

## An Integrated Model of Physical Education, Recreation, and Local Wisdom for Enhancing the Well-Being of Older Adults in an Aging Society

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**ABSTRACT:** As the global society enters an aging era, enhancing the holistic well-being of older adults has become a critical challenge. Conventional physical activity programs often encounter cultural barriers and limitations in sustaining long-term participation. This article aims to propose an integrated model of physical education, recreation, and local wisdom to promote the holistic well-being of older adults within the context of an aging society. The study adopts a conceptual development approach based on a synthesis of relevant literature and theoretical frameworks, including Active Aging, Successful Aging, and holistic well-being, combined with an analysis of community social capital.

The findings indicate that the proposed integrated model comprises three key components: (1) physical education, emphasizing safe physical movements aligned with older adults' physical conditions; (2) recreation, focusing on fostering social relationships and psychological vitality; and (3) local wisdom, serving as a cultural foundation to create meaning, pride, and sustainability in program activities. The model outlines a four-stage implementation process: contextual analysis, participatory design, integrated activity implementation, and holistic evaluation.

This integrated model redefines the role of older adults from passive service recipients to valuable contributors to social capital. The findings offer a strategic framework for educational institutions, local administrative organizations, and public health agencies to promote dignified and high-quality aging at both local and global levels.

**KEYWORDS:** Physical Education, Recreation, Local Wisdom, Older Adults, Holistic Well-Being, Aging Society.

### 1. INTRODUCTION

The demographic transition toward an aging society has emerged as a critical demographic challenge with far-reaching implications for economic stability, social structures, and educational management systems worldwide. According to the United Nations, by 2050 the global population aged 60 years and older is projected to double to approximately 2.1 billion, rendering the promotion of older adults' well-being and quality of life an urgent international agenda (United Nations, 2020). In Thailand, this transition has occurred at an accelerated pace, characterizing the country as experiencing rapid aging, which has compelled both the public and private sectors to develop proactive mechanisms to address increasing dependency ratios and rising healthcare expenditures.

In response to these challenges, the World Health Organization introduced the concept of Active Aging, defined as the process of optimizing opportunities for health, participation, and security in order to enhance quality of life as people age (World Health Organization [WHO], 2002). This framework aligns closely with the roles of physical education and recreation as fundamental mechanisms that extend beyond the enhancement of physical fitness for the prevention of non-communicable diseases (NCDs). Importantly, they also function as vital tools for psychological well-being and social balance through meaningful interpersonal interaction and community engagement (Biddle & Mutrie, 2008; Taylor, 2014).

Despite ongoing efforts to promote physical activity among older adults, the organization of activity programs within the contemporary Thai social context continues to face cultural gaps and challenges related to sustainability. Many existing programs are largely adapted from Western models, which may not be fully compatible with traditional lifestyles and sociocultural values. As a result, older adults may experience limited motivation and a diminished sense of ownership and engagement in such activities (Phraphram, 2021). Integrating local wisdom, as a form of cultural capital reflecting community identity and historical heritage,

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with principles of physical education and recreation therefore represents a highly promising innovative strategy. This integration not only fosters holistic well-being across physical, psychological, social, and intellectual dimensions but also restores the value and dignity of older adults as custodians and transmitters of community knowledge (UNESCO, 2019).

Accordingly, this academic article aims to develop and propose an integrated model of physical education, recreation, and local wisdom as both a scholarly framework and a set of policy-oriented recommendations for relevant stakeholders, including local administrative organizations and educational institutions. The proposed model seeks to guide the design and implementation of sustainable, culturally responsive activity programs that effectively promote the well-being of older adults within the context of a high-quality aging society.

## **2. RELATED CONCEPTS AND THEORETICAL FRAMEWORKS**

### **2.1 Physical Education for Older Adults' Well-Being**

Physical education in the context of older adults has undergone a paradigm shift from an emphasis on competitive skills toward the promotion of health-related physical fitness. This approach prioritizes safe mobility, muscular strength for postural support, flexibility, and balance factors that are essential for maintaining independent living and reducing the risk of frailty (American College of Sports Medicine [ACSM], 2019). Consistent with this perspective, empirical studies have demonstrated that regular physical activity significantly reduces the incidence of non-communicable diseases (NCDs), delays neurological degeneration and age-related brain pathology, and alleviates the severity of depressive symptoms among older adults (Chodzko-Zajko et al., 2009; Taylor, 2014).

### **2.2 Recreation and the Concept of Active Aging**

Recreation can be conceptualized as a lifelong learning process that generates positive experiences and enhances happiness and life satisfaction. Within the framework of Active Aging, the World Health Organization emphasizes the importance of creating opportunities for older adults to participate in activities that align with their cultural contexts and personal interests. In this regard, recreation serves as a motivational mechanism that transforms physical activity from a perceived obligation into an enjoyable experience. This transformation fosters sustained participation (adherence) and enhances social well-being through group interaction and collective engagement (World Health Organization [WHO], 2002; Iwasaki et al., 2018).

### **2.3 The Concept of Holistic Well-Being**

Holistic well-being extends beyond the mere absence of disease to encompass a balanced integration of physical, psychological, social, and spiritual dimensions. This concept is closely aligned with the Successful Aging model proposed by Rowe and Kahn (1997), which identifies three core components: (1) minimizing the risk of disease and disability, (2) maintaining physical and cognitive functioning, and (3) sustaining active engagement in social life and meaningful activities. Furthermore, spiritual well-being has been highlighted as a critical factor that enables older adults to cope mindfully with age-related transitions and to maintain a sense of hope and purpose in later life (Koenig, 2015).

### **2.4 Local Wisdom and the Enhancement of Older Adults' Quality of Life**

Local wisdom represents a form of intellectual capital accumulated through collective experience and sustained interaction with the community's natural and social environments. The application of indigenous practices—such as traditional games, folk dance, or movement patterns derived from agricultural lifestyles—can foster cultural congruence, thereby enhancing acceptance and engagement among older adults more effectively than standardized global activity programs alone (UNESCO, 2019). Moreover, enabling older adults to draw upon and transmit their existing knowledge and skills creates inclusive social spaces that promote self-esteem and support the sustainable transmission of cultural heritage across generations (Phraphram, 2021; World Intellectual Property Organization [WIPO], 2020).

## Theoretical Foundations for Older Adults' Well-being Model

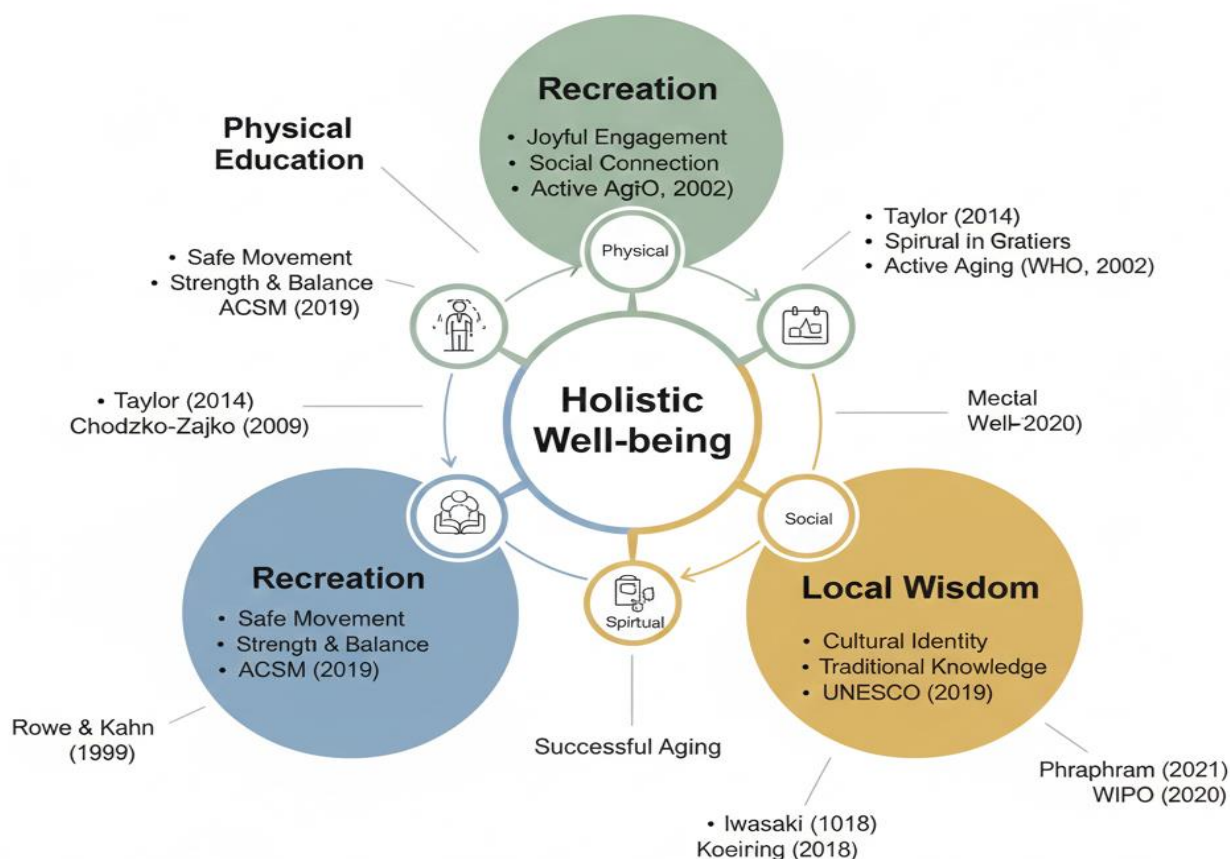


Figure 1: Theoretical Framework: The Synergy of Physical Education, Recreation, and Local Wisdom on Holistic Well-being.

### 3. CONCEPTUAL FRAMEWORK FOR THE DEVELOPMENT OF THE INTEGRATED MODEL

The conceptual framework of this article was developed through the synthesis of three core theoretical perspectives: Active Aging, Holistic Well-Being, and Community-Based Learning. Within this framework, physical education, recreation, and local wisdom are conceptualized as integrated components functioning as independent variables (predictors) that directly contribute to the enhancement of older adults' well-being.

This study emphasizes the systematic relationships among physical activity, social engagement, and the cultural context of the community, which collectively lead to the desired outcome of holistic well-being across four key dimensions: physical well-being, psychological well-being, social well-being, and spiritual well-being. These dimensions are consistent with models of successful aging, which underscore the importance of maintaining functional capacity and sustained engagement in meaningful activities throughout later life (Rowe & Kahn, 1997; World Health Organization [WHO], 2002).

## Integrated Model for Older Adults Well-being

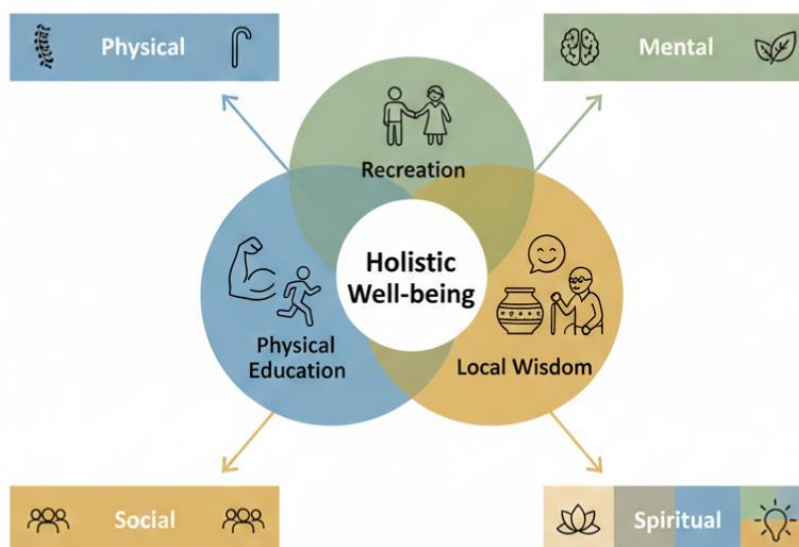


Figure 2: Conceptual Framework of the Integrated Model for Older Adults' Holistic Well-being

### 4. AN INTEGRATED MODEL OF PHYSICAL EDUCATION, RECREATION, AND LOCAL WISDOM

#### 4.1 Key Components of the Model

The proposed integrated model comprises three interrelated and mutually reinforcing pillars, as follows:

1. **Physical Education for Older Adults.** This component emphasizes the provision of movement-based activities that prioritize safety and are tailored to individuals' functional capacity. The primary objectives are to enhance muscle mass, flexibility, and cardiovascular circulation, thereby supporting functional independence and overall physical well-being (American College of Sports Medicine [ACSM], 2019).
2. **Inclusionary Recreation.** Recreational activities are utilized as a means of fostering positive social interaction, reducing social isolation, and stimulating psychological well-being. These experiences function as key motivational factors that promote retention and sustained participation among older adults, thereby enhancing the continuity and effectiveness of program engagement (Iwasaki et al., 2018).
3. **Local Wisdom Heritage.** This component involves the application of cultural heritage practices such as traditional games or movement patterns derived from everyday lifestyles as a mechanism for creating emotional connection, generating meaningful engagement, and fostering pride in one's cultural roots and identity (UNESCO, 2019).

#### 4.2 Operational Process

To ensure adaptability across diverse community contexts, the operational process of the model is structured into four key stages (Taylor, 2014):

1. **Contextual Assessment.** This stage involves assessing older adults' physical capabilities and identifying existing local wisdom resources within the community.
2. **Co-Creative Design.** Activities are collaboratively designed by professionals and older adult representatives to ensure alignment with participants' genuine needs and preferences.
3. **Integrated Implementation.** Physical education and recreational activities are implemented using a wisdom-based physical activity approach that integrates local cultural knowledge as a foundational element.
4. **Empirical Evaluation.** Outcomes are systematically monitored and evaluated across physical, psychological, social, and cognitive dimensions of well-being.

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## 4.3 Stakeholder Roles

The effectiveness of the integrated model depends on the coordinated and systematic engagement of multiple stakeholders. Physical education teachers and recreation professionals serve as learning facilitators, while community members and local knowledge holders act as co-creators and cultural advisors. This collaborative structure reflects a sustainable approach to population development grounded in the principles of lifelong learning and community participation (United Nations [UN], 2020).

**Table1. An Integrated Model of Physical Education, Recreation, and Local Wisdom for Enhancing Older Adults' Well-Being**

| Model Component    | Sample Activities                   | Local Wisdom Foundation                 | Promoted Dimension of Well-Being |
|--------------------|-------------------------------------|-----------------------------------------|----------------------------------|
| Physical Education | Low- to moderate-intensity exercise | Traditional agricultural work movements | Physical well-being              |
| Physical Education | Balance and flexibility training    | Local dance postures / folk dance       | Physical well-being              |
| Recreation         | Traditional games for older adults  | Folk games                              | Psychological well-being         |
| Recreation         | Group interaction activities        | Community traditions                    | Social well-being                |
| Local Wisdom       | Knowledge transmission activities   | Community knowledge holders             | Spiritual well-being             |

## 5. APPLICATION OF THE MODEL IN THE COMMUNITY CONTEXT

The integrated model can be applied in elderly care centers, senior schools, and local administrative organizations, in alignment with area-based health and education policies. The incorporation of culturally familiar activities enhances participation rates and continuity of engagement, thereby generating positive effects on older adults' quality of life (Iwasaki et al., 2018).

The integrated model of physical education, recreation, and local wisdom for enhancing the well-being of older adults in an aging society is presented as follows.

### 1. Principles and Conceptual Foundations of the Integrated Model.

The integrated model of physical education, recreation, and local wisdom represents an activity-based approach to promoting older adults' well-being grounded in the concept of holistic human development. It emphasizes the integration of physical, psychological, social, and spiritual dimensions through activities that align with community lifestyles, cultural contexts, and social capital.

The core principles of the model include:

- 1) The use of physical education as a tool for age-appropriate physical capacity development.
- 2) The use of recreation as a mechanism for fostering motivation, enjoyment, and social interaction.
- 3) The use of local wisdom as a learning foundation and a means of preserving older adults' identity.

The integration of these three components ensures that activities extend beyond technical exercise routines, transforming them into meaningful and sustainable learning processes.

### 2. Components of the Integrated Model

1) Physical Education for Older Adults. Physical education within this model emphasizes movement-based activities that are appropriate for older adults' physical conditions, such as low- to moderate-intensity exercise, balance and fall-prevention training, and flexibility exercises for muscles and joints. A practical example can be found in rural communities, where traditional daily work movements, such as sweeping yards, rice pounding, or water carrying, are adapted into exercise routines. These familiar movements reduce fear of physical activity, enhance acceptance, and support sustained practice in daily life.

2) Recreation for Enhancing Quality of Life. Recreation plays a crucial role in fostering happiness, reducing stress, and strengthening social relationships among older adults. Recreational activities should emphasize enjoyment and participation, group-based engagement, and interaction among older adults and across generations.

Examples include traditional games such as *Ree Ree Khao San* and *Mon Son Pha*, as well as collective folk singing activities. These activities effectively stimulate memory, foster a sense of belonging, and reduce social isolation among older adults.

3) Local Wisdom as a Learning Foundation. Local wisdom constitutes an essential form of cultural capital, with older adults serving as primary knowledge holders. Integrating local wisdom into activities enhances older adults' self-worth and social roles.

For instance, organizing activities in which older adults act as local knowledge instructors, transmitting knowledge related to traditional cuisine, herbal medicine, handicrafts, or local customs integrated with physical movement and recreational activities can significantly enhance spiritual well-being and self-esteem.

### 3. Process-Based Model of Implementation.

The integrated model can be implemented through four key stages:



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- 1) Community context analysis, examining physical conditions, lifestyles, cultural practices, and community resources.
- 2) Participatory activity design, engaging older adults, community leaders, and physical education specialists in collaborative planning.
- 3) Integrated activity implementation, combining physical education, recreation, and local wisdom within each activity.
- 4) Holistic well-being evaluation, assessing outcomes across physical, psychological, social, and spiritual dimensions.

## **4. Expected Outcomes of the Model.**

The application of this integrated model is expected to result in age-appropriate physical fitness, enhanced psychological well-being with reduced stress and social isolation, strengthened community cohesion and collective engagement, and the concrete preservation and transmission of local wisdom.

## **6. DISCUSSION**

The synthesis presented in this article indicates that the integrated model of physical education, recreation, and local wisdom holds significant strategic potential for systematically promoting older adults' well-being in an aging society. A distinctive strength of this model lies in its emphasis on cultural alignment, whereby activities are closely attuned to local cultural contexts, demonstrating greater effectiveness than conventional physical activity promotion models. Although international research has consistently confirmed the crucial role of physical activity and recreation in enhancing physical fitness and mental health (Biddle & Mutrie, 2008; Taylor, 2014), the findings of this study reveal a notable knowledge gap in existing literature, which tends to prioritize physiological dimensions over cultural aspects and community-based social capital.

The integration of local wisdom as a core component represents an expansion of the concept of active aging from the individual level to the socio-ecological level. In this model, local wisdom is not merely a contextual backdrop but functions as a meaning-making mechanism that enables older adults to maintain their identity and self-worth. This approach aligns with the concept of aging with dignity and with Continuity Theory, which posits that older adults adapt more successfully when new activities are meaningfully connected to their past experiences (Atchley, 1989).

Furthermore, the proposed integrated model reflects emerging global dynamics in health promotion that emphasize participatory design and the sustainable utilization of community resources. The integration of physical education into traditional lifestyles helps to dismantle motivational barriers, which have historically contributed to the lack of continuity in older adult health programs (Iwasaki et al., 2018).

This model also challenges the traditional medical model, which often conceptualizes older adults primarily as dependents or service recipients. Instead, it presents an alternative perspective that recognizes older adults as holders of social and cultural capital, capable of driving community activities and transmitting knowledge to younger generations. This perspective is consistent with Social Capital Theory, which suggests that collective engagement and culturally embedded relationships strengthen community resilience and reduce long-term dependency (Putnam, 2000).

Nevertheless, limitations in the practical application of this model include inter-individual variability in physical capacity and differences in the strength of social capital across communities. Consequently, implementation requires a tailoring approach to ensure contextual suitability and optimal effectiveness. Future research should prioritize longitudinal empirical evaluations to verify the sustainability of outcomes, particularly in terms of spiritual well-being and community cohesion.

Overall, this discussion confirms that the integrated model of physical education, recreation, and local wisdom not only aligns with international research standards but also represents a conceptual innovation that addresses previously underrepresented social and cultural dimensions. This model offers a comprehensive and sustainable pathway toward enhancing the quality of life of older adults in aging societies.

## **7. RECOMMENDATIONS**

### **7.1 Practical Recommendations**

Educational agencies, educational institutions, local administrative organizations, and agencies responsible for improving the quality of life of older adults should systematically and continuously apply the integrated model of physical education, recreation, and local wisdom in organizing activities for older adults. Practical implementation guidelines are as follows:

1. Designing activities aligned with local contexts Prior to activity design, assessments should be conducted to examine older adults' physical conditions, interests, lifestyles, and cultural capital within each community. This ensures that physical education and recreational activities are appropriate, non-redundant, and feasible for daily practice.
2. Integrating activities within learning centers and community settings Community Spaces such as older adult quality-of-life development centers, temples, schools, and community learning centers should be utilized as regular activity bases. Activities should integrate movement, play, learning, and the transmission of local wisdom in a cohesive manner.

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3. Capacity building for personnel and activity leaders Physical education teachers, older adult educators, public health volunteers, and community leaders should be trained to develop competencies in organizing integrated activities, including knowledge of safety considerations and health-related limitations specific to older adults.
4. Continuous monitoring and evaluation Activities should be regularly evaluated across multiple dimensions, including physical fitness, psychological well-being, and social participation, in order to refine program design and ensure long-term sustainability.

### **7.2 Policy Recommendations**

At the policy level, government agencies should prioritize the integration of physical education and recreation grounded in local wisdom into older adult development plans through the following approaches:

1. Incorporating the framework into national and local development plans The promotion of culturally grounded physical and recreational activities should be formally embedded in older adult development plans at the national, provincial, and local administrative levels to ensure continuity and strategic direction.
2. Providing financial and resource support Budget allocations should be designated to support activity model development, personnel training, and the establishment of collaborative networks among educational, public health, and community sectors.
3. Establishing integrated collaborative mechanisms Collaboration among government agencies, educational institutions, and civil society organizations should be strengthened to collectively advance older adult well-being initiatives using local wisdom as a foundational resource.

### **7.3 Recommendations for Future Research**

To strengthen the academic rigor of the proposed integrated model, future research should focus on the following empirical directions:

1. Experimental or quasi-experimental research designs The integrated model should be tested among older adult populations in diverse contexts, with comparisons to control groups, in order to systematically validate its effectiveness in enhancing well-being outcomes.
2. Mixed-methods research approaches Quantitative methods should be complemented with qualitative inquiry to capture both measurable outcomes and the lived experiences, perceptions, and meanings that older adults derive from participation in integrated activities.
3. Long-term impact and sustainability studies Longitudinal research should examine the long-term effects of the model at individual, community, and policy levels to assess sustainability and the potential for scalability across different contexts.

## **8. CONCLUSION**

This article proposes an integrated model of physical education, recreation, and local wisdom for enhancing the well-being of older adults in the context of an aging society. The primary objective of the model is to holistically connect the physical, psychological, social, and spiritual dimensions of well-being. The proposed model is grounded not only in internationally recognized principles of physical education and recreation, but also emphasizes cultural contexts and community-based social capital as critical determinants of acceptance, sustainability, and long-term implementation.

From an academic perspective, this study addresses a notable gap in existing research, which has predominantly focused on physical activity promotion in terms of physiological outcomes alone. By introducing an integrated conceptual framework, the study elevates the role of local wisdom from a peripheral contextual factor to a core mechanism for meaning-making, value formation, and identity preservation among older adults. The synthesis of findings indicates that activity designs aligned with local lifestyles and cultural practices significantly enhance motivation, participation, and continuity of engagement among older adults.

From a practical standpoint, the proposed integrated model is flexible and adaptable to diverse contexts, including both urban and rural settings. By leveraging existing community resources as the foundation for implementation, the model facilitates scalability and practical application at the local level. Moreover, the model repositions older adults as active contributors serving as knowledge transmitters and co-creators of activities rather than passive recipients of health services.

From a policy perspective, this article underscores the necessity of systematically integrating physical education and recreation grounded in local wisdom into older adult development plans to address long-term demographic transitions. Clear policy support can strengthen collaborative mechanisms among education, public health, and community sectors, thereby fostering sustainable approaches to enhancing the quality of life of older adults.

In conclusion, the integrated model of physical education, recreation, and local wisdom presented in this article offers a comprehensive and meaningful framework for promoting older adult well-being across academic, practical, and policy dimensions. The model provides valuable guidance for advancing high-quality and sustainable aging societies in the future.

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