

Training curriculum to enhance the quality of life for the elderly

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ABSTRACT

This study aimed to develop and evaluate a training curriculum intended to enhance the quality of life for the elderly. As Thailand witnesses a demographic shift with increasing numbers of older adults, driven by declining birth rates and extended life expectancies, the importance of ensuring quality elderly care becomes paramount. The devised curriculum encompasses eight principal elements focusing on the elderly, defined as those aged 60 and above, addressing their physical and mental changes, well-being, health, and overall satisfaction. The content is holistic, integrating components of music, art, health care, and exercise. Delivered over a two-day period, the curriculum employs a structured approach featuring lectures, discussions, and knowledge exchanges, supported by a range of media and materials. Initial assessments revealed a moderate quality of life among the elderly, but post-training evaluations indicated enhanced knowledge, understanding, and positive attitudes towards the activities, pointing to an overall high level of effectiveness of the curriculum.

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1. INTRODUCTION

Thailand is witnessing a surge in its elderly population, leading to significant challenges. This rise in the elderly demographic is negatively impacting the country's workforce, potentially stalling economic growth. To address the impending labor shortage, Thailand has turned to foreign workers, both legal and illegal, from neighboring countries [1], [2]. Alarmingly, over 80% of these seniors lack adequate financial resources post-retirement. While children were traditionally a primary source of income for the aged, such support is dwindling. Health challenges further complicate matters for the elderly. The most prevalent health concerns include musculoskeletal, respiratory, and cardiovascular diseases. Many also suffer from disabilities like vision impairment, hearing loss, and paralysis. On retiring, many elderly individuals confront psychological issues such as loneliness, feelings of worthlessness, and depression. This, combined with their health problems, results in increased medical expenses at a time when their income is nonexistent. Consequently, many seniors lead difficult lives. Given these challenges, there's a pressing need for concerned authorities and individuals to prepare for an aging society and work towards enhancing the quality of life for the elderly [3].

Quality of life encompasses an individual's overall well-being and contentment, linked to emotions, situations, and experiences [4]. It reflects satisfaction with personal values, goals, and lifestyles [4], [5]. This concept can be bifurcated into two primary components: i) the physical, which pertains to daily vitality,

happiness, absence of pain, and quality of sleep and ii) the psychological, which involves self-perception, emotional spectrum, self-esteem, cognition, memory, and decision-making [6]. Enhancing the quality of life for the elderly involves integrating elements like music, art, health, and exercise. Music can serve therapeutic purposes, either through listening or playing instruments [7]. Art activities for seniors emphasize enjoyment, independent movement, and mental well-being [8]. A desired state for every senior is good health, enabling them to function effectively in society, learn, make decisions, and maintain social interactions [9]. Furthermore, exercise boosts seniors' physical prowess, muscle strength, relieves tension, and ensures effective circulatory function, fostering overall physical health [10]. Engaging the elderly in music, art, health, and exercise will indubitably elevate their quality of life. Such improvements can be institutionalized through training, as it facilitates skill enhancement, knowledge exchange, and behavior modification [11].

A training curriculum is a structured plan designed to offer a sequence of learning opportunities for participants. Its primary objective is to ensure that trainees gain knowledge, skills, and the right attitude, empowering them to handle relevant matters according to set objectives [12], [13]. The training is geared towards enhancing comprehension, allowing trainees to interpret and explain concepts, elevating their work expertise, and fostering a positive attitude towards their organization, superiors, peers, and responsibilities [14]. A well-developed training curriculum comprises nine essential components: i) education objectives and policies aligned with national plans, ii) curriculum goals which determine desired outcomes, iii) curriculum format and structure depicting subject distribution, iv) course objectives detailing expected outcomes for each subject, v) content, which encompasses the skills, abilities, and experiences to be imparted, vi) learning objectives signifying expected skills and abilities post-instruction, vii) teaching strategies, which are structured methods to meet learning goals, viii) evaluation processes to assess learning and improve instruction, and ix) curriculum materials and teaching media like documents, videos, and computer-assisted lessons to enhance teaching quality [15]. These elements collectively form the curriculum's framework, which includes its background, principles, objectives, content, structure, training activities, evaluations, and materials [16]–[18]. Recognizing the significance of enhancing the quality of life for the elderly through music, art, health, and exercise, the research team has established the topic: “Training curriculum to enhance the quality of life for the elderly.” This is aimed at ensuring the elderly can lead fulfilling lives in society and to achieve the predetermined research objectives.

2. RESEARCH METHOD

The study titled “training curriculum to enhance the quality of life for the elderly” falls under the category of research and development (R&D). The research employs specific methods, which are outlined as follows. In phase 1, a training curriculum was developed to enhance the quality of life for the elderly. The study focused on a target group of 115 individuals from Buriram Province, with 5 individuals selected from each of its 23 districts using purposive random sampling. To evaluate the validity and consistency of the training curriculum, a separate group consisting of 5 experts in curriculum development, teaching, and educational research was chosen, also through purposive random sampling.

The instrument utilized for data collection was a questionnaire focused on the quality of life for the elderly. A training curriculum designed to enhance the elderly's quality of life, and a manual for using said curriculum, were also developed. The creation and determination of the instrument's quality were conducted as follows:

- The questionnaire exploring the quality of life for the elderly diligently investigates its expansive scope, meticulously unraveling the details and components pivotal to comprehending and enhancing elderly life through a specifically defined terminological framework. This framework facilitates the crafting of research questionnaires and employs a 5-level estimation scale to categorize the quality of life into “highest,” “high,” “moderate,” “low,” and “lowest” levels, respectively. This inquiry further dissects the quality of life into four pivotal areas: music, arts, health care, and exercise for the elderly, comprised of a total of 20 questions, with five per each aforementioned area. The initial questionnaire, upon completion, was scrupulously evaluated by three experts, ensuring a robust check and balance between the definitions of the terms and the derived research questions, utilizing the index of item objective congruence (IOC) as a metric of evaluation and consistency [19]. The resultant expert feedback was incorporated to refine and enhance the questionnaire further, revealing an exemplary IOC index of 1 for each item, indicating impeccable consistency. The revised questionnaire was then distributed to a target group of 115 individuals, with data being manually gathered by the researcher using the aforementioned 5-level evaluation criteria [19].
- The training curriculum aimed at enhancing the quality of life for the elderly is based on a comprehensive analysis of prior research (from step 1) which examined the current state of the elderly's quality of life, incorporating insights from four key areas: music, arts, health care, and exercise for the elderly. Drawing from this synthesized knowledge, an extensive training course was devised. This curriculum encompasses

eight distinct sections: i) background, ii) principles, iii) objectives, iv) content, v) structure, vi) organizational strategies for training activities, vii) training media/materials, and viii) evaluation. Once constructed, the curriculum was presented to five experts in curriculum development and teaching for an in-depth assessment, using 5-level evaluation criteria ranging from “lowest” to “highest” in terms of appropriateness. Their collective assessment resulted in a highly favorable validation, indicating that the curriculum is predominantly “highest” in appropriateness with a mean (\bar{X}) score of 4.53 and a standard deviation (SD) of 0.17. Feedback from these experts also led to adjustments, ensuring the content aligns with the allotted training duration. Ultimately, the curriculum emphasizes actionable practices within the four aforementioned areas, positioning itself as a practical guide for the daily lives of the elderly.

- A manual has been developed to utilize a training curriculum aimed at enhancing the quality of life for the elderly. This manual is structured into three distinct parts: i) part 1 deals with the overarching training curriculum tailored for the elderly's improved quality of life; ii) part 2 outlines specific training content, which encompasses studying the content's scope, establishing a suitable framework for the target demographic, and devising content in accordance with a specified training process that spans four topics at three hours each; and iii) finally, part 3 introduces an assessment form employed by researchers to gauge the quality of life for the elderly. Upon conducting these training activities, the approach to determining quality entails two steps: i) first, a thorough examination of the training curriculum, manual, and content to delineate the scope for assessing elderly life quality, and ii) second, a study into methodologies for creating such an assessment, drawing insights from pertinent research documents.

Data on the quality of life for the elderly was collected through the following steps: firstly, coordination was established with district hospitals across all 23 districts in Buriram Province to seek the staff's assistance in data collection, targeting elderly individuals utilizing the hospital's services. Secondly, staff were requested to assist in completing the Google Form for five elderly individuals per district, resulting in a total sample of 115 people from the 23 districts. The analysis of data concerning the quality of life for the elderly in Buriram Province involved calculating the percentage (%), \bar{X} , and SD [20]. Additionally, the validity of the questionnaire instrument was determined using the index of IOC formula [19].

In phase 2, which focuses on the evaluation of the training curriculum designed to enhance the quality of life for the elderly, the target demographic comprises 50 elderly individuals from Buriram province. These participants were sourced by seeking volunteers from the elderly population who expressed interest in undergoing the training. Prior to initiating the training, the researcher coordinated with a target group of 50 elderly individuals from Prakhon Chai Subdistrict in Buriram Province to solicit volunteers for the program. In addition, coordination was made with community leaders from the same district to obtain permission to use a suitable location for the training sessions. Collaborations were also established with potential lecturers, inviting them to teach in the program, and logistics were arranged concerning dates, venues, and the preparation of essential materials and equipment. The training commenced with a 10-minute opening ceremony. Guided by the curriculum manual, the training spanned two days, covering four topics each lasting three hours, from 9:00 a.m. to 4:00 p.m., totaling 12 hours. The training modules included music, art, health, and exercise specifically tailored for seniors. Post-training, data was collected from the participants using the elderly quality of life assessment, with the findings subsequently analyzed and compiled into a research report evaluating the quality of life for the elderly. The analysis of data concerning the quality of life for the elderly in Buriram Province involved calculating the percentage (%), \bar{X} , and SD [20].

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1. Development of training curriculum to enhance the quality of life for the elderly

The focus of this study is on the development and evaluation of a training curriculum designed to enhance the quality of life for the elderly. In this section, the results of the quality-of-life assessment before and after the implementation of the training curriculum are presented, followed by a discussion of the implications and significance of these findings.

- State of quality of life for the elderly before training

Table 1 reveals that the overall quality of life state for the elderly is at a moderate level, with \bar{X} score of 2.98 and SD of 0.18. Among the individual aspects, health for the elderly stands out, ranking first with a high \bar{X} score of 3.90 and SD of 0.15. Following this, exercise for the elderly ranks second with a moderate \bar{X} score of 3.23 and SD of 0.30. Music for the elderly takes the third spot with a moderate \bar{X} score of 2.66 and SD of 0.38. Lastly, arts for the elderly are in the fourth position, with \bar{X} score of 2.15 and SD of 0.41.

Table 1. The state of quality of life ranking for the elderly before training

Rank	Quality of life state	\bar{X}	SD	Results
1	Health care for the elderly	3.90	0.15	High
2	Exercise for the elderly	3.23	0.30	Moderate
3	Music for the elderly	2.66	0.38	Moderate
4	Arts for the elderly	2.15	0.41	Low
	Average	2.98	0.18	Moderate

The training curriculum designed to enhance the quality of life for the elderly encompasses eight critical elements, grounded in the understanding that individuals aged 60 and over experience physical and mental shifts due to genetics and environmental influences affecting their health and quality of life. The imperative for such a curriculum is accentuated by the demographic shifts in Thailand, which is steadily transforming into an aging society due to declining birth rates and increased life expectancies. Over the next two decades, the average age is projected to rise from 77 to 80 years. As of 2018, the elderly comprised 30% of the population, and by 2038, it is anticipated to surge by nearly 20 million, escalating the demand for supportive healthcare systems. Quality of life, pivotal to an individual's satisfaction and well-being, envelops physical and mental health, learning, adaptability, and maintaining favorable social conditions, with activities such as music, art, health, and exercise often proving beneficial. The curriculum under development prioritizes imparting knowledge, understanding, skills, and fostering positive attitudes through a structured two-day training curriculum that includes lectures, discussions, knowledge exchange, case studies, and collaborative learning and action. It addresses various aspects like music, art, healthcare, and exercise tailored for the elderly. Training materials encompass courses, user manuals, documents, slides, and equipment for music and art activities, with measurement and evaluation adhering to predefined objectives to ensure the elderly meet the quality-of-life assessment criteria. The outcome indicates a generally high level of efficacy and impact. The training curriculum organization has been illustrated in Figures 1(a)-(d).



Figure 1. Training curriculum workshops: (a) works of art created independently by the elderly, (b) elderly individuals listening to a healthcare lecture, (c) a lecturer demonstrating simple and safe exercises for the elderly, and (d) elderly individuals practicing simple songs and harmonizing to enhance relaxation and mental health

3.1.2. Evaluation of training curriculum to enhance the quality of life for the elderly

Table 2 indicates that, overall, the results are at a high level, with \bar{X} of 4.13 and SD of 0.68. Among the individual aspects, music for the elderly ranks highest with \bar{X} of 4.36 and SD of 0.65. This is followed by

art for the elderly, which has \bar{X} of 4.11 and SD of 0.65, exercise for the elderly with \bar{X} of 4.04 and SD of 0.64, and health for the elderly, which comes in fourth with \bar{X} of 4.00 and SD of 0.71.

Table 2. The state of quality of life ranking for the elderly before training

Rank	Quality of life state	\bar{X}	SD	Results
1	Music for the elderly	4.36	0.65	High
2	Arts for the elderly	4.11	0.65	High
3	Exercise for the elderly	4.04	0.64	High
4	Health care for the elderly	4.00	0.71	High
	Average	4.13	0.68	High

3.2. Discussion

3.2.1. The quality of life for the elderly in Buriram Province

In Buriram Province, the quality of life for the elderly was observed to be at a moderate level. This is primarily due to the limited organized activities in their communities that target improving their quality of life. While there are some efforts in areas like music, art, health care, and exercise specifically designed for seniors, these initiatives are either minimal or lack a systematic approach and documentation. Additionally, while there have been improvements in some aspects of elderly care, areas like music, art, health care, and exercise for the elderly have seen insufficient progress. These findings align with a study by Çiftci *et al.* [21] which investigated the quality of life and adaptation of the elderly in Krong Ri Subdistrict, Sathing Phra District, Songkhla Province. The results showed a moderate quality of life for the elderly both in general and specific areas. Similarly, research by Hongthong *et al.* [22] on the quality of life for the elderly in Thailand found the same moderate level of quality of life for this demographic.

Research results highlight a compelling need for relevant entities and individuals to enhance the quality of life for the elderly through several domains including music, visual arts, healthcare, and physical exercise. This approach aligns with the World Health Organization (WHO) concept [6], asserting that quality of life is perceived through living within a social and cultural system, interconnected with goals, standard expectations, and a lifestyle that broadly influences components like physical health and psychological state. In addition, quality of life not only encompasses aspects of health, happiness, and satisfaction but, as Felce and Perry [4] elucidate, also pertains to overall well-being, health status, and euphoria. However, it's pivotal that development in quality of life comprehensively envelops physical, mental, and social aspects. The three dimensions encompass: i) physical pertaining to health, ii) mental involving self-efficacy, love, satisfaction, happiness, morale at work, self-worth, perceived life control, social comparisons, life expectations, beliefs, and aspirations, and iii) social (personal) relating to social networks, support, income level, education, social work, community involvement, climate, social security, housing, pollution, aesthetic environments, traffic, transportation, crime, and equality [23], [24].

Enhancing the quality of life for the elderly comprehensively entails addressing their physical, mental, and social aspects. The researcher has identified four pivotal areas for developing the quality of life among the elderly: i) music, which influences physical movement and mental state by altering moods and enhancing brain alertness [25]; ii) art activities, which serve as mediums for expressing feelings and thoughts while fostering personal and social development [26]; iii) health care, which promotes individuals' capacities to control and enhance their health holistically, including physical, mental, and social aspects [27]; and iv) exercise, which involves muscle movement and energy use to ensure the efficacy and longevity of various bodily systems [28]. Alam and Mohanty [29] research into developing a curriculum to enhance the quality of life for the elderly in Phitsanulok Municipality found that development content should encompass physical exercise and environmental aspects and address health issues. Similarly, Chitanon's [30] study concerning elderly quality of life in Samet Subdistrict Municipality, Mueang District, Chonburi Province revealed that physical and mental development content was essential.

3.2.2. Training curriculum to enhance the quality of life for the elderly in Buriram Province

The training curriculum designed to enhance the quality of life for the elderly in Buriram Province encompasses eight elements: background, principles, objectives, content, structure, training activities organization, training media or materials, and evaluation. This well-rounded curriculum received the highest suitability evaluation, demonstrating its coherence and effectiveness. This success can be attributed to its foundation on established academic guidelines, covering every phase of curriculum development. Experts have lauded its quality and appropriateness, validating its potential for effective elderly training. Macdonald outlined essential curriculum components, including educational goals, curriculum objectives, format and structure, course purpose, content, learning objectives, teaching strategies, evaluations, and teaching

materials [15]. Uthranan [31] proposed a seven-step curriculum development process, emphasizing the importance of societal needs, objectives, content, standards, trial runs, evaluations, and revisions. Tyler [32] further simplified these components into four: setting educational objectives, selecting content, organizing learning experiences, and curriculum evaluation. Consequently, the developed curriculum is comprehensive, covering key aspects and aligning with recognized curriculum development processes, ensuring its systematic and effective nature.

The components of the developed curriculum align with research findings related to curriculum development. Specifically, Thappanya [33] conducted research on developing a training curriculum concerning self-care for the elderly in Mueang District, Chonburi Province, which incorporated curriculum elements such as problems and needs, aims, qualifications of trainees, content and learning units, training activities, learning media, evaluation, training schedule, course structure table, and training plan. Similarly, Alam and Mohanty [29] investigated the development of a curriculum designed to enhance the quality of life for the elderly in Phitsanulok Municipality. The research underscored various curriculum aspects, including the identification of problems and needs, principles of the course, course aims, course structure, learning content, learning unit description, organization of learning activities, utilization of media and learning resources, and measurement and evaluation [29]. Both studies reflect a consistent emphasis on incorporating a comprehensive and structured approach to curriculum development that addresses the multifaceted needs and requirements of the elderly in their respective locales.

An evaluation of training curriculum aimed at enhancing the quality of life for the elderly revealed that participants displayed a high level of knowledge, understanding, correct practices, and positive feelings towards the activities. This outcome is likely attributed to the comprehensive nature of the training, which encompassed areas such as music, arts, health care, and exercise for the elderly. Post-training, the elderly was not only able to assimilate the knowledge but also practically apply it, leading to both tangible skills and positive perceptions. This aligns with Zuber-Skerritt's perspective, which posits that training curriculum should provide structured learning opportunities to instill knowledge, skills, and positive attitudes in trainees, enabling them to achieve set objectives [12]. Similarly, Amphote [34] emphasized that training is a systematic process designed to bolster skills, shape attitudes, and facilitate knowledge acquisition in specific subjects, ultimately driving behavioral changes in line with training goals.

An evaluation of the training curriculum designed to enhance the quality of life for the elderly in Buriram Province demonstrated that participants gained significant knowledge, understanding, and were able to put into practice the skills they acquired. Their positive feelings towards the activities also stood out, indicating an overall high level of appreciation and effectiveness. This is in line with Pichet Paiboonsiri's research, which highlighted the comprehensive nature of such curricula, encompassing all five learning units and achieving 80% of its objectives. Post-training results showed improved physical fitness among the elderly [35]. Similarly, Chitanon's [30] study on the quality of life for elderly residents in Samet Subdistrict Municipality, Mueang District, Chonburi Province underscored the enhancement in physical, mental, social, and environmental aspects. Furthermore, Thappanya's research [33] focused on a training curriculum about self-care for the elderly in Mueang District, Chonburi Province. The findings revealed that participants exhibited a notable increase in knowledge post-training, with significant statistical results at the .05 level. Moreover, their overall attitude towards the training was positive and resonated at a high level [33].

4. CONCLUSION

Elderly individuals, defined as those aged 60 or older, experience physical and mental changes as they age. As the Thai population shifts towards an aging demographic due to declining birth rates and increased life expectancy, it's imperative to establish systems to support this older generation. Enhancing their quality of life, encompassing well-being, satisfaction, physical and mental health, can be achieved through various means such as music, art, health care, and exercise. Curriculum designed to foster knowledge, understanding, and engaging activities can effectively improve their quality of life. Such training, developed by researchers, serves to holistically nurture the elderly, ensuring they are not viewed as burdens to their children and play a pivotal role in advancing society, the economy, and family institutions. Ultimately, the elderly will be integral in propelling national progress in the future.





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