

The Impact of Integration of National Fitness and Healthy Elderly Care on the Psychological Status of the Elderly from the Perspective of Healthy China

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Abstract

In order to address the health and elderly care issues brought about by the current aging population in China, research conducted to explore the impact of integration of national fitness and healthy elderly care on the psychological status of the elderly from the perspective of healthy china. Total 1900 questionnaires were distributed among elderly people in fitness. Used quantitative research approach and cross sectional research design. The SPSS software results indicates that frequency of urban elderly people participating in fitness is significantly higher than that of rural elderly people, among them, the highest proportion is once a week, followed by twice a week, the number of elderly people who participate in fitness more than three times a week is higher than those who participate three times a week, people are 3.2% higher, and rural elderly people participate in fitness more frequently, as the number increases, the participation rate gradually decreases. Under the guidance of the current "Healthy China" strategy, there are three paths for the integration of national fitness and the health and elderly care industry, namely concept integration, industry integration, and service integration. This study results also contributed that integration of national fitness and healthy elderly care can positively impact the psychological status of the elderly, promoting overall well-being and quality of life in the context of Healthy China.

Keywords: Healthy China; National Fitness; Healthy Elderly Care; Psychological Condition.

Introduction

In theory, there is a broad social identity and logical relationship between the integration of national fitness and healthy elderly care, the relevant theoretical support is as follows: The academic community has formed a consensus on the concept of "exercise promotes health". As early as 2007, the American Sports Medicine Association and the American Medical Association officially proposed the academic viewpoint of "exercise is a good doctor" and the concept of health promotion (Berryman, 2010; Fletcher et al., 2018). At the 2010 "World Health Prescriptions" conference, the concept of "exercise is a good doctor, and exercise promotes health" was widely recognized by participating experts and scholars. At the 4th National Health Science Conference held in Shenzhen in 2014, Chen Junshi, an academican of the CAE Member, also elaborated on this concept in his keynote speech "Sport is a good doctor, science is the key", it believes that scientific evidence strongly suggests that appropriate participation in sports and mass health activities plays an important role in both physical health and chronic disease prevention (Grol et al., 2021).

The goals of "national fitness" and "healthy elderly care" are consistent, and the ultimate goal of the two policies is to

achieve consistency, both for the sake of health. National fitness services for healthy elderly care. The target audience of national fitness is the entire nation, with teenagers and children as the focus, and the elderly should be the main body of its care and services. The means and approaches for achieving "national fitness" and "healthy elderly care" are the same.

To some extent, the methods and approaches for achieving health through national fitness and healthy elderly care are mostly the same, both through health education to enhance the understanding of health concepts among the target audience, and through effective exercise intervention, gradually form a lifestyle oriented and conscious behaviour habit of national physical exercise, with the ultimate goal of achieving health and laying the foundation for a happy life (Artinian et al., 2010; Cress et al., 2005). The integration logic between national fitness and healthy elderly care is that the former integrates the concept of fitness and sports promoting health into the elderly's awareness of healthy elderly care, thus, when constructing their elderly care concept of promoting health through exercise, the elderly form good habits of physical exercise and lifestyle, effectively achieving the goal of healthy elderly care (Stonerock & Blumenthal, 2017; Trost & Loprinzi, 2008). For the elderly, the stronger their concept of promoting health and elderly

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care through exercise, the more their participation in physical exercise will develop towards normalization and daily life (Ma, 2021).

Data research shows that the higher the degree of integration between the two, the more significant the effectiveness. The specific manifestation of participating in physical exercise normalization and daily life is that the relevant population maintains a high frequency of physical exercise, a longer duration, and appropriate exercise intensity (Nimrod, 2007; Taylor et al., 2004). For the elderly population, their choice of exercise intensity needs to be based on their own health status, physical fitness, exercise habits, and other differences to make reasonable choices, essentially, elderly people are not encouraged to engage in high-load, high-intensity, and high-intensity fitness activities (Zhang & Zhang, 2021).

Since 2000, China has entered and will continue to be in an aging population society. As stated in the 2019 government work report, by the end of 2018, the population aged 60 and above in China had reached 250 million, accounting for 17.9% of the total population. With the continuous intensification of population aging, the problem of "longevity without health" is becoming increasingly prominent. As early as May 2016, China is one of the countries with a relatively high degree of population aging in the world, with the largest and fastest aging population. The task of dealing with population aging is the heaviest. Properly solving the social problems brought about by population aging is related to the overall development of the country and the well-being of the people, and we need to make great efforts to cope with it, The No. 46 document issued by the state in 2014 clearly stated that "'fitness for all has become a national strategy', requiring 'to create conditions for development, create a social atmosphere that attaches importance to sports, supports sports, and participates in sports,' to strengthen sports guidance, promote 'Exercise prescription', give play to the positive role of physical exercise in disease prevention and health promotion, and promote the integration of sports and elderly care'.

At the same time, from the perspective of the elderly themselves, they should also actively respond to the call of the national strategy of national fitness, actively participate in physical exercise, and integrate into the wave of national fitness, by completing fitness activities within one's capabilities, one can effectively improve their physical fitness and quality of life (Flanagan, 1978; Rejeski & Mihalko, 2001). Therefore, the effective integration of national fitness and healthy elderly care is not only a development need for national strategic implementation, but also a need for healthy elderly care. Seeking this

significance, research objective was to check the impact of integration of national fitness and healthy elderly care on the psychological status of the elderly from the perspective of healthy china.

The research findings highlight significant disparities between urban and rural elderly people's participation in sports and fitness in China. Urban areas exhibit a higher proportion of elderly individuals frequently engaging in fitness activities, with women displaying a significantly higher enthusiasm for participation compared to men. However, in rural areas, the proportion of regular participation in fitness is relatively lower, and women still show greater interest than men. Despite some improvement over time, the overall effect of integrating elderly individuals into national fitness remains somewhat limited. Moreover, the satisfaction with sports venues is notably lower among rural elderly people compared to their urban counterparts, indicating a need for improved infrastructure. The main motivation for elderly individuals to participate in fitness activities is to improve their physical health, with rural elderly showing a higher inclination toward exercise for health purposes. Nonetheless, there are misconceptions and weak subjective willingness to engage in fitness activities among the elderly, indicating a need for health education and awareness programs. These findings suggest the importance of tailored strategies and policy support to bridge the gaps between urban and rural elderly populations and encourage active and sustainable participation in national fitness initiatives.

Literature Review

National health is an important manifestation of the comprehensive strength of the country, an important symbol of economic and social development and progress, and the ultimate goal of a healthy China (Chen & Xie, 2019; Song et al., 2016). National fitness is an important way and means to achieve national health, and it is the basic guarantee for all people to enhance their physical fitness and live a happy life (Lin et al., 2020; Nutbeam, 2000; Shahtahmasebi, 2006). Integrating regional folk sports culture into the entire cycle and process of national fitness, exploring the profound impact of traditional sports culture on national fitness, and leveraging the role of regional characteristic cultural heritage is not only the inheritance and protection of traditional folk customs, but also in line with the fitness habits of the local people, and more in line with the policy needs of national fitness and healthy development in China. Give full play to the leading and demonstration effect of folk sports activities in Cultural

resource management, expand the existing form of folk sports in the national fitness system, strengthen the scientific, standardized, socialized and modernized management of folk sports activities in the national fitness system, and make the development of folk sports an important part of the modern national fitness system and Chinese traditional culture. To achieve the inheritance and innovation of folk sports with regional attributes in the national fitness system, while serving and enriching the content and path selection of the national fitness system, to effectively integrate regional folk sports culture and the national fitness system, complement each other, promote and develop together, and promote the health of the whole people.

Against the backdrop of accelerated aging, effective physical exercise can enhance the physical and mental health of the elderly. Sun, J., and others focused on studying the current level of public sports services for the elderly in order to promote the development of healthy aging in China. The rationality of evaluation indicators is tested using expert consultation method, and each evaluation indicator is scored using questionnaire survey method, the weight of each indicator is calculated using Analytic Hierarchy Process (AHP). Finally, take the public sports services for the elderly in a certain city as an example for verification (Sun & Hu, 2021). Chen et al. (2021) aimed to explore the relationship between functional fitness test scores and abdominal obesity in elderly people in Taiwan. A total of 22399 data items from the National Physical Fitness Survey Database (NPFSD 2014-2015) were collected for review and analysis. In the multiple linear regression analysis, the quartile of functional fitness test results is taken as the dependent variable to test the relationship between functional fitness and abdominal obesity (Chen et al., 2021). For the elderly themselves, they have a good state of health, it will make them more willing to share happiness with family and friends, taking advantage of changes in social relationships and understanding of the social environment, among them, achieving higher life satisfaction and happiness will result in a significant change in subjective quality of life.

In addition, actively participating in physical exercise can also promote the metabolism of brain cells, which can help slow down cognitive aging in the elderly, it will effectively improve the physical health and quality of life of the elderly (Bernardo et al., 2016; Camandola & Mattson, 2017). After the integration of national fitness and healthy elderly care, it not only helps to strengthen the awareness of elderly people to participate in healthy sports, but also gradually forms the behavioral habits of physical exercise in daily life (Ali, Sudirjo, & Rahman, 2022; Malina, 2001; Verplanken

& Melkevik, 2008). The proposal of the concept of healthy elderly care has positive significance in improving the overall physical fitness of the elderly, alleviating their sense of loneliness in their later years, and improving their sense of happiness in life.

At the same time, from the perspective of the elderly themselves, they should also actively respond to the call of the national strategy of national fitness, actively participate in physical exercise, and integrate into the wave of national fitness, by completing fitness activities within one's capabilities, one can effectively improve their physical fitness and quality of life (Flanagan, 1978; Rejeski & Mihalko, 2001). Therefore, the effective integration of national fitness and healthy elderly care is not only a development need for national strategic implementation, but also a need for healthy elderly care. Seeking this significance, research objective was to check the impact of integration of national fitness and healthy elderly care on the psychological status of the elderly from the perspective of healthy china. The conceptual framework of the study has been adopted from study of Kim and Lee (2022) which is predicted in Figure 1 below.

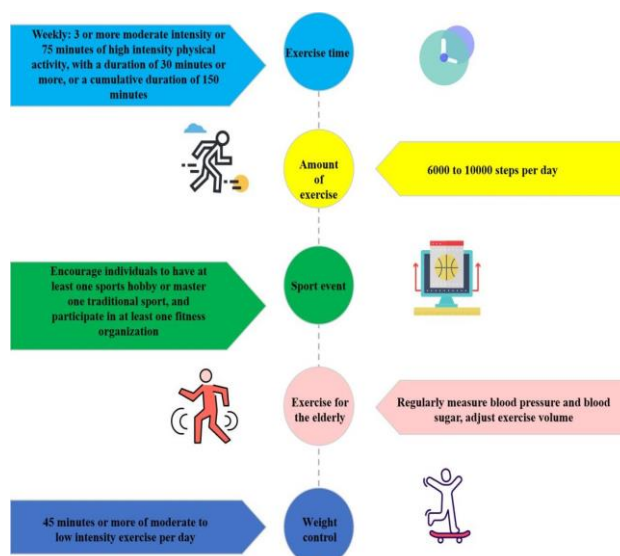


Figure 1. How to Exercise the Healthiest.

Research Methodology

Taking the integration of national fitness and healthy elderly care as the research object, this study investigates and analyses the impact of the national fitness strategy on healthy elderly care, and explores the driving force, path, and guarantee of the integration between the two. To get this objective, researchers used the quantitative research approach and cross sectional research design. The author mainly conducts research on the integration between the national fitness strategy and healthy elderly care, a

literature search was conducted on CNKI with the theme of "National Fitness, Health and Elderly Care", resulting in a total of 19 search results. A total of 37 policies and regulations were searched through official government websites such as the National Government website and the General Administration of Sport for nationwide fitness and elderly health. In addition, by searching for relevant literature materials from other libraries, this provides important theoretical reference for the integration research between national fitness and healthy elderly care. The author conducted a closed questionnaire survey on the participation of elderly people in fitness in multiple provinces and cities in China using a questionnaire survey method. In order to ensure the credibility and breadth of the questionnaire survey, unified pre training was conducted for personnel participating in the survey, the scope of this survey involves 17 townships and 21 villages in 12 provinces and cities across the country, a total of 1900 questionnaires were distributed, and 1821 were collected, with a recovery rate of 95.8%, the effective questionnaire rate for the collected questionnaires is 100%. Taking into account the differences in material conditions, construction concepts, and other aspects between urban and rural elderly people in China, therefore, in the questionnaire design, the questionnaire is also divided into two types: Urban and rural survey questionnaires, the distribution of provinces, cities, and urban and rural areas involved in this survey is shown in [Table 1](#).

Table 1

The Distribution of Provinces, Cities, Towns, And Villages (Quantity) Involved in This Questionnaire Survey (Number).

Name of Province and City	A	B	C	D	E	F	G	H	I	J	K	L
Town (17)	1	1	1	1	1	6	1	1	1	1	1	1
Rural (21)	1	2	1	1	1	7	2	1	2	1	2	0

Data Analysis and Results

By distributing a survey questionnaire on the participation of elderly people in national fitness to 7 towns and 21 villages, based on the collected valid questionnaires, data statistics and analysis were conducted, and the results are presented as follows.

According to relevant statistical results, the proportion of urban elderly people who frequently participate in sports and fitness is 36.7%, among them, women account for 82.7% and men account for 17.3%; For rural elderly people, the proportion of regular participation in sports and fitness is 19.3%, with women accounting for 64.6% and men accounting for 35.4%.

It can be found that among the elderly who participate in sports and fitness, the proportion of people participating in fitness in urban areas is much higher than that in rural areas, with a value of approximately 1.9 times, the proportion of women participating in fitness is much higher than that of men, with a value of approximately 4.78 times in urban areas and 1.83 times in rural areas. This means that the situation of urban elderly people frequently participating in sports and fitness is significantly better than that of rural areas, and the enthusiasm of women to participate in sports and fitness is also significantly higher than that of men ([Brebinaru, 2021](#)).

Comparing the survey bulletins on the status of national fitness activities released in 2020 and 2014, there is information on the proportion of elderly people participating in sports and fitness, among them, the proportion of people aged 60-69 who participate in physical exercise is 0.27% higher, 0.1% higher for those aged 70 and above, 0.17% higher for those aged 60-69 who frequently participate in physical exercise, and 0.3% higher for those aged 70 and above. This indicates that after a certain period of development, under the influence of the national strategy and related policies for national fitness, the integration of elderly people into national fitness has slightly improved, but the overall effect is still not very significant.

The total satisfaction and satisfaction of urban elderly with sports venues is 35%, much higher than 19.6% in rural areas, however, 56.8% of rural residents are dissatisfied with sports venues, while 22.3% in urban areas, the dissatisfaction in rural areas is significantly higher than that in urban areas. In areas where fitness venues are considered average, urban areas are significantly higher than rural areas. In summary, whether in urban or rural areas, the satisfaction of elderly people with sports and fitness venues is relatively low, this will have a negative impact on the emotional and effective integration of elderly people into physical fitness.

For elderly people, the main reason for participating in physical fitness is for their physical health, the proportion of reasons why elderly people in urban and rural areas participate in sports and fitness is shown in [Table 2](#). Through the data in the Table, it can be found that rural elderly people have a higher purpose in exercising for their health than urban elderly people, however, when it comes to participating in fitness for the sake of physical and mental pleasure and hobbies, urban elderly people are higher than rural elderly people. In addition, the reasons why urban and rural elderly people participate in fitness include fear of loneliness and passing the time, the proportion between these two parts is relatively close. The

other reasons for elderly people participating in fitness are relatively complicated, and in this proportion, urban elderly people are much higher than rural elderly people. The main reason why elderly people do not participate in fitness is because there is no organization, in this reason, the proportion of elderly people in rural areas is much higher than that in urban areas, secondly, the reluctance of elderly people to participate in fitness due to sports venues, and the feeling that exercise is too tiring and they do not like it, are considered elderly, the secondary reason why people are unwilling to participate in fitness, from this factor, it can be found that there are misconceptions among the current elderly regarding fitness. However, there is still a high proportion of elderly people who are not willing to participate in fitness due to reasons that have not been clearly described. The relevant data is shown in Table 3 and Figure 2, combined with the data in the table and the above textual analysis, it can be found that elderly people have relatively weak artistic concepts and weak subjective willingness when participating in fitness (Ramírez-Valdivia & Latorre, 2022).

Table 2

Survey Results on the Reasons for Urban and Rural Elderly People to Participate in Sports and Fitness (%).

Reason	Town	Village
Good Health	67.4	86.7
Pleasure Both Physically and Mentally	38.2	22.1
Interest	36.1	13.5
Fear of Loneliness	22.7	27.2
Pass The Time	17.3	25.3
Other Reasons	11.4	6.7

The frequency of elderly people participating in physical fitness can better reflect their preferences for physical fitness. The frequency of urban elderly people participating in fitness is significantly higher than that of rural elderly people, among them, the highest proportion is once a week, followed by twice a week, the number of elderly people who participate in fitness more than three times a week is 3.2% higher than those who participate three times a week, and the frequency of rural elderly people participating in fitness, as the number increases, the participation rate gradually decreases. Overall, the current atmosphere for rural elderly people to participate in fitness has not yet formed, the atmosphere for urban elderly people to participate in fitness is relatively strong, but it can be observed from it that, elderly people who participate in fitness three or more times a week, their attitude towards life must be positive and optimistic.

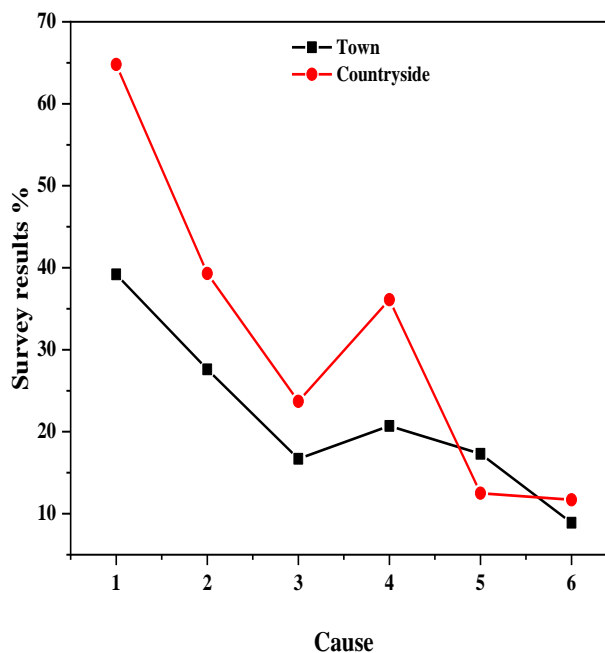


Figure 2. Investigation Results on The Reasons Why Elderly People in Urban and Rural Areas Do Not Participate in Sports and Fitness.

Table 3

Investigation Results on the Reasons for the Elderly People in Cities and Towns Not Participating in Sports and Fitness (%).

Reason	Town	Village
No one to stop	39.2	64.8
No venue	27.6	39.3
Not fond of sports	16.7	23.7
Exercise too tiring	20.7	36.1
Malaise	17.3	12.5
Be unable to explain clearly	8.9	11.7

The amount of exercise is also one of the main goals for presenting fitness effects, and the size of the amount of exercise is mainly determined by the duration and intensity of the exercise, the longer the exercise time and the greater the intensity, the greater the amount of exercise. But for elderly people, the amount of exercise is not necessarily the better, although a small amount of exercise may not achieve fitness results, excessive exercise can also harm physical health, therefore, in order to achieve good fitness results, elderly people need to choose the appropriate exercise intensity. It is generally believed that the exercise intensity of elderly people should be moderate to below, and the duration of exercise should be 30-60 minutes, of course, there are also differences in physical differences among elderly people, so different amounts of exercise can also be chosen based on their own physical condition. The time for urban elderly people to participate in fitness activities is concentrated between 20-60 minutes, while rural elderly people are concentrated between 10-30

minutes, this means that urban elderly people participate in sports longer than rural elderly people. The length of fitness time also reflects that the time for urban elderly people to participate in fitness is relatively suitable, while rural elderly people participate in fitness for a relatively short time. Without the guarantee of exercise volume, it is difficult to ensure the fitness effect.

Discussion

The integration of national fitness and healthy elderly care has become a significant soft power factor for international competition and a fundamental aspect of sustainable development for countries. China, recognizing the importance of "national fitness" at a strategic level, has introduced multiple policies to integrate sports fitness and elderly care effectively. The General Office of the State Council issued three opinions in 2016, guiding the integration of national health and healthy elderly care, establishing a national strategic framework. This integration aims to prioritize health as a development strategy and incorporate the concept of promoting health into the entire process of public policy formulation and implementation (Tarchi & Villalón, 2021). To achieve the integration, various driving forces are at play. Externally, the impetus comes from the national strategy for national fitness, while internally, it arises from the demands of the elderly for healthy elderly care. Emphasizing the importance of thought as a precursor to action, China seeks to integrate the concept of "sports promoting health" into the ideology of the elderly. By integrating health promotion and fitness activities into the daily lives of the elderly, China aims to reduce loneliness, enhance happiness, and guide them to improve their physical health and quality of life through suitable exercises. (Mitić, 2019; Tang, Zan, & Zhang, 2022; Zhang, 2021)

Furthermore, integration is sought in the health and elderly care public service system. Recognizing the common goals and contents of national fitness and healthy elderly care services, China aims to promote their deep integration and development. This involves coordinating the construction and management of public service facilities, functional settings of institutions, and the allocation of shared resources (Berniell, De la Mata, & Valdés, 2013; Dziewaltowski, Estabrooks, & Glasgow, 2004; Ettinger et al., 1997). Special attention is given to creating public service areas that cater to both fitness and elderly care, fostering a culture of co-construction and service sharing. To ensure successful integration, a robust guarantee mechanism is crucial. Policy support serves as a necessary prerequisite, and the "Healthy China 2030" Plan

Outline emphasizes integrating health into all policies, providing the direction for integrating national fitness and elderly care. The government's role in purchasing services related to national fitness and healthy elderly care is also highlighted. Implementation of the national fitness strategy requires active participation from various organizations, especially sports social organizations and clubs, which play a significant role in engaging the elderly in fitness activities (Cohran et al., 2022).

Health education is another critical aspect of integration, serving as a driving force to change fitness and elderly care perceptions. By promoting correct health concepts and healthy lifestyles, health education aims to extend the healthy lifespan of the entire population. It also focuses on talent development, integrating health education into the national education system, and providing pre and post-service training for physical education teachers to enhance their comprehensive abilities in elderly care services. The fitness environment, including both software and hardware components, is essential in achieving integration. The hardware environment comprises fitness venues, equipment, and facilities, while the software environment refers to the cultural atmosphere constructed through sports competitions and fitness training. The interaction between these elements forms a "fitness field," which influences people's enthusiasm for sports and fitness activities.

Implications and Future Recommendations

The results of the study holds an important contributions for both of academicians and practical perspective for addressing the health and elderly care challenges posed by China's aging population. For researchers, the study's results shed light on the current state of elderly participation in fitness activities and highlight notable differences between urban and rural areas. The significant difference in the frequency of urban and rural elderly people participating in fitness suggests the need for targeted interventions and policy measures to encourage and enable increased fitness engagement among rural elderly individuals. Moreover, the identification of higher participation rates among elderly individuals who engage in fitness more than three times a week emphasizes the importance of promoting regular and sustained physical activity for the elderly population's psychological well-being. In other words, practically, study contributes valuable understandings to inform the development and implementation of effective strategies for integrating national fitness and healthy elderly care under the "Healthy China" initiative. The three paths for integration concept, industry, and service provide a framework for policymakers and healthcare providers to work collaboratively in designing

comprehensive solutions. By recognizing the positive impact of such integration on the psychological status of the elderly, efforts can be focused on creating accessible and tailored fitness programs and elderly care services that cater to the specific needs of both urban and rural elderly populations. These initiatives can help improve overall well-being and quality of life for the elderly, ultimately promoting healthy aging and alleviating the burden on the healthcare system.

This article takes the integration of national health and healthy elderly care as the research object, investigates and analyzes the impact of national health strategies on healthy elderly care, and explores the driving forces, paths, and guarantees of the integration of national healthy elderly care strategies. There may also be other related relationships between them, and further in-depth research is needed in the future. Although this article has its own research characteristics and certain guiding significance, its shortcomings are also worth paying attention to. These shortcomings may provide valuable clues for future research, which is also the author's wish. The research also several recommendations,

1. There should be increase awareness and promotional campaigns in rural areas to encourage more elderly participation in national fitness activities, focusing on the health benefits and social aspects of fitness to address misconceptions and barriers.
2. Also enhance the infrastructure and facilities for fitness venues in both urban and rural areas, ensuring accessibility and satisfaction for elderly participants, thereby fostering a positive and supportive fitness environment.
3. Strengthen health education programs targeted at the elderly to promote the importance of regular exercise and its positive impact on physical and mental well-being, thus increasing their motivation and engagement in fitness activities.

Conclusion

The research concluded that this study objective was to explore the impact of integrating national fitness and

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healthy elderly care on the psychological status of the elderly population in China, within the context of the "Healthy China" initiative. The study employed a quantitative research approach and cross-sectional research design, distributing 1900 questionnaires among elderly individuals participating in fitness activities. The findings revealed that the frequency of urban elderly people participating in fitness was significantly higher than that of rural elderly people, with urban women showing the highest participation rates. The study also highlighted the three paths for integration: concept integration, industry integration, and service integration, all guided by national strategies. Importantly, the research demonstrated that integrating national fitness and healthy elderly care positively impacted the psychological well-being of the elderly, promoting overall well-being and quality of life. These insights provide valuable implications for policymakers, healthcare professionals, and stakeholders, emphasizing the need for targeted interventions to encourage rural elderly participation and the importance of comprehensive integration strategies to enhance the health and well-being of the aging population in the context of "Healthy China." However, further research is needed to explore potential relationships and address the identified shortcomings for more comprehensive and effective integration strategies in the future.

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