eISSN: 2589-7799

2023 April; 6 (4s): 497-503

# The Development And Psychological Of An Exercise Management Model For Elders Operating In Bangkok

## Jarosporn Pussakham<sup>1\*</sup>, Pram Inprom<sup>2</sup>, Saowalee Kaewchuay<sup>3</sup>, Oam Toaj<sup>4</sup>

1\*, 2,3,4 Faculty of Social Sciences and Humanities, Mahidol University, Nakhon Pathom, 73170 Thailand

\*Corresponding Author: Jarosporn Pussakham

\* Faculty of Social Sciences and Humanities, Mahidol University, Nakhon Pathom, 73170 Thailand

email: Jarosporn.pu@ssru.ac.th

Received: 7-September-2023 Revised: 23-October-2023 Accepted:14-November-2023

#### **ABSTRACT**

Thailand has become a full-fledged aging society, how to serve the needs and necessities of exercise promotion for the elderly in Bangkok. Methods: There are four steps to conducting this research: 1. Formulation of the conceptual framework 2. Studying current conditions (actual conditions) and desirable conditions (expected conditions) by asking 400 elderly residents in Bangkok and conducting research using the Delphi Technique with 20 people from 7 experts. Results: PNI values in desirable conditions averaged higher than current conditions in all four aspects. Management has the highest difference, or PNI value, followed by money, man, and material. The study of the development of an exercise management model for elders operating in Bangkok includes inputs, processes, and results. Let's summarize it into a model and evaluate its feasibility. Conclusions: it was confirmed that it was appropriate to use the exercise promotion model for the elderly in Bangkok to achieve good results.

KEYWORDS: Management Model, System Theory, Organization, Management Process

#### 1. Introduction

The environment has been altered as a result of the changing globe in contemporary times. The population that lives in any nation is an integral part of the economy. All of these societies are beginning to undergo the transition towards an aging society with a greater proportion of senior citizens. The percentage of the population that is aged 65 and over has been continuously rising in Thailand, going from 6.8% in 1994 to 9.4% and 10.7% in more recent years, it is anticipated that it will rise to 11.70% in 2011 and 20% in 2025. There is a correlation between an old person's age and the rate of decline that they experience. The body of an aged person goes through changes that are associated with aging, such as muscular atrophy caused by a lack of usage. As bones degrade, they become more fragile [1]. The condition of various joints worsens, which ultimately results in a reduction in nutrients. Arthritis Decreased performance of the brain as well as the autonomic nervous system A loss of control over one's balance might result in a reduction in one's capacity to carry out tasks and in their agility [2], [3]. Because it is so difficult to move the body, the organs that are engaged in movement may occasionally become out of contact with one another. The global demographic landscape is undergoing a significant transformation with a notable increase in the elderly population [4],[5]. As a result of improved healthcare, better living conditions, and advancements in medical technology, people are living longer lives. This demographic shift poses various challenges and opportunities, particularly in urban areas like Bangkok, where the concentration of elders is on the rise. Ensuring the well-being and quality of life for the elderly has become a priority for both policymakers and healthcare professionals [6]. The rapidly aging population in Bangkok, as in many urban centers globally, presents a significant societal and healthcare challenge. This demographic shift necessitates the development of comprehensive and innovative strategies to address the unique needs and well-being of older adults, particularly in the context of physical health and psychological well-being. As such, the proposed research seeks to establish an Exercise Management Model for Elders in Bangkok, focusing on the incorporation of psychological aspects into their exercise routines. Demographic Shift in Bangkok: Bangkok, Thailand's capital city, has witnessed a substantial increase in its aging population over recent decades. Factors such as improved healthcare, increased life expectancy, and changing family structures have contributed to this demographic shift. The growing number of elders in Bangkok brings forth a range of health-related challenges, including the prevalence of age-related chronic illnesses, cognitive health concerns, and psychological issues such as depression and loneliness. As a result, there is an urgent need to develop a holistic approach to cater to the physical and psychological well-being of the elderly population. Elders often face physical health challenges, such as reduced muscle mass, diminished bone density, and increased risk of falls. Simultaneously, psychological well-being is equally crucial. The aging process can bring about feelings of isolation, depression, and anxiety, which, when left unaddressed, can

eISSN: 2589-7799

2023 April; 6 (4s): 497-503

significantly impact an elder's overall quality of life. While there are existing programs and initiatives aimed at promoting the health of older adults in Bangkok, many of these programs tend to focus primarily on physical fitness. The integration of psychological well-being into these programs is often limited or overlooked. Additionally, cultural factors specific to Bangkok may influence the preferences and needs of its elderly population. This research seeks to bridge the gap by developing an Exercise Management Model that considers both physical and psychological dimensions of health among the elderly in Bangkok. By addressing the specific cultural, physical, and psychological needs of this demographic, the model aims to enhance their overall well-being, foster social inclusion, and provide a more comprehensive approach to healthy aging.

One of the key components of promoting the health and well-being of the elderly population is regular physical activity and exercise. Physical activity has been proven to have a multitude of benefits, ranging from improving cardiovascular health and maintaining muscle strength to enhancing mental well-being and preventing the onset of chronic diseases. However, elders often face unique barriers to engaging in regular exercise, such as age-related physical limitations, social isolation, and lack of tailored exercise programs [7].

The elderly is seen as a population that is at a greater risk of contracting a variety of ailments than other age groups; hence, the National Sports Development Plan's action plan calls for the devolution of power to local administrative organizations to design a mission with the primary purpose of increasing the health and quality of life of all segments of the population. The following vision is outlined in the 6th National Sports Development Plan (2017-2021): It is an important mechanism for creating value to promote the country's economy and laying the foundation for a strong health system with unity to achieve continuous results. It is an important part of people's livelihoods in all sectors [8]. The exercise management Model for seniors in Bangkok, it is of utmost significance. Bangkok, as a bustling metropolis and a cultural hub, presents a unique context for studying and addressing the exercise management needs of the elderly population. The city's rapid urbanization, combined with traditional cultural norms and modern lifestyles, creates a complex environment that demands innovative solutions for promoting healthy aging [9]. Developing an exercise management model specifically tailored to the needs and challenges faced by elders in Bangkok can have far-reaching implications for enhancing their overall quality of life. This research seeks to address the existing gaps in exercise management for the elderly in Bangkok by proposing and developing a comprehensive exercise management model [10], [11]. The model will encompass various dimensions, including physical, psychological, and social aspects, to create a holistic approach that recognizes the multifaceted nature of health and well-being in old age. By integrating both local cultural nuances and global best practices, this model aims to provide a sustainable framework that empowers elders to adopt and maintain a physically active lifestyle. The subsequent sections of this research will delve into the existing literature on exercise and aging, exploring the challenges faced by the elderly population in Bangkok, and reviewing relevant theoretical frameworks and models related to exercise management. Furthermore, the research will outline the methodology used for model development, which involves a combination of qualitative interviews, surveys, and collaboration with relevant stakeholders [3],[12].

As a result, the researcher understands the significance of a management strategy that is acceptable and right in order to encourage physical activity among Bangkok's senior citizens. It is completely safe to use. In order to slow down the rate at which their bodies deteriorate, seniors should be encouraged to participate in sports and to exercise on a consistent and regular basis. Build a healthy community while working to lessen the need that the elderly will have on society in the years to come.

The aims of the present study, therefore, were:

- 1) To study the essential needs for promoting physical activity among the elderly in Bangkok.
- 2) To study management to promote physical activity among the elderly in Bangkok.
- 3) To study the management model of physical activity promotion among the elderly in Bangkok.
- 4) To assess the feasibility of a model for promoting physical activity among the elderly in Bangkok.

#### 2. Method

This study comprises two primary research approaches: needs assessment research and future research employing the Delphi technique. The investigation revolves around understanding the imperative of promoting physical activity among the elderly in Bangkok.

Initially, the Needs of Promoting Physical Activity were explored, aiming to delineate the current and desired states of physical activity promotion for the elderly in Bangkok. This entailed employing a questionnaire to gather data from 400 participants, aimed at assessing the existing and anticipated conditions within the framework of promoting physical activity among the elderly. The primary objective was to scrutinize the prevailing and aspired scenarios of the management model designed to incentivize physical activity among the elderly in Bangkok.

eISSN: 2589-7799

2023 April; 6 (4s): 497-503

The disparities between the current and desired states were meticulously examined, and the average score variations were systematically analyzed employing the Modified Priority Index (PNI modified) methodology. This technique facilitated the categorization and ranking of the discrepancies.

Subsequently, the study delved into the management aspect of promoting physical activity among the elderly in Bangkok, utilizing the Delphi technique in conjunction with interviews involving 20 professionals from relevant industries. The objective here was to glean insights from these experts regarding management strategies for encouraging physical activity among the elderly population.

The synthesized findings culminate in a comprehensive synopsis outlining the guiding principles for evaluating management models aimed at promoting physical activity. This encompasses a multidimensional understanding derived from both quantitative and qualitative methodologies, providing a nuanced overview of the strategies and considerations associated with fostering physical activity among the elderly in Bangkok.

#### 3. Results

Data sample from 400 elderly residents in Bangkok and 20 experts. To analysis a model for promoting physical activity among the elderly in Bangkok.

## 3.1 PNI Analysis with Needs of Promoting Physical for the elderly in Bangkok

The subjects needed management resources to promote physical activity among the elderly in Bangkok. In a desirable council. In terms of location and materials, the average was 4.16, followed by management with an average of 4.14, men with an average of 4.12, and budget (money) with the least demand, with an average of 4.08. In fact, the respondents saw that management resources were needed to promote physical activity among the elderly in Bangkok. In terms of location and materials, the average was 3.44, followed by men with an average of 3.41, management with an average of 3.34, and budget (money) with the least demand, with an average of 340.

The information you've provided appears to be in the form of bullet points or fragments. If you're looking to turn this into a coherent and comprehensive section of your research, here's how you could structure and expand upon it:

Management Resources to Promote Physical Activity among the Elderly in Bangkok

Promoting physical activity among the elderly in Bangkok requires a robust allocation of management resources to ensure a desirable level of engagement. This section delves into the key management resource areas and highlights the disparities between the perceived needs and the current actual conditions.

Personnel and Volunteer Training: The effective promotion of physical activity among the elderly heavily relies on trained personnel and volunteers who can lead exercise sessions and provide support. According to the findings, the need for volunteers from the elderly group to be trained as exercise leaders scored a PNI (Perceived Need Index) of 0.24, indicating its significant importance. Similarly, personnel within organizations equipped with the requisite knowledge and skills to guide elderly exercise activities also emerged as a critical factor, with a PNI of 0.21. This underscores the need for comprehensive training programs for both volunteers and personnel to enhance their ability to facilitate meaningful physical activity sessions.

Budget Support: Adequate financial resources are essential to sustain and scale initiatives aimed at promoting elderly physical activity. The research findings highlight that there is a higher perceived need for external or private budget support (PNI = 0.24) and sufficient budget support from agencies responsible for the elderly (PNI = 0.24). Additionally, the presence of accurate and transparent budget audits (PNI = 0.24) emerged as a key requirement. These results emphasize the importance of securing diverse funding sources and implementing rigorous financial oversight to ensure the availability of resources for promoting physical activity among the elderly.

Facilities and Materials: The availability and maintenance of suitable exercise facilities and equipment play a pivotal role in facilitating safe and effective physical activity for the elderly. The data indicate that continuous inspection and repair of premises and exercise equipment (PNI = 0.26) is a priority, followed closely by support from external organizations or the private sector for exercise facilities and equipment (PNI = 0.24). Furthermore, the development and integration of modern exercise facilities and equipment (PNI = 0.21) are identified as additional needs. These findings emphasize the significance of investing in well-maintained exercise spaces and modern equipment to enhance the elderly's engagement in physical activities.

Effective Management Practices: Successful management strategies are crucial for the sustained promotion of elderly physical activity. Transparent audit and evaluation of management practices (PNI = 0.30), establishment of a moderator tree responsible for activities and a public calendar (PNI = 0.28), and community involvement in management (PNI = 0.27) are highlighted as essential practices. These results underscore the need for clear management structures, effective communication strategies, and community engagement to ensure the continuous success of initiatives promoting physical activity among the elderly.

eISSN: 2589-7799

2023 April; 6 (4s): 497-503

3.2 Analysis of expert opinions on the development of management models to promote physical activity among the elderly in Bangkok

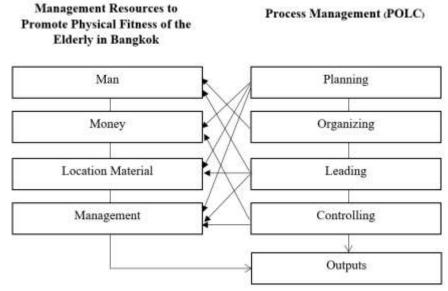


Fig. 1. The link between the need for management resources to promote physical activity among the elderly in Bangkok

We adopted a management resource and Link to the Process Management (POLC) framework, and select important factor will be used appropriately and most effectively to promote physical activity among the elderly in Bangkok Management resource

- 1. Man: Personnel selection, Personnel Development and Training, Volunteer Promotion.
- 2. Money: Money Planning, Money Allocation, Money allocation for maintenance of premises and equipment materials.
- 3. Material: Provision of fitness facilities and materials, maintenance of premises and equipment materials to ensure availability and safety, creating understanding for the elderly to use the service.
- 4. Management: A good and transparent management system, there is a supervision committee, and there is a continuous evaluation, promote participation from communities and external agencies in the management of physical activity projects for the elderly.

## Process Management (POLC)

- 1. Planning: Data Analysis, Event planning and organization, defining indicators to evaluate the success of each project, allocating budget resources to suit all projects.
- 2. Organizing: Establishment and appointment of the Project Management Committee, Improvement of an appropriate organizational structure to enable the most effective management. Clearly define and assign roles and responsibilities to suit personnel.
- 3. Leading: Promotion and incentive for personnel, Promoting and building working relationships, encourage communities and the elderly to participate in organizing activities.
- 4. Controlling: Project results should be monitored and evaluated, it is summarized as a lesson to solve problems and serves as a model of operation, Performance is published.

## 4. Discussion

## According to the findings of this research

Man is essential for the management of resources in order to encourage physical activity among Bangkok's senior citizens. This conclusion was reached in the context of staff. It is necessary to develop from the selection of personnel into the organization, including the development of personnel, to have the highest standard. Additionally, the issue that is found to be the most important should be carried out, namely additional training in health promotion for the elderly for personnel to be of the same standard. The people are the most valuable resource and the management of an organization's human resources will determine whether the business is successful. The old people pay more attention to the location of the exercise facility, followed by the staff. This means that if there are not both characteristics to promote exercise, it may result in fewer elderly people going to exercise. Because the supply could not keep up with the demand.

**Money** is an essential resource for increasing physical activity levels among elderly people in Bangkok, particularly in terms of financial considerations. The entirety of the process will be unable to go forward if it is not executed in a way

eISSN: 2589-7799

2023 April; 6 (4s): 497-503

that is both helpful and straightforward. Therefore, there must be methodical planning and allocation of budgets, particularly concerning issues to be analysed and formulated as budget plans, in order to ensure that the management, which includes activities to promote exercise among the elderly, will go smoothly and achieve the set goals. Money was one of the most essential considerations for the administration is the financial plan. The preparation of the budget is the management's responsibility; it is required to contain the strategy for the project in addition to the money received and the costs incurred. First and foremost, executives are responsible for preventing the abuse and waste of money.

Material is the most essential resource for encouraging elderly people in Bangkok to participate in exercise is the provision of appropriate materials. Because the facility and equipment must be ready and used normally to ensure safety and not damage the elderly, which requires frequent inspection and repair, the elderly are very sensitive. The facility and equipment must be ready and used normally to guarantee safety and not harm the elderly. There is one more crucial thing that should be done to make the management effective, comprehensive, and useful to the greatest extent. This should be founded on the idea of employing materials in an appropriate manner. Get the most out of the situation. Utilize it efficiently in terms of work, money, and time, and the equipment needs to be handled correctly. Also, take care not to become stuck when using it. The eldest people pay more attention to the location of the exercise facility, followed by the staff. This means that if there are not both characteristics to promote exercise, it may result in less senior people going to exercise. Because the supply could not keep up with the demand.

Management, promoting physical activity among the senior population in Bangkok will not be successful if there is insufficient management. Because of this, it demands effective management. There are committees and people who are directly responsible for supervising and creating participation from the whole community and providing opportunities for the elderly to participate in management, as well as monitoring and evaluating management results in order to achieve the best results. Management is a process that uses art and strategies to carry out various steps based on the cooperation of various individuals. Management is a process that uses art and strategies to carry out. Thai elderly people have a high degree of systematic demand for exercise management and that management should be improved to better accommodate the requirements of elderly people.

Planning plays a significant role in determining whether the procedure is successful. This research begins with the use of health data to identify the promotion of physical activity among the elderly. Additionally, an analysis of various environmental circumstances that will be utilized in creating the plan to promote physical activity for good management is also performed, which asserts that planning is the first step taken by the executive in the process of formulating policies, goals, missions, objectives, or plans, as well as forecasting future outcomes. The operation and allocation of resources for various activities to promote and achieve the goals must take place regardless of who will do what. An effective plan will influence other aspects of administrative work, Objectives and performance indicators need to be stated in a way that is both clear and specific. The responsibility for performance should take precedence over management practices. Bringing the structure down to a more manageable size so that it can more effectively cover activities as well as updating the management approach develop some self-control in your spending so that you may maximize your use of available funds.

Organizing, the results of this research found that agencies that promote physical activity reserve the elderly. Must have an appropriate management structure. There is a clear executive committee, and meetings are held regularly to administer the work. For each unit must design, structure operations, assign duties and responsibilities to various personnel, and determine coordination methods so that they can be carried out in accordance with the planning. The task grouping must be appropriate to resources and circumstances, the organization consists of organizing personnel, dividing departments, and allocating resources appropriately in accordance with the work plan so that the organization can implement the plan to achieve the specified objectives and goal. Consideration must be given to the composition or characteristics of the aging population both now and in the future, along with quantitative trends, and health is an important indicator of the well-being of the elderly population. In addition to not having financial problems, one must have good physical and mental health.

Leading, it provides opportunities for personnel to propose opinions in order to find new and better approaches, in addition to seeking cooperation in both the agency and the community in order to achieve the goals and encourage senior citizens, who are the target groups, to participate in activities to promote physical activity in order to meet the needs of senior citizens themselves. The stipulates the necessity of defining plans, establishing projects, and assigning staff in order to carry out tasks. In addition to this, CEOs need to have leadership qualities within themselves and be able to inspire other people to complete their duties so that the firm may reach its objectives. The participation of the elderly who want to participate in activities with the community is an important force to help push and connect things related to the elderly together. The ability to exercise power and motivate others to follow along to achieve the goals of the organization. The most of the older persons desire to participate in every step of the process ever since they took the initiative. Participate

eISSN: 2589-7799

2023 April; 6 (4s): 497-503

equally in the planning of operations, the execution of plans, the monitoring and evaluation of results, and the assumption of responsibility for any positive or negative consequences resulting from operations.

Controlling, the results of this research showed that in order to achieve the highest results in management, there must be a follow-up process, both in place and in the indicators that will be used to evaluate the results of promoting physical activity among the elderly. There is a joint assessment meeting between the agency and the community, and most importantly, the results should be summarized and improved, as well as the elderly's satisfaction with participating in the project., control is a process. Systematically monitor performance to compare operations with standards or criteria in order to maintain the organization in the direction of the goal correctly according to the main objectives of the organization by considering whether the actual performance meets such standards or criteria. In order to improve the performance of the organization. The exercising control is an essential component of management. Using a variety of control tools, operational comparisons are conducted with the standards or objectives that have been defined in order to accomplish activities with resource consumption that is as cost-effective as possible. Performance assessment is necessary for effective control procedures. Project assessment is one technique to promote rationality in management using facts on the results of projects.

#### 5. Conclusion

In tandem with the transformational paradigm shift in promoting physical exercise among Bangkok's elderly population, it is imperative to place a significant emphasis on their psychological well-being. The study's findings underscore that the holistic approach should encompass the mental health aspect of aging, recognizing the significance of emotional and psychological wellness. By promoting not only physical fitness but also psychological resilience, the comprehensive approach aims to empower elderly individuals to lead healthier and happier lives, aligning with their intrinsic value within the fabric of society. This strategic emphasis on psychological well-being not only fosters self-sufficiency among the elderly but also diminishes their reliance on their offspring for emotional support, thus mitigating the potential burden on government healthcare expenditures and contributing to substantial cost savings. This orientation assumes heightened importance within the context of Thailand's profound demographic shift towards an aging population. However, it is crucial to acknowledge that realizing these envisioned positive outcomes necessitates meticulous allocation of management resources and the establishment of effective, collaborative procedures that engage all sectors. Each facet of the proposed paradigm must be intricately integrated, as the absence of any essential component could impede the attainment of these transformative results. The exercise promotion model for the elderly, meticulously crafted from the study's outcomes, has undergone rigorous evaluation by experts in the field. It is now poised for implementation, with the aspiration of yielding favorable outcomes that extend beyond individual benefits to serve the broader societal interest, addressing both physical and psychological dimensions of well-being [13]. This model stands ready for implementation, with the aspiration of yielding favorable outcomes that extend beyond individual benefits to serve the broader societal interest.

## References

- 1. Babine, R.L., et al., *Mobilizing older adults: A multi-site, exploratory and observational study on patients enrolled in the Hospital Elder Life Program (HELP)*. Geriatr Nurs, 2019. 40(3): p. 239-245.
- 2. Blundell, J.E. and K. Beaulieu, *The complex pattern of the effects of prolonged frequent exercise on appetite control, and implications for obesity.* Appetite, 2023. 183: p. 106482.
- 3. Tsai, P.F., et al., A supplemental report to a randomized cluster trial of a 20-week Sun-style Tai Chi for osteoarthritic knee pain in elders with cognitive impairment. Complement Ther Med, 2015. 23(4): p. 570-6.
- 4. Cesari, M., et al., *The Multidomain Intervention to preveNt disability in ElDers (MINDED) project: rationale and study design of a pilot study.* Contemp Clin Trials, 2014. 38(1): p. 145-54.
- 5. Sirois, M.J., et al., Functional Decline After Nonhospitalized Injuries in Older Patients: Results From the Canadian Emergency Team Initiative Cohort in Elders. Ann Emerg Med, 2022. 80(2): p. 154-164.
- 6. Fujita, E., et al., Repeated sit-to-stand exercise enhances muscle strength and reduces lower body muscular demands in physically frail elders. Exp Gerontol, 2019. 116: p. 86-92.
- 7. Han, D.S., et al., Differences in the gut microbiome and reduced fecal butyrate in elders with low skeletal muscle mass. Clin Nutr, 2022. 41(7): p. 1491-1500.
- 8. Huang, T.T., Managing fear of falling: Taiwanese elders' perspective. Int J Nurs Stud, 2005. 42(7): p. 743-50.
- 9. Izquierdo, M. and M. Fiatarone Singh, *Promoting resilience in the face of ageing and disease: The central role of exercise and physical activity.* Ageing Res Rev, 2023. 88: p. 101940.
- 10. Makaroun, L.K., R.L. Bachrach, and A.M. Rosland, *Elder Abuse in the Time of COVID-19-Increased Risks for Older Adults and Their Caregivers*. Am J Geriatr Psychiatry, 2020. 28(8): p. 876-880.

eISSN: 2589-7799

2023 April; 6 (4s): 497-503

11. Tsai, P.F., et al., A pilot cluster-randomized trial of a 20-week Tai Chi program in elders with cognitive impairment and osteoarthritic knee: effects on pain and other health outcomes. J Pain Symptom Manage, 2013. 45(4): p. 660-9.

- 12. Sawchuk, C.N., et al., *A randomized trial to increase physical activity among native elders.* Prev Med, 2008. 47(1): p. 89-94.
- 13. Wu, M., et al., *Nurses' Perceptions of Factors Influencing Elder Self-neglect: A Qualitative Study*. Asian Nurs Res (Korean Soc Nurs Sci), 2020. 14(3): p. 137-143.