Factors Affecting Effectiveness of Elderly Life Quality Development in Lampang Province

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Abstract

The purpose of the study was to study factors affecting effectiveness of the elderly’s life quality development in Lampang Province using structural equation modeling. Data on effectiveness of the elderly’s life quality development were collected by using questionnaires that were studied from samples of 384 elderly persons in Lampang Province. Data were analyzed by using the structural equation method. The results showed that the models presented with empirical data were consistent and appropriate with statistical values: $\chi^2=86.223$, df=73, p=.138, $\chi^2$/df=1.181, GFI=.974, and RMSEA=.022 which show that support from family and local government support had direct effects on effectiveness of the elderly’s life quality development, with significant path coefficients of .41 and .38, respectively; community and society support, government support, and local government support showed indirect effects on effectiveness of the elderly’s life quality development with path coefficients of .19, .54, and .13, respectively.

Keywords: Effectiveness, Life quality development, The elderly

บทความย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่ศึกษาปัจจัยที่มีผลต่อประสิทธิผลของการพัฒนาคุณภาพชีวิตผู้สูงอายุจังหวัดลำปางเก็บรวบรวมข้อมูลประสิทธิผลของการพัฒนาคุณภาพชีวิตผู้สูงอายุโดยใช้แบบสอบถามจากกลุ่มตัวอย่างผู้สูงอายุในจังหวัดลำปางจำนวน 384 คน วิเคราะห์ข้อมูลโดยใช้วิธีสมการโครงสร้าง ผลการวิจัยพบว่า แบบจำลองที่นำเสนอเก็บข้อมูลเชิงประจักษ์มีความสอดคล้องและเหมาะสมตัวแปรค่าสถิติ $\chi^2=86.223$, df=73, p=.138, $\chi^2$/df=1.181, GFI=.974, และ RMSEA=.022 ซึ่งแสดงว่า การสนับสนุนจากครอบครัวและการสนับสนุนจากองค์กรปกครองส่วนท้องถิ่นมีผลโดยตรงต่อประสิทธิผลของการพัฒนาคุณภาพชีวิตผู้สูงอายุ...
Introduction

The United Nations (UN) has defined "Elderly" as the population of both males and females aged 60 and over (60+), while The World Health Organization (WHO) has no definitions. The reason is that countries around the world have the different elderly definitions. They may define by age, social, culture, and functional markers, such as in the developed countries has defined the elderly from aged of 65 years or above, or some countries may be defined the elderly along a retirement age (aged 50 or 60 or 65 years), or defined along a physical condition, by elderly women were in the range of 45-55 years old and the elderly men were in the range of 55-75 years old. For Thailand, it has defined “elderly” according to the Act on the Elderly, B.E. 2546 (2003 A.D.) that a person over the age of sixty years had Thai nationality (DOP, 2003 a).

The elderly is a growing group of people in every country, including Thailand. This is due to the fact that public health and medical advancement help people live longer. The elderly is the age that has a problem with the deterioration of the body, which is natural as the age increases including the presence of chronic disease, which usually occurs in the elderly such as diabetes and high blood pressure from lack of movement and exercise, health problems, income decrease or no income, and mental health problems because it is the age of separation loss. Therefore, it is the age that requires specific care, different from other ages, so that the elderly can take care of themselves with enough age, and good health, both physically and mentally, to reduce the problems of the elderly, families, and society (Kraipiboon, 2015).

Currently, the number of elderly people increases continuously in both Thailand and around the world. Many countries are aware of the importance of this and their efforts are being made to ensure that all people are aware and well-equipped to care for the elderly as well as care for the population in other age groups. In Thailand it has entered the elderly society in the year 2004-2005. The elderly population was aged 60+ accounting for 10.2-
10.4% of the total population in Thailand and it is expected that Thailand will enter the complete elderly society of 2024-2025 (DOP, 2016) due to the population aspect situation. The government, private sector, and all sectors of society have to set policies and actions to support the aging society of Thailand to be the effective and comprehensive target for all elderly people that will help the elderly be able to improve their life quality and stability with dignity.

The elderly’s life quality development is to improve the well-being of the elderly to have good condition in physics, emotion, society, and environment to meet the various needs of the elderly to be fit and adequate for living such as (1) Physical aspects: The elderly want a healthy body, need hygienic food, and want to have close care takers (Glamrat, 2011 & Campbell, Converse & Rodgers, 1976). (2) Mind aspects: the elderly want to know new various something, feel themselves be worth accept and respect for the family and society (Prasartkul & Wapattanawong, 2010). (3) Social aspects: the elderly wants to be one of the family, community, and society around them. In addition, they also want to live together with the community, have activities together with the community, and reduce dependency on others (ONEC, 2009 & Ratanaubon, 2011). (4) Economic aspects: financial status and security income of the elderly who do not rely on their descendants or even their spouses and create self-esteem of the elderly. If there is the promotion of career or vocational training appropriate for the elderly, they will have the opportunity to work at age appropriately. The budget to support the elderly can be reduced in the future (NESDB, 2016; Delamottee & Takezawa, 1984).

Lampang province is another province that has advanced to an aging society, based on the statistics of the number of elderly people in Thailand in 2018 as of December 31, 2018 of the Department of Elderly Affairs, The Ministry of Social Development and Human Security found that there were 162,894 elderly (60 years of age or older), representing 21.93% of the population of the entire province (742,883), which is the second highest percentage of the country inferior to Sing Buri (DOP, 2018 c). In addition, according to the study of Vilailuck Promsen (2013), it was found that the elderly in Lampang province had the main income from the government pension scheme of 50.60%, 26.40% of children, and 1.40% from savings/interest. It was also found that most local administrative organizations in Lampang Province still do not have a long-term operation or planning in creating career and
income security for the elderly. The main activities that will be done according to the mission that has been transferred were: 1) the provision of subsistence allowance, 2) providing assistance to the elderly who are poor and lack of support, 3) promote support for the elderly to participate in social activities Together to relax loneliness rather than social groups to create careers and income, which these operations are non-proactive manner. The job then is to solve immediate problems and the operation will face problems that occur all the time. This has resulted in the past operations being a kind of relief rather than the development of the elderly potential that will create sustainability and reduce dependence from the government.

From the above reasons, the researcher is interested in studying the effectiveness of the elderly life quality development which is part of the performance evaluation of the elderly life quality development policies. In addition, it is also to study the support factors from the agencies and all sectors as related that affect the elderly life quality development. The data of this study was collected from the elderly in Lampang Province where is in the upper north region. The information obtained from this research can be used as a common guideline for sectors of public, private, and society of the elderly life quality development to support the elderly society of Thailand that is efficiency, effectiveness, and comprehensive coverage of all the elderly.

Research Methods

The population in this research comprised elderly persons in Lampang Province, Thailand. The size of the samples was determined by the Stevens’ criterion (Stevens, 1996) which determined that the sample size for the linear structure relationship analysis should be at least 20 units per an observed variable. In this research, 17 observed variables were defined. The minimum sample required for this criterion was 340 persons. The participants of this research were elderly persons of 384 (> 340). The research instrument was a questionnaire with reliability of .95. Descriptive statistics and inferential statistics were used to analyze the data.

The data were analyzed by using descriptive statistics and a structural equation modeling (SEM). Goodness of fit of the model to the data was assessed using $\chi^2$ statistics and fit indices as suggested Kline (2005) that is the chi-square probability level (pvalue) more
than .05. Value of the Relative Chi-square ($\chi^2/df$) is considered satisfactory when < 3 in large samples (N > 200), < 2.5 in medium-sized samples (100 < N < 200), and < 2 in small samples (N<100) (Arbuckle & Wothke, 1999, Byrne, 2001). Value of the Goodness of Fit Index (GFI), like multiple r-squared, theoretically ranges from 0 (poor fit) to 1 (perfect fit), considered satisfactory when >.90 (Schumacker & Lomax, 2004; Kline, 2005). A value for the Root Mean Square Error of Approximation (RMSEA) of less than .05 would indicate a “close fit” and a value of .08 or less would indicate a “reasonable fit” (Brown & Cudek, 1992, Kline, 2005).

Structural equation modeling technique was applied to test the consistency of the model that consisted of five latent variables:

1) Government support (GOS): Means the government’s policies for improving the quality of life for the elderly It is the law, policy, plan, and project to develop the elderly in line with social change. It consists of 3 components which are defined as observed variables in this study, namely 1) government welfare for elderly (WDE), 2) infrastructural and public transport for elderly (IPT), and 3) development of lifelong education and learning for elderly (LDE) (Nithangkorn & Soonthornchavakarn, 1999, Klamratana, 2011).

2) Local government support (LGS): Means the role of local administrative organizations in caring for the elderly, having the authority to provide public services for the benefit of local people. It consists of 3 components which are defined as observed variables in this study, namely 1) services development for elderly (SDE), 2) education and training promotion for elderly (ETE), 3) facilities development for elderly (FDE), and 4) preparation to the elderly society (PES) (Choonharas, 2007 & Chandee, 2015).

3) Community and society support (CSS): Means the community and society surrounding the elderly, which has a role in caring and improving the elderly life quality, making the elderly happy in their own lives, is a social support, helping the elderly to adjust their lives in the long-term. It consists of 3 components which are defined as observed variables in this study, namely 1) elderly health promotion (EHP), 2) elderly income promotion (EIP), and 3) local wisdom promotion (LWP) (Siripittayakunkit, 2010, Brown, 2014).

4) Support from family (SFF): Means the family role of the elderly because the family must understand and recognize the importance of the elderly, and must have knowledge in the care and practice towards the elderly correctly and appropriately for the happiness of the elderly and family members. It consists of 4 components which are
defined as observed variables in this study, namely 1) physical and mental health of the elderly (PME), 2) good relationship in family (GRF), 3) elderly household economy (EHE), and 4) elderly household facilities (EHF) (Sinsuphun, 2014 & Soonthorndada, 2009).

(5) Effectiveness of elderly life quality development (ELQD): Means elderly life quality development according to the elements in the Elderly Act 2003 (revised 2010). It consists of 3 components which are defined as observed variables in this study, namely 1) employment promotion and income security (EPI), 2) health and hygiene of the elderly (HHE), and 3) lifelong education and learning (LEL) (NESDB, 2016; Delamottee & Takezawa, 1984; Phungphosop & Chanprasert, 2012, Prasartkun & Wapattanawong, 2010, Campbell, Converse, & Rodgers, 1976, Ratanubol, 2011).

Results

The majority of participants were a female, aged between 60-65 years old with a married status. They were educated at elementary or equivalent level and had public welfare benefits that were provided to the elderly. There were 3 members in the household with monthly income between 10,000-15,000 Baht, and their career is agriculture.

The analyzed structural equation modeling found that the developed model was consistent with empirical data after adjusting the model with the statistics were as follows: Chi-square ($\chi^2$) was 86.223, degrees of freedom (df) was 73, Chi-square probability level (p value) was .138, Chi-square relative ($\chi^2$/df) was 1.181, Goodness of fit index (GFI) was .974, and Root mean square error of approximation (RMSEA) was .022 as appearing in Table 1 and Fig. 1.

Table 1 The data model-fit evaluation criteria with the empirical data of model developed

<table>
<thead>
<tr>
<th>Evaluating the Data-Model Fit</th>
<th>CRITERIA</th>
<th>Statistics from Analysis result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Chi-square probability level (p value)</td>
<td>$p &gt; 0.05$</td>
<td>0.138</td>
</tr>
<tr>
<td>2) Relative Chi-square ($\chi^2$/df)</td>
<td>$&lt; 2$</td>
<td>1.181</td>
</tr>
<tr>
<td>3) Goodness of Fit Index (GFI)</td>
<td>$&gt; 0.90$</td>
<td>0.974</td>
</tr>
<tr>
<td>4) Root Mean Square Error of Approximation (RMSEA)</td>
<td>$&lt; 0.08$</td>
<td>0.022</td>
</tr>
</tbody>
</table>
Figure 1 Shows statistics of the consistency of causal relationship model to the empirical data.

Table 2 Composition of predictive relationships

<table>
<thead>
<tr>
<th>Path</th>
<th>Effect type</th>
<th>Standardized coefficient</th>
<th>SE</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOS → LGS</td>
<td>Direct</td>
<td>.824**</td>
<td>.070</td>
<td>9.862</td>
</tr>
<tr>
<td>GOS → CSS</td>
<td>Direct</td>
<td>.889**</td>
<td>.096</td>
<td>10.782</td>
</tr>
<tr>
<td>LGS → SFF</td>
<td>Direct</td>
<td>.341*</td>
<td>.052</td>
<td>2.416</td>
</tr>
<tr>
<td>CSS → SFF</td>
<td>Direct</td>
<td>.690**</td>
<td>.052</td>
<td>3.536</td>
</tr>
<tr>
<td>SFF → ELQD</td>
<td>Direct</td>
<td>.412**</td>
<td>.395</td>
<td>2.645</td>
</tr>
<tr>
<td>LGS → ELQD</td>
<td>Direct</td>
<td>.382**</td>
<td>.113</td>
<td>3.176</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01

From Fig. 1 and Table 2: Analysis of the effect of all the variables is summarized as follows:

1. GOS had direct effects on LGS, with a significant path coefficient of .82
2. GOS had direct effects on CSS, with a significant path coefficient of .89
3. LGS had direct effects on SFF, with a significant path coefficient of .34
4. CSS had direct effects on SFF, with a significant path coefficient of .69.

5. SFF and LGS had direct effects on ELQD, with significant path coefficients of .41 and .38, respectively.

6. CSS had indirect effects on ELQD through SFF (CSS → SFF → ELQD), with a significant path coefficient of .28 (.69×.41).

7. LGS had indirect effects on ELQD through SFF (LGS → SFF → ELQD), with a significant path coefficient of .14 (.34×.41).

8. GOS had indirect effects on SFF through 2 ways: (1) GOS → CSS → SFF, with a significant path coefficient of .61 (.89×.69); (2) GOS → LGS → SFF, with a significant path coefficient of .28 (from .82×.34). Therefore, GOS had total effects on FAS, with a significant path coefficient of .89 (.61+.28).

9. GOS had indirect effects on ELQD through 3 ways: (1) GOS → LGS → ELQD, with a significant path coefficient of .31 (.82×.38); (2) GOS → LGS → SFF → ELQD, with a significant path coefficient of .11 (.82×.34×.41); (3) GOS → CSS → SFF → ELQD, with a significant path coefficient of .25 (.89×.69×.41). Therefore, GOS had total effects on ELQD with a significant path coefficient of .67 (.31+.11+.25).

The research result of the factors affecting effectiveness of elderly life quality development in Lampang province founded that GOS, CSS, LGS, and SFF had total effects on ELQD, with significant path coefficients of .67, .28, .52, and .41, respectively. The prediction coefficient (standardized regression coefficient) of the effectiveness of elderly life quality development was .58 ($R^2 = .58$) which indicated that the support factor variables used in the model that consisted of government support (GOS), local government support (LGS), community and social support (CSS), and family support (SFF) which could explain the variability of the effectiveness of elderly life quality development (ELQD) of 58%.

**Discussion**

The research results concluded that the support factors of four aspects including government support (GOS), local government support (LGS), community and society support (CSS), and support from family (SFF) had effects on effectiveness of elderly life quality development (ELQD) by both directly and indirectly. This may be because:
1. The Thai government has set policies and policies integration for the elderly through various agencies relevant in both the central and the local levels. There is development of the welfare system for the elderly in various aspects. Moreover, there is promotion for the family and the private sector encouraging to play an increasingly important role in elderly care (DOP, 2003 a, NESDB, 2016), which is in line with research of Soonthorndhada (2009) who found that if the government pushed the employment policy of the elderly and the career opportunities of the elderly it would result in income stability and help to support the life quality of the elderly to be self-reliant with dignity and can reduce dependence on household workers.

2. The local government support is to care for the elderly because the local government has a responsible for the welfare and development of the quality of life of children, the elderly, and the underprivileged. It has a responsible for promoting the participation of people in the area, which shows their role in developing the quality of life of the elderly in the services development for the elderly, enhancing education and vocational training for the elderly, development of facilities for the elderly, and the preparation for the elderly society, which includes direct action and indirect action form central government policies. The local government is central and regional interconnections on elderly care services with high dependency and long-term care. It is in line with the idea of Choonharas (2007) who said that the local government has an important role in improving the quality of life for the elderly as they are closest to the people. This makes it possible to perceive the problems of older people differently from the central government as creating a new perspective on the development of the elderly as well as promoting health and preventing illness among the elderly with various health promotion activities for the elderly and their families.

3. The community and society support have a role in the care and development of the quality of life for the elderly that makes the elderly happy in their lives because the community and society around the elderly have influences on the elderly. It will make elderly have their own appearance to feel part of society and can adapt through all the situations that come through the life of the elderly, which is in line with the study of Siripittayulkit (2010) who found that social support is a contributing factor for diabetes people to adjust their long-term care plans.
4. The support from family for the elderly is essential which families must understand and be aware of the importance of the elderly and to have proper knowledge of care and treatment of the elderly for their well-being elderly and family members. According to the study of Sinsuphun (2014) found that family relationships and quality of life are positively correlated. As the families with good relationships would support the good mental health of the elderly and that is also a way to improve the quality of life of the elderly. It is in line with Malatham et al. (2009) who found that support from family was positively correlated with the satisfaction of the elderly.

**Conclusion and Recommendations**

From the research results founded that the support from government support, local government support, community and society support, and support from family are related to the effectiveness of elderly life quality development. So, the government, the private sector, and all sectors of society have to set policies and actions to support the aging society of Thailand for effective and comprehensive target for all elderly, to help the elderly, have good quality of life, dignity, and stability of life as follows:

1) The definition of the paradigm and action for the entering to the elderly society in all sectors to be effective and achieve the objectives must be defined as a public policy and nation agenda.

2) The National Elderly Plan No. 2 (2002-2021) and The National Economic and Social Development Plan and the 20-year National Strategy (1960-2022) must be a map that will determine the major direction of the elderly of the country. It consists of government policy on the elderly, budget allocation, human rights focus, and collateral savings before entering the elderly age which increase the potential of the elderly fund in the development of equality to support elderly society with quality.

3) The government has to set policies and supervise the operation of all agencies, organizations, and all sectors related to the implementation of the Elderly Act 2003 in order to ensure efficiency and achieve the objectives.

4) All related agencies must develop a strategy for organizing a public environment that everyone can access and use Availability for All Act (AAA) which is to promote and
improve the quality of life for all to access and utilize the public environment in a convenient, safe, thorough, fair, modern, and equal manner.

5) Adjust the concept of paradigm “Welfare” that encourages and persuades the elderly to rely on themselves and live a life of dignity and respect for human rights and coexistence in a peaceful society.

6) Integration in collaboration, knowledge, and resources between agencies and organizations for the development of older people has resulted more successfully in aging missions.

7) The government agency must adjust its role from worker to coordinator or facilitator, support for resource allocation, facilitate the local community to implement the social welfare system for the elderly to be in accordance with the social welfare policy and principles, and to monitor and evaluate the above-mentioned performance.

8) Welfare must be in accordance with the needs of the elderly and local wisdom. The public sector, the people, and the elderly; it must participate in the cooperation, participation, flexibility, sustainability, and budget integration and funding sources to implement the activities in accordance with social welfare.

9) Implementation of the project network characteristics, learning activities, and the provision of elderly resources which has resulted in creativity with efficiency and effectiveness implementation at the national level, regional level, as well as entered the aging society internationally.

10) Implementation of projects and activities for the elderly to achieve their goals. The community leaders must see the importance, commitment, strength, and sacrifice.

11) Preparing for integration into the elderly society must consider the whole system of the country because the elderly is involved in all sectors including government, private sector, civil society, and so the people of all ages. Thus, this should be defined as a national agenda.
References


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