Vol.5 Iss.4 2024
https://doi.org/10.37420/j.adr.2024.050
Art & Design Research

Study on Renewal Strategies of Urban Community Public Space under the Perspective of Positive Ageing :The Case of Rongdong Community

Li Chen*
School of Design, Jianghan University, Wuhan, Hubei, China
***Corresponding author, E-mail: daisychen101@163.com**

Abstract:
As the problem of population ageing becomes more and more serious, China's 13th Five-Year Plan Outline has clearly put forward the development vision of building a senior care service system with family as the core, community as the support, institutions as the auxiliary, and medical care for the elderly combined. The degree of improvement of community public space is directly related to the happiness of the elderly in their twilight years. This study takes the idea of active ageing as the theoretical basis and deeply analyzes the connection between active ageing and public space renewal in urban communities. Taking Wuhan Rongdong Community as a case study, it explores the community public space renewal strategy from the three dimensions of the basic behavioral needs of the elderly, the characteristics of activity space configuration, and the satisfaction of community space use.

Keywords:
Urban community, Public space, Renewal

In 2002, the World Health Organization (WHO) put forward the concept of “age-friendly communities” on the basis of the concept of healthy cities, and regarded age-friendly healthy communities as a key element in solving the problem of ageing in cities. Internationally, the United States, Canada, the United Kingdom, Japan and other countries have explored localized solutions for age-friendly communities and healthy communities. China has carried out rich theoretical and practical explorations on the construction of age-friendly and healthy communities, including the theory of healthy communities, research on evaluation and development issues, and the method of creating community spaces suitable for the behavioral laws of the elderly, and has carried out planning and practical explorations in many cities.

At present, China's garden landscape design still takes visual as the main transmission method, but more should consider the physical condition of the elderly group from multiple levels, such as the behavioral and psychological characteristics of the elderly, their lifestyles, living habits and so on. The study of urban community gardening and greening design for ageing is of practical significance.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

1 The relationship between active ageing and the concept of renewing public space in the elderly community.

Today, our urban construction has entered the era of stock rather than increment. While public space is a place for community residents to gather and communicate, good design of public space can encourage people to socialize and enhance interactions between people. Renewal of community public space can enhance community cohesion and residents' sense of belonging, improve the environmental outlook and image of the community, and provide more leisure and recreational facilities to improve residents' daily life and quality of life.

1.1 Meaning of Positive Ageing

“Positive ageing” expands the social participation of the ageing population from the economic sphere to all aspects of society. The prevalence of the positive psychology movement at the end of the 20th century led to the creation of the theory of positive ageing. Positive psychology has shifted the goal of psychology from treatment to potential development, and in the case of ageing, it aims to help older people develop their potential, build a positive mindset for social participation, eliminate age bias against non-older people, and provide an appropriate environment for social participation. On these issues, the goal of active ageing is to help the elderly develop their potential and build a positive mindset for social participation. Positive ageing not only continues and develops the connotations of “successful ageing,” “healthy ageing,” and “productive ageing,” but also, due to the differences in the older adult population, is more effective in the areas of “healthy” and “productive” ageing. The dimensions of “health” and “participation” are supplemented by the dimension of “security”; and “participation” does not only refer to economic participation. Participation” does not only refer to economic participation, but aims to improve healthy longevity and quality of life for all people in old age (WHO, 2002), including those with disabilities, frailty and care needs, and comprehensively encompasses social, cultural, sporting and public affairs.

The theory of active ageing includes the determinants of active ageing, the challenges posed by an ageing population, and policy responses. One of the most important aspects of urban community public space renewal in China is to establish the concept of ageing-appropriate renovation, and to use the theory of active ageing to guide the practice of community public space renewal.

1.2 The infrastructure of active ageing is community public space

In the “Chinese” concept of old age, the elderly will rely more on their children, and are more resistant to entering social institutions for the elderly. At present, the state advocates “ageing at home”, so the concept of community public space renewal is a new community construction concept based on China's basic national conditions. As a diverse guiding theory, positive ageing emphasizes that the autonomy of the elderly should be maintained as much as possible. In the future, the concept of community public space renewal for the elderly with Chinese characteristics will dominate, and it will inevitably become the point of active ageing theory when guiding community public space renewal.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

1.3 The renewal and development of community public space and active ageing promote each other

The 13th Five-Year Plan for the Development of the National Ageing Program and the Construction of the Pension System mentions the concept of renewing public space in China's elderly communities. “Focusing on strengthening the life security and service provision for the elderly, giving full play to the active role of the elderly, guiding the elderly to establish the concept of lifelong development, actively facing old age, participating in the development of society and making new contributions, and aiming at a senior care service system based on the home, with the community as the foundation, supplemented by institutions, and combining medical care and nursing.” It can be seen that the theory of transforming the traditional passive concept of ageing into an active and participatory advanced positive ageing, which not only calls for the construction of a sound social security mechanism for the elderly, but also encourages the elderly to engage in social activities and continue to explore and realize their personal values.

In the process of promoting the renewal of community space for the elderly, both the concept of active ageing and the concept of community space renewal emphasize that the elderly should give full play to their values. While the concept of active ageing emphasizes the self-reliance of older people, the concept of community space renewal in China focuses more on improving the quality of life of older people, and the two concepts have their own characteristics. On the one hand, the concept of active ageing provides a theoretical framework for community space renewal; on the other hand, the concept of community space renewal makes up for the shortcomings of the concept of active ageing in practical operation. Both concepts complement each other and work together to promote the improvement of the well-being of older persons and the optimization of the community environment.

2 Empirical Analysis of Micro-Renewal of Community Service Facilities under the Perspective of Active Ageing

2.1 Research Design and Data Sources

2.1.1 Sample Area

Rongdong Community, which has different characteristics of service demand of the elderly, is located in Qiaokou District of Wuhan City. It has a total building area of 16,000 square meters, a land area of about 5,714 square meters, a total number of 1,363 households, and a large proportion of elderly population. After more than 20 years of development, Rongdong Community has built a perfect 15-minute living circle, including a vegetable market, schools, convenience stores, Huazhong University of Science and Technology Tongji Hospital, elderly homes, and other facilities, with a complete configuration of facilities, and the community is maturely developed. Rongdong community as the second batch of urban old community renewal construction pilot, has now completed the community infrastructure renovation, is relatively high quality of renovation of the old community, but the community renovation is mainly based on environmental improvement and the construction of old houses, for the renewal of the community's public environment and facilities is not yet very obvious, the current community attention to the elderly is still to be improved, and in the level of active

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

ageing as a lack of.

2.1.2 Data sources and methodological design

(1) Research data

Specifically used the questionnaire survey method and interview method, this paper chose the elderly in Rongdong community as the object of investigation, the author first for the expected results of research effectiveness, targeted design of the problem. The survey is a total of two times, the first time through the community staff interviews, to understand the current services provided by the community, so as to obtain the basic attributes of the community's elderly characteristics, the content of daily activities and their gender, age, physical condition and other daily needs. The second survey, on the other hand, is based on the content of the activities of the elderly and the basic situation of the community, in order to explore the overall satisfaction of the elderly with the public space of the community and to develop a questionnaire about the satisfaction of community activities. Prior to the interviews, the author created a framework for the interviews to meet the expectations of the interviews. A total of 105 people were surveyed and 96 elderly people were interviewed in this research. The ratio of men and women was basically equal, and the age ratio was 17% for 60-64 years old, 13% for 65-69 years old, 25.1% for 70-74 years old, 24.9% for 75-79 years old, and 20% for 80 years old or above, which is basically the same ratio for all age groups.

(2) Research Methodology

In this study, the authors are committed to exploring how the concept of active ageing leads to the renewal of community public space facilities. The core of the study focuses on three key areas: first, to gain an in-depth understanding of the daily activity patterns of older people in community public spaces; second, to make meticulous improvements and additions to community public spaces based on the specific needs of older people and from the theoretical perspective of active ageing; and lastly, to address the shortcomings of the current public spaces in paying attention to older people, and based on the concept of active ageing, to strengthen the community's attention and support to make up for the inadequacy of existing services.

This study carefully analyzes the behavioral characteristics of the elderly in order to better meet their needs for public space. Based on the questionnaires and interviews obtained from the first round of research, the researcher has meticulously categorized and sorted out the different age groups of the elderly in the community according to their age, and listed their daily activities and needs in detail. This helps to dig deeper into the real needs of the elderly as well as the pressing issues that need to be addressed by community service facilities. The study adopts the concept of active ageing and builds an analytical framework around the three core dimensions of “health, participation and security”, with the aim of seeking breakthroughs and promoting the renewal and enhancement of community space services, and exploring the needs and characteristics of public space for the elderly in the community in a comprehensive manner, in order to achieve the purpose of the study.

2.2 Survey Analysis

2.2.1 Characteristics of behavioral needs of the elderly in community public space

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

After statistically analyzing the data from the first survey, it was learned that the demand of the elderly in Rongdong community for health consultation, door-to-door consultation, and regular medical checkups was higher than 50%, 68% of the elderly who wished to participate in cultural learning activities, and 56% of the elderly who wished to participate in public welfare activities, cultural and sports activities. The demand for community service facilities in terms of meal assistance services, life care services and ageing-friendly design is even higher than 39%. How to actively cope with population ageing, Rongdong community lacks in three aspects of elderly health, participation and protection, and there is still room for improvement. Younger seniors are in better health, with relatively strong activity and self-care ability, and community activities based on family services and fitness and leisure. The senior citizens take on relatively less household chores, and their daily activities are mostly based on elderly care, fitness and leisure.

The behavioral needs of the elderly in Rongdong community for community public space services are characterized by the following:

(a)Health needs: as they grow older, elderly residents become more dependent on medical facilities, especially the senior citizens who use medical resources more frequently and have relatively less need for household services. In contrast, younger elderly groups are more inclined to participate in community activities, while the senior citizens are more concerned about the elderly care and medical support provided by the community.

(b)Demand for participation: Community activity venues have not yet fully met residents' expectations, and there is room for improvement. While many are open to participating in more diverse activities, and most residents are willing to seek out companions in community activities, there are some residents who feel uncomfortable or resentful in socializing, which needs attention. In terms of socialization, many residents found it difficult to establish friendships with those around them, lacked common points of interest and often felt lonely.

(c)Protection needs: Elderly residents in the community generally expect the community to enhance the ageing-friendly design and provide more services such as assistance and meal assistance in order to improve the overall level of protection services in the community.

2.2.2 Characteristics of the Configuration of Public Space in Elderly Communities

Currently, there are some obvious problems in the configuration of cultural, sports and medical ageing spaces in the Rongdong community. First of all, there is a shortage of cultural, sports and recreational space, and the functions in the space are relatively single, often only meeting the most basic needs of the elderly, and lacking in-depth understanding and fulfillment of the diversified needs of the elderly. For example, cultural and sports activities may be limited to simple fitness or recreational activities, without taking into account the fact that older persons may be pursuing higher-level cultural pursuits, such as artistic creations, fun sports and other richer cultural experiences.

Similarly, medical care facilities for the elderly may only provide basic medical services, ignoring the elderly's need for more comprehensive health services such as health counseling, disease prevention, and rehabilitation care. And the service staff may lack professional training and an inadequate understanding of the

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

special needs and psychological state of the elderly, resulting in a lack of personalized care and professional guidance in the service process. The poor quality of such services not only affects the elderly people's feeling of using the services, but also limits their enthusiasm in participating in community activities to a certain extent.

Moreover, the service programs lack diversification and cannot meet the specific needs of different individuals in the elderly community. For example, some elderly may need more opportunities for social interaction, while others may be more concerned about spiritual and cultural nourishment. However, current service programs often fail to cover these segmented needs, leading some older persons to feel that the services are out of touch with their actual needs.

3 Countermeasures for Renewal of Community Public Space under the Perspective of Positive Ageing

3.1 Creating an environment for active ageing

The Rongdong community needs to pay attention to the individual differences of the elderly in terms of age and health status to ensure that their basic living needs are met, including daily life care, entertainment and leisure, health care, and cultural and sports participation. The community should make active ageing a core objective, encourageing older people to maintain good health while continuing to participate in social activities to give their lives a deeper value. Community staff should play multiple roles in this process, including resource integrators, emotional supporters, and promoters of the cause of the elderly, etc., to motivate the elderly to be self-reliant and participate in appropriate cultural and sports activities, so as to enhance their physical and mental health, continue the value of their lives, and improve their quality of life.

3.2 Enhancing the capacity of health services for the elderly

In order to meet the specific needs of the elderly residents in Rongdong Community and the conditions of the existing facilities, the community should set up additional community medical and health service stations to meet the basic medical needs of the elderly. At the same time, the existing sports facilities should be optimized and integrated, and the table tennis room, cultural activity room and youth activity classroom should be merged and upgraded into a multi-functional center for cultural activities. On this basis, the existing venues are fully utilized to add a variety of sports facilities such as table tennis courts and semi-basketball courts to provide the elderly with more diversified sports choices and more spacious space for activities. In addition, in order to meet the demand of the elderly in the Rongdong community for professional and quality services, the community will also introduce higher-level elderly service facilities to enrich the cultural and sports activities for the elderly and to ensure that there are sufficient venues for various activities for the elderly.

3.3 Increase the frequency of cultural activities and activity space

The Rongdong community needs to continue to strengthen its support for elderly cultural and sports teams, and promote the organization and large-scale development of related activities. The activities of these teams should not be limited to the community, but should also be extended to a wider range of social and cultural

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

activities, so that the active and energetic image of the elderly can be more widely displayed.

In order to increase the space for community cultural activities, community managers can adopt a series of strategies, including reserving special areas for cultural activities at the planning stage in order to meet the needs of different activities and designing multi-functional cultural activity centers to suit different needs; using existing unused space as cultural venues; and adding community garden green space outdoors as a place for residents to have leisure and cultural exchanges. Cooperate with other institutions such as schools, libraries or commercial centers to share cultural activity spaces; encourage community residents to participate in designing and planning cultural activity spaces through community meetings and workshops. Utilize movable partitions, furniture and equipment to design flexible and changeable spaces and enhance the multi-purpose nature of the spaces. At the same time, community volunteers are trained to participate in daily management to ensure the long-term availability and safety of the cultural activity space, which promotes cultural activities and enhances community cohesion and cultural atmosphere.

3.4 Further focus on age-appropriate design of public facilities

The spatial upgrading work of Rongdong Community mainly focuses on environmental beautification and renovation of old residences, but the results in modernizing community service facilities are not yet significant, especially in meeting the needs of the elderly, and many elderly residents reflect that community service facilities have not yet fully considered the ageing-adapted factors. Therefore, attention must be paid to the issue of ageing-friendly design in both new construction and the renovation of existing facilities. Specifically, this should include the realization of barrier-free designs for indoor areas, entrances, exits and passageways, the addition of elevators to facilities on two floors and above, the use of non-slip materials for indoor floors to reduce the difference in height between indoor and outdoor areas, entrances and exits designed as gently sloping ramps, with handrails installed on both sides of the steps, and the installation of resting chairs and wheelchair-friendly resting areas in community public activity areas. Non-slip floor tiles should be used in outdoor fitness areas, and long-wave colors such as yellow should be chosen for the visual characteristics of the elderly to enhance visibility, while lighting facilities should be installed at the edges of flowerbeds and on both sides of roads to ensure nighttime lighting and guidance.

Funding

The study was funded by the Hubei Provincial Department of Education's Philosophical and Social Science Research Project (No. 22G057).

References:

[1] Wu, Anqi. Research on the distribution of aged population and the optimisation of the layout of elderly institutions in Lanzhou urban area [D]. Lanzhou:Northwest Normal University, 2020.
[2] Zhou Jie, Chai Yanwei. Progress of research on spatial behaviour of the elderly in China[J]. Progress in Geoscience, 2013, 32(5).
[3] Li Zao, Gao Yan Yan, Cui Wei Yi et al. Accessibility analysis of urban medical facility locations and

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

its ageing-friendly development research - taking Hefei City as an example [J]. Architecture and Culture, 2019(5):136-140.
[4] WU Yizhou, YANG Jiacheng, CHEN Qianhu. Research Progress and Key Dimension Exploration of Healthy Community Construction - Based on International Knowledge Mapping Analysis[J]. International Urban Planning, 2020, 35(5):80-90.
[5] HU Xiao-Jing, HUANG Jian-Zhong. Age-friendly healthy community creation:International experience and inspiration[J]. Shanghai Urban Planning, 2021(1):1-7.
[6] Wang Y. Community planning under healthy city orientation[J]. Planner, 2015, 31(10):101-105.
[7] Wang DW, Ren J. On the Construction of Senior-Friendly Communities in the Context of Population Ageing [J]. Journal of Xiamen University (Philosophy and Social Science Edition), 2015(5):125-135.
[8] Wang Yu, Shang Tingting, He Chen et al. Challenges and reflections in the construction of age-friendly settlements - Based on the research work of partial revision of the Residential Design Code [J]. Shanghai Urban Planning, 2020(6): 36-41.
[9] Zhou Bo, Liu Shilei, Shen Wei. Research on Ageing Adaptation of Community Public Space Based on Behavioural Differences--Taking Dalian City as an Example[J]. Shanghai Urban Planning, 2020(6):22-29.
[10] Zheng Y, Fang KL, He HY et al. Research on micro-remodelling strategy of healthy community under the perspective of old and young friendly--The case of three-eyed well community in Guangzhou City[J]. Shanghai Urban Planning, 2021(1):31-37.
[11] XU Jingzhao,LI Mingzhi. Behavioural Characteristics of Chinese Older Adults' Sports Characteristics[J]. Chinese Journal of Gerontology,2021(02):649-654.
[12] REN Xinxin,LI Xinru,ZHANG Min,LIU Wenxin. A survey study on the satisfaction of outdoor fitness landscape environment for the elderly and its influencing factors--Taking Dalian as an example[J]. Architectural Science,2020(10):77-83.
[13] ZHOU Yanmin,WANG Chunyu. A study on outdoor environment design of age-friendly communities for creating a good social atmosphere - an example of continuous tracking research in a community in Beijing[J]. Age Friendly Community,2020(06):15-21.
[14] Li Hui. Study on the Highlighting of Elderly People's Sports Demand under the Background of Building a Healthy China[J]. Shandong Physical Education College News,2020(06):48-53.
[15] HUANG Wei,LU Xiaoshu,WU Jianfeng. Research on the design of community outdoor fitness space to meet the social needs of elderly users[J]. Architecture and Culture,2020(03):162-164.
[16] LI Huizhu,ZHU Lishan. Design of public fitness facilities for the elderly based on systematic thinking[J]. Design,2018(01):31-33.
[17] Hou Xiaochong. Research on the optimisation strategy of the activity space environment for the elderly in Shenzhen Lizhi Park [D]. Harbin Institute of Technology. 2015
[18] Wang J, Lin WJ, Tang LJ. A study on the scale characteristics of outdoor activity venues for the elderly in residential areas-Based on a survey of outdoor activities of the elderly population in Beijing [J]. Central China Architecture,2013(5):177-181.
[19] LI Xiang,NING Zequn,MA Huidi,ZHAO Peng. A study on the satisfaction of leisure life of urban empty-nester elderly in Beijing-Taking three typical communities in Beijing as an example[J]. Journal of Tourism,2010,25(4):76-83.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

[20] Jongeneel-Grimen B, Droomers M, Oers H, et al. The relationship between physi-cal activity and the living environment: A multi-level analyses focusing on changesover time in environmental factors[J]. Health & Place, 2014, 26(2):149–160.
[21] Humphrey A A. Physical Environmental Influences on the Physical Activity Be-havior of Independent Older Adults Living in Continuing Care Retirement Com-munities[D]. North Carolina: North Carolina State University, 2010.
[22] Kaczynski A T, Potwarka L R, Saelens B E. Association of Park Size, Distance,and Features With Physical Activity in Neighborhood Parks[J]. American Journalof Public Health, 2008, 98(8):1451–1456.
[23] Sugiyama T, Thompson C W. Associations between characteristics of neighbour-hood open space and older people's walking[J]. Urban Forestry & Urban Greening,2008, 7(1):41–51.
[24] Weigand L R. Active recreation in parks:Can park design and facilities promoteuse and physical activity?[D]. Portland: Portland State University, 2007.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)