

# DEVELOPMENT OF THE QUALITY OF LIFE FOR THE ELDERLY TO ACTIVE AGEING RANONG PROVINCE

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## Abstract

The factors effecting the quality of life among the elderly people living in Ranong province of Thailand is rarely addressed by previous studies. Although, quality of life of elderly people has major importance, however, still this phenomenon is ignored by the literature. Thus, this study attempted to identify the factors effecting the quality of life for the elderly people living in Ranong province, Thailand. Results of the study obtained by carrying out a survey among the elderly community. A questionnaire survey is used to collect data from the respondents. Results of the study shows that; financial resources have influential role to promote quality of life as it has positive effect on quality of life. Furthermore, social connection by the elderly people also has the potential to promote quality of life. It is observed that, physical activity and health behavior of elderly people has positive influence to promote quality of life. Therefore, this study identified four important factors having major influence on quality of life among elderly people which include; financial resources, social connections, physical activity and health behavior.

**Keywords.** Financial resources, social connections, physical activity, health behavior, quality of life, elderly people, Ranong province Thailand.

## 1. Introduction

There are number of factors which effect on quality of life of an individual (Duong et al., 2022; Martyr et al., 2018). It is not easy for an individual to achieve a certain level of quality. The quality of life of elderly people is depends upon various factors. The quality-of-life achievement is one of the challenges for the individual because the number of factors effect on quality of life and the balance between the factors is most important to achieve a certain level of quality. Number of previous authors have carried out research on quality of life and address that it is a challenging task for the people and it depends upon several elements which are needed to address.

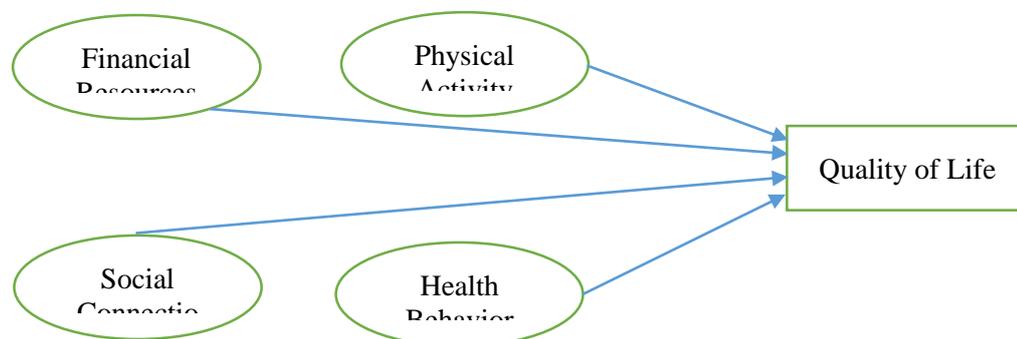
The achievement of quality of life for elders is most challenging (Gutiérrez-Vega, Villar, Armando, Carrillo-Saucedo, & Montañez-Alvarado, 2018; Lu, Wu, Mao, & Liang, 2020)as compared to any other stage of life. With the increase in individuals' life the challenges in the life always increase which require an ideal condition to achieve a certain level in quality of life. Every individual wants to achieve a significant level of quality; however, it is not easy as it is based on number of factors. Similar with other nations, in Thailand, the achievement of quality of life for elderly people is also a crucial task. Particularly the elderly people living in Ranong province Thailand required a level of quality. The elderly people are based on the people related to the retired people from various organizations as well as other people having different professions. However, several factors affecting on the elderly people are seen which are needed to address by the literature as well as practitioners to promote elderly people's quality of life in Ranong province, Thailand. Therefore, the current study is an attempt to highlight different factors which has affect on quality of life. The current study targeted the people living in

Ranong province Thailand. As in this province of Thailand, a significant percentage of elderly people are living and it is important to address the quality of life of these people which is less addressed by previous studies.

Previous studies have addressed the quality of life through different aspects (Aruta, Callueng, Antazo, & Ballada, 2022; Gebremedhin, Workicho, & Angaw, 2019), however, the quality of life of elderly people is not comprehensively addressed by previous studies. Most importantly the quality of life of elderly people in Ranong province of Thailand is not addressed by earlier studies. Several studies identify different factors affecting on quality of life, but the factors identified by previous study related to the elderly people is ignored in the literature. In this way the current study addressed four important factors which may influence the quality of life of the people. These factors include; financial resources, social connections, physical activity and health behaviour. This study considered that these four factors have major influence on quality of life which is not addressed by several previous studies. Few of the factors related to these factors are addressed by previous studies, however, these factors are not clearly addressed elderly people of Ranong province of Thailand. Therefore, the objective of the study is to identify the factors affecting elderly people's quality of life in Ranong province of Thailand. The identification of these factors which has effect on quality of life are more important for the people. The practitioners can promote quality of life among elderly people with the help of reviewing the results of the current study because the study results indicated the influential role of various factors in quality-of-life improvement.

## 2. Literature Review

The current study addressed the effect of four independent variables on dependent variable. The four independent variables include; financial resources, social connections, physical activity and health behavior. The dependent variable is quality of life of elderly people in Ranong province. Therefore, the effect of these independent variables is considered in relation to the quality of life. The relationship between financial resources, social connections, physical activity, health behavior and quality of life is presented in Figure 1 as theoretical framework of the current study.



**Figure 1: The relationship between financial resources, social connections, physical activity, health behavior and quality of life**

## 2.1 Financial Resources

Financial resources are a term covering all financial funds of the organization (Scarpellini, Marín-Vinuesa, Portillo-Tarragona, & Moneva, 2018). However, this study is dealing with the financial resources of an individual. Therefore, financial resources of an individual are covering all the financial funds of an individual. To spend a good quality of life the financial resources of an individual have central important. To manage various routine activities is require sufficient financial resources. The current study is dealing with the financial resources of elderly people. The elderly people may be based on the people who retired from various organizations as well as various other earning activities. All these people have limited financial resources; however, a sufficient number of financial resources are always required. The quality of life is also majorly depending upon the resources of an individual related to the finance. As proved by previous studies that finance is one of the most important factors in quality of life of any individual (Bowling et al., 2003; Phillips, Stanton, Provan, & Lew, 1994).

**Hypothesis 1:** Financial resources have relationship with elderly people's quality of life.

## 2.2 Social Connections

Social connections are based on the social capital in which the people connected with each other and corporate with each other's in case of any emergency (Hameed, Mohammad, & Shahar, 2020). The connection among the people is always helpful to cope various problems. In case of elderly people living in any society required various sources to spend the idle time. In this way, the connection between the people is most helpful activity which help to spend quality time. The social connections between the people help the society to resolve various issues. The participation of elderly community to resolve various community problems help them to stay confident and satisfied. Thus, the importance of elderly people in a society is most important which is based on the positive communication between the society members. Therefore, the connection between the people is most important to support quality of life. It is observed that connection between the people has the potential to promote quality in life which is reported in the literature (Abdul-Hakim, Ismail, & Abdul-Razak, 2010; Jong, Carrico, Cooper, Thompson, & Portillo, 2017). This study supported those social connections as positive effect on quality of life.

**Hypothesis 2:** Social connections have relationship with elderly people's quality of life.

## 2.3 Physical Activity

The physical activity is most important to spend a healthy life. As physical activities have direct connection with the health of an individual which is reported in previous study. Most importantly the physical activities has Central importance for the people of old age (Erwin, Fedewa, Beighle, & Ahn, 2012). The old age people generally face various diseases and most of the diseases can be recovered with the help of physical activity. Therefore, it is always recommended to the old people to involve in any physical activity to stay healthy. Physical activity may be considered in case of physical exercise. Furthermore, it can also be considered in a relation to any physical game such as sports. Any type of physical activity carried out by

an individual has significant effect to improve the health of the human. Therefore, a healthy body always enjoy the life which has central importance in quality of life. Thus, it is proposed that the physical activity involvement by the elderly people have positive influenced to improve quality of life.

**Hypothesis 3:** Physical activity has relationship with elderly people's quality of life.

## 2.4 Health Behavior

Along with the other factors the health behavior is also most important factor which has significant relationship with quality of life. It is observed from the literature that health behavior has important consideration in relation to the quality of life (Strine, Mokdad, Balluz, Berry, & Gonzalez, 2008). Because the literature addressed that health behavior is most influential element to improve the quality of life. In this way, the current study considered health in the quality of life of elderly people. Along with the young people the health behavior has major influence on quality of life of elderly people. The old age people always require specific intention towards the health activities. In old age the specific behavior towards the improvement in health is important for any individual. Health behavior maybe based on the intention of an individual to visit the doctors on routine basis for medical checkup. It is also based on the activities carried out by an individual to remain healthy. Furthermore, the healthy behavior of an individual may reflect in the intention of that individual to take various healthy foods. However, the intention of an individual towards the health behavior has positive role to promote quality of life (Strine, Chapman, Balluz, Moriarty, & Mokdad, 2008). Similar with the previous studies, it is proposed that help behavior has positive influence on quality of life among elderly people.

**Hypothesis 4:** Health behavior has relationship with elderly people's quality of life.

## 3. Methodology

The current study is based on a survey study which is carried out in Thailand. The population of the study are elderly people living in Ranong province, Thailand. As the study investigated the factors affecting the quality of life of elderly people, therefore, the study only considered elderly people living in Ranong province, Thailand. For this purpose, the people having age above 50 years were considered as old, however the people below 50 years were not included in the current study. In this way, the current study highlighted the quality of life with the help of questionnaire survey. Therefore, the study adopted quantitative research approach. By using quantitative research approach, the study adopted cross-sectional research design for data collection.

Data collection is made with the help of questionnaire which is designed to measure financial resources, social connections, physical activity, health behavior and quality of life. It is observed that number of previous studies carried out on quality of life are based on quantitative research approach. Instead of using secondary data to measure quality of life, this study deal with the help of questionnaire. The quality of life measured by considering the satisfaction level of elderly people from the current situation of their life. In this measurement the current

study considered the satisfaction level by asking various questions related to the resources provided to these people. Social connection is measured by considering the connection with other people. Financial resources are considered by asking various questions related to the available requirement of resources to carry out daily activities. It is observed that whether the financial resources can fulfil the daily requirements or not. Moreover, social connections are measured with the help of identifying the level of social capital. It is measured by considering the relationship of elderly people with other people which shows social capital. In addition to this, the current study also measured physical activity with the help of activities of elderly people related to the exercise. In this measurement, various questions related to the physical exercise of elderly people are used. Finally, the current study measured health behavior by asking various questions related to the intention of the elderly people towards their health. In this measurement, this study considered whether the individual's visit to the doctor on routine basis or not. These measurements are designed on Likert scales which were distributed among the elderly people. 800 questionnaires were distributed among the elderly people of Ranong province Thailand. Simple random sampling is used to distribute the questionnaire. Finally, the current study received 380 questionnaires and it is observed that 10 questionnaires are not completely filled. Finally, the current study used 370 questionnaires for data analysis. After collection of data from respondents, data screening is carried out this is given in Table 1.

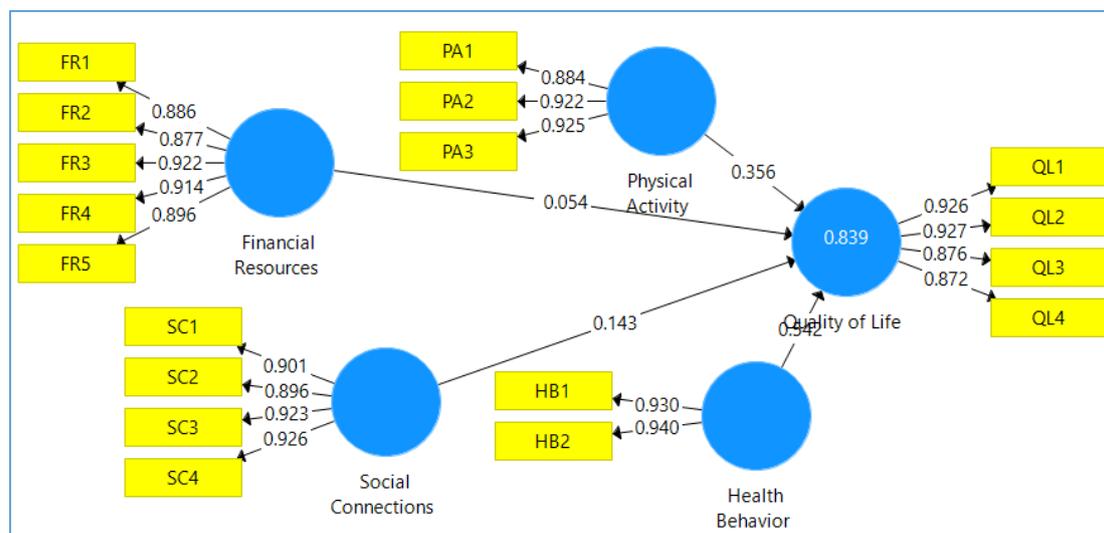
**Table 1: Data Statistics**

|     | No. | Missing | Mean  | Median | Min | Max | SD    | Kurtosis | Skewness |
|-----|-----|---------|-------|--------|-----|-----|-------|----------|----------|
| FR1 | 1   | 0       | 3.208 | 3      | 1   | 7   | 1.376 | -0.336   | 0.079    |
| FR2 | 2   | 0       | 3.26  | 3      | 1   | 7   | 1.74  | -0.4     | 0.519    |
| FR3 | 3   | 0       | 3.406 | 3      | 1   | 7   | 1.558 | -0.073   | 0.37     |
| FR4 | 4   | 0       | 3.396 | 3      | 1   | 7   | 1.655 | -0.451   | 0.242    |
| FR5 | 5   | 0       | 3.344 | 3      | 1   | 7   | 1.606 | -0.84    | -0.026   |
| SC1 | 6   | 0       | 3.458 | 3      | 1   | 7   | 1.75  | -0.498   | 0.326    |
| SC2 | 7   | 0       | 3.292 | 3      | 1   | 7   | 1.695 | -0.221   | 0.574    |
| SC3 | 8   | 0       | 3.438 | 3      | 1   | 7   | 1.773 | -0.659   | 0.259    |
| SC4 | 9   | 0       | 3.438 | 3      | 1   | 7   | 1.778 | -0.597   | 0.319    |
| PA1 | 10  | 0       | 3     | 3      | 1   | 7   | 1.486 | 0.433    | 0.871    |
| PA2 | 11  | 0       | 3.094 | 3      | 1   | 7   | 1.422 | 1.19     | 0.98     |
| PA3 | 12  | 0       | 3.135 | 3      | 1   | 7   | 1.419 | 0.891    | 0.89     |
| HB1 | 13  | 0       | 2.969 | 3      | 1   | 7   | 1.237 | 0.285    | 0.496    |
| HB2 | 14  | 0       | 2.927 | 3      | 1   | 7   | 1.301 | 0.248    | 0.512    |
| QL1 | 15  | 0       | 3.083 | 3      | 1   | 7   | 1.374 | 0.039    | 0.532    |
| QL2 | 16  | 0       | 2.979 | 3      | 1   | 7   | 1.216 | 0.863    | 0.782    |
| QL3 | 17  | 0       | 2.896 | 3      | 1   | 7   | 1.311 | 0.083    | 0.449    |
| QL4 | 18  | 0       | 3.094 | 3      | 1   | 7   | 1.415 | 0.439    | 0.683    |

Note: FR = Financial Resources; SC = Social Corrections; PA = Physical Activity; HB = Health Behavior; QL = Quality of Life

#### 4. Findings

The current study employed Structural Equation Modeling (SEM) by using Smart PLS 3, a most popular data analysis technique (Joseph F Hair Jr et al., 2021; Purwanto & Sudargini, 2021). PLS measurement model is presented in Figure 2 which shows the factor loadings. Table 2 indicates that all the items have factor loadings higher than 0.5 which is minimum level considered in this study to retain the scale items. Additionally, to check the reliability, composite reliability (AVE) is given in Table 3. It is observed that CR is above 0.7. Finally, average variance extracted (AVE) is given in Table 3 which is also above 0.5.



**Figure 2: Measurement Model**

Note: FR = Financial Resources; SC = Social Corrections; PA = Physical Activity; HB = Health Behavior; QL = Quality of Life

**Table 2: Factor Loadings**

|     | Financial Resources | Health Behavior | Physical Activity | Quality of Life | Social Connections |
|-----|---------------------|-----------------|-------------------|-----------------|--------------------|
| FR1 | 0.886               |                 |                   |                 |                    |
| FR2 | 0.877               |                 |                   |                 |                    |
| FR3 | 0.922               |                 |                   |                 |                    |
| FR4 | 0.914               |                 |                   |                 |                    |
| FR5 | 0.896               |                 |                   |                 |                    |
| HB1 |                     | 0.93            |                   |                 |                    |
| HB2 |                     | 0.94            |                   |                 |                    |
| PA1 |                     |                 | 0.884             |                 |                    |
| PA2 |                     |                 | 0.922             |                 |                    |
| PA3 |                     |                 | 0.925             |                 |                    |
| QL1 |                     |                 |                   | 0.926           |                    |
| QL2 |                     |                 |                   | 0.927           |                    |
| QL3 |                     |                 |                   | 0.876           |                    |
| QL4 |                     |                 |                   | 0.872           |                    |
| SC1 |                     |                 |                   |                 | 0.901              |
| SC2 |                     |                 |                   |                 | 0.896              |
| SC3 |                     |                 |                   |                 | 0.923              |
| SC4 |                     |                 |                   |                 | 0.926              |

Note: FR = Financial Resources; SC = Social Corrections; PA = Physical Activity; HB = Health Behavior; QL = Quality of Life

**Table 3: Alpha, CR and AVE**

|                     | Cronbach's Alpha | rho_A | Composite Reliability | (AVE) |
|---------------------|------------------|-------|-----------------------|-------|
| Financial Resources | 0.941            | 0.943 | 0.955                 | 0.809 |
| Health Behaviour    | 0.857            | 0.86  | 0.933                 | 0.875 |
| Physical Activity   | 0.897            | 0.897 | 0.936                 | 0.829 |
| Quality of Life     | 0.922            | 0.923 | 0.945                 | 0.811 |
| Social Connections  | 0.932            | 0.944 | 0.952                 | 0.831 |

This study used two methods to confirm the discriminant validity. The first method used is the AVE square root. It is shown in Table 4 which shows the square root of AVE. The second method is based on the cross-loadings. All the cross-loadings are given in Table 5. Both the methods have confirmed the discriminant validity.

**Table 4: Discriminant Validity (AVE Square Root)**

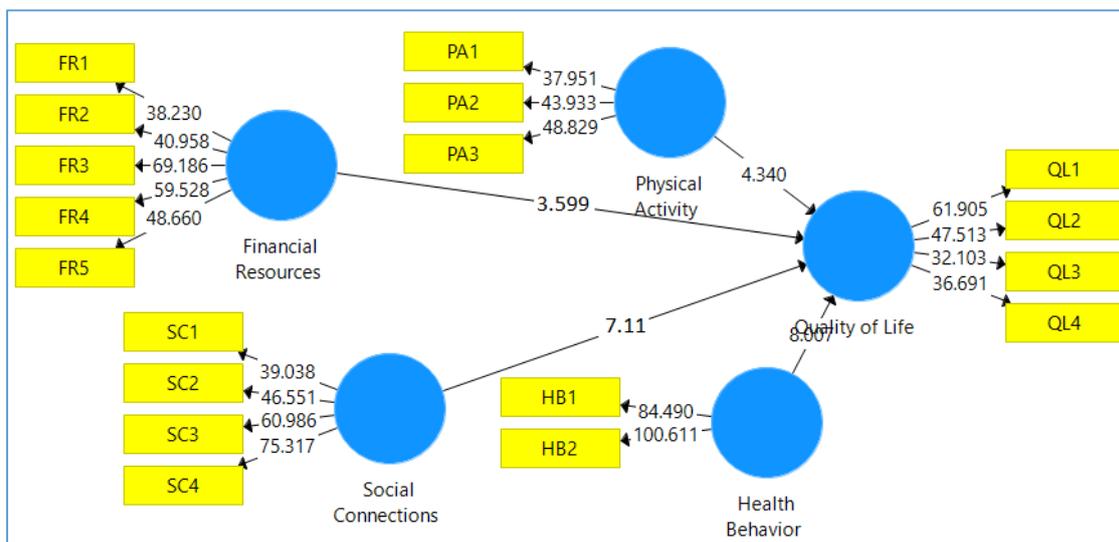
|                     | Financial Resources | Health Behaviour | Physical Activity | Quality of Life | Social Connections |
|---------------------|---------------------|------------------|-------------------|-----------------|--------------------|
| Financial Resources | 0.899               |                  |                   |                 |                    |
| Health Behaviour    | 0.586               | 0.935            |                   |                 |                    |
| Physical Activity   | 0.579               | 0.84             | 0.911             |                 |                    |
| Quality of Life     | 0.603               | 0.887            | 0.86              | 0.901           |                    |
| Social Connections  | 0.633               | 0.541            | 0.558             | 0.585           | 0.912              |

**Table 5: Discriminant Validity (Cross-Loadings)**

|     | Financial Resources | Health Behaviour | Physical Activity | Quality of Life | Social Connections |
|-----|---------------------|------------------|-------------------|-----------------|--------------------|
| FR1 | 0.886               | 0.581            | 0.544             | 0.577           | 0.824              |
| FR2 | 0.877               | 0.504            | 0.519             | 0.558           | 0.819              |
| FR3 | 0.922               | 0.544            | 0.529             | 0.558           | 0.864              |
| FR4 | 0.914               | 0.509            | 0.515             | 0.538           | 0.855              |
| FR5 | 0.896               | 0.488            | 0.488             | 0.468           | 0.831              |
| HB1 | 0.541               | 0.93             | 0.771             | 0.798           | 0.505              |
| HB2 | 0.554               | 0.94             | 0.8               | 0.859           | 0.506              |
| PA1 | 0.453               | 0.768            | 0.884             | 0.778           | 0.421              |
| PA2 | 0.593               | 0.781            | 0.922             | 0.783           | 0.595              |
| PA3 | 0.534               | 0.746            | 0.925             | 0.789           | 0.507              |
| QL1 | 0.541               | 0.827            | 0.75              | 0.926           | 0.54               |
| QL2 | 0.619               | 0.808            | 0.802             | 0.927           | 0.593              |
| QL3 | 0.605               | 0.798            | 0.782             | 0.876           | 0.568              |
| QL4 | 0.4                 | 0.763            | 0.765             | 0.872           | 0.399              |
| SC1 | 0.854               | 0.46             | 0.476             | 0.477           | 0.901              |
| SC2 | 0.829               | 0.456            | 0.488             | 0.52            | 0.896              |
| SC3 | 0.895               | 0.474            | 0.472             | 0.493           | 0.923              |
| SC4 | 0.832               | 0.566            | 0.581             | 0.621           | 0.926              |

Note: FR = Financial Resources; SC = Social Corrections; PA = Physical Activity; HB = Health Behavior; QL = Quality of Life

PLS structural model is presented in Figure 3. PLS structural model is recommended by other studies to examine the relationship between variables (Basco, Hair Jr, Ringle, & Sarstedt, 2021; Joe F Hair Jr, Howard, & Nitzl, 2020). Results are given in Table 6. T-value 1.96 is considered to check the significance of the relationship. Results shows that; financial resources have significant effect on quality of life. Furthermore, social connections, physical activity and health behavior also has significant effect on quality of life as the t-value is higher than 1.96 for all hypotheses. Therefore, all the four hypotheses are supported.



**Figure 3: Structural Model**

Note: FR = Financial Resources; SC = Social Corrections; PA = Physical Activity; HB = Health Behavior; QL = Quality of Life

**Table 6: Direct Effect Results**

|  | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics ( O/STDEV ) | P Values |
|--|---------------------|-----------------|----------------------------|--------------------------|----------|
| Financial Resources -> Quality of Life | 0.054               | 0.049           | 0.015                      | 3.599                    | 0        |
| Health Behaviour -> Quality of Life    | 0.542               | 0.547           | 0.068                      | 8.007                    | 0        |
| Physical Activity -> Quality of Life   | 0.356               | 0.349           | 0.082                      | 4.34                     | 0        |
| Social Connections -> Quality of Life  | 0.143               | 0.141           | 0.02                       | 7.11                     | 0        |

**5. Conclusion**

The conclusion section of the current study is based on the results of four direct hypotheses. As the current study highlighted four important factors which has influence on quality of life, therefore, the current study purposed four direct hypotheses and the effect of independent variables is considered on dependent variable namely; quality of life. The first hypotheses highlighted the relationship between financial resources and quality of life. It is observed that financial resources have positive effect on quality of life which indicates that the increase in financial resources can increase the quality of life among elderly people. It is observed that all the people having sufficient financial resources are leading to a significant level of quality of

life. However, the people having fewer financial resources cannot fulfill the requirements of these people and effect on quality of life. Second hypothesis shows the relationship between social connections and quality of life which indicates that social connection has positive effect on quality of life. Thus, the development of social capital between elderly people can increase the quality of life. The connection between the people can help to increase the level of communication which has the possibility to enhance the satisfaction level. Therefore, the increase in social connections among the elderly people has the potential to promote quality by increasing the level of satisfaction among them. The third hypothesis highlighted the relationship between physical activity and quality of life. Similar with financial resources and social connections, it is identified that physical activity among the elderly people can increase the quality of life. As finding shows that physical activity has positive effect on quality of life. The physical activity indicates a physical exercise which is also based on sports as well as any other type of exercise. These exercises among the elderly people can help to enhance quality of life. Finally, hypotheses four shows the relationship between health behavior and quality of life. As indicated by previous studies that health behavior has significant importance in any individual's life and it has major role to enhance quality of life. Therefore, among the elderly people the health behavior is also important to enhance the quality of life. The intention of elderly people to take care of their health with the help of visiting the doctor on routine basis help to maintain a quality of life. Thus, the current study identified four important factors which has effect on quality of life and these factors include; financial resources, social connections, physical activity and health behavior.

## 6. Implications

This study has several implications for the literature because the number of studies carried out research on quality of life through different aspects, however, these studies have ignored important aspects. Therefore, the current study covered gap of the literature and contributed theoretically. Most importantly, the current study considered the relationship between financial resources, social connections, physical activity and help behavior along with the quality of life which is not addressed in previous studies. It is highlighted in previous studies that various factors effect on quality of life, however, most importantly these factors have not considered in the relation to the quality of life of elderly people. Particularly, the previous studies in the literature have ignored the elderly people of Ranong province, Thailand. In this way, this study carried out to identify various factors affecting on the elderly people of Ranong province and their quality of life which is unique in nature. The results of the study leading to several practical implications. The organizations which take care of the elderly people can maintain a significant level of quality of life by considering their financial resources, social connections, physical activity and health behavior. It is recommended to these organizations to promote various ways to enhance financial resources of elderly people. It is also recommended to these organizations to enhance the social connection between them and increase the physical activity along with the health behavior of these people. Most importantly, it is important for various organizations to enhance physical activities specially related to the elderly people in Thailand

## 7. Future Directions

This study has covered most important elements of quality of life which are not addressed by previous studies. However, this study has not covered all the factors which has affect on quality of life of elderly people. In this way, the future studies should also identify various other factors affecting on quality of life. This study is only considered four factors affecting quality of life but there are number of other factors which also have major influence on quality of life which must be identified by future studies. Additionally, the current study only considered four independent variables, however, it is observed that financial resources, social connection, physical activity and health behavior has effect on satisfaction level of elderly people which further causes to increase quality of life. Therefore, in this direction the future studies should use satisfaction as mediating variable to provide most reliable results.

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