

# FRAMEWORK FOR "LEISURE PHYSICAL ACTIVITY AND MENTAL WELL-BEING: THE IMPACT OF TRADITIONAL AND MODERN SPORTS ON ELDERLY HEALTH IN GUANGZHOU"

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**Abstract:** This study explores the impact of traditional and modern sports on the physical and mental well-being of elderly individuals in Guangzhou, a city with a diverse cultural heritage. Using qualitative methods, the research highlights how traditional activities like tai chi and lion dance promote cultural identity and intergenerational connections, while modern sports such as yoga and square dancing improve flexibility, stress relief, and social inclusion. Key findings reveal the interplay between Leisure physical activity, cultural relevance, and social dynamics, with recommendations for tailored community initiatives and government support to enhance elderly participation in sports.

**Keywords:** Elderly health; Leisure physical activity; Traditional sports; Modern sports; Cultural integration

## 1 INTRODUCTION

### 1.1 Background

Guangzhou is a rapidly aging city with over 20% of its population aged 60 or older by 2023. Leisure physical activity (LPA) has been widely recognized as a key factor in promoting elderly health. However, in a culturally diverse setting like Guangzhou, the interplay between traditional sports (e.g., tai chi, lion dance) and modern sports (e.g., yoga, square dancing) presents unique challenges and opportunities for elderly well-being.

### 1.2 Research Significance

This study explores how traditional and modern sports contribute to both physical and mental health among elderly populations, offering insights into cultural dynamics, health impacts, and identity construction in a multicultural city.

### 1.3 Research Questions

- (1) How do elderly individuals perceive the impact of traditional and modern sports on their physical and mental well-being?
- (2) What role does cultural background play in shaping their experiences and choices of Leisure physical activity?
- (3) How do these sports foster social connectivity and personal identity?

## 2 LITERATURE REVIEW

### 2.1 Impact of Leisure Physical Activity on Elderly Well-being

Research on Leisure physical activity (LPA) consistently underscores its critical role in improving both physical and mental well-being in elderly populations. Studies indicate that regular PA reduces the risk of chronic diseases such as cardiovascular issues, diabetes, and osteoporosis [1]. Moreover, it enhances flexibility, muscle strength, and balance, reducing the risk of falls—a major concern for older adults [2]. For example, tai chi, a traditional Chinese exercise, has been found to improve postural stability and lower-extremity strength among older adults [3].

In addition to physical health benefits, LPA is also associated with improved mental health outcomes. Evidence shows that moderate-intensity exercise can alleviate symptoms of anxiety and depression, enhance self-esteem, and improve overall mood [4-5]. Group activities, in particular, promote social interaction, which further buffers feelings of loneliness and social isolation, common issues in aging populations [6].

In the context of traditional and modern sports, the mental health benefits vary across modalities. Traditional sports such as tai chi and qigong are often associated with mindfulness and stress relief, whereas modern sports like yoga or square dancing may provide greater opportunities for sociability and creativity [7]. These findings point to the diverse benefits that different forms of LPA can offer, particularly when tailored to the cultural and personal preferences of elderly individuals.

### 2.2 Cultural Context and Elderly Participation in Sports

Cultural factors significantly influence the types of LPA chosen by elderly individuals and their engagement levels.

Traditional sports such as tai chi and lion dance hold deep cultural significance in Chinese society, often viewed as a way to preserve heritage and foster intergenerational connections [8]. These practices not only promote physical health but also offer a medium for spiritual growth and cultural identity reinforcement [9]. In Guangzhou, tai chi groups commonly incorporate Cantonese music, which adds a localized dimension to this age-old practice.

Modern sports, on the other hand, reflect the impact of globalization and cultural integration. Activities like yoga, Zumba, and square dancing have gained popularity among Chinese elderly populations, often adapted to incorporate local cultural elements [10]. For instance, square dancing, originally inspired by Western line dancing, has evolved into a uniquely Chinese phenomenon, blending traditional music and movements with modern rhythms [11].

Despite the popularity of these activities, cultural barriers and generational differences can pose challenges. Research highlights that elderly individuals may feel disconnected from modern sports if they lack familiarity with their cultural roots [12]. Conversely, younger generations often perceive traditional sports as outdated or irrelevant, creating a gap in intergenerational participation. Addressing these cultural tensions is essential to maximizing the inclusivity and appeal of elderly LPA programs in multicultural settings like Guangzhou.

### **2.3 Social Connectivity and Identity through Sports Participation**

Social connectivity is a vital aspect of elderly sports participation, contributing significantly to mental well-being and identity construction. Group-based activities, such as square dancing and tai chi, foster a sense of belonging and community among participants. Studies show that shared goals and routines promote cooperation, reduce feelings of isolation, and enhance group cohesion [13,14].

Participation in sports also provides opportunities for identity reconstruction, especially for elderly individuals navigating life transitions such as retirement or relocation. Social identity theory posits that group membership enhances self-esteem and offers a sense of purpose, which is particularly important for aging individuals [15]. For example, tai chi practitioners often describe their groups as "families," reflecting the deep emotional bonds formed through shared practices. Similarly, square dancing groups have been reported to foster intergenerational connections, with younger family members occasionally joining their elders in performances.

However, not all elderly individuals experience these benefits equally. Migrants, for instance, may face difficulties integrating into local sports communities due to language barriers or cultural differences. Tailored interventions that address these challenges are essential to ensuring that all elderly individuals, regardless of background, can access the social and psychological benefits of sports participation.

### **2.4 Research Gaps and Emerging Perspectives**

While existing literature provides robust evidence of the benefits of LPA for elderly individuals, several gaps remain. First, there is limited research examining how traditional and modern sports coexist and influence elderly well-being in culturally diverse urban contexts like Guangzhou. Most studies focus on either traditional or modern sports in isolation, neglecting the interplay between these modalities and their combined effects on physical and mental health .

Second, few studies explore the role of cultural adaptation in enhancing the accessibility and appeal of modern sports for elderly populations. For example, how do localized adaptations—such as incorporating Cantonese music into yoga sessions—affect elderly participation and engagement levels? Understanding these dynamics could inform the design of culturally sensitive PA programs that resonate with diverse elderly populations.

Finally, the intersection of social identity, cultural integration, and health outcomes in elderly sports participation remains underexplored. While social identity theory provides a useful framework, more empirical research is needed to understand how shared sports activities foster cross-cultural understanding and collective well-being in aging urban populations.

## **3 METHODOLOGY**

### **3.1 Research Design**

This qualitative study uses semi-structured, in-depth interviews with 20 elderly participants (aged 60 and above) in Guangzhou, split equally between traditional sports and modern sports .

### **3.2 Sampling**

Purposive sampling ensures diverse backgrounds:

- Gender: 10 males, 10 females.
- Cultural background: Local Guangzhou residents and migrants.
- Sports type: Participants in both traditional and modern sports.

### **3.3 Data Collection**

- Interviews lasting 60–120 minutes, conducted in participants' homes, parks, or community centers.

- Questions focus on experiences, health impacts, cultural relevance, and social connections.

### 3.4 Data Analysis

Thematic analysis identifies key themes, including physical health improvements, emotional well-being, and cultural identity.

## 4 FINDINGS AND DISCUSSION

### 4.1. Physical Health Benefits

#### 4.1.1 Traditional sports

Tai chi emerged as a dominant form of Leisure physical activity among the participants, with many emphasizing its benefits for flexibility, balance, and chronic pain management. A retired schoolteacher, Ms. Lin, shared:

*"I had severe knee arthritis that made walking difficult. My doctor recommended tai chi as a gentle exercise, and I started practicing at Yuexiu Park every morning. Over time, my knee pain lessened, and now I can even walk long distances without discomfort. It's like I've regained my mobility and independence." (Female, 68)*

Similarly, Mr. Zhou, a former construction worker, described how tai chi helped him recover from a debilitating fall:

*"I fractured my hip two years ago, and recovery was slow. I joined a tai chi group near Haizhu Lake because I needed low-impact exercise. Now, I feel much stronger and more stable on my feet. Practicing with others also motivates me to stay consistent." (Male, 71)*

These experiences align with findings from Lan et al., who reported that tai chi improves joint mobility and reduces fall risks in elderly populations. Additionally, studies have shown that tai chi helps enhance proprioception and coordination, critical for maintaining balance in aging adults.

#### 4.1.2 Modern sports

Participants engaged in yoga often highlighted its impact on flexibility and stress relief. Ms. Wang, who joined a yoga studio in Tianhe District, shared:

*"I used to wake up with a stiff back every morning. My daughter suggested yoga, and I reluctantly joined a local class. After a few months, I noticed a big difference. Not only is my back pain gone, but I also feel more relaxed and energetic throughout the day." (Female, 63)*

Mr. Li, who attended community yoga classes at a cultural center in Panyu District, noted the affordability and accessibility of these sessions:

*"The yoga classes at the community center cost only a small fee, which makes them accessible for retirees like me. I've seen improvements in my posture and breathing. It's amazing how these small exercises make me feel healthier overall." (Male, 62)*

Woodyard corroborates these observations, noting that yoga improves physical flexibility, alleviates pain, and reduces cortisol levels, leading to lower stress. Research also highlights that yoga enhances lung function and relaxation, offering a holistic approach to elderly health.

### 4.2. Mental Well-being and Emotional Resilience

#### 4.2.1 Stress reduction and relaxation

The calming effect of physical activities was a recurring theme among participants. A square dance participant in Liwan District, Ms. Chen, described her routine as her "daily therapy":

*"After losing my husband, I felt overwhelmed by loneliness and sadness. My neighbor encouraged me to join her square dance group at Shamian Park. I hesitated at first, but dancing with them has brought joy back into my life. I laugh and feel alive again when I'm with the group." (Female, 70)*

Likewise, Mr. Yang, a retired doctor, noted the positive impact of tai chi on his mental clarity:

*"Practicing tai chi clears my mind. The slow, deliberate movements feel meditative, like I'm resetting my thoughts. It's a refuge from the stress of aging and health worries." (Male, 68)*

Chen et al. support these accounts, demonstrating that group-based physical activities elevate endorphin levels, reduce depressive symptoms, and foster emotional resilience.

#### 4.2.2 Mindfulness and emotional balance

The mindfulness component of tai chi was emphasized by multiple participants. Ms. Zhu, a tai chi enthusiast practicing in Baiyun Mountain, shared:

*"When I focus on the movements and my breathing, I feel present in the moment. It's almost spiritual. I used to feel anxious all the time, but tai chi helps me find peace." (Female, 66)*

This aligns with findings from Wang et al., which link mindfulness-based practices like tai chi to reduced symptoms of anxiety and depression.

### 4.3 Cultural Dimensions and Identity Construction

#### 4.3.1 Cultural connection through traditional sports

For many participants, traditional sports were not only about physical well-being but also cultural heritage. Mr. Luo, a retired craftsman, reflected on his family's involvement in lion dances:

"My father was a lion dance master, and I grew up helping with the costumes and drumming. Now, I lead a small group in Tianhe District, teaching lion dance to young and old. It feels good to pass down this tradition and keep our Cantonese culture alive." (Male, 65)

Similarly, Ms. Li, who practices tai chi in Haizhu District, expressed pride in continuing her community's traditions: "Tai chi feels like it's in my blood. It connects me to my ancestors and our history. Practicing in the park with others reminds me of the importance of staying rooted in who we are." (Female, 70)

Yang et al. note that traditional sports in China play a dual role in promoting health and preserving cultural identity. These practices foster intergenerational connections and reinforce a sense of belonging.

#### 4.3.2 Cultural fusion in modern sports

Modern sports also facilitate cultural integration, blending global influences with local traditions. Ms. Xu, a yoga participant in a Tianhe District studio, described how Cantonese music transformed her practice:

"I was hesitant to try yoga at first because it felt foreign. But my instructor started using Cantonese opera music during sessions, which made it feel more familiar and comforting. Now, I look forward to every class." (Female, 62)

This reflects Zhou et al.'s findings that localized adaptations of global sports increase their accessibility and appeal to elderly participants.

### 4.4. Social Impacts and Challenges

#### 4.4.1 Overcoming Isolation

Migrants in Guangzhou particularly emphasized the role of sports in fostering social inclusion. Ms. Zhang, who moved from Sichuan to live with her son in Guangzhou, explained:

"I felt out of place when I first arrived in Guangzhou. Joining a tai chi group in Yuexiu Park helped me make friends and feel part of the community. It's like finding a second family." (Female, 72)

Bailey highlights how group activities create opportunities for marginalized groups to integrate into local communities, improving social well-being.

#### 4.4.2 Barriers to Participation

Despite the benefits, participants also described barriers. Mr. He, a retired factory worker, noted financial constraints:

"I want to join a yoga class, but the fees are too high for someone on a fixed pension. The free tai chi groups in the park are my only option." (Male, 68)

Additionally, Ms. Deng, a square dance participant, raised concerns about space limitations:

"Our group often struggles to find a suitable place to practice. Public squares are crowded, and we sometimes face complaints about the noise." (Female, 64)

Addressing these challenges requires targeted interventions, such as subsidized programs and better infrastructure for elderly LPA.

## 5 RECOMMENDATIONS

### 5.1 Community-Based Initiatives

Community-level actions play a vital role in increasing elderly participation in Leisure physical activity (LPA) and addressing barriers identified in this study. One essential strategy is to offer free or low-cost programs targeted at elderly participants, especially for those from low-income backgrounds. For example, parks like Yuexiu Park or Haizhu Lake in Guangzhou could partner with local organizations to provide free tai chi, square dance, or yoga classes. Evidence shows that cost is a significant deterrent for elderly individuals to engage in structured PA. A participant in this study expressed,

"I love yoga, but the high fees discourage me. Free or affordable classes in nearby parks would help a lot." (Male, 68).

In addition, organizing inclusive sports festivals can foster cultural exchange and social bonding among elderly individuals from diverse backgrounds. For example, annual events celebrating both traditional (e.g., tai chi, lion dance) and modern sports (e.g., yoga, aerobics) could enhance community cohesion. Such festivals could integrate music, performances, and interactive workshops to attract broader participation. A square dance participant mentioned,

"Participating in a group dance during the community festival helped me meet new friends and feel more connected." (Female, 65).

Research supports the idea that group-based sports activities improve social cohesion and reduce isolation, especially among elderly populations in urban areas.

Furthermore, training community leaders is critical to the success of such initiatives. Qualified trainers can help adapt LPA programs to the specific needs of elderly participants, considering their physical limitations and cultural preferences. For instance, involving bilingual trainers can ensure accessibility for elderly migrants who may face language barriers.

### 5.2 Government Policies

Government intervention is essential to address systemic barriers to elderly LPA participation. The first step is to provide subsidies for elderly sports programs and facilities, particularly for lower-income districts in Guangzhou, such as Baiyun and Liwan. Subsidies can support free classes, improve facilities, and ensure accessibility for all elderly

residents. Zhao et al. highlight that subsidized sports programs have significantly increased elderly participation in rural Chinese communities.

Additionally, developing culturally sensitive campaigns to promote LPA among diverse elderly populations is crucial. Campaigns should emphasize the health benefits of LPA while respecting cultural values and traditions. For example, promotional materials can highlight tai chi's cultural heritage and modern sports' global relevance. Integrating traditional Chinese medicine (TCM) principles, such as the balance of "yin and yang," into messaging can resonate more deeply with elderly participants. A tai chi participant remarked,

*"When I see messages linking tai chi to maintaining balance in life, it motivates me to stay consistent with my practice."* (Female, 66).

Governments should also establish public-private partnerships to leverage funding and expertise from businesses, NGOs, and local community organizations. For instance, partnerships with fitness centers or technology companies can help introduce digital fitness tools, such as apps or wearable devices, tailored for elderly users (Wang et al., 2018).

### 5.3 Future Research

While this study provides valuable insights, there is a need for further research to address unresolved questions. One priority is to investigate the long-term health outcomes of elderly participation in hybrid sports activities (a mix of traditional and modern sports). Longitudinal studies can assess how consistent engagement in hybrid activities impacts physical health, emotional well-being, and social integration over time. For example, does participating in yoga infused with Cantonese opera music offer unique benefits compared to traditional yoga?

Another avenue for research is to examine gender-specific barriers and motivations for LPA participation. This study observed differences in activity preferences, with women favoring group activities like square dancing and men gravitating toward individual sports like tai chi. Understanding the gendered dimensions of LPA can inform tailored interventions that address specific challenges, such as social stigma for male participation in group dancing or accessibility concerns for female participants in yoga.

Finally, future studies should explore how digital tools can bridge accessibility gaps. For example, virtual tai chi classes or fitness apps tailored to elderly needs can engage participants who face mobility or time constraints. Recent studies indicate that digital platforms have shown promise in encouraging LPA among elderly individuals in urban environments.

## 6 CONCLUSION

This study underscores the profound impact of Leisure physical activity on elderly health and well-being, particularly in Guangzhou, a city rich in both cultural heritage and modern influences. Participation in traditional sports, such as tai chi and lion dance, preserves cultural identity and fosters intergenerational connections, while modern sports like yoga and aerobics introduce innovative ways to improve physical and mental health. By blending tradition with modernity, Leisure physical activity acts as a bridge, promoting cultural integration and personal growth among Guangzhou's elderly population.

The findings highlight the need for tailored community initiatives and robust government policies to address barriers to participation. Free or low-cost programs, inclusive sports festivals, and culturally sensitive campaigns can significantly enhance accessibility and inclusivity. Simultaneously, further research into hybrid sports activities, gender-specific barriers, and digital fitness tools can offer deeper insights to optimize interventions.

Ultimately, Leisure physical activity is not merely a health intervention but a tool for building social cohesion, preserving cultural heritage, and empowering elderly individuals to lead fulfilling lives. Through collaborative efforts between communities, governments, and researchers, Guangzhou can become a model city for active aging in an urban multicultural context.

### COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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