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A Realistic Examination, International Comparison, and Chinese Reflections on the Allocation of Public Service Resources for National Fitness

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Abstract

This paper examines the allocation of public service resources for national fitness in China, providing a realistic assessment, international comparisons, and Chinese reflections. It highlights the growing importance of national fitness as emphasized in the 20th National Congress of the Communist Party of China, alongside the 14th Five-Year Plan for Public Service Development. The paper identifies key challenges in China's public resource allocation for national fitness, including high costs, low efficiency, and regional imbalances. Acknowledging the growing demand for fitness services, it explores the inefficiencies caused by a government-dominated allocation system and the lack of market mechanisms.

The paper compares international practices from the UK, US, and Germany, which have successfully integrated market mechanisms, legal frameworks, and digital technologies to enhance resource allocation efficiency and equity in public service provision. It draws lessons from these countries' experiences, particularly in optimizing competitive market approaches, involving social participation, and ensuring legal and procedural transparency.

Based on these insights, the paper proposes several reforms for China: optimizing resource allocation models by introducing market mechanisms, improving regional balance in resource distribution, advancing digital empowerment for better management, and strengthening performance evaluation systems to enhance service quality and efficiency. By adopting these strategies, China can overcome existing barriers and create a more effective and equitable national fitness public service system, contributing to the realization of its sports powerhouse goal.

Keywords : National Fitness Public Service Resource Allocation ; Equity and Efficiency ; Sports Governance

1.Introduction

The report of the 20th National Congress of the Communist Party of China states: "Extensively carry out national fitness activities, strengthen youth sports work, promote the comprehensive development of mass sports and competitive sports, and accelerate the construction of a sports powerhouse." Fully implementing the national fitness strategy and building a higher-level public service system for national fitness are core tasks in laying a solid foundation for constructing a sports powerhouse and advancing the modernization of the sports governance system and capacity. Meanwhile, on January 10, 2022, the National Development and Reform Commission and 21 other departments issued the *14th Five-Year Plan for Public Service Development*, which proposed "leveraging the guiding role of the government, optimizing resource allocation, attracting social participation, and continuously expanding the supply of inclusive non-basic public services." This undoubtedly poses new requirements and challenges for the allocation of public service resources for national fitness. Optimizing the methods and improving the efficiency of resource allocation for national fitness public services is a key approach to meeting the people's growing needs for a better sports life. It is also a fundamental path to constructing a higher-level national fitness public service system, overcoming barriers such as unbalanced and insufficient development, and achieving high-quality development of national fitness.

Since 2005, Chinese academia has gradually recognized the importance of resource allocation for national fitness public services and has conducted in-depth research in this field, exploring how to enhance resource utilization efficiency through optimized allocation^[1] and seeking policy options for optimizing the allocation of public sports resources in China^[2]. At the micro level, studies have primarily focused on the benefits of resource allocation in rural areas^[3], differences in resource allocation levels across counties^[4], and the equity of resource allocation within regions^[5]. These studies provide empirical support for further optimizing resource allocation strategies, though challenges remain in practical application. At the macro level, research has concentrated on optimizing resource allocation for national fitness public services through policy reforms and institutional innovations. Specifically, researchers have examined the leading role of the government in resource allocation and how to better introduce market mechanisms to improve efficiency. For instance, equity in resource allocation has become a key focus of macro-level studies^[6]. suggested that reforms in resource allocation should prioritize balanced development between regions and urban-rural areas to reduce disparities caused by economic differences. Studies on the evolving characteristics of resource allocation disparities further reveal that, amid rapid economic growth, the gap in resource allocation between regions—particularly between the eastern coastal areas and the central-western regions—has widened significantly^[7]. These macro-level studies provide valuable theoretical support and empirical evidence for formulating fairer and more efficient resource allocation policies. In 2017, the General Office of the CPC Central Committee and the State Council issued the *Guiding Opinions on Innovating the Allocation of Government Resources*, advocating for greater use of market mechanisms and market-

oriented approaches to promote market-oriented reforms in public resource allocation. This triggered a new wave of academic reflection on the allocation of national fitness public service resources, exploring how to properly balance the relationship between government and market in market-oriented reforms^[8] and whether sports social organizations should become effective entities following such reforms^[9]. However, domestic research has gradually reached a bottleneck, particularly facing significant obstacles in practical implementation. To achieve breakthroughs, it is necessary to shift perspectives and draw on international experiences, examining and comparing China's allocation of national fitness public service resources from a global perspective.

2. A Realistic Examination of the Allocation of National Fitness Public Service Resources in China

2.1 High Resource Allocation Costs, Low Service Supply Efficiency, and Widespread "Ineffective Supply"

The *14th Five-Year Plan for Public Service Development* emphasizes "leveraging the guiding role of the government, optimizing resource allocation, attracting social participation, and continuously expanding the supply of inclusive non-basic public services," while the *14th Five-Year Plan for Sports Development* calls for "building a higher-level national fitness public service system." However, the *Key Points of Mass Sports Work for 2022 and 2023*, issued by the General Office of the State General Administration of Sport, did not provide comprehensive coordination or clear deployment for optimizing the allocation of national fitness public service resources. From 2010 to 2022, China's GDP tripled, and per capita GDP doubled. Central government funding for mass sports and lottery public welfare funds increased from 10 billion yuan and 5 billion yuan in 2010 to 30 billion yuan and 15 billion yuan in 2022, respectively. However, during the same period, the per capita area of sports facilities only rose from 1.2 square meters to 1.5 square meters, a relatively modest increase. From a value-oriented perspective, sports management departments, established with the organizational rationale of "enhancing international influence and national confidence through competitive sports achievements," have primarily adopted a top-down "vertical" decision-making approach to efficiently allocate public resources in support of competitive sports development. This restricts the horizontal flow of resources, inevitably clashing with the "social rationality" formed by public demand^[10], thereby limiting the methods of resource allocation for national fitness public services in China. As a fundamental material carrier of modern public services, national fitness public service resources possess the "non-competitive" and "exclusive" characteristics of public goods. When the government increasingly converts resources into pure public goods, it inevitably leads to a convergence in the public goods supply paradigm and a governmental monopoly over resource allocation, resulting in widespread "ineffective supply" of national fitness public services.

2.2 Surging Demand for National Fitness, Single Service Supply Entity, and Worsening "Supply-Demand Imbalance"

According to the *2022 National Fitness Trends Report*, among Chinese people aged 7 and above, 67.5% participated in physical exercise at least once a week, an 18.5% increase from the 2014 survey. The *2023 China Fitness Industry Data Report* indicates that in 2023, there were approximately 117,000 broadly defined fitness venues nationwide, including 36,447 commercial fitness clubs and 42,177 fitness studios. This suggests that fitness services are primarily provided by commercial entities, with a relatively singular supply structure. In August 2021, the State Council issued the *National Fitness Plan (2021-2025)*, explicitly stating that "regional imbalances and insufficient public service supply remain prominent issues in national fitness." In January 2022, the State General Administration of Sport released the *Basic Public Service Standards for National Fitness (2021 Edition)*, detailing norms and requirements for the allocation of basic public service resources for national fitness in China. However, with the continuous improvement of China's economic level and people's quality of life, the demand for national fitness has surged rapidly, with increasingly personalized and diversified fitness needs across different age groups, genders, occupations, and regions. Furthermore, regional disparities have exacerbated supply imbalances amid this surging demand. Fitness service facilities in first-tier cities and developed regions are relatively well-equipped to meet residents' basic needs. However, in second- and third-tier cities and less developed areas, inadequate facilities make it difficult to meet the growing fitness demands of residents. Additionally, factors such as socioeconomic levels and income inequality affect people's demand for and ability to pay for fitness services, further intensifying the "supply-demand imbalance" in national fitness public services. Although the government has invested significant resources in this area, its resource allocation authority remains centralized, lacking effective participation from social forces. Community fitness venues lack diversity, and the supply of professional fitness institutions and instructors is limited. Under the current "vertical" public service supply system, public opinions and demands in the field of national fitness are rarely fully heard or addressed, making it difficult for the government to accurately grasp actual needs. This results in resource waste, low facility utilization rates, and a gap between macro-level decisions and micro-level implementation.

2.3 Ambiguous Government Role, Imperfect Market Mechanisms, and Frequent "Pseudo-Marketization"

Government and market are two effective means of resource allocation. The establishment of the socialist market economy with Chinese characteristics aims to gradually allow the market to play a decisive role in resource allocation while reforming the government's singular approach. In March 2022, the CPC Central Committee and the State Council issued the *Opinions on Building a Higher-Level National Fitness Public Service System*, explicitly stating the need to "further leverage the government's role and stimulate the

enthusiasm of social forces" and emphasizing the formulation of "methods and implementation rules for government procurement of national fitness public services." However, in practice, the government has long played the roles of "rule-maker," "service provider," and "resource allocator," often intervening excessively—such as over-guiding and controlling the market—leading to a loss of the market's self-regulating function. Moreover, current laws and regulations lack sufficient coverage in the field of national fitness public services. Although the *Government Procurement Law* and public resource trading platforms provide legal entry thresholds and platforms for resource transactions, specific provisions and requirements for national fitness public services remain inadequate. Additionally, guidance directories for service procurement issued by local governments vary in content and standardization. For example, the *Interim Measures for Government Procurement of Services in Chongqing* and the *Chongqing Municipal Government Procurement Service Guidance Directory* do not include provisions related to purchasing national fitness or sports public services, leaving optimization of resource allocation methods without clear legal grounding. This undoubtedly reduces the standardization and transparency of government procurement of national fitness public services. The ambiguous positioning of the government's role and the lack of targeted provisions for resource allocation are fundamental reasons for the absence of market mechanisms and the frequent occurrence of "pseudo-marketization" in this field.

2.4 Emphasis on Initial Investment, Lack of Rational Performance Evaluation, and Prevalent "Power Rent-Seeking"

Integrity and transparency in public services are governance goals pursued by governments worldwide. In the field of national fitness public service resources, government decisions on initial investments may be influenced by factors such as local performance evaluations. Some officials may prioritize building large-scale sports venues as symbols of achievement, focusing excessively on initial investments like venue construction and infrastructure while neglecting long-term operation, maintenance, and actual public fitness needs. This leads to some venues becoming underutilized or abandoned after completion due to insufficient funding and manpower, failing to fulfill their intended functions. Excessive concentration of power in the resource allocation process can also give rise to "power rent-seeking," where certain administrative departments or officials exploit their authority for personal gain. For example, some officials may secure illicit benefits through project approvals or fund allocations, while certain companies or individuals may leverage government connections to unfairly obtain contracts for national fitness public service projects. This not only undermines fair market competition but also compromises service quality. The absence of performance evaluation exacerbates these issues, preventing timely detection and resolution. In the national fitness public service domain, the lack of a scientific and comprehensive performance evaluation system hinders government departments from objectively assessing implementation outcomes, allowing some problems to fester into chronic issues that severely affect service quality and efficiency.

3. International Comparison of National Fitness Public Service Resource Allocation

Globally, whether it is national fitness or sports public service resource allocation, the governance goals of countries and regions are generally the same: pursuing quality, efficiency, and sustainability. However, due to differences in political systems, policy environments, and administrative structures, distinct characteristics and approaches emerge in resource allocation practices. Therefore, analyzing international experiences, their allocation methods, and the internal and external conditions shaping key policy documents can help optimize China's national fitness public service resource allocation, clarify its current stage, and provide references for effective policymaking.

3.1 The United Kingdom: Optimizing Public Service Resource Allocation through Competitive Market Mechanisms and Social Participation

After World War II, the UK began building a welfare state based on the *Beveridge Report*, providing comprehensive public services, including sports, and declared itself the world's first welfare state in 1948. However, constrained by insufficient productivity before the Third Industrial Revolution, the rapid expansion of public services led to excessive fiscal burdens, economic stagnation, and high labor costs. Starting in 1979, influenced by New Public Management theories, the UK government abandoned the Keynesian economic policies it had followed since the war, becoming the first country globally to initiate public service reforms to optimize resource allocation.

3.1.1 Proactive Introduction of Competitive Market Mechanisms

In the 1980s, the Thatcher government recognized competition's role in stimulating market vitality and improving resource allocation efficiency. To reduce redundant public service expenditures, it introduced the "Compulsory Competitive Tendering" (CCT) system, marking the first integration of market mechanisms into public services, including sports. CCT required government and public sectors to issue tenders publicly, disclosing bidding announcements, documents, and evaluation criteria to ensure equal competition among potential suppliers. This system encouraged diverse service providers—private enterprises, nonprofits, and community groups—to compete, reducing costs and improving service quality, thus optimizing resource allocation^[11]. However, this marketization also raised issues like rising service prices and commercialization, making it difficult for lower- and middle-income groups to access satisfactory services, undermining equity. In 1997, the Blair government introduced the "Best Value" policy under the "Third Way" governance model to replace CCT.^[12] It established Sport England and launched the "Future of Sport for All" initiative, aiming for holistic governance of market mechanisms in public service resource allocation through institutional frameworks and oversight systems.

Overall, the UK's introduction of competitive market mechanisms significantly improved service quality and efficiency in national fitness public service resource allocation.

However, it also exposed challenges to equity during marketization, offering valuable lessons for China.

3.1.2 Emphasis on Pre-Implementation Assessment and Social Participation

In 1991, the Major government launched the "Citizens' Charter" initiative, emphasizing citizens' rights as "customers" of public services to receive high-quality, efficient services. All 42 UK public service systems, including sports, established their own charters, specifying service standards and detailed resource allocation procedures. These charters underscored citizens' rights to scrutinize allocation channels, methods, and processes and expand service options based on their needs. During this period, citizens were widely regarded as customers of public services. Before project implementation, governments and departments conducted detailed demand analyses, risk assessments, and feasibility studies to ensure projects met public needs, utilized resources rationally, and achieved intended goals. Pre-implementation assessments were key to ensuring project success and efficient resource use, guided by the six principles outlined in the Citizens' Charter. Departments set service standards accordingly and delivered services to enhance administrative efficiency^[13]. The UK government heavily emphasized public participation in national fitness public service resource allocation, encouraging citizens to provide input on policymaking, project implementation, and service delivery through various channels. This broad participation enhanced policy transparency and public satisfaction while providing valuable public opinion data, ensuring resource allocation better aligned with public needs.

In summary, the Citizens' Charter established the UK's pre-assessment and social participation model, enabling the government to understand public needs and expectations fully, thus informing more efficient public service policies.

3.1.3 Strong Policy Innovation and Flexibility in Public Service Resource Allocation

Starting with the welfare state model based on the *Beveridge Report*, the UK later introduced CCT to address high costs and low quality, followed by the "Best Value" policy to mitigate over-commercialization. The UK government has consistently demonstrated innovation and flexibility, pioneering reforms like the Citizens' Charter, which influenced countries like France and Belgium (e.g., their 1992 "Public Service Charters"). Adhering to decentralization and co-governance principles, these innovations have kept the UK at the forefront of public service resource allocation globally. The government adjusts policies based on evolving realities and public needs, ensuring effective responses to changing social and economic conditions.

3.2 The United States: Efficient Resource Allocation through Legal Systems and Digital Tools

Unlike the UK's internally driven reforms, U.S. public service resource allocation reforms resulted from combined internal and external pressures. In the early 1990s, facing fiscal deficits from the Gulf War and global financial crises, alongside successful public service reforms in Western countries like the UK, President Clinton joined this wave of change.

3.2.1 Comprehensive and Timely Updates to Legal Frameworks

The U.S. prioritizes the rule of law in public service and sports resource allocation. The *Amateur Sports Act* of 1978 detailed the rights and obligations of sports management entities, laying a legal foundation for amateur sports development and guiding resource allocation. In 1992, the Clinton administration revised it into the *Olympic and Amateur Sports Act*, transferring related civil litigation from state to federal district courts. Congress, with legislative authority, can amend government policies and resource allocation in real-time to ensure fairness, rationality, and efficiency, adapting to evolving social needs. Beyond sports, comprehensive legal systems in education, healthcare, and transportation—e.g., the *Elementary and Secondary Education Act* (ESEA), *No Child Left Behind Act* (NCLB), and *Patient Protection and Affordable Care Act* (ACA)—provide robust legal support for resource allocation, ensuring compliance and transparency.

3.2.2 Emphasis on Post-Implementation Evaluation and Procedural Oversight

The U.S. emphasizes comprehensive oversight and post-implementation evaluation, with laws like the *Government Performance and Results Act* (GPRA) setting performance standards for federal agencies and requiring regular public reports. This ensures fairness, transparency, and continuous process optimization, enhancing overall public service efficiency. In 1992, Vice President Gore emphasized "customer-first" principles, followed by President Clinton's 1993 Executive Order 12862, mandating customer service standards to improve service quality and shift government functions^[14]. The 1993 GPRA legislated performance management principles across federal agencies, adjusting resource allocation strategies based on outcomes. Internal administrative and external public oversight ensure procedural justice, balancing stakeholder interests in decision-making.

3.2.3 Active Promotion of Digital Resource Allocation

As the birthplace of computers and the internet, the U.S. leverages robust digital infrastructure to enhance resource allocation efficiency and government-public interaction. The 2002 *E-Government Act* encouraged online service migration to boost efficiency and

transparency. The 2010 *National Broadband Plan* expanded broadband access, reducing the digital divide and improving digital service access. In 2013, President Obama's *Open Data Policy* promoted information sharing and transparency. Technologies like big data, AI, and cloud computing enable precise management, real-time monitoring, demand assessment, and trend forecasting, improving allocation accuracy and efficiency.

3.3 Germany: Adherence to Equalization Principles and Deep Cooperation with Sports Social Organizations

As a traditional capitalist developed nation, Germany has a mature public service system, offering valuable lessons for China. Post-reunification, Germany faced socioeconomic and public service disparities akin to China's regional imbalances after 40 years of rapid reform and opening-up. Germany's localized reform approach aligns with China's gradual pilot-based reforms in special zones.

3.3.1 Mature Network of Sports Social Organizations

Germany boasts a mature network tested by two world wars, with over 200 years of government collaboration. Originating grassroots, these organizations—spanning competitive and fitness activities—numbered 85,000 in 2009, rising to 91,080 by 2012. By 2017, 35.43% of men and 22.76% of women participated, with over 55% regularly exercising^[15]. Although the *Deutscher Olympischer Sportbund* (DOSB) offers national coordination, decision-making power is largely devolved. State federations translate national guidelines into regional priorities, while municipal associations and grassroots clubs tailor programmes to local demand—an arrangement that preserves autonomy yet ensures coherence across the federal system. Financially, most clubs rely on a four-part mix of membership dues, earmarked lottery proceeds, targeted government grants, and private sponsorships. This diversified portfolio shields them from abrupt funding shocks and allows long-term planning, from youth-training pathways to inclusive programmes for migrants and older adults. Volunteerism is equally embedded: hundreds of thousands of licensed coaches and officials donate time that would otherwise strain public budgets. In recent years the DOSB has accelerated a digital turn, rolling out the “*Sportdeutschland*” platform and electronic membership cards that streamline registration, facility booking, and data reporting. These upgrades give policymakers real-time insight into resource distribution while helping clubs fine-tune services. The result is a densely woven ecosystem—highly autonomous yet closely partnered with the state—that both meets diverse community needs and underpins Germany's enduring strength on the international sporting stage.

3.3.2 Commitment to Public Service Equalization

The post-war division of Germany produced two contrasting sports systems: a state-directed, achievement-oriented model in the East and a club-based, participatory model in the West. Reunification therefore exposed deep disparities in facility density, equipment quality

and coaching resources. In response, the federal government, state and municipalities agreed on a phased levelling-up strategy. The flagship “*Golden Plan East*” channelled €52 million between 1999 and 2003—financed partly by the solidarity surcharge (*Solidaritätszuschlag*)—to renovate or build more than 3 000 sports halls, multi-use pitches and swimming pools across the five new states. Subsequent tranches extended the programme to rural districts, ensuring that no community lay more than fifteen minutes from a basic sports venue. Equalisation today reaches beyond bricks and mortar. Dedicated federal lines (*Sportstättenförderung*) co-fund inclusive design—step-free access, adaptive equipment—and oblige municipalities to embed sport in their local development plans. Nationwide initiatives such as “Integration durch Sport” under the DOSB funnel coaching grants, language courses and mentoring to clubs that serve migrants, women and older adults. By coupling infrastructure subsidies with social-programme support, Germany seeks to guarantee that geography, income or background never bars residents from regular physical activity.

3.3.3 Innovative Fiscal Support and Procurement

Germany’s multi-tier public-finance system blends stable base funding with flexible top-ups for sport. The federal government signs four-year performance agreements with the *DOSB* to underwrite Olympic preparation, talent pathways and facility-improvement schemes; state governments co-finance most projects on roughly a 1:1 ratio according to fiscal capacity. At the local level, municipalities tap low-interest development loans to modernise community venues while still meeting balanced-budget rules. Partnerships with non-profit clubs are governed by sports-promotion legislation and modern public-procurement rules that favour quality-based tenders and allow multi-year service contracts—an arrangement vital for programmes such as school-club cooperation. Tax incentives further broaden the funding mix: donations to recognised sports organisations are income-tax deductible, and most club activities are exempt from value-added tax. Combined, these measures create a diversified, shock-resistant revenue stream that encourages private giving yet maintains strong public oversight.

Table 1: Comparison of National Fitness Public Service Resource Allocation Models in the UK, Germany, and the U.S.

Dimension	UK Model	Germany Model	U.S. Model
Basic Principles	Competitive market mechanisms via open bidding to enhance efficiency	Equalization, ensuring fairness across regions and groups	Legal frameworks emphasizing fairness and efficiency
Government-Market Relations	Reduced direct intervention via market tools, adjusted when quality declines	Close cooperation with social organizations via fiscal and policy support	Legal and policy regulation with strict market constraints
Social Participation	Citizens as customers with decision-making and oversight rights	Broad participation by sports organizations with government-backed autonomy	Emphasis on citizen feedback, post-evaluation, and procedural oversight
Digital/Tech Application	Limited, reliant on market and policy adjustments	Low, focused on traditional organization and management	Strong push for digitization using big data and AI for optimization
Legal/Regulatory Mechanisms	Policy innovations like Citizens' Charter, but fairness issues in marketization	Long-standing legal frameworks for equalization and cooperation	Robust legislation like GPRA for quality and allocation optimization
Fairness-Efficiency Balance	Efficiency improved, but fairness declined, corrected by "Best Value"	Prioritizes fairness, efficiency limited by regional balance focus	Balances both via legal and tech means, though richer areas benefit more

Outcomes/Challenges	Enhanced quality/efficiency, but over-marketization raised prices and inequity	High fairness and participation, weaker in efficiency/innovation	High efficiency and tech integration, requires ongoing legal/tech updates
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4. Chinese Reflections on National Fitness Public Service Resource Allocation

A survey of the United Kingdom, the United States, and Germany reveals that, despite their divergent political systems, fiscal architectures, and sociocultural contexts, each pursues a triple objective of efficiency, equity, and sustainability in allocating public-service resources. For China, these experiences are both a mirror and a boundary. The mirror shows that competitive market mechanisms, robust legal safeguards, and digital technologies can invigorate resources and enhance transparency. The boundary, however, reminds us that China’s vast territory, colossal population, pronounced regional disparities, and socialist-market-economy framework preclude simple transplantation of foreign models. Consequently, China must remain problem-oriented and institutionally confident. While drawing on international best practices, it should anchor reform in a governance architecture of government leadership, social co-production, public participation, and rule-of-law assurance. Leveraging the nation’s capacity for “concentrating resources to accomplish major undertakings,” China can promote market-oriented reforms and digital empowerment through a tiered, region-specific approach. Only by integrating global insights with domestic realities can China forge a resource-allocation pathway that is universally accessible, efficiency-driven, and capable of continual iteration.

4.1 Facilitating Sports Governance Transformation: Optimizing Allocation Models

The slow transition of sports governance is a key challenge in China. The traditional government-led model struggles to meet surging fitness demands. While government leadership is essential, market mechanisms should be appropriately introduced. The government must clarify its role, engage social forces, and build a multi-stakeholder governance structure to enhance allocation efficiency. It should enact clear policies to encourage participation from social organizations, businesses, and communities. Drawing on UK and U.S. experiences, China should leverage its institutional strengths, update sports laws, and standardize procurement processes—specifying procedures, standards, and partners—to ensure rational and effective resource use. Introducing competitive market mechanisms in non-basic services can stimulate providers to improve quality and meet public needs. Joint reward-punishment mechanisms across departments (e.g., finance, taxation) can incentivize

excellence and penalize violations, ensuring accountability. This diversified model can enrich supply, boost social vitality, and modernize sports governance.

4.2 Coordinating Regional Balanced Development: Enhancing Allocation Fairness

Fair resource allocation is vital for national health. China's vast geography and economic disparities result in uneven resource distribution—developed areas enjoy robust support, while less developed regions lag, compounded by geographic, demographic, and cultural factors. Borrowing from Germany's *Golden Plan East*, China should conduct detailed surveys in rural-urban fringes, remote, and underdeveloped areas to tailor fitness plans. Measures include increased fiscal support, improved grassroots facilities, and local talent development. Fiscal transfers and project funding can boost investment in underserved regions, while regional coordination mechanisms can foster East-West collaboration, sharing resources and expertise via platforms, training, and exchanges.

4.3 Accelerating Digital Empowerment: Enhancing Intelligent Allocation

Digital technology offers new pathways in the information age. Digital management platforms can monitor facility use, demand shifts, and resource distribution in real-time, enabling dynamic adjustments and informed decision-making. Smart fitness equipment—e.g., treadmills and gyms—offers personalized experiences, tracking data and optimizing utilization via IoT. Government subsidies and lower entry barriers can promote smart facility adoption. Online fitness services, such as remote courses and guidance, extend access beyond physical venues, breaking time-space constraints. Measures include building information platforms, developing smart apps, and using IoT for facility management, enhancing service quality and participation.

4.4 Improving Performance Evaluation Systems: Ensuring Allocation Effectiveness

A robust evaluation system is critical for effectiveness. The government should establish scientific indicators covering inputs, service quality, and satisfaction, conducting regular assessments and incorporating public feedback for fairness. Linking results to resource allocation and policy adjustments creates a virtuous cycle, continuously improving service efficacy. For instance, the 2022 revised *Sports Law* supports government procurement of public sports services but lacks clarity on "how, what, and from whom" to purchase, granting local discretion. Clear guidelines are needed to standardize execution.

5. Conclusion

Optimizing the allocation of public service resources for national fitness is crucial to achieving China's goal of becoming a sports powerhouse. With the growing demand for national fitness and the inefficiencies in the current resource allocation system, urgent reforms are needed. China's current resource allocation system is primarily government-led and

struggles to meet the diverse needs of the population. The lack of market mechanisms and limited social participation are major obstacles to improving efficiency and fairness. Therefore, it is recommended to introduce competitive market mechanisms into the resource allocation system to improve resource use efficiency and encourage more service providers to participate. However, this shift must be carefully managed to avoid excessive commercialization, ensuring fair access for low-income groups and rural areas.

Addressing regional imbalances in resource allocation is also crucial. Targeted investments should be made in underdeveloped regions through fiscal transfers and cooperation between local governments, businesses, and community organizations to ensure that the benefits of national fitness programs reach all regions of the country, regardless of economic status or geographical location. In addition, the use of digital technologies and smart tools will significantly enhance the accuracy of resource allocation, helping the government and society to adjust service content and distribution in real-time to meet the needs of different regions and groups.

Establishing a scientific performance evaluation system is key to ensuring the long-term success of public fitness programs. Regular assessments of service quality and resource allocation outcomes, along with timely adjustments to strategies, can optimize resource utilization and improve management efficiency. By drawing on international experiences and adapting them to China's context, fostering collaboration between government, market, and social organizations will provide strong support for building a more equitable, sustainable, and efficient public fitness service system.

Disclosure

Authors' contribution:

ZongQian Yang:Responsible for selecting the topic of the paper, formulating the research question, and drafting the initial version of the article.

Liang Deng:Analyzing,and interpreting relevant data to support the research findings.

XiaoLing Huang:Reviewing and proofreading the article to ensure clarity, coherence,and adherence to the intended argument structure.

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