Research on the Influence of National Education on the Development of Pension Industry Based on Binary Logistic Regression Model

Shu Yu[1], Xiaomeng Qu[1] *

[1]Dalian Polytechnic University, School of Management, 116034 Dalian, China
suesunyu@126.com, qxmeng99@163.com

Abstract:

Population aging is a basic national condition that runs through the 21st century in China. Actively dealing with population aging is a long-term strategic task of the country. Through a questionnaire survey, statistical analysis and other methods, this paper discusses the public's understanding of China's aging and national education, and divides national education into three small parts to explore its impact on the sustainable development of the elderly care industry, thus putting forward three hypotheses. The results show that the hypotheses are valid, so national education has a positive impact on the sustainable development of the pension industry. Therefore, we should expand the publicity channels of national education to increase the popularity of national education on aging, and put forward some suggestions for promoting the sustainable development of China's pension industry.

Keywords: *National condition education, Pension industry, Sustainable development*

1 INTRODUCTION

With the continuous development of society, population aging has become an extremely serious social problem in China. It not only is an old problem of its own, but also involves many aspects of political, economic, cultural and social development. It has brought a series of problems, such as a heavy social burden, the development of social cultural welfare does not adapt to population aging, the weakening of family pension function, the elderly's demand for medical care, and prominent problems in life services.

In addition, we should clarify our work ideas, actively build a good social environment for the elderly, filial piety and respect for the elderly, and actively carry out education on the national conditions of population aging. Wucangping mentioned in the endowment industry weekly that carrying out national education on population aging has great practical significance and theoretical value for learning and implementing the spirit of the 19th National Congress of the Communist Party of China and actively responding to population aging [1] [2]. In addition, the national education on aging should cover the whole society, actively respond to the population aging [9], deepen the national education on aging and promote its healthy development [8]. The notice on carrying out national education on population aging clearly points out that the national education on population aging will be carried out continuously in the whole society [10]. Maliping believes that we should face the grim situation of population aging, take a positive view of the elderly life and improve the quality of life [6].

National condition education is an educational activity that "takes China's history and current situation as the content and aims to enhance people's patriotic enthusiasm and socialist consciousness" [3]. The national condition education on aging is to create a good atmosphere for the whole society to care, support and participate in actively responding to population aging through a series of activities, stimulate the whole society to enhance the initiative, pertinence and consciousness of responding to population aging, and promote the accelerated development of the province's aging cause and industry [4] [7]. The education on national conditions of population aging is geared to the whole society, and the key objects are party and government cadres, teenagers and the elderly [5].

Carrying out national education on aging will help to establish the awareness of self-confidence, self-love, self-esteem, self-reliance and self-improvement of the

elderly, establish the concept of "being prepared to grow old" and carry forward the pension culture of "being old and being old", so that the majority of young people can cope with the challenge of individual aging, reserve knowledge and skills, physical and mental health and lifestyle, fully prepare for a better destination in life, and enter old age healthily and happily.

2   PREPARATION RESEARCH HYPOTHESIS

This paper mainly investigates whether national condition education will promote the sustainable development of the elderly care industry. National condition education is divided into three parts: filial piety and respect for the elderly culture education, positive aging concept education and population aging achievement education. It can be expressed by the degree of caring for the elderly, the attitude of forcibly giving up seats to the elderly and the satisfaction with community elderly care facilities. Therefore, the following assumptions are put forward:

General hypothesis: national education has a significant impact on the sustainable development of the pension industry.

H1: Filial piety and respect for the elderly culture education has a significant impact on the sustainable development of the pension industry.

H2: Positive aging concept education has a significant impact on the sustainable development of the pension industry.

H3: Population aging achievement education has a significant impact on the sustainable development of the pension industry.

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3   DATA SOURCES AND STATISTICAL ANALYSIS

Before the formal survey, the pre-survey of the questionnaire is carried out first. First, ask the teacher and students to fill in the questionnaire in the form of the word in the class. In this pre-survey, it was found that there were a few topics, which were not comprehensive and specific enough, and they were revised after confirmation. The questionnaire star was used to design the questionnaire, and the questionnaire was distributed through Microblog, Wechat and QQ. Finally, 356 questionnaires were received.

3.1   Sample Descriptive Statistics

This paper aims to understand the popularity of aging national education through the investigation of the cognition of aging national education, and what form to take to solve the aging national education, so that people of different ages can further understand the aging national education. As can be seen from Table 1 shows that: there are many women in this survey. The overall age of the sample is 18-40 years old, and most of the education is a bachelor's degree. The main respondents were college students. Secondly, a small number of surveys were conducted on teachers, cadres of Party and government organs, personnel of enterprises and institutions and other personnel. In China, people aged 60 and over are defined as the elderly, but according to the survey, most people do not know or know the definition of the elderly. At present, China's elderly population accounts for 18%, and 62.92% of the respondents do not know the proportion of the elderly in China's current population. Therefore, if we want to increase the popularity of national education on aging, we should let people of different ages further understand the importance of national education on aging.

Table 1 Descriptive analysis

	N	Min	Max	Mean	SD
Gender	356	1	2	1.60	.491
Age	356	1	4	2.05	.481
Occupation	356	1	5	1.88	1.449
Education	356	1	4	2.86	.475

3.2   Reliability and Validity Test

This paper analyzes the reliability and validity of the questionnaire data to ensure the rationality and scientificity of the questionnaire data. We tested the scale with SPSS 21.0. The results show that: Total Cronbach $\alpha = 0.873 > 0.7$, indicating that the reliability of this study is high. According to Bartlett's spherical test, kmo = $0.781 > 0.70$, P = $0.000 < 0.05$, indicating that the data is also very effective.

3.3   Research Results

3.3.1 Filial Piety and Respect for the Elderly Culture and Education

This article mainly from the following three aspects to understand whether the culture and education of filial piety and respect for the elderly have a significant impact on the sustainable development of the elderly care industry. The culture and education of filial piety and respect for the elderly can be expressed by the frequency of calling the elderly, the number of gifts, and the number

of trips together. Then a binary logistic regression model is constructed according to the above information:

$$(1)\quad Y_1 = \propto_{it} + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_i$$

Using Stata15 for data analysis, according to the data in the following Table 2: Y1 = 1.044 + 0.329x1 + 0.079x2+ 0.025x3. X1 is significant at the level of 0.01 and X3 is significant at the level of 0.1. Hypothesis 1 holds. Therefore, the frequency of calling the elderly and the number of trips with the elderly will have a significant impact on the sustainable development of the elderly care industry. To sum up: we should pay more attention to the elderly, accept their nagging, chat with the elderly at home and listen to their voices. Accompany them out for a walk, or watch TV and go shopping together quietly. Many simple actions can shorten the distance between the elderly and you, and make them feel at ease and considerate.

Table 2 Linear regression

Y	Coef.	St.Err.	t-v	p-v	[95%	Interval]	Sig
X1	.329	.089	3.71	0	.154	.505	***
X2	.079	.145	0.54	.588	-.208	.365	
X3	.285	.147	1.93	.055	-.007	.576	**
Constant	1.044	.357	2.93	.004	.338	1.749	***
*** p<.01, ** p<.05, * p<.1							

3.3.2 Active Concept of Aging Education

This article mainly from the following three aspects to understand whether the positive concept of aging education has a significant impact on the sustainable development of the elderly care industry. Among them, filial piety and respect for the elderly culture education can be expressed by the attitude towards the elderly to buy insurance, the attitude towards going out to work, and the attitude towards forced seat giving. Then a binary logistic regression model is constructed according to the above information:

$$(2)\quad Y_2 = \propto_{it} + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_i$$

It can be concluded from the data in the Table 3 below: Y1 = 1.016 + 0.342x1 + 0.182x2+ 0.254x3. X1 is significant at the level of 0.01, X2 and X3 are significant at the level of 0.05. Hypothesis 2 holds. Therefore, a positive attitude towards the old people's behavior of buying insurance and going out to work does not force the young people to give up their seats will have a significant impact on the sustainable development of the pension industry. To sum up: we should take the initiative to understand and pay attention to the needs of the elderly, let them express their views on hot things, support their correct ideas, and help them deal with various emotions and moods.

Table 3 Linear regression

Y	Coef.	St.Err.	t-v	p-v	[95%	Interval]	Sig
X1	.342	.104	3.28	.001	.136	.547	***
X2	.182	.072	2.54	.012	.04	.324	**
X3	.254	.097	2.61	.01	.062	.446	***

Constant	1.016	.27	3.76	0	.482	1.551	***

*** p<.01, ** p<.05, * p<.1

3.3.3 Population Aging Achievement Education

This paper mainly understands whether the population aging achievement education has a significant impact on the sustainable development of the elderly care industry from the following two aspects. Among them, the population aging achievement education can be expressed by the elderly's awareness of fraud and their satisfaction with community elderly care facilities. Then a binary logistic regression model is constructed according to the above information:

$$(3) \quad Y_3 = \propto_{it} + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_i$$

According to the data in the following Table 4: X1 and X2 are significant at the level of 0.01, so a high sense of vigilance and satisfaction with community elderly care facilities will have a significant impact on the sustainable development of the elderly care industry. Hypothesis 3 holds. To sum up: fraud prevention education can be carried out for the elderly. At ordinary times, a lesson on fraud prevention can be given to the elderly in combination with videos, pictures, etc., so that they can have a certain understanding of the fraud methods used by swindlers and improve their vigilance.

Table 4 Linear regression

Y	Coef.	St.Err.	t-v	p-v	[95%	Interval]	Sig
X1	.731	.051	14.22	0	.63	.833	***
X2	.183	.043	4.27	0	.098	.268	***
Constant	.318	.185	1.72	.087	-.047	.684	*

*** p<.01, ** p<.05, * p<.1

To sum up: Since assumptions 1, 2 and 3 are true, the general assumption is true. National education has a positive impact on promoting the sustainable development of the elderly care industry.

4 SUGGESTIONS

4.1 Service Concept Innovation

With the improvement of material and cultural levels, the elderly put forward higher requirements for the contents, standards and emotional exchanges of elderly care services. First of all, we should create a good and warm living environment for the elderly. The elderly living outside should pay more attention to spiritual care and stabilize their emotions. More importantly, we should treat the elderly as relatives, provide high-quality and efficient services, and let the elderly enjoy more humanistic care. In addition, we should provide personalized services with high standards and high added value according to the personalized needs of the elderly.

4.2 Service Mechanism Innovation

We must carry out institutional innovation with an innovative spirit in line with the operation mode of the market mechanism, and enhance our awareness of competition and crisis. The government should issue a complete industrialization standard based on full investigation, and standardize and standardize the pension industry system through reform according to the industrialization development direction. We will innovate the investment system, formulate preferential policies for investment, encourage private capital to enter the pension industry, invigorate the pension market, and promote the socialization of welfare.

4.3 Service Model Innovation

The current pension model in China is at the primary stage of development, which is limited to pension institutions such as nursing homes, apartments for the elderly, welfare homes, elderly activity centers, colleges and universities and other community institutions. Learn from the excellent experience of developed countries, refine service functions and types, and form a multi-level

and wide coverage pension model. For example, by promoting the elderly care real estate development project of "combination of medical care and elderly care", elderly care institutions are integrated into the community and home-based elderly care is integrated, which can provide elderly care services such as professional life, medical care, spiritual comfort, culture and entertainment for the elderly.

4.4 Innovation of Service Means

The rapid development of science and technology has also had a profound impact on the lifestyle of the elderly. Modern communication tools and information technology should be widely used in elderly care services. We should widely combine information technology with the elderly care industry, provide convenient and efficient services for the elderly, and promote a scientific and comfortable lifestyle for the elderly. Today, with the deepening of population aging, the informatization of the pension industry represents the development trend of pension in the future. With the continuous progress of science and technology and the wide application of the Internet of things, informatization has changed the health service mode of the elderly. The elderly population information service platform will become an important development direction. The community home-based elderly care model based on the cloud platform will become an effective means to improve service quality, and the intelligent terminal equipment for home health monitoring and auxiliary treatment will become an essential tool for the elderly.

4.5 Service Channel Innovation

In view of the measures that the government should take to promote the national education on aging, according to our survey, the following conclusions are drawn: the respondents basically agree with and support the three measures of carrying out theme publicity, centralized publicity and organizing cultural creation. In order to let more people understand the national education on population aging, the following are our suggestions, as shown in Table 5 below:

The government can provide relevant courses or special counseling lectures on "national education activities on population aging". The government can hold "education on the national conditions of population aging" 3-4 times in government offices, enterprises, schools, communities, elderly care institutions, etc. on holidays every year, mainly focusing on the main contents of the education on the national conditions of population aging, and upload the special report to the Internet as video courseware for more people to watch.

Expand channels for education and publicity of national conditions.

We will actively carry out the cultural activity of "education on the national conditions of the aging population". Each community can carry out group activities such as respect for the elderly month, physical fitness for the elderly, cultural and artistic performances in combination with traditional holidays, and carry out educational theme activities on the national conditions of the aging population with distinctive characteristics and strong attraction. The traditional virtues of changing customs and respecting and loving the elderly are publicized through literary and artistic performances, and the active concept of aging is advocated to guide the elderly to give full play to their positive energy and make new contributions in the new era.

Table5 Publicity channels for national education on population aging

Publicity activities	Main activities
Offering courses related to national education	The spirit of the 19th CPC National Congress; General secretary Xi Jinping's important speech on strengthening the work of ageing and the spirit of important instructions
Expand the channels of national conditions education and publicity	Make full use of wechat public platform, wechat group, public account, etc. to widely publicize population aging national education activities online, and broadcast more teaching videos, teaching materials and activity programs related to population aging national education.
Actively carry out the cultural activity of "education on national conditions of aging population"	A special calligraphy exhibition will be held once a month; Hold a knowledge contest on national education on population aging every few months; Hold a special photography exhibition on the elderly every six months; Arrange special programs once a year.

5   CONCLUSIONS

Carrying out national education on population aging will not only help to improve the scientific cognition of the health of the elderly, but also help young people to establish a positive concept of aging, so as to create a friendly social environment. National condition education plays a very important and positive role in the sustainable development of the elderly care industry, so we should strengthen the publicity of national condition education on population aging, pay attention to the sustainable development of the elderly care industry, and let people constantly learn national condition education, to better adapt to the development of society and better integrate into society.

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