

Article

Community Governance in Age-Friendly Community Regeneration—A Case Study on Installing Elevators in Old Residential Buildings

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Abstract: The rise in aging world populations poses enormous concerns, among which is the critical topic of how to promote active aging by improving the health and well-being of the elderly. Accordingly, installing elevators in old residential buildings has become a main issue in age-friendly community regeneration to make it easier for the elderly to go outside. There is limited evidence on stakeholder involvement in age-friendly community regeneration. Some studies have overlooked the fact that fostering age-friendly communities in developing countries requires innovative governance for inclusive physical and social features despite the low awareness of citizen engagement. With reference to community governance as a structure and process, a theoretical framework is proposed to understand the practice of elevator installation in age-friendly community regeneration in Guangzhou, China. This study adopted the questionnaire survey method and collected 455 valid samples (150 valid samples with installed elevators; 305 valid samples did not install elevators). The findings led to the following conclusions: (1) shared common interests lead to effective community governance and smooth elevator installation; (2) some communities failed to install elevators due to opposition from people whose interests were hindered; and (3) it is important to set up self-governing organizations and find key people in community governance for interest-based negotiation. This paper's contribution is that it makes up for the deficiency in the previous research that has neglected the elderly's participation in public affairs via age-friendly community regeneration. Finally, this study suggests further research on the dynamic processes of different types of age-friendly community regeneration affairs.

Keywords: community governance; elderly people; community regeneration; installing elevators



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1. Introduction

People's living and health standards, as well as medical standards, are constantly improving as the social economy grows, resulting in an increase in average life expectancies all over the world. However, the unprecedented phenomenon of population aging has introduced many unknown factors into human life and future development. The focus of global attention has shifted to providing safe and healthy life security to the elderly in basic support fields such as living environments and nursing [1]. As communities are the basic units of cities, developing age-friendly communities has become an important issue for policymakers [2].

Built-up areas are the main components of many countries, and it is not easy to build a good, standard, age-friendly community. In this sense, age-friendly community regeneration has been an important issue in urbanization from developing to developed countries. Since China's reform and opening-up policies were implemented, many communities have been built, given the acceleration of industrialization. Due to poor construction standards, old communities and residential buildings have become inhabitable. With a functional

decline, living conditions have been unable to reach a “livable” level. The lack of elevators is now a major problem in societies with rapidly aging populations. Due to previous construction standards, many elderly people living in old residential buildings have reported that a lack of access to an elevator has a significant impact on their daily lives, and they are likely to reduce their frequency of going out in order to avoid the inconvenience of going up and down stairs [3,4]. Although installing elevators in old residential buildings has a small economic impact, it provides a social benefit to an aging population [5].

Based on the definition of an age-friendly community, two dominant forces are of great concern—an age-friendly physical environment that is convenient for elderly people and an age-friendly social environment that makes it convenient for elderly people to participate in social affairs [6]. Age-friendly physical environment regeneration works by linking urban design, architecture, public space regeneration, and related perspectives to support the needs of people as they grow old [7–9]. Age-friendly social environment regeneration means that a community provides a supportive opportunity for inhabitants to grow older actively, with numerous chances for older people’s participation in community regeneration, which are related to older people’s needs [10,11].

According to the definition of an age-friendly community, in the context of the age-friendly community regeneration process, adding elevators is a major issue that involves not only physical space transformation but also community governance, participation, and human rights [12]. Especially for people who have achieved more economic freedom, their desire for autonomy in life has steadily emerged through age-friendly community regeneration [13]. Local governments have also been made aware of the necessity of including local residents in decision-making and the implementation of projects [14]. However, the previous research has focused more on technical innovation in installing elevators in old residential buildings [15,16]. Available evidence that demonstrates older people’s participation in community public affairs is lacking. For many old communities without property management organizations, since it is not easy for elderly people to participate in public governance, there is more need to investigate the mechanism of providing communication channels for public participation [17,18]. Meanwhile, in the domain of physical space transformation research, there have been many studies on the regeneration of community environment design, which can help provide a safe and comfortable community environment for older people [19–21]. The convenience of routes of the walk for the elderly is the most important; otherwise, it is difficult to enjoy a good community environment. However, in the previous research on age-friendly community regeneration, not much evidence has been able to demonstrate how different stakeholders participate in community public affairs. Even though some researchers have explored older people’s participation, they have often assumed older people to be a homogeneous group and paid little attention to their diversity of circumstances and needs [22]. The importance of multi-party cooperation in the process of age-friendly community regeneration must be highlighted for stakeholders including governments, the private sector, and the elderly [23,24].

Given the above, the aim of this article is to inquire into the workings of community governance as a structure and process in the case of installing elevators in old residential buildings. To address this aim, the following questions were explored: (1) How do elderly people participate in the process of community regeneration in the case of installing elevators? (2) Why has the installation of elevators been achieved successfully in some old residential buildings but failed in some communities? (3) Is there an existing mechanism that can be used for reference and promotion?

This paper proceeds in five sections. A theoretical framework is proposed based on a literature review of community governance in Sections 2 and 3, followed by a discussion of the methodology of the study in Section 4. The results of the study are presented in Section 5 with a discussion of the age-friendly community regeneration mechanism. Finally, the paper concludes in Section 6.

2. Literature Review

2.1. Characteristics of Community Governance

The emergence of community governance can be traced back to the application of governance theory within the realm of community studies [25,26]. Conflicts of interest within community governance have primarily revolved around interactions between owners' committees, community management organizations, and frequently property committees acting on behalf of residents [27]. Community-level governance stands out as fundamentally distinct from the conventional mechanisms of the state or market. The three forms of governance—the state (characterized by a system of command), the market (defined by voluntary exchange), and community governance (based on cooperation)—seldom exist in complete isolation from one another [28]. Yet, the intricacies and subtleties of demands at the community level are such that a specific institutional framework is required to allow ample space for collaboration among community members. As per the insights of [29], for example, community governance encompasses “the collection of small group social interactions that, alongside the market and state, influence economic results”. This is pertinent to both the self-interest and altruistic aspects of human nature, as well as the social capital within a community. The unique characteristics of communities necessitate a specific form of institutional arrangement tailored to local conditions [30]. Nevertheless, a shared attribute among all effectively operating community governance institutions is the perpetuation of continuous and reciprocal cooperation among community members. This approach offers the most efficient and cost-effective means of achieving sustainable development within a community [31].

2.2. Community Governance in an Old Community

Old communities, representing a distinctive category within the transformation of Chinese urban grassroots governance, pose challenges due to their complexity and unique characteristics [32]. The obstacles preventing the revitalization of older communities are primarily rooted in a dearth of government oversight and insufficient financial support. Moreover, the absence of active resident participation in the regeneration process contributes to a limited understanding of the regeneration efforts, leading to residents attributing their dissatisfaction solely to the regeneration process [33]. Several factors, including the behaviors and attitudes of community governance organizations, residents' subjective norms, and participation barriers, play significant roles in influencing residents' engagement in the governance of communities [34]. Regarding community governance, the success of public affairs strongly correlates with the methods and characteristics employed in community management. Owners' committees and community management organizations play a pivotal role, particularly concerning residents' trust in these community entities [35]. From the institutionalist perspective, which analyzes the governance of old communities, efficient community-level institutions require clear insider–outsider distinctions, adaptation to local conditions, the channeling of public opinions into decision-making, and the preservation of local discretion against external pressures [36].

Current research on the regeneration of old communities in China lacks depth, relying solely on the institutionalist perspective, which inadequately explains complexities. Resources are insufficient, and sustainable old communities involve diverse service deliveries and cooperative interactions. Sustainability in the regeneration of old communities hinges on coordinating natural and social capital, spanning economic and social activities [37–39]. Community governance analyses must include service delivery and self-organized resource management.

3. Theoretical Framework

3.1. Explanation of Community Governance

In a community, a common interest is an important basis of community governance according to group theory and policy networks in the majority of the literature [40]. A common interest is gained in a community itself by means of the public policy discourse right. The rediscovery of the public policy discourse right is based on the background

in which states and markets are losing legitimacy [41]. The public policy discourse right is based on a new relationship between the state, the market, and civil society, which emphasizes the utilization of people's voluntary capacity to solve their own problems [42].

Based on this new discourse, community governance is considered a "normative construct", and it is promoted as the best tool for satisfying local needs [42]. The reasons for this are as follows: Firstly, there are underlying assumptions that communities have a "sense of place", which means that they are homogeneous. Secondly, it makes for sustainable social capital with natural organizational forms that can easily relate to governments and markets, which are accountable and can plan, manage, deliver, and coordinate better than governments or markets [43].

There are two factors at play when attempting to comprehend community governance: governance as a structure and governance as a process. Firstly, governance as a structure focuses on the organizational and institutional arrangements of state and non-state groups. The role of the public sector has shifted significantly, and there is now a variety of formal partnership arrangements between the public and private sectors [44,45]. Whereas traditional governance involves only the state, new governance includes both the state and civil society [46]. With its hierarchy and power, the government's public sector is now involved in networks and partnerships with the commercial and voluntary sectors. In government, governance is concerned with outcomes, rather than just organizational structures. Secondly, governance as a process underlines processes that involve both government and non-government organizations. Community governance generally means that, in order to achieve community development goals, the dynamic process of a series of decisions and actions that deal with public affairs within a community is implemented. Those who believe that governance is a dynamic product of social and political groups, and thus that the dynamics must be addressed, challenge the premise that modifying structures will get governance "right". However, the interaction mechanisms of different types of social groups may vary according to the types of community members [47]. Insufficient attention has been paid to the interaction between different social capital and community development concepts for marginalized people, so there is a need to take into account the community governance mechanism in diverse neighborhoods, such as old residential communities in China.

3.2. Building a Community Governance Framework

Installing elevators in old residential buildings is the main issue that involves not only physical space regeneration but also community governance. Community governance does not involve only one set of prescriptions; rather, it varies according to the ways in which local groups interact with their own community, as well as other levels of governance. Although age-friendly community regeneration can be analyzed using community governance from the perspective of governance as a structure and a process, most studies have focused on just one aspect [48]. Using the reference of governance as a structure and a process, this paper innovatively proposes a theoretical framework revealing the mechanisms related to the public and private sectors in the process of age-friendly community regeneration. In the case of installing elevators in old residential buildings in Guangzhou, from the structural perspective, the involved stakeholders comprise different groups, such as governments, residents, residents' self-governing organizations, and private sectors. Instead of being involved in the operation process directly and completely, the public government gives more autonomy and independence to residents and monitors community governance. Thus, the government can appropriately shift the focus from the routine management of community work to the development of the community. The process concerns how to work together and make decisions. Step one is to propose the issue to residents through the community government, which is the power-sharing arrangement in modern democracies. Step two is to build a self-governing organization that is formed by one family member in the same community. The self-governing organization will welcome and train new members who live in the same community by offering orientation concerning the

policies and procedures to teach them how to join in community governance. Step three is to propose an issue scheme at a meeting for the members of the self-governing organization for further discussion. Step four is to identify problems and amend the scheme, and this process will be repeated many times if the members of the organization are unable to make a final decision. Step five is to negotiate with people who disagree about the community issue. Step six is to implement the community issue scheme (Figure 1).

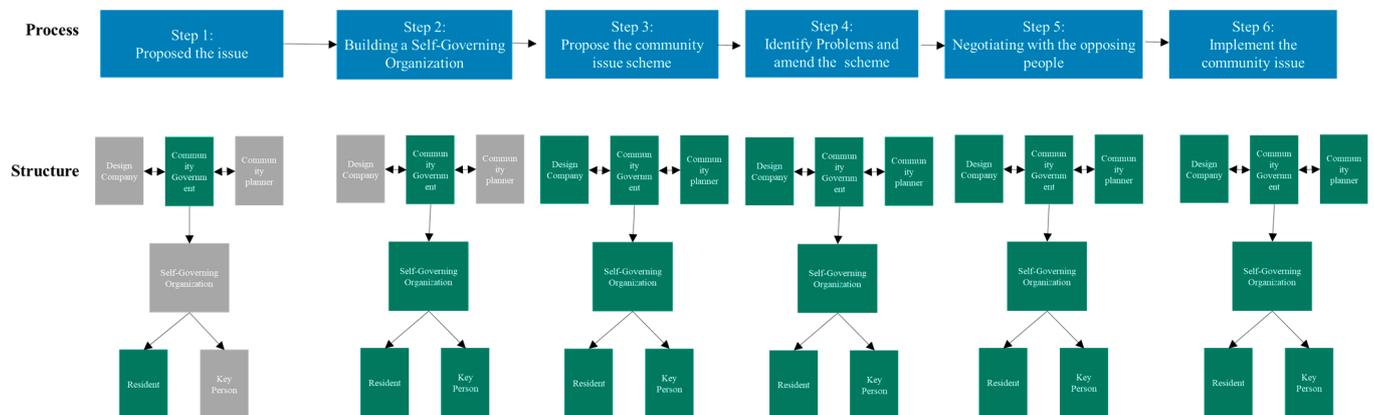


Figure 1. Theoretical framework.

4. Methodology

4.1. Study Context

Located in the south-central part of Guangdong Province, Guangzhou is a regional center of southern China. This study selected Guangzhou for two reasons. Firstly, the distinctive conditions of Guangzhou represent the regeneration of age-friendly old residential areas in China. Guangzhou is an aging region in China, and this tendency is expected to continue. Guangzhou's population of people aged 65 or older was 1,460,300 in 2022, accounting for 7.82 percent of the total population [49]. Secondly, regeneration projects in Guangzhou are active and have made remarkable achievements, especially in the case of installing elevators in old residential buildings. Specifically, Guangzhou began to declare citywide age-friendly community regeneration projects in 2021, which aim to create no fewer than 22 eligible age-friendly communities. For historical reasons, about 50,000 residential buildings with 7 to 10 floors in the old city of Guangzhou do not have elevators. Therefore, in these age-friendly community regeneration projects, the installation of elevators in old residential buildings has become the main project.

4.2. Research Data

This study adopted the method of a questionnaire survey; depending on the nature of the questions, questionnaires can be classified as a qualitative method [50]. This study was part of a funded project examining the installation of elevators in old residential buildings in Guangzhou. Its method involved non-probability sampling.

With the direct assistance of authorities, the questionnaires needed for this research were distributed and collected. The questionnaires were distributed and collected using both online and offline methods. The online method used WeChat's "Wenjuanxing", while the offline distribution method targeted grassroots community workers. The survey plan followed the principle of quota sampling, based on the List of Approved Elevator Addition Projects in Guangzhou. This determined the questionnaire sampling quantity required for each district based on the proportional distribution of existing additional elevators in each district. Some questionnaires were deemed invalid due to uncontrollable factors in the distribution method, such as the use of WeChat forwarding. After several amendments and the pre-filling of the questionnaire, a large-scale questionnaire was distributed three times, and a total of 928 completed questionnaires were collected.

The questionnaire was distributed and collected both online and offline. However, the online distribution posed challenges in targeting participants with elevator installations in their residential buildings, which led to a higher number of invalid samples. The invalid completed questionnaires mainly included two categories. Firstly, 258 questionnaires completed by residents living beyond the 10th floor were eliminated from the sample because old residential buildings in Guangzhou are usually no higher than 10 floors. If a respondent stated that they lived above the 10th floor, then this meant that they lived in an old residential building that had elevators when it was built, and they were not among the sought-after respondents. Secondly, among the remaining 670 completed questionnaires, 215 were obtained from one district in which only 2 elevators had been built, and this did not conform to the basic principles of quota sampling, so they were also excluded from the study. In short, only 455 valid surveys were obtained.

Out of 455 valid surveys, 150 respondents lived in old residential buildings with installed elevators, and 305 respondents lived in old residential buildings without installed elevators. While this project involved residents from every district of Guangzhou who lived in old residential buildings, the participants were recruited from different old residential buildings. The basic information of the participants is shown below (Table 1).

Table 1. Basic information of the participants.

Age	Under 18, 2.5%
	18–25, 15.5%
	26–35, 30.4%
	36–45, 25.8%
	46–55, 17.1%
	56–65, 7.1%
	Over 66, 1.6%
Gender	58.4% female
	41.6% male
Income	Under CNY 50,000, 24%
	CNY 50,000–100,000, 36.3%
	CNY 100,000–150,000, 20.1%
	CNY 150,000–200,000, 8.4%
	Above CNY 200,000, 11.2%
Education	Less than primary school, 1.4%
	Junior high school, 4.1%
	High school, 20.3%
	College or above, 74.2%

5. Main Findings

5.1. Sharing a Common Interest Leads to Effective Community Governance

Community governance was achieved through a shared interest: enabling older individuals to easily access the outdoors with elevator installations. Based on the statistical data, 77.5% of the respondents believed that the addition of elevators facilitated vertical mobility and expanded opportunities for leaving the building. Additionally, 14 respondents (6.7%) saw elevators as a means of enhancing neighborly interactions. Furthermore, 22 respondents (10.5%) perceived elevator installation as a value-boosting feature for their homes, while 11 respondents (5.3%) believed that it would provide limited benefits (see Figure 2a). The primary advantage of elevator installations, as perceived by most residents, was their capacity to simplify vertical movement, thus increasing opportunities for outdoor access.

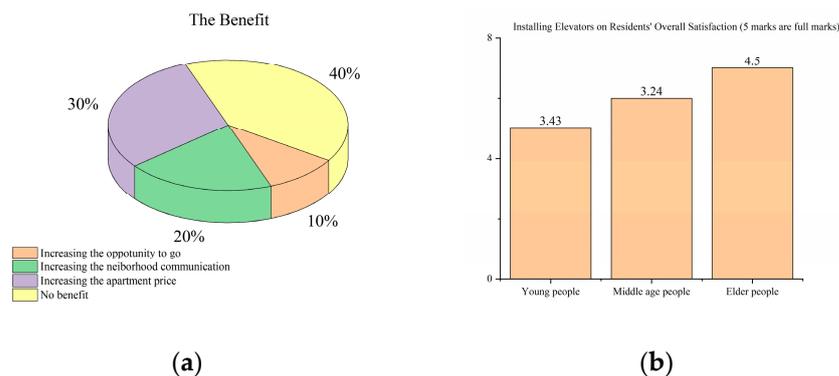


Figure 2. The benefit of elevator installation (a); effect of elevator installation on residents' overall satisfaction (maximum of 5 marks) (b).

Without elevators, many longtime tenants were trapped in their homes, reliant on food deliveries, and unable to meet friends or go for walks. One white-haired woman in her 90s had sat in the sunshine in a wheelchair outside a Guangzhou clinic on a recent afternoon. She waited briefly with two younger family members for a special wheelchair-accessible taxi that would take her home after her medical treatment. Until the recent addition of an elevator to her high-rise building, she had almost never left her residence. Doing so required two or three people to carry her down the many flights of stairs.

To delve deeper into the influence of installing elevators on residents' overall satisfaction across various age groups, a cross-analysis was performed by correlating elevator usage with different age groups. The results indicate that elderly residents expressed higher levels of satisfaction than younger individuals (Figure 2b).

5.2. Benefits of Community Governance

This section was condensed by drawing a comparison between individuals who had access to elevators and those who did not.

5.2.1. Increasing Residents' Participation Awareness

Compared to residents without elevator additions to their residential buildings, the residents with elevator additions to their residential buildings had increased participation awareness. Among the residents without elevator additions to their residential buildings, 36% explicitly stated their willingness to participate in community governance. However, among those with elevator installations in their residential buildings, nearly half expressed a desire to participate in community governance again, indicating a significant improvement in public participation awareness due to the residents' involvement in elevator addition projects.

5.2.2. Establishing a Good Relationship with Neighbors

The neighborhood relation scores of the survey subjects who had elevators installed in their residential building were higher than those who did not have elevators installed in their residential building, indicating that the addition of elevators significantly improved residents' neighborhood relations (Table 2).

Table 2. Neighborhood relation scores.

Neighborhood Relation	Score	Confidence Interval (CI)	Confidence Level (CL)	
I knew my neighbors	With elevator	3.21	[3.084–3.376]	95%
	Without elevator	2.90	[2.778–3.022]	95%
My neighbor's ideas were similar to mine	With elevator	3.15	[3.012–3.288]	95%
	Without elevator	2.83	[2.680–2.980]	95%

Table 2. Cont.

Neighborhood Relation		Score	Confidence Interval (CI)	Confidence Level (CL)
We trusted each other	With elevator	3.36	[3.242–3.478]	95%
	Without elevator	3.09	[2.955–3.225]	95%
When in trouble, I could turn to my neighbors for help	With elevator	3.41	[3.250–3.470]	95%
	Without elevator	3.12	[3.290–3.530]	95%
Neighborhood was very harmonious	With elevator	3.44	[3.293–3.587]	95%
	Without elevator	3.20	[3.070–3.330]	95%

5.3. Community Governance Challenges: A Group with Conflicts of Interest

The success or failure of elevator installation cases hinged on the presence of individuals whose interests were adversely affected and who opposed the installations. Additionally, handling stakeholder conflicts and negotiations proved challenging without effective leadership, facilitators, or the ability to reconcile group interests amid conflicting concerns. Our survey identified three primary causes of conflicts of interest during the elevator installations, namely noise pollution, reduced daylight, and contentious negotiations, as illustrated in Figure 3.

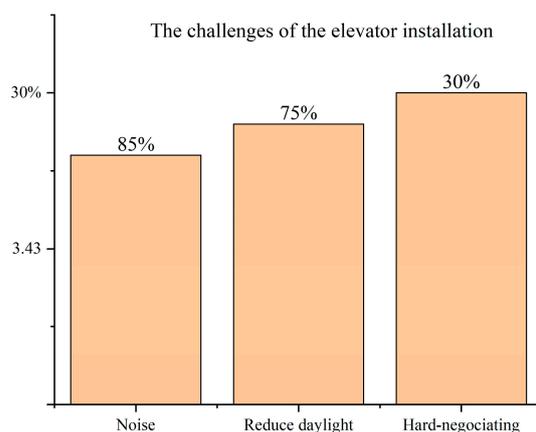


Figure 3. The challenges of elevator installation.

5.3.1. Noise Pollution

Elevators make noise during their operation, especially when they are installed externally on old residential buildings, resulting in increased noise levels. According to the survey, 85% of the residents believed that post-installation elevator noise would be more pronounced, impacting their daily lives as vibrations and noise escalated with the elevator's speed. Most objections came from residents on lower floors, primarily due to noise concerns.

5.3.2. Reduced Daylight

The installation of elevators in old residential buildings was also not universally appreciated, particularly by residents on the lower floors. Elevators usually blocked one or more of these residents' windows and scarcely benefited them, which caused the elevator room or corridor to affect the daily lighting of their homes. About 75 percent of the respondents thought that adding an elevator to their building would cause shading and affect the lighting of their homes, especially for the residents living on the lower floors. The addition of an elevator would block the sun, and the living conditions in their homes would not be as comfortable as before. Since there was not enough room to install elevators in old residential buildings, many elevators obscured existing housing windows and reduced

daylight. This was why some people who were affected asked for monetary compensation; otherwise, they would not agree to the installation of elevators.

Chen Xin, a 52-year-old Guangzhou residential owner, first fought an elevator renovation in her building that required bricking up her front door and forcing her to enter and leave through a side door onto a patio. Ms. Chen consented after higher-floor tenants gave her USD 500 in monetary compensation for this inconvenience. Guangzhou had placed stipulations on the projects to avoid disagreements and court cases. If two-thirds of a residential building's unit owners and two-thirds of the building's residents by square footage voted in favor of an elevator, the project had to be put into motion despite objections.

5.3.3. Hard Negotiating

Hard negotiating primarily manifested in three scenarios: disputes concerning elevator installation, debates over installation costs, and conflicts over resident compensation. The greatest opposition to elevators came from residents on the lower floors, who strongly opposed or demanded compensation for what they saw as a public good akin to "not-in-my-backyard" (NIMBY) facilities. The owners of the first floor received monetary compensation because of the negative externalities of the elevators' addition. The conflict group argued that, if no compensation were made, then the rights and interests of the owners of the lower floors would be violated.

5.3.4. Failing to Know the Applicant Process

In order to understand the opinions of the residents who participated in the preparation of materials and the application for the planning permits for construction projects on the deficiencies of government approval in the process of elevator additions, the questionnaire was structured with multiple-choice questions. The survey respondents generally regarded the deficiencies of government approval in the process of installing elevators in old residential buildings as follows: 24% thought the approval time was too long, 34% thought the approval of materials was too complicated, 24% thought there were too many departments involved, and 19% thought the process guidelines were unclear (Figure 4). It can be seen that these four problems all occur in the process of installing elevators in old residential buildings, among which the cumbersome approval of materials is the most serious.

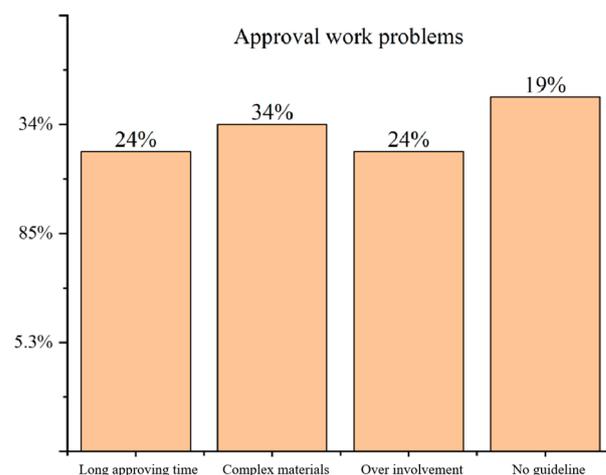


Figure 4. Approval work problems.

5.4. Community Governance Mechanism

5.4.1. Mechanism Background

According to the Property Law of the People's Republic of China, decisions should be subject to the consent of co-owners or all co-owners who hold more than two-thirds of shares. Thus, on the basis of this law, the key action is to ensure that two-thirds of the

shareholders in one old residential building agree to the installation of elevators. Opposition comes mainly from residents on lower floors and mostly regards concerns about safety, fees, and noise, which are regarded as conflicts of interest. Regarding the mechanism of age-friendly community regeneration in elevator installation, community governance initiatives have gained experience in dealing with people's problems and concerns and are becoming better at helping residents reach agreements in their negotiations, including by forming self-governing organizations for community governance as a structure and encouraging some role changes among residents for community governance as a process.

5.4.2. Building a Self-Governing Organization

The self-governing organizations met urban community governance needs by establishing partnerships, developing funding proposals, having member-elected chairs, and playing a role in rebuilding local governance. They used remote methods via platforms such as WeChat and QQ for efficient discussions. Generally speaking, self-governing organizations protected legitimate interests, as well as being the first step of carrying out rights protection and leading citizens to participate in democratic decision-making. The self-governing organizations concerning the installation of elevators exhibited certain particularities. Due to the addition of elevators being a common interest, the members' democratic consciousness was high.

Self-governing organizations combine top-down and bottom-up community governance methods, which have effectively solved a series of social problems caused by top-down rapid urbanization and construction in the past. The purpose of a self-governing organization is to promote public participation and government action, to communicate and collaborate with each other so that multiple stakeholders can reach a consensus, and to allow the residents of the same residential building to talk to each other. Although conflicts arise in the communication process, multiple consultations are used to safeguard the interests of stakeholders and promote the fair and just allocation of resources.

5.4.3. Identifying Key People in Community Governance

Community governance as a process means that governance is a dynamic product of social and political groups, and thus, dynamics must be addressed, challenging the premise that modifying structures will get governance "right". Key people play an important role in community governance between the government and the public in promoting an elevator installation, acting as mediators and coordinators of community affairs, as well as being instrumental in matchmaking and organizing. Two types of key people facilitated communication. The first type was elevator installation advocates. They were strong leaders, understanding policies, technical requirements, and community needs. They managed projects and empathized with residents, ensuring effective communication and collective action. The second type of key person, known as a "policy broker" or "policy entrepreneur", specialized in mediating and seizing opportunities for change. With their long-term engagement with government departments, they understood resident and government needs, increasing the chances of elevator installation.

Since the addition of elevators affects the interests of some people, their participation is low, and they become the "naysayers" of the masses. Since the addition of elevators only requires the consent of two-thirds of residents, the main compensation for these people is monetary compensation. People who highly participate in such projects give these naysayers cash compensation, but the elevators are not connected to their floors. In addition, some communities would organize owners to carry out related activities, first to increase mutual understanding and then to discuss an elevator plan multiple times, to resolve objections from owners. In this process, due to constant face-to-face communication, an understanding of each other's work and life backgrounds is formed on the basis of mutual communication. Some appeals encourage or enlist help from neighbors and gradually dispel the concerns of those who hold opposing opinions. After further communication, a consensus is finally reached. Since there are two "two-thirds" requirements in related

policies, the overall management of community management affairs is focused on meeting the two “two-thirds” requirements even if the owners cannot fully reach a consensus.

5.4.4. Roles of Government Members and Professional Teams

A fully independent owners’ committee would be free from government interference, but it would lose bureaucratic support and struggle to keep track of government information. It would struggle to act as a bridge between the government and advisory bodies if it were free from bureaucracy. Therefore, the government is considering some relatively modest measures to increase mutual trust between owners’ committees and government departments. The concrete measures include introducing civil society figures with relevant experience and professional knowledge into owners’ committees, such as companies with relevant experience in installing elevators or retired civil servants and community planners, to assist in the development of elevator installation plans. Another measure is to set up an agenda group under such committees, comprising a committee chair and a non-governmental representative nominated by all members, to advise on the options of installing additional elevators (Figures 5 and 6).

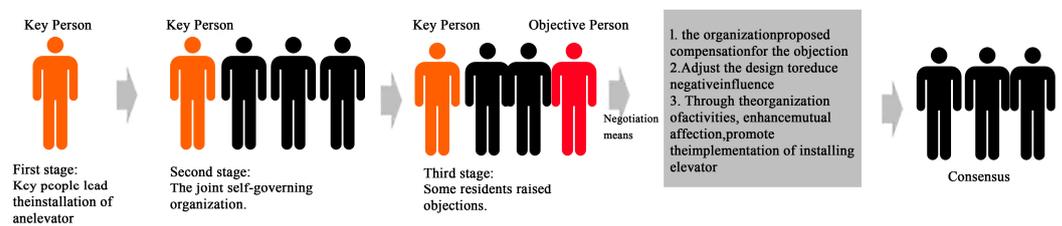


Figure 5. Community governance of elevator installation.

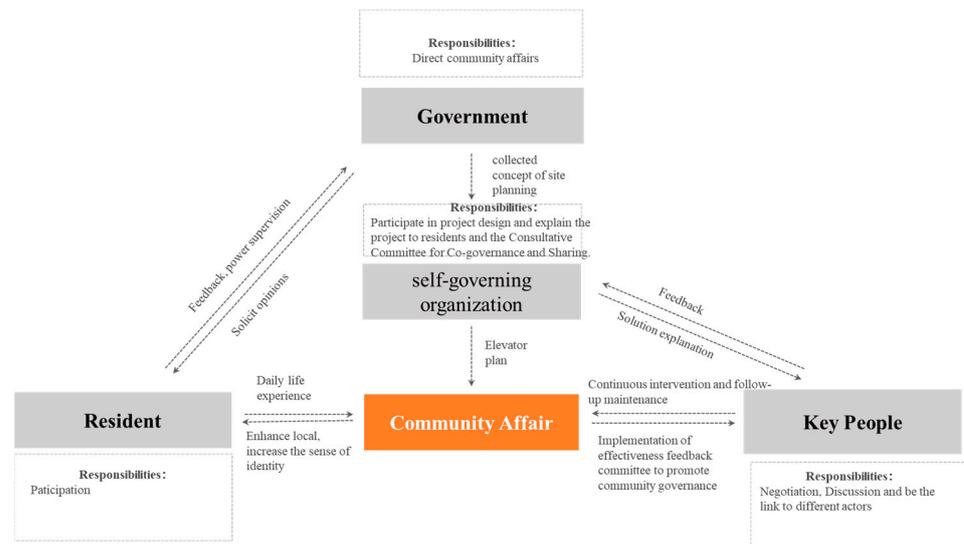


Figure 6. The mechanism of community governance.

In summary, key people are the critical factors in community governance regarding elevator installation in age-friendly community regeneration. However, a key person emerges accidentally, and there have been cases in which the lack of a key person has led to the failure of community governance. In the near future, relevant community governance roles, such as community planners, should legally and regularly appear in community governance affairs, which is also a direction that community governance research should explore in the future.

6. Conclusions and Limitations

The increase in the aging world population poses enormous concerns. Given the aging population, service providers and policymakers are becoming more aware of the importance of creating and sustaining age-friendly communities. Due to previous construction standards, older people living in old residential buildings have found it hard to leave their homes. Therefore, the government hopes to install elevators in older, walk-up residential buildings. Carrying out age-friendly community regeneration is a challenge, especially in developing nations with limited citizen engagement. It involves establishing new governance procedures to ensure physical and social features that cater to all age groups and encourage participation through volunteering, social services, and intergenerational activities, which has been limited in the existing research.

This paper examined three questions:

- (1) How do older people participate in the process of community regeneration in the context of elevator installation? The answers are as follows: Firstly, the community establishes a self-governing body aimed at fulfilling the requirements of urban community governance. This organization maintains partnerships with the local administration while also independently developing funding proposals. The group's chair is elected by its members, who bear the responsibility for making decisions on specific matters. They offer local leadership within the community and form various collaborative partnerships both within and outside the local area. Their role within the local community involves an effort to reconstruct local governance mechanisms that may have been lost during the restructuring of the local government, covering legal, financial, and informational aspects. Beyond the community, they engage in negotiations with higher levels of governance, often involving the translation of their demands to align with established procedures. The self-governing organization employs remote methods, such as WeChat and QQ groups on social media, to facilitate discussions of social matters, enabling property owners to engage in conversations easily and swiftly. Secondly, key figures are identified. Key individuals are pivotal in community governance, particularly in the context of elevator installation within age-friendly community regeneration. Thirdly, the residents actively engage with discussion topics and participate in voting. Simultaneously, through workshops and various training formats, senior citizens acquire fundamental research skills and gain a better grasp of real-world issues, enabling them to express their needs and make more precise suggestions. In contrast to the conventional notion of "participation", an age-friendly community promotes the idea of "collaborative partnership", facilitating communication between older adults and relevant authorities. The experiences within age-friendly communities incorporate both top-down and bottom-up approaches in which older adults play active roles in advancing and enhancing a city's age-friendliness.
- (2) Why does the installation of elevators achieve success in some old residential buildings but fail in some communities? The answers are as follows: Common interest is the key factor for achieving success in elevator installation. Community governance can be achieved when there is a common interest, namely older people being able to easily exit a building after elevators are installed.
- (3) Is there any existing mechanism that can be used for reference and promotion? The answers are as follows. The mechanism for elevator installation in age-friendly community regeneration involves several key components: (a) Building up a self-governing organization: A self-governing organization is established to meet the needs of urban community governance. A self-governing organization serves as a combination of top-down and bottom-up community governance methods, promoting public participation, government action, communication, collaboration, and consensus-building among multiple stakeholders. (b) Selecting key people in community governance: Key individuals play a vital role in facilitating communication between the government and the public regarding elevator installation. They act

as mediators and coordinators of community affairs, and they are instrumental in coordinating, matchmaking, and organizing. (c) Collaborating with the government and professional teams: The government introduces civil society figures with relevant experience and knowledge to the owners' committee. They include companies with elevator installation experience, retired civil servants, and community planners who assist in developing elevator installation plans.

The theory of community governance as a structure and process offered theoretical underpinnings to answer these research questions. A theoretical framework was proposed to understand the relatively successful cases of installing elevators in old residential buildings through age-friendly community regeneration in Guangzhou, China.

This study adopted the questionnaire survey method. Drawing on a range of qualitative data, the results show that the sharing of common interests leads to effective community governance. In the unsuccessful cases, the installation of elevators was opposed by people whose interests were hindered, and the community failed to reach a consensus. By focusing on the governance structure and process, this paper has provided evidence of how older people can be actively engaged in community projects. The benefits include expanding social networks, increasing residents' participation, and establishing good relationships with neighbors. However, the challenges faced in community governance, such as noise pollution, reduced daylight, difficult negotiations, and a lack of knowledge about the application process, could have been overlooked. This paper has also reported the positive implications of age-friendly community regeneration mechanisms, including building owner committees through community governance as a structure and encouraging some role changes among residents through community governance as a process, especially key people, such as elevator installation promoters, "policy brokers", government members, and professional teams. It is important to set up community governance mechanics that can provide a platform for people to negotiate, discuss, and compromise, which is now practiced well in the case of elevator installation and will be amalgamated into other public affairs in the future.

This study's principal achievement is the introduction of innovative governance procedures and systems in a developing nation. This plays a pivotal role in achieving the rejuvenation of older-age-friendly communities through active civic engagement, particularly in regions with limited citizen awareness about participation. These efforts aim to promote sustainable age-friendly initiatives, aligning with a fundamental principle of sustainability: social equity. This initiative also increases opportunities for older individuals to venture outside their homes and enjoy public facilities while ensuring their right to engage in public affairs. However, this research only dealt with some of the descriptive issues of community governance at this stage. There remain some doubts about whether these groups effectively represent community governance. In sum, these contributions and limitations have opened up new study avenues. Future research could concentrate on a comparative social analysis of community governance. Furthermore, age-friendly community regeneration practices and the synchronous process should be investigated further to determine their applicability to different types of organizations, contexts, and process phases.

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