

## Research Article

# Content Analysis of Elderly Education Policies in China: From the Perspective of Policy Instruments (1982–2021)

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Population aging has emerged as a social issue in most countries worldwide. Developing education for the elderly is one of the key strategies to combat the challenges of an aging population. Based on the two-dimensional analysis framework of the policy instruments and the type of elderly education, the content analysis method was used to analyze 49 elderly education policy documents developed and issued in China over the last four decades in this study. This study aims to provide a reference for the formulation of education policies for the elderly in China and other countries. The results indicated that the allocation of policy instruments was inconsistent between and within types. It is imperative to issue new programmatic documents, optimize the allocation of policy instruments, and enhance their adaptability, thereby boosting the development of elderly education.

## 1. Introduction

Population aging has emerged as a social issue on a global scale during the 21st century [1, 2]. The results of China's seventh population census, conducted on November 1, 2020, revealed that the country's population included 260 million individuals aged 60 years and above, constituting 18.7% of the total population. Among them, 190 million people were aged 65 years and above, accounting for 13.5% of the total population [3, 4]. Developing education for the elderly is an important strategy for managing the aging population in China [5]. By the end of 2019, a network of 76,000 universities (schools) tailored for the elderly, spanning various types and levels, had 10.882 million students [6]. Implementing scientific and effective policies regarding elderly education is essential to promote its healthy development of elderly education. Over the past 40 years, China has issued numerous national policies related to the education of the elderly. These policies aim to standardize the management of elderly education, increase the resource input of government departments, social organizations, enterprises, and individuals in elderly education, and expand their scale. The

ultimate objective is to ensure that a greater number of older adults have equal access to the resources of education services. As a large population and an emerging aging country, China's elderly education policy has served as a valuable model for similar countries.

Recently, the Chinese government has successively issued a series of policies on elderly education. However, most of these policies focused on policy documents related to aging issues, such as population work, aging work, elderly care, medical health, and culture [7]. Variations in the external environment, including politics, economy, culture, and population, have modified China's elderly education policies with respect to motivation, value orientation, implementation path, policy target, and other aspects. This adjustment has proven to be advantageous in ensuring the development of education for the elderly. However, a delay persisted in implementing the elderly education policy, resulting in a slow development of elderly education. The factors contributing to the aforementioned delay were the inadequate legal basis, deviation of the executive body, incomplete management system, imperfect supervision mechanism, outdated concept of aging development,

unequal basic rights, limited diversity of choices, insufficient educational empowerment, human development awareness, and educational stratification [8]. Previous studies have investigated the problems and factors that have influenced the developmental stages of China's elderly education policy, such as policy formulation, policy development and variation, and policy implementation, and have provided valuable recommendations regarding the framework and implementation of the policy system [9]. To a certain extent, these studies can help policymakers formulate more effective policies for education for the elderly. However, the primary limitation common to existing studies is that the research objects are restricted to external factors of the elderly education policy, such as policy-making, policy development, and policy implementation. Systematic research on the content of the elderly education policy has not been reported. Therefore, a more comprehensive investigation of the content analysis of the elderly education policy in China is necessary to provide reference information for future policy formulation and adjustment.

Recently, research on relevant policies from the perspective of policy instruments has gained significant attention, particularly in the content analysis of policies [10, 11]. To date, however, there have been no studies on the content analysis of the elderly education policy from the perspective of policy instruments. The effective implementation of a policy depends on the cognition of the policy implementer, the implementation target, and the selection of scientifically sound and reasonable policy instruments [12, 13]. Educational policy instruments are a means by which policymakers can achieve educational policy objectives, and different types of policy instruments have an important impact on achieving policy objectives [14]. Consequently, 49 policies developed and issued at the national level related to the development of education for the elderly were selected based on the perspective of policy instruments. An analysis was conducted to identify the basic situation of existing elderly education policies and the allocation of policy instruments to identify problems in the configuration of policy instruments. This study aims to improve the implementation effect of the policy under the same external environment by optimizing the selection and allocation of policy instruments, which would serve as a beneficial reference for China and other similar countries worldwide in developing policies on elderly education.

## 2. Methodology

**2.1. Sample Selection.** We conducted a keyword search, "education for the aged," on the websites of the Chinese government, including the Ministry of Education, Ministry of Culture and Tourism, China Association of Universities for the Aged, and others without specifying the starting and ending years. We selected "laws," "outlines," "plans," "opinions," "programs," and "notices" issued by the Central Committee of the Communist Party of China, the State Council, and its directly subordinated ministries and commissions. Terms such as "News reports," "meeting

minutes," and "letters" were excluded. Meanwhile, the "Peking University Lawyer Network" reviewed and supplemented the related policies. A total of 49 policy samples issued between 1982 and 2021 were eventually selected. The details are presented in Table 1.

**2.2. Framework for the Content Analysis of Elderly Education Policy Samples.** The main focus of this study was the analysis of policy instruments. The analysis framework of the elderly education policy was constructed using two dimensions, "the choice of policy instruments" and "the school-running types of elderly education," as presented in Figure 1. The content analysis method was employed to quantitatively analyze the allocation of policy instruments for the existing elderly education policy.

**2.3. X Dimension: Policy Instruments.** Policy instruments are the means and measures that policymakers use to achieve policy objectives and are the main contents of policy texts [15]. A policy may sometimes be identifiable in terms of a decision but often involves a series of decisions or what may be seen as more of a general orientation. Moreover, policies have tended to change over time. Policy instruments could be classified in various ways, but two of the most prevalent were (i) classifying them according to their characteristics. For example, McDonnell and Elmore divided policy instruments into command, incentive, exhortation, capacity-building, and system revolution instruments and (ii) classified policy instruments according to their effects. For instance, Rothwell and Zegveld divided policy instruments into supply-, environment-, and demand-based instruments [16–18]. The Chinese government promotes the rapid development of elderly education primarily by directly increasing the supply of resources, optimizing the environment for using resources, and encouraging social organizations and enterprises to support the initiative. These regulatory patterns perfectly conform to the classification theory of policy instruments proposed by Rothwell and Zegveld. Therefore, this study classified policy instruments into three categories based on the classification of Rothwell and Zegveld: supply-, environment-, and demand-based instruments, as the X dimension of the elderly education policy analysis. Furthermore, the special elderly education policy *Development Plan for the Elderly Education (2016–2020)* issued in 2016 was used as a reference to summarize the primary measures to promote the development of elderly education. In this study, supply-based instruments were classified into five policy instruments: educational investment, resource allocation, resource construction, team construction, and technical support. Environment-based instruments were subdivided into six policy instruments: policy and strategy, goal programming, standardized management, implementation guidance, incentive guidance, platform, and publicity. Demand-based instruments were subdivided into four policy instruments: industry-driven, purchase service, value-leading, and honor-driven. Table 2 lists the connotations of each type of policy instrument.

TABLE 1: List of samples of elderly education policies.

No.	Policy sample name	Issuing department	Year of issue
1	Notice on the issuance of several provisions of resignation and recuperation system for veteran cadres	The State Council	1982
2	The situation and the main points of future activity plan of aging work	China National Committee on Aging	1983
3	The seven-year development outline of China's aging work (1994–2000)	The National Planning Commission	1994
4	Law of People's Republic of China on education	National People's Congress	1995 (revised in 2021)
5	Law of People's Republic of China on the protection of the rights and interests of the elderly	National People's Congress	1996 (revised in 2018)
6	Opinions on strengthening the cultural work for the elderly	Ministry of Culture	1999
7	Decision on strengthening the work on aging	The Communist Party of China Central Committee, the State Council	2000
8	Notice on improving the elderly education	The Organization Department of the Central Committee of the CPC	2001
9	Program outline of the “tenth five-year plan” for the development of China's elderly cause	The State Council	2001
10	Guiding opinions on further strengthening the construction of grassroots culture	Ministry of Culture	2002
11	Notice of the sharing of cultural and educational resources at the grassroots level	Ministry of Culture	2002
12	Notice on further activating the cultural life of grassroots people	Ministry of Culture	2002
13	Several opinions on promoting community education	Ministry of Education	2004
14	The “11th five-year plan” for the development of China's aging cause	The State Council	2006
15	Programme outline of the national medium and long-term education reform and development (2010–2020)	The Communist Party of China Central Committee, the State Council	2010
16	Several opinions on promoting the reform and innovation of higher vocational education and leading the scientific development of vocational education	Ministry of Education	2011
17	The “12th five-year plan” for the development of vocational education	The State Council	2011
18	The “12th five-year plan” for the development of China's aging cause	The State Council	2011
19	The “12th five-year plan” for national population development	China National Committee on aging	2012
20	Opinions on further strengthening the construction of the elderly culture	General Office of the Ministry of Education	2012
21	Opinions on further strengthening the construction of activity centers for retired cadres in colleges and universities directly under the central government	Ministry of Education	2012
22	The 12th five-year plan for the development of national education	China National Committee on Aging	2013
23	Opinions on further strengthening the preferential treatment of the elderly	Ministry of Civil Affairs	2015
24	Implementation opinions on encouraging private capital to participate in the development of elderly service industry	Ministry of Education	2016
25	Opinions on running the open university	Ministry of Education	2016
26	Several opinions on comprehensively opening the development of community education improving the quality of elderly care service	General Office of the State Council	2016
27	National population development plan (2016–2030)	The State Council	2016
28	The “13th five-year plan” for education informatization	Ministry of Education	2016
29	Guiding opinions on promoting the construction of liveable environment for the elderly	China National Committee on Aging	2016
30	Development plan of the elderly education (2016–2020)	General Office of the State Council	2016
31	The “13th five-year plan” for the development of national elderly cause and the construction of the elderly care system	The State Council	2017
32	The “13th five-year plan” for national education development	The State Council	2017
33	Opinions on the formulation and implementation of elderly care service projects	General Office of the State Council	2017

TABLE 1: Continued.

No.	Policy sample name	Issuing department	Year of issue
34	“13th five-year plan” for healthy aging	National Health and Family Planning Commission	2017
35	Opinions on promoting the development of the elderly care services	General Office of the State Council	2019
36	Implementation plan for supporting hainan to deepen education reform and opening up	Ministry of Education	2019
37	Implementation plan for accelerating the modernization of education (2018–2022)	The General Office of the Communist Party of China Central Committee, the State Council	2019
38	China’s education modernization 2035	The Central Committee of the Communist Party of China, the State Council	2019
39	Guiding opinions on establishing and perfecting the elderly health service system	Ministry of Education	2019
40	Notice on the implementation programme for effectively solving the difficulties of the elderly in using intelligent technology	General Office of the State Council	2020
41	Comprehensive reform plan of the National Open University	Ministry of Education	2020
42	Action plan for improving the quality of vocational education (2020–2023)	Ministry of Education	2020
43	Opinions on promoting the healthy development of elderly care services	General Office of the State Council	2020
44	Notice on carrying out the establishment of demonstration national age-friendly community	National Health Commission	2020
45	National human rights action plan (2021–2025)	The State Council	2021
46	Notice on widely carrying out education and training on the application of intelligent technology for the elderly	Ministry of Education	2021
47	Program outline of action plan for national scientific quality (2021–2035)	The State Council	2021
48	Opinions on strengthening the work of aging in the new era	The Central Committee of the Communist Party of China, the State Council	2021
49	The “14th five-year plan” for the development of national elderly cause and the construction of the elderly care system	The State Council	2021

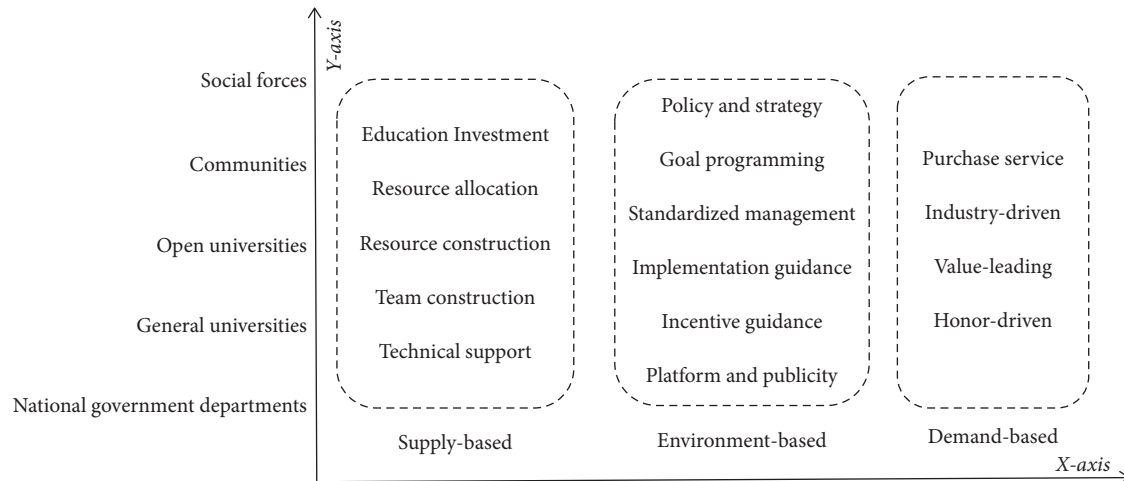


FIGURE 1: Content analysis framework for the elderly education policy.

**2.4. Y Dimension: The School-Running Type of Elderly Education.** According to the organization's subjects, there were five different school-running types of elderly education in China: those organized by national government departments, general universities, open universities (adult colleges and universities), communities, and social forces (enterprises, private capital, and so on). The operation modes of the different types of elderly education were relatively independent. Although many policies have been issued at the national level, their efficacy is frequently limited to one or a few types of elderly education. Evidently, when conducting policy analysis, it is necessary to conduct independent and comparative research on policies according to different types of education for the elderly. Consequently, the Y dimension of the policy content analysis included five different school-running types of elderly education: government departments, general universities, open universities, communities, and social forces.

**2.5. Coding Method.** The screened policy samples were sorted according to the chronological order of policy release, with the first-level code serving as the serial number. The policy instruments were coded at two to four levels according to the serial number of the text chapter [15, 19, 20]. For instance, the additional level of code could be appended to the minimum level of serial numbers to further subdivide a number of distinct fundamental analysis units; this would result in a three- to five-digit code. For example, in the "No. 37 policy text-Accelerate the Implementation of the Modernization of Education (2018–2022)"---"II. Key tasks"---"(10) Deepen the comprehensive reform of key areas of education"---"3. Accelerate the construction of the lifelong learning system." The serial number of the second policy instrument related to elderly education "Carry out the construction of national community education demonstration areas and demonstration schools of elderly universities" was "37-2-10-3-2." The classification of policy instruments was based on the criterion of "containing the

minimum complete intention" meaning that further subdivision of the sample would affect the expression of the true intention of the policy.

**2.6. Classification of Policy Instruments.** Classification of X and Y dimensions was performed for each coded policy instrument. The classification of X dimension was based on the definition of the connotation of the policy instruments in Table 2, in accordance with the real intention of the policy sample. Its classification was exclusive: a policy instrument only corresponded to one type of policy instrument; otherwise, it would have required further subdivision. The classification of Y dimension was based on text content, with reference to the title and background of the policy. The categorization of Y dimension had a situation in which one policy instrument targeted multiple school-running types of elderly education, and simultaneously, the same code was applied to multiple school-running types of elderly education for statistical types. Meanwhile, a policy instrument that did not specifically target a certain elderly education school-running type was classified as "undifferentiated" and, therefore, was excluded from the statistical scope of Y dimension analysis and X-Y cross-analysis. Finally, to ensure the accuracy of the classification of policy instruments, two doctors with expertise in educational policy analysis were invited to independently classify each policy instrument and engage in repetitive discussion regarding differences until a consensus was reached. Finally, 292 coding results and classification tables for the elderly education policy instruments were formed, as revealed in Table 3.

### 3. Results

**3.1. The Issuance Time and Department Analysis of the Elderly Education Policy.** Before 1994, only one education policy for the elderly was issued in 1982 and 1983. In the 28 years between 1994 and 2021, 47 policies related to elderly education were issued, among which no policy was issued in nine years, only one policy was issued in ten years, 2-3 policies were issued every four years, and four or more were issued in five years after 2016. In terms of the time of issuance, elderly education policies exhibited characteristics

TABLE 2: Classification and connotation definition of policy instruments for the elderly education.

Type of instruments	Name of the instruments	Definition of the connotation of instrument classification	Sample text (serial number from the policy)
Supply-based	Education investment	The government invests funds and other materials for the elderly education	Governments at all levels should continue to increase the investment in the elderly education (No. 14)
	Resource allocation	Improve the utilization rate by optimizing the allocation of the existing resources	Actively explore the establishment of fixed learning places in nursing homes for the elderly, urban social welfare homes, rural nursing homes, and other elderly care institutions (No. 30)
	Resource construction	Build the infrastructure of the elderly education or develop the curriculum, course, teaching resource library, and so on	Establish a learning resource library for the elderly to support the development of the elderly education in the region (No. 30)
	Team construction	Training, introduction, and welfare guarantee of the teachers and administrators of the elderly education	Establish a part-time teacher team for the elderly education composed of retired cadres, professional and technical personnel, and other veteran comrades with expertise (No. 30)
	Technical support	Provide Internet, information, and other technical support to promote the development of the elderly education	Promote the integration of information technology into the whole process of education and teaching for the elderly, facilitate online and offline integrated teaching, and support the elderly to do online learning (No. 30)
Environment-based	Policy and strategy	Policy, direction, and vision of the elderly education	The establishment of an elderly university should conform to the national education policy and the purpose of the elderly work (No. 6)
	Goal programming	Put forward specific education plans, objectives, and requirements	The proportion of towns (streets) with schools for the elderly reached 50%, and the proportion of the elderly who regularly participated in educational activities reached more than 20% (No. 31)
	Standardized management	Establish system and mechanism, clarify management subject and responsibility, and perfect system	Formulate and promulgate national regulations on elderly education and strengthen the standardized management of elderly education (No. 9)
	Implementation guidance	Guide the implementation paths, forms, methods, and contents of the elderly education	According to the characteristics of the elderly, combine ideological education with healthy and beneficial cultural and sports activities, solve ideological problems, and solve practical issues (No. 7)
	Incentive guidance	Encourage and mobilize all target groups to actively support the elderly education	Encourage social education institutions to provide convenience and preferential services for the elderly to carry out learning activities (No. 33)
	Platform and publicity	Build a platform to promote exchange and cooperation, resource sharing, experience promotion, and so on	Build a national platform for the elderly education resource sharing and public services (No. 43)

TABLE 2: Continued.

Type of instruments	Name of the instruments	Definition of the connotation of instrument classification	Sample text (serial number from the policy)
Demand-based	Purchase service	The government funded the purchase service to support all target groups to hold or participate in the elderly education	Support and encourage various social forces to hold or participate in elderly education by means of sole proprietorship, joint venture, cooperation, through government purchase of services and project cooperation (No. 30)
	Industry-driven	By promoting the development of the related industries, forming investment value, and driving all target groups to support and participate in the elderly education	Expand the consumption of elderly education, explore the value of elderly care services, tourism, clothing, culture, and other industries closely related to elderly education, promote the upgrading of life services, stimulate domestic demands, and enhance investment growth and the development of related industries (No. 30)
	Value-leading	Guide target groups to support and participate in elderly education by publicizing and emphasizing personal or social values	Encourage the elderly to use their expertise to actively serve and contribute to society in the fields of science popularization, environmental protection, community service, public security, stability maintenance, and so on (No. 30)
	Honor-driven	Honors such as “advanced” and “demonstration” will be given to drive all target groups to support and participate in the elderly education	Commend the advanced units and individuals who have outstanding performance in elderly education and elderly sports activities (No. 14)

TABLE 3: Examples of coding and classification of the elderly education policy instruments.

No.	Policy instruments	Code	X dimension—policy instruments	Y dimension—the school-running system of the elderly education
6	The general guiding principle of aging work is that, based on reality, it promotes the development of the cause of aging in a planned and step-by-step manner and achieves the goals of ensuring the old people's access to care, medical treatment, worthiness, learning, and enjoying life	3-2-1	Environment-based-policy and strategy	Undifferentiated
41	Encourage and guide social forces to set up various schools for the elderly in accordance with the related regulations	7-4-1-4	Environment-based-incentive guidance	Social forces
80	The problems of funds, teaching materials, and teachers should be addressed to gradually realize the goal of the elderly universities being held in counties and counties	12-10-3	Supply-based-education investment	Government departments
136	Promote the development of elderly care services and elderly education courses in ordinary universities and vocational colleges, and provide teaching resources and services for communities, elderly education institutions, and elderly care service institutions	26-5-3	Supply-based-resource construction	Ordinary universities and communities
292	Encourage elderly education institutions to carry out online elderly education	49-8-1-5	Environment-based-implementation guidance	Undifferentiated



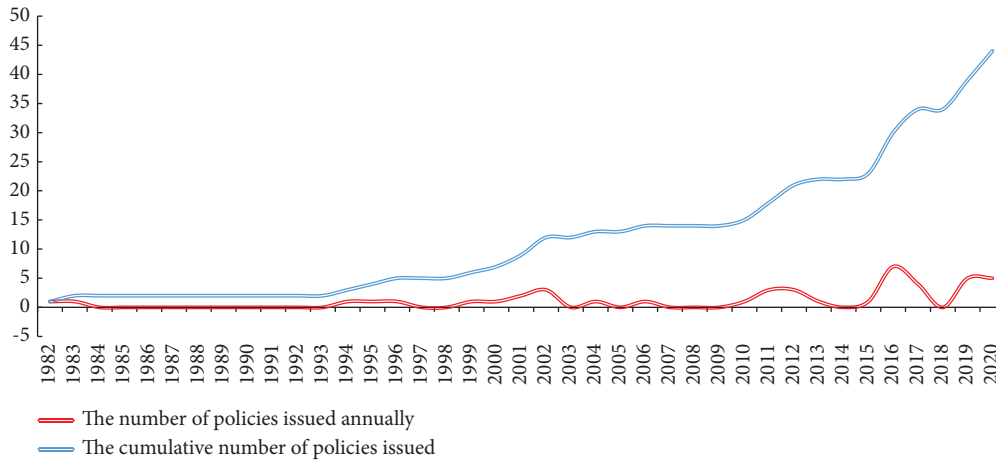


FIGURE 2: Chronological distribution of the elderly education policy samples.

such as uncertainty in the time of policy issuance, a gradual increase from 1994, and a significant upward trend in 2016, which may be attributed to the issuance of the programmatic document on elderly education, *Development Plan for Elderly Education (2016–2020)*, issued by the Chinese State Council in 2016. The diachronic distribution of the elderly education policy samples was determined based on the release time of the 49 policies, as illustrated in Figure 2. The subjects of developing policies on elderly education were diverse, with two laws issued by the National People’s Congress of China (Chinese legislature), 22 policies issued by the State Council of China, and 25 policies issued by Chinese ministries and commissions. Among them, up to 25 ministries and commissions were involved in the issued policies, including the Ministry of Education, Ministry of Culture, Ministry of Health, and Ministry of Civil Affairs. In addition, among the 49 policy texts, two were specifically issued for elderly education, and the remaining policies were distributed across various domains, including education and aging. Notably, no policies have been issued specifically for elderly education after introducing the *Development Plan of Elderly Education (2016–2020)*.

**3.2. X Dimension: Analysis of Policy Instrument Types.** As revealed in Table 4, 292 policy instruments employed in 49 elderly education policy texts were classified and counted, and the results indicated that environment-based policy instruments were the most prevalent (64.04%, 187/292), followed by supply-based policy instruments (30.14%, 88/292), and demand-based policy instruments were the least prevalent (5.82%, 17/292). It is evident that the most used policy instruments by the government were environment-based, such as “policy and strategy,” “standardized management,” or “implementation guidance,” followed by supply-based policy instruments, such as “resource construction” or “resource allocation.” The demand-based policy instruments were the least used.

Among the environment-based policy instruments, policy (18.8%, 55/292) and implementation guidance (18.5%, 54/292) instruments were used with the highest frequency, followed by incentive guidance (10.6%, 31/292),

standardized management (8.9%, 26/292), goal programming (5.1%, 15/292), and platform and publicity (2.1%, 6/292) instruments. It is evident that among the environment-based policy instruments, the use frequency of “policy and strategy” and “implementation guidance” instruments is significantly higher than “goal programming” and “platform and publicity” instruments. The most frequently used supply-based policy instruments were resource allocation instruments (12.0%, 35/292), followed by resource construction (7.1%, 21/292), education investment (5.5%, 16/292), team construction (4.4%, 13/292), and technical support (1.0%, 3/292) instruments. “Resource allocation” is the most used instrument denoting more flexible and efficient use of existing resources. The utilization rate of the “education investment” instrument, which represents the investment of new resources, accounts for less than half that of the “resource allocation” instrument. Among the demand-based policy instruments, honor-driven (3.4%, 10/292) and value-leading (1.7%, 5/292) instruments were relatively more frequently used, whereas purchase service (0.3%, 1/292) and industry-driven (0.3%, 1/292) instruments were each mentioned only once in the *Development Plan of Elderly Education (2016–2020)*, a special document on elderly education. The utilization rates of “honor-driven” and “value-leading” instruments were much higher than those of “purchase services” instruments, which may be due to the substantial fee associated with the use of the “purchase service” instrument. Figure 3 presents a comparison of various types of policy instruments.

**3.3. Y Dimension: Frequency Analysis of the Use of Policy Instruments by the School-Running Type of Elderly Education.** Among the 292 coding results selected, 160 did not explicitly point to the specific school-running type of elderly education, and 132 policy instruments pointed to certain or several school-running types of elderly education. According to the Y dimension classification method, 161 policy instruments were selected for five different school-running types. There were distinct differences in the distribution of policy instruments in the school-running types of elderly education. As presented in Figure 4, policy instruments for community

TABLE 4: Distribution of elderly education policy instruments in the X dimension.

Type (percentage)	Name of the instruments	Basic analysis unit code	Frequency	Percentage (%)
Supply-based 88 (30.14%)	Education investment	5-7-6-4, 6-3-15, 6-3-1, 9-3-4-2, 9-4-2-1.....	16	5.5
	Resource allocation	3-3-6-3, 3-3-6-6, 6-3-5, 6-3-8, 8-2-3.....	35	12.0
	Resource construction	14-2-2, 17-2-2, 19-5-4-6, 20-2-3, 29-4-2,.....	21	7.1
	Team construction	11-6-1, 11-6-2, 30-3-5-1, 30-3-5-2, 30-4-5-1.....	13	4.4
Technical support	20-3-1, 30-3-3-2, 46-2-5-2	3	1.0	
Environment-based 187 (64.04%)	Policy and strategy	3-2-1, 4-1-11, 5-1-4, 6-3-1, 7-2-3.....	55	18.8
	Goal programming	3-3-6-5, 8-2-4, 9-3-2-1, 14-3-2-1, 30-3-1-2.....	15	5.1
	Standardized management	6-3-3, 7-6-3, 8-2-2, 9-3-4-7, 12-10-1.....	26	8.9
	Implementation guidance	3-3-4, 5-4-15, 6-2-1, 7-4-1-1, 17-3-2-3.....	54	18.5
	Incentive guidance	7-4-1-4, 8-4-1, 9-3-4-4, 11-6-3, 12-10-2.....	31	10.6
	Platform and publicity	30-3-1-11, 30-3-5-4, 30-5-5-1, 35-5-6-2, 43-3-1-3, 48-4-1-7	6	2.1
	Purchase services	30-3-4-1	1	0.3
	Industry-driven	30-3-4-5	1	0.3
	Value-leading	30-3-2-7, 30-3-2-8, 30-4-5-2, 30-4-5-3, 39-2-1-3	5	1.7
	Honor-driven	8-2-5, 14-6-2, 25-2-4-3, 29-3-4-6-2, 30-4-2-5.....	10	3.4
Demand-based 17 (5.82%)				

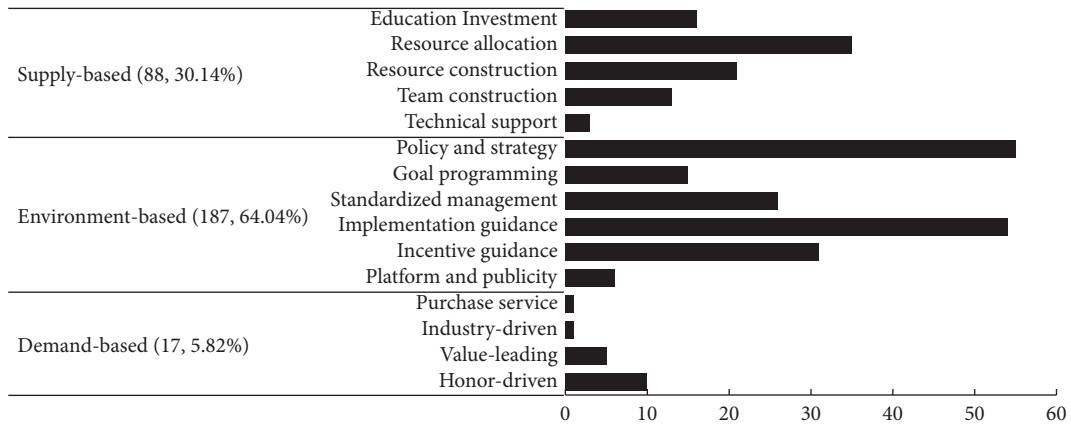


FIGURE 3: Statistical comparison of the frequency of the use of elderly education policy instruments.

elderly education (47%, 75/161) were the most frequently used, followed by social force elderly education (19%, 30/161), government department elderly education (14%, 23/161), general university elderly education (13%, 21/161), and open university elderly education (7%, 12/161). Evidently, the largest number of policies pertains to community elderly education, accounting for nearly half of all policy instruments prioritized by the government.

3.4. X-Y Dimension: Analysis of Policy Instruments Allocation of Different School-Running Types of Elderly Education. The policy instruments that exhibited distinct directions in the Y dimension were further added to the X dimension for cross-analysis, and the results are revealed in Tables 5 and 6. The proportion of the same type of policy instruments selected across different school-running types of elderly education was quite different. Supply-based policy instruments were allocated more heavily to open university elderly education (50.0%, 6/12), general university elderly education (47.6%, 10/21), and community elderly education (41.3%, 31/75), which was significantly higher than the overall level (34.8%, 56/161). Moreover, it was the least allocated in social force elderly education (10.0%, 3/30), accounting for less than one-third of the overall level. Notably, among the types of supply-based policy instruments, elderly education in general and open universities predominantly used the “resource allocation” instrument rather than the “education investment” instrument. The above data analysis further demonstrates that the “supply-based” instrument, which symbolizes new resource input, is mainly used in community elderly education, whereas the other school-running type of elderly education predominantly utilizes the “resource allocation” instruments.

The proportion of environment-based instruments used in different types was social force (86.7%, 26/30), government department (65.2%, 15/23), community (52.0%, 39/75), general university (52.4%, 11/21), and open university (41.7%, 5/12) elderly education. Among these, the selection of environment-based instruments by social force elderly education was significantly higher than the overall level (59.6%, 96/161), whereas open university elderly education

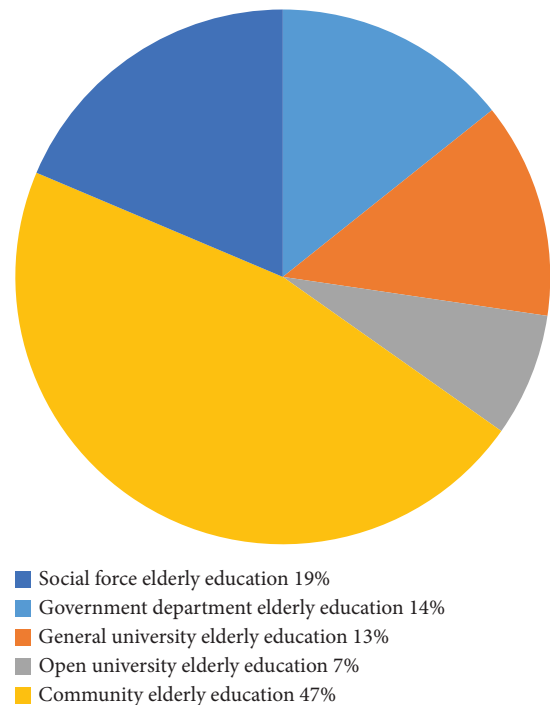


FIGURE 4: Comparison of policy instruments selected for different school-running types of elderly education.

was significantly lower than the overall level. The demand-based instruments were selected in a relatively high proportion in government departments (2/23, 8.7%) and open university (1/12, 8.3%) elderly education types. In contrast, demand-based instruments were selected relatively less in general university (0/21, 0%) and social forces’ (1/30, 3.3%) elderly education.

#### 4. Discussion

From a comprehensive perspective, out of the 49 samples of elderly education policies examined, only two have been issued exclusively focusing on elderly education, while the remaining policies were mainly dispersed throughout the elderly population policy, education policy, and other

TABLE 5: Distribution of policy instrument types in different elderly education types.

	Supply-based (34.8%, 56/161) (%)	Environment-based (59.6%, 96/161) (%)	Demand-based (5.6%, 9/161) (%)
Government department elderly education (23/161)	6/23, 26.1	15/23, 65.2	2/23, 8.7
General university elderly education (21/161)	10/21, 47.6	11/21, 52.4	0/21, 0
Open university elderly education (12/161)	6/12, 50.0	5/12, 41.7	1/12, 8.3
Community elderly education (75/161)	31/75, 41.3	39/75, 52.0	5/75, 6.7
Social forces elderly education (23/161)	3/30, 10.0	26/30, 86.7	1/30, 3.3

TABLE 6: Distribution frequency of the elderly education policy instruments in the X-Y dimension.

Type	Government department	General university	Open university	Community	Social forces
Supply-based (34.8%, 56/161)	Education investment	1	0	4	2
	Resource allocation	4	6	16	1
	Resource construction	0	2	9	0
	Team construction	1	1	1	0
Environment-based (59.6%, 96/161)	Technical support	0	1	1	0
	Policy and strategy	4	1	13	1
	Goal programming	3	0	4	0
	Standardized management	2	2	1	3
	Implementation guidance	3	1	14	1
	Incentive guidance	2	6	6	20
	Platform and publicity	1	1	1	1
Demand-based (5.6%, 9/161)	Platform and publicity	0	0	0	1
	Industry-driven	0	0	0	0
	Value-leading	0	0	0	0
	Honor-driven	2	0	5	0

related policies. In addition, most texts were expressed in general terms, lacking sufficient specificity and detail. Policy introduction was not periodically organized from the past to the future and lacked systematic organization from the total to the sub in the contents. Second, the subject of policy implementation was unclear, and the expression of the policy text tended toward a macro level. The policy texts extensively involved subjects such as education, culture, health, grassroot governments, and universities. However, the description of the policy implementation department was obscure, and the leading position of the education department was not prominent.

From the perspective of policy instruments, the main manifestations included the insufficient use of supply-based policy instruments (30.14%, 88/292), excessive use of environment-based policy instruments (64.04%, 187/292), and a serious shortage of demand-based policy instruments (5.82%, 17/292). According to the conclusion presented in the official government document, the primary challenges in China's elderly education are an insufficient supply of resources and regional development imbalances. In addition, there is an imbalance in using specific policy instruments within the same type of policy instruments. Among supply-based instruments, the "education investment" instrument is rarely used, especially in rural communities with poor infrastructure, rendering satisfactory outcomes elusive. Honor-driven and value-leading instruments comprised most demand-based instruments, whereas purchase services- and industry-driven instruments were relatively few. They were deficient in material incentives and weak in guiding social forces, especially private enterprises, to participate in the education of the elderly.

From the perspective of the school-running type of elderly education, policy instruments (47%, 75/161) for community elderly education were the most prevalent, and the "hard supply" instruments, such as "education investment" in supply-based policy instruments, were mainly used in the community elderly education type. In contrast, other types were mainly used in "soft supply" instruments such as "resource allocation." This is consistent with the current situation of the development of elderly education in China because the scale of expansion space of universities for the elderly organized by government departments and universities is limited, and social forces can only serve as a supplement. Compared to other school-running types of elderly education, it was not the responsibility of general universities and social forces to organize elderly education, and their inclination to participate was relatively low, rendering demand-based instruments indispensable for enhancing their enthusiasm to participate in elderly education.

## 5. Conclusions

This study performed a systematic content analysis of elderly education policies in China from the perspective of policy instruments. The basic situation of China's elderly education policy and the allocation of policy instruments over the past four decades have been elucidated for the first time. The

results of this study provide a useful reference for the formulation of elderly education in China and other countries that are also facing the same dilemma. The recommended policies are as follows.

First, we expedited the introduction of new programmatic documents and supported policies for elderly education. The new policy should delineate the development plan for elderly education while establishing the main body, management organization and procedures, and types of elderly education. Moreover, it should specify the expected magnitudes, forms, and levels of elderly education at different stages of development to accommodate the needs of different elderly people. According to the above mentioned programmatic documents, local governments and relevant departments should develop specific implementation programs and support policies to form a perfect education policy system for the elderly.

Second, the allocation of policy instruments should be adjusted according to the developmental stage of elderly education. It is recommended to increase the selection of supply-based policy instruments to ensure instrument supply for elderly education resources, especially to increase the proportion of supply-based policy instruments such as capital investment and facility construction. Environmental- and demand-based policies can only be effectively implemented with sufficient resource supply. It is recommended to reduce environmental instruments that represent commands such as "guidelines and policies" and "standardized management" and instead choose platforms and publicity instruments that promote the exchange of resources and experiences among different regions and school-running types. Another effective method would be to increase the number of demand-based policy instruments. Specifically, policy instruments such as "purchase service" and "honor-driven" are used to enhance the enthusiasm of the organizers of elderly education.

Third, while the use of policy instruments is generally consistent for different types of education for the elderly, some incompatibilities exist. Universities and social forces have increased the use of demand-based policy instruments in elderly education policies. Demand-based policy instruments should be allocated to attract more social forces with resources and the ability to engage in elderly education through the government purchase of services and the development of elderly-related industries.

However, despite its originality, the limitation of this study is that the policy sample is limited to the national level, which fails to conduct a comprehensive analysis of the elderly education policies introduced by local governments, resulting in insufficient specific and targeted policy recommendations. Furthermore, this study only analyzed the situation of the policy instruments contained in the policy content and did not consider the actual effect of policy implementation.

## Data Availability

The data used to support the findings of this study are included within the article.

## Conflicts of Interest

The authors declare that they have no conflicts of interest.

## Authors' Contributions

Weidong Wang conceptualized the study and wrote, reviewed, and edited the article. Mochang Qiu proposed the methodology and performed analysis. Mochang Qiu prepared the original draft. All authors have read and agreed to the published version of the manuscript. The authors thank Zijin Xu and Ziqi Cai for their comments on the previous versions of this article. Any remaining errors or inaccuracies are exclusively the authors' responsibility.

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