

Senior Citizen-Oriented Public Sports Services in Wenzhou: A Systemic Analysis of Supply-Demand Imbalance and Optimization Pathways

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Abstract

This study employs documentary analysis, interview-based research, and logical analysis to systematically examine supply-demand discrepancies in public sports services for senior citizens in Wenzhou City under the context of population aging. The investigation reveals three-tier structural issues within Wenzhou's elderly sports service system: institutional safeguards, resource allocation mechanisms, and regulatory oversight frameworks. Grounded in local conditions, the study proposes three context-specific recommendations: (1) Refine elderly sports service policies and strengthen institutional safeguard implementation for public sports services targeting senior citizens; (2) Enhance tri-dimensional integrated supply systems and optimize resource allocation efficiency in elderly sports services; (3) Establish smart monitoring-evaluation architectures and develop regulatory oversight mechanisms for senior-oriented public sports services.

Keywords

Senior-Oriented Public Sports Services, Wenzhou Senior Citizen Population, Optimization Pathways.

1. Introduction

With accelerated population aging in China, Wenzhou—a city in the Yangtze River Delta region with advanced aging demographics (as of the end of 2024, registered senior citizens in Wenzhou numbered 1.89 million, representing an aging rate of 22.03%)—now faces critical supply-demand mismatches in public sports services for senior citizens, posing constraints to achieving healthy aging objectives. Under the strategic framework of active aging, public sports services constitute both a fundamental safeguard for elderly health rights and a vital manifestation of social equity. However, Wenzhou's current elderly sports service system exhibits structural imbalances characterized by low-tier supply coexisting with stratified demand: urban-rural disparities in sports facility coverage reach 32 percentage points with marked service homogenization, while heterogeneous demand hierarchies—stemming from variations in health status, physical mobility, and cultural capital among seniors—remain inadequately addressed by existing service models. Consequently, investigating quality enhancement strategies for Wenzhou's senior-oriented public sports services has become an urgent imperative.

2. Current Challenges in Public Sports Services for the Elderly in Wenzhou

2.1. Institutional Safeguards

2.1.1. Lack of Systematic Quantitative Policy Evaluation Metrics

Fragmented Evaluation Standards: While the Quantitative Assessment Measures for Municipal Sports Associations in Wenzhou establishes detailed scoring criteria for annual work, this system primarily targets municipal-level sports associations and does not comprehensively cover elderly sports initiatives. Compared to the explicit quantitative goals in the Zhejiang Province 14th Five-Year Plan for Elderly Sports Development (e.g., "69% elderly sports participation rate by 2025"), Wenzhou's policy indicators for elderly sports remain overly generalized.

Inadequate Evaluation of Implementation Effectiveness: The Implementation Opinions on Strengthening Elderly Sports Work mandates "integrating elderly sports facilities into urban-rural development plans" but lacks specific metrics, making outcomes difficult to measure.

2.1.2. Ambiguous Interdepartmental Responsibilities

Overlapping Jurisdictions and Fragmented Accountability: Elderly sports initiatives involve multiple departments (Sports Bureau, Civil Affairs Bureau, Health Commission, etc.). Despite calls for "coordinated efforts," the absence of a lead agency or collaboration mechanism results in duplicated resources or coverage gaps. For instance, the Wenzhou Elderly Sports Association relies on civil affairs departments for community resources despite being administratively guided by the Sports Bureau.

Poor Policy Coordination: While Wenzhou's Implementation Plan for Building a National Key Elderly Health Pilot City proposes integrated health services (including sports and healthcare), it fails to clarify the Sports Bureau's role, hindering synergy between elderly sports and health services.

2.1.3. Weak Grassroots Implementation Incentives

Limited Application of Evaluation Results: Current policies employ simplistic rewards and penalties. Grassroots governments prioritize "visible tasks" (e.g., meeting facility quotas) over service quality improvement.

Low Participation of Social Organizations: Policies encourage social forces to engage in elderly sports services but lack quantitative metrics for enterprises. For example, the Quantitative Assessment Measures awards points for using social funds to organize activities but omits efficiency or coverage evaluations, leading to superficial outcomes.

2.1.4. Absence of Legal Safeguards

The Wenzhou Public Fitness Promotion Regulations (effective July 2023) covers citywide fitness initiatives but only briefly mentions elderly sports rights in Articles 15 and 22. Special protections for elderly sports participation remain unlegislated. Additionally, proposals like "opening school sports facilities" and "improving emergency services" lack systematic implementation.

2.1.5. Underdeveloped Fiscal Support System for Elderly Sports

Fragmented Funding and Lack of Dedicated Mechanisms: Wenzhou's fiscal spending prioritizes healthcare and elderly care infrastructure. In 2024, elderly-friendly expenditures (e.g., nursing beds, meal services) accounted for <1% of total social spending (¥7.8 billion of ¥944.7 billion), while sports funds (¥18.8 billion) lacked dedicated allocations for elderly sports.

Low Social Capital Participation and Funding Leverage: While social capital is encouraged in public sports, elderly-focused initiatives (e.g., gate ball, square dance) receive minimal incentives. Unlike cities adopting "government subsidies + social donations + market operations" models, Wenzhou relies heavily on fiscal allocations, limiting efficiency.

2.2. Resource Allocation

2.2.1. Spatial Imbalance

Uneven Urban-Rural and Community Facility Distribution: Despite the "15-Minute Fitness Circle" goal, community facilities like "public gyms" cluster in urban centers, with rural and older communities underserved. Overlaps exist between elderly sports centers and elderly care facilities.

Mismatched Facility Types and Functions: Specialized elderly sports venues (e.g., gate ball) are concentrated in city-level stadiums, while community facilities (gyms, trails) lack diversity. Facilities like senior centers often neglect sports functions.

Inefficient Facility Management and Services: Urban stadiums and schools offer free access, but rural venues struggle with operational costs. School facilities are only open sporadically (e.g., 2 hours daily), limiting utilization.

2.2.2. Digital Divide

Complex Technology Interfaces: Smart sports platforms (e.g., motion tracking, online bookings) remain underused by seniors due to poor age-friendly design. Most lack smartphone training, hindering participation.

Supply-Demand Mismatch in Age-Friendly Services: New facilities often include age-friendly equipment (e.g., non-slip flooring) but lack clear instructions. Communities rely on traditional management, failing to integrate health data for personalized services.

Insufficient Digital Literacy Training. Seniors face psychological barriers ("unwilling, afraid, unable") and lack systematic training. Existing programs (e.g., one-off lectures) are inadequate for sustained skill development.

Disjointed Data Integration and Feedback: Health and sports data silos persist, impeding scientific exercise prescriptions. A unified tracking and feedback mechanism is urgently needed.

2.2.3. Human Resource Shortages

Inefficient Allocation: Dedicated professionals (e.g., sports instructors, rehab specialists) are severely lacking. Urban parks lack scientific guidance, reducing activities to formalities.

Regional Disparities: Central districts (e.g., Lucheng, Ouhai) have dense resources, while rural areas (e.g., Dongtou) face shortages. The 2024 "Strong City Fitness" program's "on-demand delivery" model underperforms in remote regions.

Misaligned Supply and Demand: Seniors prioritize non-material services (e.g., coaching, events), but resources focus on hardware. Urban park activities lack innovation and fail to address diverse needs.

Weak Grassroots Management and Training: Community sports staff are often part-time or volunteers with limited training. No long-term incentives exist to attract professionals.

Insufficient Policy and Funding Support. Administrative neglect and funding biases toward infrastructure exacerbate talent shortages.

2.3. Supervision Mechanisms

2.3.1. Outdated Monitoring and Incomplete Feedback

Inadequate Elderly Health Monitoring: The 2022 Wenzhou Citizen Fitness Report omitted elderly-specific data despite an overall 2.2% decline in fitness pass rates.

Delayed Application of Monitoring Results: Declines in strength metrics (e.g., 10.4% drop in grip strength) lacked elderly-focused interventions, rendering data ineffective for service optimization.

2.3.2. Information Asymmetry and Lagging Demand Response

Diverse Needs vs. Homogeneous Supply: Seniors prioritize non-material services (e.g., fitness guidance), yet Wenzhou's 2025 plan focuses on adding 130+ facilities without service coverage targets.

Weak Communication and Feedback: Traditional outreach (e.g., community notices) fails to address seniors' demand for scientific fitness knowledge. The 2023 "Cultural Hub" initiative lacks mechanisms to collect feedback.

2.3.3. Weak Evaluation Capacity of Social Organizations

Simplistic Assessment Mechanisms: The 2024 Ou Hai District "Star Rating" system prioritizes event scale (e.g., square dance competitions) over effectiveness (e.g., satisfaction, health outcomes).

Lack of Professional Standards: While national referees are required for events, elderly sports instructors face no clear quality benchmarks, hampering service evaluation.

2.3.4. Underutilized Digital Monitoring Tools

Primitive Data Collection Methods: Elderly fitness monitoring relies on manual sampling, lacking big data or smart devices for real-time analysis.

Poor Integration of Smart Health Services: "Smart Health Hubs" remain disconnected from medical and elderly care systems, preventing holistic health management.

3. Enhancement Pathways for Elderly Public Sports Services in Wenzhou

3.1. Refine Elderly Sports Service Policies and Strengthen Institutional Safeguard Implementation for Public Sports Services Targeting Senior Citizens

3.1.1. Construct a Systematic Policy Assessment System

Refine Quantitative Targets: Develop specialized quantitative indicators for elderly sports in Wenzhou (e.g., elderly sports participation rate, facility coverage rate) by referencing the *Zhejiang Province 14th Five-Year Plan for Elderly Sports Development*, with clear timelines and responsible entities.

Strengthen Implementation Evaluation: Incorporate specific assessment metrics into policy documents, and engage third-party institutions for regular performance audits.

3.1.2. Clarify Interdepartmental Responsibilities and Collaboration Mechanisms

Establish Cross-Department Coordination Bodies: Form a "Joint Office for Elderly Sports Services" under municipal leadership to integrate resources from departments such as the Sports Bureau, Civil Affairs Bureau, and Health Commission, and establish regular interdepartmental meetings to avoid overlapping functions and redundant investments.

Improve Policy Alignment: Clearly define the roles of sports departments in the *Implementation Plan for Building Wenzhou into a National Key Elderly Health City* to promote data sharing and project synergy between elderly sports and health services.

3.1.3. Mobilize Grassroots Implementation

Link Assessment Results to Incentives: Incorporate elderly sports service evaluations into local government performance assessments, tie results to fiscal allocations, and offer additional rewards to outstanding communities.

Optimize Social Organization Participation: Issue *Guidelines for Social Force Participation in Elderly Sports Services in Wenzhou*, specifying quantitative metrics for corporate involvement (e.g., service coverage, fund utilization efficiency), and create a "Social Capital Contribution Award."

3.1.4. Strengthen Legal Safeguards

Enact Specialized Elderly Sports Legislation: Add a dedicated chapter on "Elderly Sports Rights Protection" to the *Wenzhou Municipal Regulations on the Promotion of National Fitness*, outlining standards for age-friendly facilities and fitness guidance services.

Implement Policy Prioritization: Revise the *Wenzhou Public Sports Funding Subsidy Measures* to allocate dedicated subsidies for elderly sports, prioritizing age-friendly facility upgrades and smart service projects.

3.1.5. Improve Fiscal Guarantee Mechanisms

Establish an Elderly Sports Special Fund: Allocate a fixed percentage of sports lottery revenue to elderly sports services, following the model of Jinhua City, and create a "government-society" co-funding mechanism.

Optimize Fund Distribution: Increase the proportion of elderly sports funding in public welfare budgets, focusing on rural and aging urban communities to reduce regional disparities.

3.2. Enhance Tri-Dimensional Integrated Supply Systems and Optimize Resource Allocation Efficiency in Elderly Sports Services

3.2.1. Optimize Spatial Layout and Facility Functionality

Enforce Planning Compliance: Revise the *Wenzhou Public Sports Facility Layout Plan* to mandate community-level facility construction timelines, with accountability measures for non-compliance.

Promote Age-Friendly Facility Upgrades: Require new residential areas to include elderly-friendly sports spaces (e.g., gate ball courts, anti-slip walkways), and retrofit older communities through "micro-renovations" to repurpose underutilized spaces with safety signage and accessibility features.

Integrate Sports and Elderly Care: Embed elderly sports centers into elderly care complexes to enable shared spaces and complementary functions, avoiding redundant construction.

3.2.2. Bridge the Digital Divide

Develop Age-Friendly Digital Services: Launch a "Wenzhou Elderly Sports" app with simplified interfaces (e.g., voice navigation, one-click reservations) and provide dual-track training (smartphone use + fitness platforms) through community partnerships.

Build Data Integration Platforms: Merge health data from the Health Commission with sports activity data to offer personalized exercise prescriptions and monitor safety via smart wearable.

3.2.3. Strengthen Human Resource Allocation

Cultivate Professional Talent: Collaborate with universities to establish "Elderly Sports Service" programs, training certified social sports instructors and rehabilitation specialists.

Enhance Grassroots Incentives: Provide subsidies and career advancement opportunities for instructors serving remote areas, and encourage volunteer participation in "Silver-Age Mutual Aid" initiatives.

Align Supply with Demand: Conduct regular surveys to tailor fitness programs (e.g., chronic disease rehabilitation exercises, advanced square dance classes) based on interests and health conditions.

3.3. Establish Smart Monitoring-Evaluation Architectures and Develop Regulatory Oversight Mechanisms for Senior-Oriented Public Sports Services

3.3.1. Refine Monitoring and Evaluation Systems

Create an Elderly Health Database: Conduct annual citywide physical fitness assessments for the elderly, publish age-specific health data, and adjust service strategies accordingly.

Translate Data into Action: Integrate fitness monitoring results with healthcare systems to design exercise interventions for high-risk groups and incorporate these into community health service evaluations.

3.3.2. Establish Dynamic Response Mechanisms

Launch a Demand-Supply Information Platform: Use community "Cultural Hubs" to collect elderly needs, generate "demand heat maps" via big data, and dynamically optimize facility layouts and activity schedules.

Implement Performance Tracking: Conduct life cycle evaluations of funded projects, regularly publish usage rates and satisfaction data, and terminate underperforming initiatives.

3.3.3. Empower Social Organizations in Evaluation

Adopt Multi-Dimensional Metrics: Include "service satisfaction" and "health improvement rates" in sports association assessments, with third-party agencies conducting independent evaluations.

Strengthen Professional Capacity: Formulate *Wenzhou Elderly Sports Instructor Certification Standards*, requiring certified instructors to complete annual continuing education hours.

3.3.4. Advance Smart Supervision Tools

Deploy Intelligent Monitoring Networks: Install smart terminals at community fitness sites to collect real-time data for municipal-level oversight.

Integrate Health Management Systems: Connect sports, medical, and elderly care data to create a "monitoring-intervention-feedback" loop, ensuring holistic health management for the elderly.

4. Conclusion

The optimization of elderly public sports services in Wenzhou requires institutional innovation as the foundation, resource allocation as the pillar, and supervision mechanisms as the safeguard, forming a comprehensive pathway characterized by policy precision, age-friendly facilities, smart services, and dynamic oversight. Through cross-departmental collaboration and societal synergy, Wenzhou can narrow urban-rural disparities and the digital divide, ultimately achieving the goal of "scientific fitness and healthy aging" for its elderly population.

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