than 10,000 baht savings.

The elderly self-perception - This refers to acceptance by the family and community and selfesteem, which are the factors reflecting socio-psychological self-perception that is related to the elderly happiness (Luchesi et al, 2018). The variable measurement was based on the interval scales. The results showed that most of the elderly were accepted by the family and community at a high level (66.0%), followed by 28.0 percent at a medium level. This was particularly true in terms of the members' regular manners towards the elderly as an important person in the family and their attention in terms of living, health, and lifestyle, which were found to be at 81.3 and 84.7 percent, respectively. This could be due to the Thai culture of respect towards the elderly (Yodpet, 2016). Hence, the elderly are important and are well tended, especially when they are the father and mother. However, it should be noted that the family never let 35.4 percent of the elderly take part in decision making, no matter what issue it was. Likewise, the community people never asked for their advice (27.2%). Besides, it was found that most of the elderly (53.7%) had high self-esteem, followed by 39.2 percent whose self-esteem was at a medium level. The elderly agreed that they were proud to be the center of attention of the family members and were proud to be participating in the temple and religious support activities at 91.7 and 91.8 percent, respectively. Since Thailand's major religion is Buddhism, the elderly have activities with the temple through the Thai 12-month merits (Phramanee, 2014). It was noted that over 38.4 percent of the elderly was tired of being an elderly due to the difficulty they encountered which could be due to lack of infrastructures for the elderly in the rural community.

**The elderly family relationship** – Most of the elderly's family relationship (48.5%) was at a high level, followed by the medium level at 42.5 percent. This was especially true in the case of regular

conversations among family members and regular dining with family members, which were found at 85.1 and 74.3 percent, respectively, since these are the common lifestyle of rural Thai society. It was noted that over 43.7 percent of the elderly never went out for recreation with the family. This could be due to the physical limitation that prevented them from a long ride in a car and their fatigue (Thai Elderly Development and Research Foundation, 2016). Limitation in terms of the economy was also found among the sample group.

**The elderly access to 5 capitals: monetary, human, social, natural and physical** – The access to the 5 capitals of 65.3 percent of the elderly was at a medium level. Most of the elderly were found to have medium and low access to the following capitals: *(1) Monetary capital* – Most had medium and low access to monetary capital (57.0 and 39.6%, respectively). Over 66.4 percent had no earning from occupation and no savings. *(2)Human capital* - 59.3 and 35.1 percent of the elderly had medium and low access to this capital, respectively. The majority did not learn any skill from the elderly school (93.7%) and did not acquire knowledge for occupational development (87.3%). However, most had higher access to the following capitals: *(3) Social capital* – Most of the elderly had medium and high access to this capital (51.8 and 32.5%, respectively). Most (80.0%) received support from the community people for traveling to the hospital and market and for their security. *(4) Natural capital* – Most had high and medium access to the natural capital (64.6 and 31.3%, respectively). *(5)Physical capital* - Most of the elderly had medium and high access to this capital the elderly had medium and high access to the solution and high access to this capital. However, were solution and high access to the elderly had medium and high access to the solution access to the solution.

**The elderly lifestyle** – The researcher studied 5 components, namely, option, struggling, means to solve problems, surviving, and sustainability of the elderly in the Northeast (Chambers and Conway, 1991; DFID, 1999) by applying the interval scale for measurement of the variables. Measured in terms of frequency of lifestyle, most of the elderly (59.0%) were found to have a moderate level of lifestyle, followed by 22.8 percent having a low level of lifestyle. Only 18.2 percent showed a high level of lifestyle. Then the five categories of lifestyles were investigated: (1) Option - Most of the elderly (47.0%) had a medium level of option for lifestyle while only 33.8 percent had a high level of option, especially in the case of options for health care and treatment from a state hospital, a private hospital or a clinic. (2) Struggling – As high as 90.3 percent of the elderly had a low level of struggling for life. Most (90.0%) had never joined together to make requests for support and had never negotiated when being partially treated. This could have been because of the limitation of the means and because it is not the tradition of this group of people. (3)Finding means to solve problems – Most showed a moderate and low level in finding means to solve problems (56.8 and 25.8%, respectively) probably because they already retired, with their children holding farming occupation instead due to their health limitation (Yodpet, 2016). However, 17.4 percent of the elderly showed a high level in finding means to solve their living problems. (4) Surviving – It was found that most of the elderly (61.2 and 27.6%, respectively) lived through the surviving dimension at a medium and high level, especially when considering strict self-care and control of congenital disease so that the disease would not worsen. (5)Sustainability – Most (56.7%) lived through the sustainability dimension at a high level. Rural elderly accepted their differences from young people and clearly understood the physical changes.

**Life happiness of the elderly** – In this research, we define life happiness of the elderly as having 4 sub-components: 1) good physical and mental health, 2) security in terms of economy and accommodation, 3) warm family, and 4) social responsibility. The analysis showed that only 53.4

percent evaluated themselves having a high level of happiness and 10.4 percent evaluated themselves at a low level of happiness. When considering item by item, the following was shown: 1) Good physical and mental health – Only 42.9 evaluated themselves as having a high level of happiness. It was noted that one-fourth of the elderly evaluated themselves as having a low level of happiness owing to congenital disease and lack of traveling for pleasure with the family at 25.0 and 12.7 percent, respectively. 2) Security in terms of economy and accommodation - 48.2 and 41.0 percent, respectively, evaluated themselves as having a high and moderate level of happiness. They were very happy when the accommodation was secure, when they had a chance to use facilities, and when children remitted money for them to use, at 78.7, 70.1, and 62.3 percent, respectively. 3)Warm family - As high as 63.1 percent evaluated themselves having a high level of happiness in terms of care by the family members and attention from children at 78.7 and 78.4 percent, respectively. 4) Social responsibility - 55.6 percent of the elderly evaluated themselves having a high level of happiness in terms of living in a safe community and receiving good support from the state at 95.0 percent. What did not make them happy was lack of chance to share their skills with the community people (66.8%) since the elderly were confident with their experiences. As it occurs, the changing society and globalization have prevented the new generation to see the importance of the skills of the elderly (Khomjakkapan and Jansawang, 2015).

Analysis of factors influencing life happiness of the rural elderly – The analysis of the factors influencing life happiness of the rural elderly comprised 4 groups of independent variables, namely, 1) personal baseline data including sex, age, education level, family status, congenital disease, average monthly income, and savings; 2) self-perception including self-esteem and acceptance by the family and community; 3) family including number of living children and relationship with household members; and 4) resources and lifestyle including access to monetary, human, social, natural, and physical capital and lifestyle. The multi-variable analysis was conducted based on the multiple regression analysis, in which independent and dependent variables must be measured by the interval scale or ratio scale. If any variable was measured at the nominal scale or ordinal scale, it needed to be adjusted to a dummy variable. The reference group was specified including sex, education level, family characteristics, and congenital disease. The study stipulated males who completed higher than elementary level, who lived in a single family and had no congenital disease as the reference group. In the multiple regression analysis, no pair of variables correlated higher than 0.75 in order to avoid multicollinearity, which resulted in less prediction quality (David, 1991). In this research, the correlation coefficients were determined to test the correlation between pair variables of those variables analyzed in the multiple regression analysis. All variables were found to have the correlation lower than 0.75; therefore, they were appropriate for the multiple regression analysis in order to test the determinant factors affecting life happiness of the rural elderly.

The 4 factor groups of variables were analyzed by multi-regression analysis using the Enter method. The results showed that only some independent variables influenced life happiness of the elderly in the rural northeastern areas (Table 1). Following are the details:

Only 2 variables of personal baseline data influenced life happiness of the rural elderly:

1) Single living had a positive effect on the life happiness of the rural northeastern elderly, with the multiple regression coefficient (b) of 5.219. This means that an elderly who lives alone is 5.219 units happier than those living with children only (the referenced group). This could be due to the fact that the elderly living alone does not have to worry about their children's behaviors. This finding agrees

## INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS AND SOCIAL SCIENCES

Vol. 10, No. 14, Special Issue: WSTI2018 - Issues and Trends on Education, Science and Technology, 2020, E-ISSN: 2222-6990 © 2020 HRMARS

with the study by Chyi & Mao (2011), who found that living with a lot of children did not make the elderly happier. Relationship with family members is more important.

2) The average monthly earning of the elderly had a positive influence on life happiness of the rural northeastern elderly, with the multiple regression coefficient (b) of 0.171. This means that a one-baht increase in monthly earning brings 0.171 unit of more happiness. A higher income enables the elderly to have access to resources, health care, and various conveniences and hence more happiness. Ergin & Mandiracioglu (2015) also explained that economic factors, especially income and assets, are the determinants of the elderly happiness since they are an important capital that leads to quality health care.

Only one variable of the elderly family had a positive effect on life happiness of the rural elderly:

1) The relationship with family members showed a positive influence on the elderly life happiness, with the multiple regression coefficient (b) of 0.776. It can be explained that a one unit increase of the elderly relationship in the family means a 0.776 unit of happiness increase. This happens because interaction with family members brings about the perception of one's importance. Similarly, Luchesi et al (2018) found that life satisfaction and relationship with family members and the community had positive effects on the elderly mental happiness.

There were only 2 variables of resources and lifestyle that affected life happiness of the rural elderly: 1) Access to human capital showed positive influence on life happiness of the rural northeastern elderly, with the multiple regression coefficient (b) of 1.158. When an elderly had one unit higher of access to human capital, life happiness increased at 1.158 units. If the elderly acquire more knowledge, news, information and learning sources, they would be able to adjust themselves well as an elderly. This is consistent with the work of Xiang et al (2017) who found that promoting the elderly to have access to the capital that is useful for quality of life development will make the elderly happier.

2) Lifestyle showed a positive influence on life happiness of the rural northeastern elderly, with the multiple regression coefficient (b) of 0.239. This means that when the elderly had an increase of 1 unit of lifestyle, they would be 0.239 unit happier. It can be understood that lifestyle is a process whereby the elderly need to interact with many groups of people and regularly develop their skills and capacity. Therefore, they have more chance to receive support and welfare and hence become happier. Moeini et al (2018) also found that attempt to have access to welfare and the lifestyle that leads to better quality of life affect the happiness of the elderly. The elderly receiving welfare from the state can live more happily.

When analyzing all of the 5 variables of the determinant factors influencing life happiness of the rural northeastern elderly from the standard multiple regression coefficient (Beta), the elderly life happiness was found to be influenced mostly from relationship with family members (Beta=0.250), followed by lifestyle (Beta=0.150), relationship between the household members and migrating laborer (Beta=0.195), single-living elderly (Beta=0.144), average monthly earning (Beta=0.144), and access to human capital (Beta=0.121). All of the independent variables analyzed had a positive influence on life happiness of the rural elderly and could significantly explain the variation of their life happiness at the level of 0.01. The factor explains the variation at 36.7 percent ( $R^2$ = 0.367). (Table 1)

Variables	b	Beta	Sig.	Order
Characteristic of elderly in rural area factor				
Female Elderly <sup>(1)</sup>	1.220	0.048	0.402	
Age	0.058	0.044	0.489	
Primary School <sup>(2)</sup>	-1.299	-0.033	0.540	
Unrelated individual family <sup>(3)</sup>	5.219	0.144	0.021	3
Living with spouse family <sup>(3)</sup>	-0.040	-0.001	0.981	
Extent family <sup>(3)</sup>	2.159	0.078	0.176	
Skipped-generation family <sup>(3)</sup>	-0.688	-0.016	0.767	
Have a disease <sup>(4)</sup>	-1.447	-0.053	0.318	
Number of incomes per mouth	0.171	0.144	0.014	3
Number of saving money	-0.080	0.047	0.391	
The elderly self-perception factor				
Self-esteem	0.417	0.103	0.279	
Acceptance by the family and community	1.493	0.082	0.339	
The elderly family factor				
Number of children alive	-0.353	-0.051	0.376	
Family relationships	0.776	0.250	0.001	1
The elderly access capitals and livelihoods.				
Access economic capital	0.485	0.056	0.381	
Access human capital	1.158	0.121	0.048	4
Access social capital	0.145	0.018	0.765	
Access natural capital	0.512	0.052	0.343	
Access physical capital	-0.602	-0.064	0.253	
Use of livelihoods	0.239	0.150	0.03	2
а	14.81			

Table 1. The results of the analysis of the determinant factors of life happiness of elderly in the
rural area, Northeast, Thailand.

## $R^2 = 0.367$ F = 57.152 Sig. of F= 0.000

**Note: Reference group** : (1) male elderly (2) upper primary education (3) single family & (4) No disease

## **Conclusion and Recommendations**

The past change of demographic structure resulted in Thai society's proceeding towards an aged society during the past 10 years. It is an important change while the Thai rural society has its own specific culture where the aged are valued highly. Therefore, the study of life happiness of the rural elderly became interesting. This research used the preliminary qualitative study on a rural community in order to develop a happiness measurement scale and to conduct a quantitative study.

The research results showed that roughly half of the elderly in the sample group evaluated themselves having a high level of holistic happiness, which was evaluated from 4 aspects of

happiness, namely, 1) good physical and mental health, 2) security in terms of economy and accommodation, 3) warm family, and 4) social responsibility.

In addition, the analysis revealed that the determinant factors of life happiness of the rural northeastern elderly included: relationship with family members, lifestyle, single-living elderly, average monthly earning and access to human capital. Thus, relevant organizations and communities, as well as the family, need to cooperate to increase life happiness of the elderly, especially among the 46.5 percent of the elderly who showed a medium and low level of happiness. This could be achieved by enhancing the family relationship and increasing lifestyle in order to strengthen the elderly so that they have more access to resources and income sources that would support them in case of chanced risks. With improved management of these issues, life happiness of the elderly will increase and they will be the sustainably capable elderly in the Thai society.

## Acknowledgments

This article presents information from the research entitled "Happiness of the Elderly in the Northeast of Thailand". The research has been granted monetary support from Faculty of Humanities and Social Sciences of Khon Kaen University. The research team is grateful to the faculty's administrators in seeing the benefits from this research and assisting the research implementation. Thanks are extended to the elderly in the Northeast, who cooperated in providing useful information for this research.

## References

Chambers, R., & Conway, G. R. (1991). *Ideas for Development*. London: Earthscan.

- Chumnanmak, R., Ayuwat, D., & Narongchai, W. (2018). The composition of happiness of the elderly in rural areas in the Northeast: the dynamics of social change in the globalization. *Humanities and Social Sciences, 35* (2), 90-116.
- Chyi, H., & Mao, S. (2012). The Determinants of Happiness of China's Elderly Population. *Journal of Happiness Studies*, 13(1), 167-185.
- DFID. (1999). *Sustainable Livelihoods Guidance Sheets*. London: Department for International Development (DFID).
- Department of Mental Health, Ministry of Public Health. (2018). *Thai Happiness Indicators*. Retrieved from http://www.dmh.go.th/test/qtest/.
- Ergin, I., & Mandiracioglu, A. (2015). Demographic and socioeconomic inequalities for self-rated health and happiness in elderly: The situation for Turkey regarding World Values Survey between 1990 and 2013. *Archives of Gerontology and Geriatrics, 61*(2), 224-230.
- Foundation for Thai Elderly Research and Development Institute. (2016). *Thai Elderly Report. 2556.* Bangkok: The Thai Elderly Research and Development Foundation.
- Khomjakkapan, P., & Jansawang, W. (2015). Household experience across generations of Thai elderly in the south. *Journal of Nursing, Prince of Songkla University, 36* (3), 35-56.
- Kramanon, R., & Gray, R. (2015). Differentials in Happiness among the Young Old, the Middle Old and the Very Old in Thailand. *Journal Population and Social Sciences, 23*(2), 180-193.
- Ministry of Social Development and Human Security. (2009). *The Elderly Care Program or the Collateral Rehabilitation Project for the Elderly*. Bangkok: Ministry of Social Development and Human Security.

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Vol. 10, No. 14, Special Issue: WSTI2018 - Issues and Trends on Education, Science and Technology, 2020, E-ISSN: 2222-6990 © 2020 HRMARS

- Ministry of Social Development and Human Security. (2010). *Paying for the disabled*. Bangkok: Ministry of Social Development and Human Security.
- National Statistical Office. (2017). *Preliminary report on the elderly population survey in Thailand, 2560*. Retrieved from https://www.m-society.go.th/article\_attach/14494/18145\_2560.pdf.
- Pramanee, N. (2014). Nostalgia and the change of heater twelve fourteen. *Journal of the Institute of Culture and Arts, 15* (1), 1-16.
- Sakdawake-isara, S. (2007). *Development of good indicators of good health*. Retrieved from www.jvkk.go.th/research/research.asp?code=201440007341.
- Somphong, S. (2016). *The happiness of the elderly in the nursing home.* Nakhon Pathom. Master Thesis Master of Arts Program (Community Psychology) Silpakorn University.
- Tancharoen, W. (2016). *Influence of external factors and internal factors on the happiness of the elderly.* Master Thesis Master of Science Program (Applied Statistics) National Institute of Development Administration.
- Yodpet, S. (2011). Sexual health in the elderly: social issues. *Journal of Geriatric Medicine and Geriatric Medicine*, 10 (2), 1-13.