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Research article

# Factors Predicting Quality of Life of the Elderly in Elderly Schools

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## Abstract

This cross-sectional analytical study aimed to examine the level of quality of life (QOL) and identify factors predicting QOL among older adults attending Elderly Schools in Chonburi Province, Thailand. A total of 230 older adults registered during the 2024 fiscal year were selected using cluster random sampling. Data were collected through structured interview questionnaires comprising six components: personal characteristics, self-esteem (Rosenberg Self-Esteem Scale), active aging (Active Ageing Scale for Thai People: AAS-Thai), family relationships (Family Attachment and Changeability Index: FAC-18), social support (Multidimensional Scale of Perceived Social Support: MSPSS), and quality of life (Older People's Quality of Life Questionnaire: OPQOL-brief). Data were analyzed using descriptive statistics, Chi-square tests, correlation analysis, and multiple linear regression. Multiple linear regression analysis indicated that active aging (***B*** = 0.138, $p < 0.001$), social support (***B*** = 0.078, $p = 0.006$), and family relationships (***B*** = 0.066, $p = 0.010$) were significant predictors of QOL, jointly explaining 29.2% of the variance ($R^2 = 0.292$, $p < 0.001$). These findings indicate that active aging, family relationships, and social support are key factors associated with QOL among older adults attending Elderly Schools and may support the development of community-based health promotion strategies in aging populations.

**Keywords:** Quality of life, Elderly, Elderly Schools

## Introduction

At present, the global population of older adults is increasing rapidly. According to recent population estimates, the number of individuals aged 60 years and older worldwide exceeded 1.1 billion in 2023 and is projected to reach approximately 1.4 billion by 2030, reflecting a continuing expansion of aging populations across all regions.[1] In Thailand, approximately 13.64 million people aged 60 years and older were recorded in 2023, accounting for about 19.5% of the total population, indicating the country's transition toward a complete aged society and its progression toward a super-aged society in the coming decades.[2] Recent projections further suggest that the proportion of older adults in Thailand will increase to more than 31% by 2040.[3]

In Chonburi Province, the proportion of older adults has continued to increase steadily in recent years. The percentage of the population aged 60 years and older rose from 13.8% in 2020 to 15.76% in 2023 and further increased to 16.37% in 2024[4], reflecting an ongoing demographic transition toward an aging society at the


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provincial level. These trends highlight the growing importance of strengthening community-based health promotion and social support systems to enhance the quality of life among older adults in local communities.

Aging is accompanied by multidimensional changes in physical, psychological, emotional, and social domains, often leading to functional decline, reduced social roles, and increased dependence on others, all of which may adversely affect quality of life.[5] In response, Thailand's 13th National Economic and Social Development Plan (2023 - 2027) emphasizes social protection, integrated welfare systems, and the expansion of long-term care services within the Universal Health Coverage framework to improve the quality of life of older adults.[6] Quality of life in later life is further influenced by life-course experiences, health behaviors, and chronic conditions, and the refore requires comprehensive and continuous care.

Quality of life reflects individuals' perceptions of satisfaction and their position in life withi cultural and social contexts. Age-related physical deterioration and psychological changes may limit daily functioning and social participation, thereby increasing vulnerability and reducing well-being among older adults.[7] Previous studies have reported that most older adults experience a moderate level of quality of life, which is shaped by the interaction of personal factors, enabling factors, and reinforcing factors such as family and social support.[8]

This conceptualization is consistent with the PRECEDE Framework, which provides a systematic approach to analyzing intrapersonal and interpersonal determinants of health and quality of life. The PRECEDE framework developed by Green and Kreuter is widely used as a conceptual model for identifying determinants of health behaviors and health outcomes through the assessment of predisposing, enabling, and reinforcing factors. In Phase 4 of the PRECEDE model (educational and ecological assessment), these factors explain how individual characteristics, access to resources, and social influences interact to shape health-related outcomes, including quality of life among older adults.[9]

In the present study, variables were selected according to the PRECEDE framework to explain quality of life among older adults attending Elderly Schools. Predisposing factors included age, income, marital status, self-esteem, and active aging, which represent demographic and psychosocial characteristics influencing adaptive capacity and perceived well-being in later life. Previous studies have shown that self-esteem is positively associated with psychological well-being and quality of life among older adults.[10] Active aging has also been identified as an important determinant of autonomy, participation, and security contributing to improved quality of life in later life.[11] The enabling factor included the frequency of participation in health promotion activities, reflecting opportunities for engagement in supportive learning environments provided by Elderly Schools.[12] Reinforcing factors included family relationships and social support, which represent interpersonal influences that strengthen health behaviors and emotional stability. Evidence consistently indicates that supportive family environments and perceived social support are strongly associated with improved quality of life among older adults.[13] Previous studies have consistently demonstrated that active aging, self-esteem, family relationships, and social support are significant determinants of quality of life among older adults. In this study, these variables were treated as independent variables according to the PRECEDE framework, whereas quality of life among older adults attending Elderly Schools was defined as the dependent variable.

In Chonburi Province, where the majority of older adults remain socially active[14], community-based support systems are particularly important. The Elderly School model, which promotes lifelong learning and social participation through multi-sectoral collaboration, represents a key community platform for enhancing knowledge, skills, and well-being among older adults.

However, although a number of previous studies have examined factors associated with quality of life among older adults in community and general population settings, limited evidence specifically addresses older adults participating in Elderly Schools.The Elderly School model represents a unique community-based learning environment

that promotes lifelong learning, social participation, and peer interaction, which may influence quality of life differently from older adults who do not participate in such programs. Therefore, identifying predictive factors of quality of life within the Elderly School context is necessary to better understand how structured community learning environments contribute to well-being in later life.

Therefore, this study aimed to identify factors predicting quality of life among older adults in Elderly Schools in Chonburi Province using the PRECEDE Framework as the guiding conceptual model. The findings are expected to support public health professionals and related organizations in developing context-specific strategies to enhance quality of life in later life.

## Method

This study employed a cross-sectional analytical research design and was conducted among older adults attending Elderly Schools in Chonburi Province, Thailand. Data were collected in March 2024.

The study population comprised 555 older adults aged 60 years and older who were registered members of Elderly Schools in Chonburi Province.[14]

Sample size estimation was based on a previous study reporting a moderate level of quality of life (68.5%) among older adults.[15] Daniel's formula for estimating sample size in cross-sectional studies[16] was applied with a 95% confidence level (Z = 1.96) and a margin of error of 0.05, yielding a required sample size of 209 participants. After adding 10% to account for potential nonresponse or incomplete data, the final sample size was 230 participants.[17]

Participants were selected using cluster random sampling. Six districts in Chonburi Province were randomly selected without replacement, and all Elderly Schools within the selected districts were included. Within each school, participants were selected by simple random sampling using school registration lists, with proportional allocation according to cluster size based on the stratified proportion-to-size formula.

Inclusion criteria were: (1) age ≥60 years; (2) registration as an Elderly School member during the 2024 fiscal year; (3) absence of cognitive impairment assessed by the Mini-Mental State Examination Thai version 2002 (MMSE-Thai 2002);[18] (4) ability to communicate verbally in Thai; (5) regular participation in Elderly School activities; and (6) absence of severe illness that could interfere with questionnaire completion. Exclusion criteria were inability to complete the questionnaire and withdrawal from the study during data collection.

### Research instrument

The research instrument was a structured interview questionnaire developed from a review of relevant literature and theoretical frameworks on quality of life among older adults, including the World Health Organization's active aging framework and House's social support framework. The instrument was adapted to the local context of Elderly Schools in Thailand and comprised six sections.

The selection of measurement instruments in this study was guided by the PRECEDE framework[9], which categorizes determinants of health outcomes into predisposing, enabling, and reinforcing factors. Predisposing factors were assessed using personal characteristics (age, income, and marital status), the Rosenberg Self-Esteem Scale, and the Active Ageing Scale for Thai People (AAS -Thai), which reflect individual demographic and psychosocial readiness influencing adaptive capacity and well-being in later life. The enabling factor was measured by the frequency of participation in health promotion activities, representing opportunities for engagement in supportive learning environments provided by Elderly Schools. Reinforcing factors were evaluated using the Family Attachment and Changeability Index (FAC-18) and the Multidimensional Scale of Perceived Social Support (MSPSS), which capture interpersonal support systems that strengthen health behaviors and emotional stability. Quality of life, defined as the dependent variable, was measured using the Older People's Quality of Life Questionnaire (OPQOL-brief).

**Section 1:** Personal characteristics questionnaire: a researcher-developed questionnaire consisting of four items: age, marital status, monthly income, and frequency of participation in elderly

health promotion activities.

**Section 2:** Rosenberg Self-Esteem Scale: assessed self-esteem using six items (four positively and two negatively worded), rated on a 3-point scale (disagree, uncertain, agree). Scores were classified as high (≥14), moderate (10 - 13), and low (6 - 9).

**Section 3:** Active Ageing Scale for Thai People (AAS-Thai): evaluated active aging using a 29-item questionnaire covering three domains: health, social participation, and security.[19] Responses were rated on a 3-point scale (not true, sometimes true, always true), and total scores were categorized as high (69 - 87), moderate (49 - 68), or low (29 - 48).

**Section 4:** Family Attachment and Changeability Index (FAC- 18): measured family relationships using an adapted 16-item version derived from the FAC-18 (eight positively and eight negatively worded). Responses were rated on a 3-point scale (never, sometimes, regularly). Scores from the Attachment and Changeability subscales were combined to generate the Family Adaptability and Cohesion (FAC) score, which was interpreted according to four family relationship types: extreme (1.00 - 3.50), moderately extreme (4.00 - 4.50), moderately balanced (5.00 - 5.50), and balanced (6.00), representing increasing levels of family cohesion and adaptability.

**Section 5:** Multidimensional Scale of Perceived Social Support (MSPSS): assessed perceived social support using 12 items. The items were adapted to reflect four functional dimensions of social support based on House's social support framework to better represent the context of older adults attending Elderly Schools in Thailand.[20] Responses were rated on a 3-point scale (not true, partly true, true), and scores were classified as high (28 - 36), moderate (20 - 27), or low (12 - 19).

**Section 6:** Older People's Quality of Life Questionnaire (OPQOL-brief): evaluated quality of life using a 13-item questionnaire covering physical health, social relationships, psychological well-being, and environmental domains. Responses were rated on a 3-point scale (disagree, uncertain, agree), and total scores were categorized as high (31 - 39), moderate (22 - 30), or low (13 - 21).

**Instrument validity and reliability**

Content validity of the questionnaire was evaluated by three external experts in public health, gerontology, and behavioral research using the item-objective congruence (IOC) index. The overall IOC value of the instrument was 0.82. The IOC values for each section were as follows: personal characteristics (1.00), self-esteem scale (0.73), active aging scale (0.90), family relationships scale (0.88), social support scale (0.81), and quality-of-life scale (0.62). All items met the acceptable criterion (IOC ≥ 0.50) and were retained after minor revisions.

Reliability testing was conducted in a pilot study with 30 older adults attending an Elderly School in Chachoengsao Province. Cronbach's alpha coefficients were calculated separately for each scale. The reliability coefficients were 0.70 for the self-esteem scale, 0.901 for the active aging scale, 0.816 for the family relationships scale, 0.791 for the social support scale, and 0.70 for the quality-of-life scale. These results indicate acceptable internal consistency for all measurement scales. The overall Cronbach's alpha coefficient of the entire questionnaire (all sections combined) was 0.909.

**Data collection and ethical considerations**

Approval for the study was obtained from the Chonburi Provincial Public Health Office Human Research Ethics Committee (Approval No. 011 - 2567, 19 February 2024). Participants were informed about the study objectives and procedures, and written informed consent was obtained prior to participation. Participation was voluntary, and participants were free to withdraw from the study at any time without consequences. Data were collected through face-to-face interviews conducted by the researchers and trained research assistants at Elderly Schools in the selected districts of Chonburi Province. Prior to data collection, all interviewers were trained on the study protocol and standardized interviewing procedures to ensure consistency and reliability of data collection. Each interview took approximately 20 - 30 minutes and was conducted in a private area within the Elderly School setting to maintain confidentiality and minimize response bias. All research data will be securely stored and

retained for at least one year after publication of the study before being destroyed in accordance with institutional data protection policies.

**Statistical analysis**

Descriptive statistics (frequencies, percentages, means, and standard deviations) were used to summarize participant characteristics and study variables. Associations between variables were examined using the Chi-square ($\chi^2$) test and correlation analysis. Pearson's correlation coefficient was used for normally distributed continuous variables, whereas Spearman's rank correlation coefficient (rs) was applied for variables that did not meet normality assumptions. Factors predicting quality of life were identified using multiple linear regression analysis. Prior to conducting multiple linear regression analysis, the underlying statistical assumptions were examined to ensure the validity of the model. Linearity between independent variables and the dependent variable was assessed using scatterplots. Normality of residuals was evaluated through normal probability plots and the Shapiro-Wilk test. Homoscedasticity was examined using scatterplots of standardized predicted values and standardized residuals. Independence of errors was assessed using the Durbin-Watson statistic. Multicollinearity among independent variables was evaluated using Pearson's correlation coefficients, tolerance values, and variance inflation factor (VIF). Correlation coefficients among independent varia bles were below 0.65, tolerance values were close to 1.0, and VIF values were less than 10, indicating no evidence of multicollinearity. The strength of Pearson's correlation coefficients was interpreted according to Hinkle et al.'s criteria, ranging from very low (0.00 - 0.19) to very high (0.80 - 1.00).[21]

## Results

**1. Participant characteristics**

A total of 230 older adults participated in the study. Most were aged 60 - 69 years (57.39%), with a mean age of 69.04 years (range: 60 - 90). The majority reported a monthly income of <5,000 THB (73.04%), with a mean income of 5,568. 33 THB (range: 600 - 50,000). Nearly half were married (46.96%). Most participants attended elderly health promotion activities 1 - 15 times per year (76.52%), with a mean frequency of 12.58 times (range: 1 - 50).

**2. Self-esteem**

Almost all participants demonstrated a high level of self-esteem (99.13%), while 0.87% had a moderate level. Satisfaction with oneself was the highest-rated item, whereas perceived self-worth relative to others was the lowest-rated item.

**3. Active aging**

Most participants exhibited a high level of active aging (92.17%), and 7.83% showed a moderate level. In the health domain, confidence and faith in religion were rated highest, while avoidance of sweet, fatty, or salty foods was lowest. In the social participation domain, being a positive role model for children and grandchildren was rated highest, whereas participation in volunteer or community service activities was lowest. In the security domain, stable and safe housing was rated highest, while health insurance or health security coverage was rated lowest.

**4. Family relationships**

Most participants reported moderately balanced family relationships (50.00%), followed by balanced relationships (44.78%), and moderately extreme relationships (5.22%). These findings indicate that the majority of older adults experienced relatively stable and supportive family environments characterized by moderate to high levels of cohesion and adaptability.

**5. Social support**

Approximately half of the participants reported high social support (49.57%), followed by moderate (48.26%) and low levels (2.17%). Instrumental support from family members was rated highest, whereas support from caregivers or village health volunteers was rated lowest. Mass media was the main source of informational support, while neighbors provided the least. Emotional support from family members was highest, whereas support from healthcare personnel or village health volunteers was lowest. Appraisal support from local administrative organizations or community leaders was highest, while that from healthcare personnel or village health volunteers was lowest.

**6. Quality of life**

Most participants reported a high level of quality of life (98.70%), while 1.30% reported a moderate

level. Independent mobility, happiness derived from family relationships, satisfaction with personal abilities, and satisfaction with the home environment were the highest-rated aspects across physical, social, psychological, and environmental domains, respectively. In contrast, perceived physical strength, availability of assistance from family or neighbors, optimism about the future, and financial sufficiency were the lowest-rated aspects (Table 1).

**Table 1** Number and percentage of participants classified by level of quality of life among older adults (n = 230)

| Level of quality of life among older adults | Number | Percentage |
|---|---|---|
| High level of quality of life (31 - 39 points) | 227 | 98.70 |
| Moderate level of quality of life (22 - 30 points) | 3 | 1.30 |
| Low level of quality of life (13 - 21 points) | 0 | 0.00 |

**7. Factors associated with quality of life**

Chi-square analysis showed no significant association between marital status and quality of life. Correlation analysis indicated that self-esteem and active aging (predisposing factors), as well as family relationships and social support (reinforcing factors), were significantly associated with quality of life. In contrast, age, income, marital status, and frequency of participation in health promotion activities (enabling factor) were not significantly associated with quality of life. The strength of correlations between significant predictors and quality of life ranged from low to moderate according to Hinkle's criteria (Table 2).[26]

**Table 2** Correlation coefficients among predisposing factors, enabling factors, reinforcing factors, and quality of life among older adults attending Elderly Schools (n = 230)

| Variables | Quality of life of order adults | Age | Martal status | Income | Self-esteem | Active aging | Frequency of participation in health-promoting activities | Family Relation-ships | Social Support |
|---|---|---|---|---|---|---|---|---|---|
| Age | -0.019* | | | | | | | | |
| Marital status | -0.078 | -0.110 | | | | | | | |
| Income | -0.097 | -0.192 | 0.130 | | | | | | |
| Self-esteen | 0.202 | -0.130 | 0.042* | -0.121 | | | | | |
| Active aging | 0.491 | 0.192 | -0.008** | -0.071 | 0.271 | | | | |
| Frequency of participation in health promoting activities | 0.050* | -0.028 | -0.154 | -0.025* | -0.009** | 0.066 | | | |
| Family relation-ships | 0.259 | -0.192 | -0.004** | -0.114 | 0.192 | 0.206 | 0.081 | | |
| Social support | 0.343 | 0.055 | -0.098 | -0.182 | 0.162 | 0.377 | -0.018* | 0.166 | |

*p < 0.05, **p < 0.01. Reference group: single, divorced, separated, or widowed

Multiple linear regression analysis indicated that active aging (***B*** = 0.138, p < 0.001), social support (***B*** = 0.078, p = 0.006), and family relationships (***B*** = 0.066, p = 0.010) were significant predictors of quality of life among older adults attending Elderly Schools and may serve as key evidence for developing targeted health promotion and social support interventions in community-based aging programs. Higher levels of active aging, greater social support, and more balanced family relationships were associated with better quality of life. Together, these variables explained 29.2% of the variance in quality of life ($R^2$ = 0.292, adjusted $R^2$ = 0.282, p < 0.001). (Table 3).

**Table 3** Results of multiple linear regression analysis predicting quality of life among older adults attending Elderly Schools (n = 230)

| Factors | *B* | S.E. | β | t | p-value | 95% of CI | |
|---|---|---|---|---|---|---|---|
| | | | | | | Lower | Upper |
| Active aging | 0.138 | 0.021 | 0.397 | 6.484 | < 0.001** | 0.096 | 0.179 |
| Social support | 0.078 | 0.028 | 0.169 | 2.780 | 0.006** | 0.023 | 0.134 |
| Family relationships | 0.066 | 0.025 | 0.149 | 2.599 | 0.010** | 0.016 | 0.116 |
| Constant | 22.105 | 1.670 | - | 13.237 | < 0.001** | 18.814 | 23.395 |

$R^2$= 0.292, adjusted $R^2$ = 0.282, S.E.= 1.637,

***B*** = unstandardized coefficient; β = standardized coefficient; **S.E.** = standard error; CI = confidence interval. *p < 0.05, **p < 0.01

## Discussion

This study examined predisposing, enabling, and reinforcing factors associated with quality of life among older adults attending Elderly Schools in Chonburi Province, based on the PRECEDE Framework.

### Predisposing factors

Self-esteem and active aging were significantly associated with quality of life, whereas age, income, and marital status were not.

Age was not significantly related to quality of life, suggesting that older adults across early-old, middle-old, and late-old age groups experienced similar levels of well-being. This finding is inconsistent with studies by Pattana[15] and Zhu et al.[13], which reported declining quality of life with increasing age, but contrasts with the findings of Sirisuwan et al.[22], who reported a significant association.

Income was also not associated with quality of life, indicating that differences in financial status did not substantially influence perceived well-being among Elderly School participants. This finding is consistent with Siladlao[23] but contrasts with Pattana[15] and Samadarshi et al.[24], who identified income as a significant determinant.

Marital status showed no significant association with quality of life, suggesting that adequate care and support may be obtained from various sources, including family members and caregivers, regardless of marital status. This result is consistent with Pattana[15] but differs from Duan et al.[25], who reported a significant relationship.

Self-esteem was a significant predictor of quality of life, highlighting the importance of positive self-perception, dignity, and perceived social acceptance in promoting psychological well-being in later life.[26] This finding aligns with Phadungyam and Duvall[27], who emphasized that self-acceptance, functional ability, and perceived health contribute to higher self-esteem and improved quality of life.

Active aging was also significantly associated with quality of life. Older adults who maintained independence in daily activities, engaged socially, and perceived security in their living conditions reported better well-being.[28] This finding supports previous evidence reported by Sirisuwan et al.[22] and reinforces the importance of promoting active aging as a key intrapersonal determinant of quality of life.

### Enabling factor

Frequency of participation in elderly health promotion activities was not significantly associated with quality of life. This finding suggests that participation alone, without consideration of activity quality, individual engagement, or contextual factors, may be insufficient to influence overall well-being. This result contrasts with Pattana[15], who found that more frequent participation was associated with better quality of life.

### Reinforcing factors

Both family relationships and social support were significantly associated with quality of life.

Supportive family relationships were positively related to quality of life, reflecting the role of emotional attachment, mutual care, and family cohesionin enhancing psychological stability and life satisfaction. This finding is consistent with previous studies by Pragodpol et al.[29] and Mingmai.[30]

Social support was also a significant determinant of quality of life. Informational, instrumental, and emotional support enables older adults to cope with daily challenges, adapt to age-related changes, and maintain autonomy and social functioning. This finding is consistent with Pattana[15] and Samadarshiet al.[25], who reported similar positive effects of social support on quality of life among older adults.

### Interaction among PRECEDE factors

Active aging (predisposing factor), family relationships, and social support (reinforcing factors) jointly predicted quality of life, explaining 29.2% of its variance. According to the PRECEDE framework, health outcomes are influenced by the interaction of intrapersonal characteristics and interpersonal environmental supports rather than by single determinants alone. Active aging reflects individual capacity for autonomy, participation, and security, while family relationships and social support function as reinforcing mechanisms that sustain adaptive behaviors and emotional stability in later life. The combined influence of these factors highlights the importance of integrating individual capacity-building strategies with family and community support systems in promoting quality of life among older adults attending Elderly Schools. Similar findings have been reported in previous studies indicating that both personal competencies and supportive social environments contribute synergistically to well-being in later life.[11,24] These findings support the multidimensional perspective of quality of life proposed by the PRECEDE Framework.[9]

## Conclusion

This study examined predisposing, enabling, and reinforcing factors influencing the quality of life of older adults attending Elderly Schools. The findings indicated that self-esteem and active aging were significant predisposing factors associated with quality of life, whereas age, income, and marital status were not. This suggests that a good quality of life in later life is achievable regardless of socio-demographic characteristics, provided that older adults maintain positive self-perception and an adequate level of active aging. Frequency of participation in elderly health promotion activities, as an enabling factor, was not associated with quality of life, indicating that participation alone may be insufficient to generate meaningful improvements. In contrast, reinforcing factors, family relationships and social support, were significantly associated with quality of life, underscoring the importance of emotional, instrumental, and informational support from families and social networks. Moreover, active aging, family relationships, and social support jointly predicted quality of life, explaining 29.2% of its variance ($R^2 = 0.292$, $p < 0.001$). These findings highlight the combined influence of individual capacity and supportive social environments in promoting well-being among older adults attending Elderly Schools.

### Policy and practice implications

At the policy level, local administrative organizations should prioritize strategies that promote active aging, strengthen family relationships, and enhance social support systems for older adults attending Elderly Schools. These may include programs that encourage social participation, peer interaction, and community engagement, as well as initiatives that reinforce family involvement and support networks through community-based services.

At the practice level, families should be encouraged to actively support older adults by promoting emotional support, communication, and participation in social and community activities. In addition, local public health agencies should strengthen community support mechanisms, particularly by enhancing informational, instrumental, and emotional support from caregivers, village health volunteers, and community organizations.

**Recommendations for future research**

Future studies should collect more detailed data on participation in health promotion activities both within and outside Elderly Schools. Comparative studies between older adults who attend Elderly Schools and those who do not are recommended. In addition, quasi-experimental studies should be conducted to evaluate the effectiveness of quality-of-life enhancement programs, particularly interventions that promote active aging and strengthen family and community support systems.

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**References**

1. United Nations, Department of Economic and Social Affairs, Population Division. *World Social Report 2023: Leaving No One Behind in an Ageing World. New York, NY: United Nations; 2023.* Accessed July 16, 2024. https://desapublications.un.org/publications/world-social-report-2023-leaving-no-one-behind-ageing-world
2. สำนักงานสถิติแห่งชาติ. *รายงานการสำรวจประชากรสูงอายุในประเทศไทย พ.ศ. 2566*. กรุงเทพมหานคร: สำนักงานสถิติแห่งชาติ; 2567. Accessed February 16, 2025. https://www.nso.go.th/nsoweb/nso/survey_detail/iM?set_lang=en#gsc.tab=0
3. สำนักงานสภาพัฒนาการเศรษฐกิจและสังคมแห่งชาติ. *การคาดประมาณประชากรของประเทศไทย พ.ศ. 2553–2583 (ฉบับปรับปรุง)*. กรุงเทพมหานคร: สำนักงานสภาพัฒนาการเศรษฐกิจและสังคมแห่งชาติ; 2567. Accessed May 2, 2025. https://www.nso.go.th/public/e-book/Statistical-Yearbook/SYB-2024/69/
4. สำนักงานสถิติจังหวัดชลบุรี.*ร้อยละของผู้สูงอายุในจังหวัดชลบุรี พ.ศ. 2566 - 2567*. ชลบุรี: สำนักงานสถิติจังหวัดชลบุรี.Accessed February 16, 2025. https://chonburi.nso.go.th/statistical-information-service/key-indicators-of-the-province/percentage-of-the-elderly.
5. จิราพร เกศพิชญวัฒนา, สุวิณี วิวัฒน์วานิช, อังคณา ศรีสุข, สหรัฐ เจตมโนรมย์.*เรียนรู้เข้าใจวัยสูงอายุ*. กรุงเทพมหานคร: ยีนยงการพิมพ์; 2561. Accessed May 2, 2025. https://resourcecenter.thaihealth.or.th/assets/mediadol/415b1ac6-e06d-ec11-80f9-00155d1aab27/4a01d52d60fa3a5659d80f2bf9e1a114.pdf
6. สำนักงานสภาพัฒนาการเศรษฐกิจและสังคมแห่งชาติ. *ร่างแผนพัฒนาเศรษฐกิจและสังคมแห่งชาติ ฉบับที่ 13 พ.ศ.2566 - 2570*. กรุงเทพมหานคร: สำนักงานสภาพัฒนาการเศรษฐกิจและสังคมแห่งชาติ; 2565. Accessed July 20, 2024. https://www.nesdc.go.th/en/the-national-economic-and-social-development-plan/the-thirteenth-plan-2023-2027/
7. เกศกนก จงรัตน์, ศรีธยา ฤทธิ์ช่วยรอด, นันทวุฒิ วงศ์เมฆ, นิพนธ์ รัตนคช. ภาวะสุขภาพและคุณภาพชีวิตของผู้สูงอายุที่มีภาวะพึ่งพิงในเขตเทศบาลเมืองทุ่งสง จังหวัดนครศรีธรรมราช. *วารสารวิชาการสาธารณสุข*. 2562; 28(6):1014-1020. Accessed May 7, 2026. https://thaidj.org/index.php/JHS/article/view/8333/7658
8. อมรศักดิ์ โพธิ์อ่ำ. คุณภาพชีวิตผู้สูงอายุกลุ่มพฤฒพลังจังหวัดนครปฐม. *วารสารวิทยาศาสตร์และเทคโนโลยีนอร์ทเทิร์น*. 2566;4(2):1-12. Accessed May 7, 2026. https://he03.tci-thaijo.org/index.php/scintc/article/view/1410/928
9. Green LW, Kreuter MW. *Health Program Planning: An Educational and Ecological Approach*. 4th ed. New York, NY: McGraw-Hill; 2005. Accessed February 24, 2025. https://openlibrary.org/works/OL379018W/Health_

program_planning
10. Mann M, Hosman CMH, Schaalma HP, de Vries NK. Self-esteem in a broad-spectrum approach for mental health promotion. *Health Educ Res*. 2004;19(4):357–372. doi:10.1093/her/cyg041
11. World Health Organization. *Active Ageing: A Policy Framework*. Geneva, Switzerland: World Health Organization; 2002. https://iris.who.int/server/api/core/bitstreams/0418705f-1c82-4fe2-82d6-d4faee89dfa0/content
12. Levasseur M, Richard L, Gauvin L, Raymond É. Inventory and analysis of definitions of social participation found in the aging literature. *Soc Sci Med*. 2010;71(12):2141–2149. doi: 10.1016/j.socscimed.2010.09.041
13. Zhu Y, Liu J, Qu B, Yi Z. Quality of life, loneliness, and health-related characteristics among older people in China. *BMJ Open*. 2018;8: e021822. doi:10.1136/bmjopen-2018-021822
14. องค์การบริหารส่วนจังหวัดชลบุรี. *ทะเบียนผู้เข้าร่วมกิจกรรมโรงเรียนผู้สูงอายุ จังหวัดชลบุรี ปีงบประมาณ 2567*. ชลบุรี: องค์การบริหารส่วนจังหวัดชลบุรี; 2567. (เอกสารภายใน). Accessed July 31, 2024.
15. พัชราภรณ์ พัฒนะ. คุณภาพชีวิตของผู้สูงอายุในศูนย์การเรียนรู้การดูแลผู้สูงอายุ เขตสุขภาพที่ 4. *พุทธชินราชเวชสาร*. 2562;36(1):101-110.https://he01.tci-thaijo.org/index.php/BMJ/article/view/218455/151289
16. Daniel WW, Cross CL. *Biostatistics: A Foundation for Analysis in the Health Sciences*. 10th ed. Hoboken, NJ: Wiley; 2013.https://opac.northsouth.edu/cgi-bin/koha/opac-detail.pl?biblionumber=29888
17. Dovetail Editorial Team. How does stratified sampling work? Guide and examples. *Dovetail*. Published 2023. Accessed July 16, 2023. https://dovetail.com/research/stratified-sampling/
18. กระทรวงสาธารณสุข. *คู่มือการคัดกรองและประเมินสุขภาพผู้สูงอายุ พ.ศ. 2564*. กรุงเทพมหานคร: กระทรวงสาธารณสุข; 2564.https://ddc.moph.go.th/uploads/ckeditor2/files/คู่มือการคัดกรองและประเมินสุขภาพผู้สูงอายุ%20พ.ศ.%202564.pdf
19. พินิจ ฟ้าอำนวยผล.*โครงการพัฒนาเครื่องมือประเมินภาวะ Active Ageing สำหรับผู้สูงอายุไทย*. กรุงเทพมหานคร: สถาบันวิจัยและพัฒนาผู้สูงอายุไทย; 2563. https://thainhf.org/wp-content/uploads/2020/11/factsheetactiveageing.pdf
20. House JS. *Work Stress and Social Support*. Reading, MA: Addison-Wesley; 1981.https://books.google.co.th/books/about/Work_Stress_and_Social_Support.html?id=qO2RAAAAIAAJ&redir_esc=y
21. Hinkle DE, Wiersma W, Jurs SG. *Applied Statistics for the Behavioral Sciences*. 5th ed. Boston, MA: Houghton Mifflin; 2003.https://openlibrary.org/books/OL20715584M/Applied_statistics_for_the_behavioral_sciences
22. Sirisuwan P, Phimha S, Banchonhattakit P. Active aging, health literacy, and quality of life among elderly in the Northeast of Thailand. Indian J Forensic Med Toxicol. 2021;15(3):2645-2650. doi:10.37506/ijfmt.v15i3.15704
23. สุรีย์วรรณ สีลาดเลา, ศรายุทธ ชูสุทน, วรรณวิมล เมฆวิมล กิ่งแก้ว, กนกพร สมพร, นิวัฒน์ ทรงศิลป์. ปัจจัยที่มีผลต่อคุณภาพชีวิตของผู้สูงอายุในชมรมผู้สูงอายุ ตำบลบางนกแขวก อำเภอบางคนที จังหวัดสมุทรสงคราม. *วารสารวิจัยและพัฒนาระบบสุขภาพ*. 2564;14(3):298-309. https://he02.tci-thaijo.org/index.php/RDHSJ/article/view/255162/174063
24. Samadarshi SCA, Taechaboonsermsak P, Tipayamongkholgul M, Yodmai K. Quality of life and associated factors amongst older adults in a remote community, Nepal. *J Health Res*. 2021;36(1):56-67.doi:10.1108/JHR-01-2020-0023
25. Duan Y, Peiris DLIHK, Yang M, Liang W, Baker JS, Hu C, et al. Lifestyle behaviors and quality of life among older adults after the first wave of the COVID-19 pandemic in Hubei, China. *Front Public Health*. 2021; 9:744514. doi:10.3389/fpubh.2021.744514
26. Sadjapong U, Thongtip S. Association between self-esteem and health-related quality of life among elderly rural community, Northern Thailand. *Cogent Social Sciences*. 2023;9(2):2282410.doi:10.1080/23311886.2023.2282410
27. มุกข์ดา ผดุงยาม, อัญชลี ช. ดูวอล. กลยุทธ์การฟื้นฟูพลังสุขภาพจิตในผู้สูงอายุ. *วารสารพยาบาลทหารบก*. 2561;19(1):66-73.https://he01.tci-thaijo.org/

index.php/JRTAN/article/view/121914/92871
28. สำนักงานสถิติแห่งชาติ.*ดัชนีพฤฒพลังผู้สูงอายุไทย (Active Ageing Index of Thai Elderly).*กรุงเทพมหานคร: สำนักงานสถิติแห่งชาติ; 2567.Accessed May 6, 2026. https://www.nso.go.th/nsoweb/storage/survey_detail/2024/20241104131733_84431.pdf
29. ปัฐยาวัชร ปรากฏผล, เยาวดี สุวรรณนาคะ, อรุณี ไชยฤทธิ์, บุญสืบ โสโสม, สราวุฒิ สีถาน, มยุรี สร้อยศรีสวัสดิ์ และคณะ.*ระดับคุณภาพชีวิตและแนวทางการพัฒนาคุณภาพชีวิตของผู้ป่วยโรคเรื้อรังในประเทศไทย.* นนทบุรี: สถาบันวิจัยระบบสาธารณสุข; 2558. Accessed May 2, 2025. https://kb.hsri.or.th/dspace/handle/11228/4371
30. กฤติเดช มิ่งไม้. คุณภาพชีวิตของผู้สูงอายุที่มีโรคเรื้อรังในอำเภอวิเศษชัยชาญ จังหวัดอ่างทอง. สักทอง: *วารสารวิทยาศาสตร์และเทคโนโลยี.* 2561; 5 (1): 13 - 24. Accessed May 6, 2025.https:research.kpru.ac.th/journal_science/jounal/6692019-03-12.pdf

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