# MECHANISM AND IMPLEMENTATION PATH OF DIGITAL EMPOWERMENT FOR THE PUBLIC SERVICE SUPPLY OF NATIONAL FITNESS FOR DISABLED PEOPLE

Jie Meng<sup>(1)</sup>; Qingjie Chen<sup>(2)</sup>

#### **Summary**

Using literature review, logical analysis, and other methods, explore the mechanism and implementation path of digital empowerment of public fitness services for people with disabilities. Digital empowerment provides new ideas and solutions for them. By using big data processing to accurately identify the demand for public sports services for people with disabilities, constructing digital platforms to promote supply coordination and enrich supply paths to improve supply efficiency, integrating digital resources to provide personalized and diversified service scenarios, a basic framework for digitally empowering people with disabilities to provide comprehensive public health services can be constructed; Strengthening the construction of digital platforms to achieve diversified business collaboration in service supply, building a disability service ecosystem based on digital technology, promoting supply and demand docking through big data, creating a favorable supply environment, and enhancing operational resilience are effective paths to achieving high-quality supply of public services for digital empowerment of disabled people's fitness.

Keywords: Digital empowerment; Disabled; National Fitness Public Service.

#### 1. Introduction

There is still a relative lack of research on public fitness services for people with disabilities. Faced with the acceleration of digital construction and the diversification and precision of the demand for public fitness services for people with disabilities, the intervention of new technologies and concepts is of great significance for improving the quality of public fitness services for people with disabilities. Relevant research urgently needs to be carried out in depth[1]. Exploring the path of improving the quality of sports public services for people with disabilities through digital empowerment is of great significance for promoting the improvement of the public service system for people with disabilities, advancing digital construction, and achieving the 14th Five Year Plan and 2035 long-term goals[2]. This study is based on implementation of the national fitness strategy and the background of the development of a healthy China. It focuses on meeting the physical exercise needs and improving the quality of life of the disabled population, exploring the mechanism and path of digital empowerment of public services for the national fitness of the disabled population. It provides a certain theoretical reference for meeting the

healthy living demands of the disabled population, promoting the comprehensive development of the national fitness cause, and the comprehensive implementation of the Healthy China strategy.

### 2 Explanation of the Mechanism of Digital Empowerment in the Supply of Public Fitness Services for Persons with Disabilities

Digital empowerment is not simply about presenting information related to public fitness services for people with disabilities through digital means, nor is it simply about adding the service process to an online processing mode[3]. Instead, it involves integrating digital technology throughout the entire process from demand identification to service generation, using digital platforms and information channels to achieve efficient linkage and precise response between supply and demand. The underlying logic for improving the quality of public fitness services for people with disabilities through digital empowerment is to intervene with digital technology to enhance the accuracy and efficiency of identifying the service needs of all people with disabilities. By building an efficient digital platform, diversified supply channels, precise supply content, and efficient supply processes can be achieved. Under this logic, constructing a digital empowerment theoretical mechanism around improving the supplydemand relationship and digitizing various links on both the demand and supply sides can effectively enhance the quality of public fitness services for people with disabilities.

## 2.1. Big data processing helps to accurately identify the demand for public sports services for people with disabilities

By using big data methods to accurately, comprehensively, and timely perceive, collect, and identify the sports public service needs, exercise characteristics, physical health characteristics, and other related data of the disabled population, analyze their sports exercise preferences, rehabilitation treatment needs, sports activity participation interests, sports consumption direction characteristics, sports activity

participation scope, and distance limitations, etc., construct a relatively accurate and detailed "portrait" of the public service demand for national fitness, overcome the problems of vague connections between the supply and demand sides, and blocked information acquisition of the public service demand for national fitness of the disabled population, realize the role change of disabled people participating in sports and enjoying public services from passive to active, and promote the transformation of the public service for national fitness of disabled people from experiential subjective decision-making to data-driven scientific analysis.

## 2.2. Digital platform construction promotes supply synergy, enriches supply paths, and improves supply efficiency

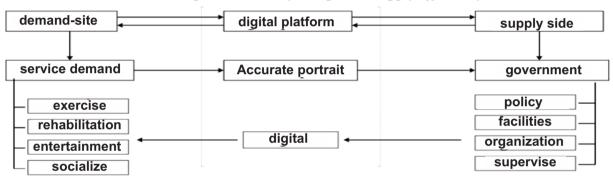


Figure 1. The Digital Ecological Operation Mechanism of Public Services for National Fitness for Persons with Disabilities

Building a digital platform for public fitness services for people with disabilities can play a role in coordinating supply entities, expanding supply channels, enriching supply paths, and improving supply efficiency to a certain extent (Figure 1). Firstly, a comprehensive and integrated digital platform can establish a unified data standard. Secondly, an integrated digital platform can make information about various elements public, break the traditional state of information blockage, eliminate information monopolies among government departments, social forces, individuals, and other entities within their respective scopes, achieve equal status among all entities, fully mobilize their enthusiasm, and reduce the pressure on government departments. Thirdly, a shared data platform is beneficial for the disabled population to timely information on fitness venues, guidance

personnel, policies and regulations, activity development, problem feedback, and other aspects. It reduces the complexity of the process for disabled people to participate in sports and fitness activities, express their needs for sports and fitness, and enjoy public health services for the whole nation, and stimulates their enthusiasm for participation.

### 2.3 Digital resource integration provides personalized and diversified service scenarios

Due to the diverse types of disabilities and complex demands for sports among the disabled population, the supply of sports public services requires a high degree of tolerance and sufficient fault tolerance. The launch of virtualization products can provide a rich variety of simulated scenarios and virtual experiences for the disabled population, bringing great convenience to the selection of sports participation projects, adaptation of sports venues, and health service

experiences. At the same time, virtual scenes, simulated experiences, and other forms can help people with disabilities find suitable sports projects, improve the tolerance of activity choices such as sports, rehabilitation, and entertainment, and to some extent reduce the economic and mental pressure of people with disabilities participating in sports and enjoying public fitness services, and enhance their sense of participation and experience.

## 3. Exploration of the Implementation Path of Digital Empowerment for Public Service Supply of National Fitness

On the existing basis, we need to strengthen the construction of a digital platform for public fitness services for people with disabilities, and eliminate the business barriers caused by issues such as "information silos" and "data chimneys" among the public fitness service providers among the disabled population[4]. promoting the openness, flow, and sharing of data resources, achieving business collaboration among multiple entities, and mobilizing the participation and enthusiasm of supply entities, it is a key path to improving the quality of public service supply for digital empowerment of people with disabilities in national fitness.

Empower the supply side of public fitness services for people with disabilities through digital technology, Internet of Things technology, etc., and build a digital ecosystem for the supply of public fitness services for people with disabilities in terms of people, time, location, and methods, providing guarantees for the continuous solution of pain points in the service needs of the disabled population, and effectively improving the experience of the disabled population enjoying public fitness services[5].

Establish a demand side management mechanism for public fitness services for people with disabilities. By empowering with big data, we can accurately identify, efficiently collect, intelligently classify, formulate plans, and provide real-time feedback on the participation needs of people with disabilities in national fitness. This will promote precise and efficient supply to meet the public service needs of people with disabilities in national fitness, and achieve a virtuous cycle of supply feedback adjustment.

The key to providing public fitness services for people with disabilities through digital empowerment is the long-term effectiveness of high-quality supply. Creating a favorable operating environment is a necessary condition for ensuring the stable and sustainable operation of the supply mechanism. The formation of a good environment relies on the joint cooperation of many elements, such as policies, funds, talents, supervision and evaluation.

### 4. Summary

As a systematic project, the public service of empowering disabled people with digital fitness has a long way to go. We need to make joint efforts in demand identification, supply side digital transformation, talent training system reform, and follow-up of regulatory feedback mechanisms. At the same time, we also need continuous attention and in-depth exploration of relevant theoretical and practical research to jointly promote the effective integration of digital technology in the supply of public fitness services for people with disabilities.

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