Can Environmental Governance Improve Happiness?-An Empirical Study Based on Cgss Micro Survey Data

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Abstract: *Based on the data of China General Social Survey (CGSS) in 2015, this paper systematically analyzed the impact of environmental governance on residents' happiness by using regression model. The results show that the central government's environmental governance and local government s environmental governance have a significant impact on residents' happiness. Age, gender, nationality, educational level, political status and marital status also have a significant impact on residents' happiness. Based on this, paper puts forward relevant policy suggestions.*

Keywords: *Environmental governance, Residents' happiness, Government*

1. Introduction

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In recent years, influenced by the government's economic policies, China's economy has been continuously developing at a high growth rate. Many achievements have been made. In 2010, Chinas GROSS domestic product surpassed Japan's to become the world's second-largest economy. Although Chinas economic development trend is good, but the economic growth model is too rough, China has to pay a certain environmental price. [1] Pollution and overconsumption are serious problems in China. Chinas aggressive economic growth model has led to severe domestic pollution and a certain amount of waste of resources. From the perspective of air pollution, air pollution affects the health of residents and is a common concern of experts and researchers in related fields at home and abroad. All forces are actively looking for effective ways to reduce air pollution and strive for the harmony between man and nature.

Shi Huaping et al [2]. equality based on the analysis of economic theory, this paper summarizes the relationship between residents' life happiness and environmental pollution, and uses the method of entropy value to complete the analysis of model index by means of weight assignment and matches the results with the comprehensive index published by relevant departments in China to get the final conclusion. Zhao Li [3] conducted an empirical study on residents' happiness from factors such as income and found that income was not the main factor affecting residents' happiness through the analysis of indicator variables. Xiao Xiangyi et al. [4] choose to analyze the influencing factors of residents' happiness from two aspects of environmental quality and government control, and choose the case of southern Jiangsu Province. Through research, it is found that higher environmental quality can improve residents' happiness accordingly. Jet Wang [5] analyzed the data of CGSS in 2013, and analyzed and discussed the relationship between the government's environmental governance and the happiness of the elderly.

At present, domestic researches on happiness can be divided into three main stages. The first stage is to divide happiness into subjective happiness and objective happiness, of which the former can be abstractly analyzed as the utility function of individual residents. In the second stage, the content of SWB in the first stage is divided into macro level and micro level, and the SWB is defined as a public good actor. The third stage: The correlation analysis between happiness and national welfare.

Researchers can analyze the effects of government policies on residents' happiness in a market economy system. Most of the literatures collected are analyzed and discussed according to these three stages. But in the field of the study is an important problem to be solved, it is in people's life under the condition of ecological environment problem is increasingly deepened, the government's environmental management policy can reflect a country in the field of environmental management to make determination and action, then the government scientific environmental management system can improve people's happiness? Will residents' subjective well-being continue to decline after environmental quality is controlled by the government?

2. Variable Selection and Model Construction

2.1. Variable Selection

(1) Explained variables

In domestic studies, the scales used to test residents' happiness have been relatively scientific and perfect, but foreign researchers have also conducted case investigations on residents' happiness according to the differences between countries and regions, such as the Japanese General Social Survey, the World Value Survey and the Chinese General Social Survey. In order to ensure the scientific nature of the data of this study, the data of China General Social Survey is mainly selected as the basis of empirical analysis. The Chinese General Social Survey stands for CGSS. It is an investigation project with certain authority representative in China. According to the latest publicly available data results, this paper selects the survey data of this project in 2015 as the data basis of the study. In the China General Social Survey, subjective well-being is divided according to the Richter scale. The question in this part is fixed as "All in all, do you think your life is happy?", the respondents chose five different degrees according to their subjective well-being to express their own happiness experience status.

(2) Explanatory variables

①Environmental governance

Environmental pollution has a profound impact on the life happiness of modern residents, and it has a certain impact on the happiness of residents according to the pollution degree and development trend. Such changes mainly exist in two aspects, First, when the degree of environmental pollution is low, people attach more importance to the happiness of material life than the needs of living environment. Economic growth brought by less significant environmental pollution can improve residents' subjective happiness to a certain extent. On the contrary, when the pollution degree increases, people are more concerned about the quality of the living environment. At this time, the increase of the pollution degree will lead to the decrease of residents' subjective well-being. Secondly, the government undertakes the work of regional environmental governance. The fundamental goal is to take effective environmental governance and protection measures to improve the environmental quality of the region, meet the material needs of residents, reduce their concerns about environmental issues and appropriately alleviate the economic problems of some low-income groups affected by pollution. After proper environmental governance measures are adopted and the cost of environmental governance is controlled within an acceptable range, residents' subjective well-being will be greatly improved. On the contrary, the government has not taken effective measures. In order to ensure the structural balance of government expenditure, the investment in other public projects will be reduced, and the regional welfare policies will also be reduced to a certain extent, Residents do not experience the effective results of environmental pollution control by the government, but the decrease of social welfare is obvious, which will stimulate the decrease of residents' subjective happiness. In short, only by ensuring the quality of environmental governance can residents' subjective well-being be improved.

The key factor to coordinate regional economic development and environmental improvement is the government's environmental governance quality. Government to take effective environmental management measures, can in a short period of time to make regional environmental pollution under control, and ensure the steady development of the economy, such cases, the positive role of economic development and the drawbacks of the problems of environmental pollution in a controllable range, income is greater than the loss, and thus the subjective well-being of residents. Whether the government's measures to deal with environmental problems are effective also reflects the credibility of the government in the minds of the public. High-quality environmental governance can establish the government's WeChat, facilitate the promotion of regional policies, and enhance the trust between the government and the public. Based on the survey data of China General Social Survey Organization in

2015, this paper compiled the survey questions on environmental governance as "government's satisfaction degree on environmental governance. According to the subjective intention of the respondents, they are divided into five feeling levels.

②Other variables

Table 1: Definition of variables and descriptive statistics

The variable name	Variables are referred to as"	Variable to explain	The mean	The standard deviation	The minimum	The maximum
Subjective happiness	HAP	All in all, how happy are you with your life? : 1=very, 2=relatively unhappy, 3=not happy, 4=relatively happy, 5=very happy	3.481	0.736	1	5
Environmental governance	ENV	Satisfaction: 1=very dissatisfied, 2=Relatively dissatisfied, 3=average, 4=Fairly satisfied, 5=very satisfied	2.087	0.764	1	5
age	AGE	One full year of life	45.266	15.174	18	91
gender	GEN	0=male, 1=female	0.478	0.449	0	1
nationality	NAT	0=other minorities, 1=the Han nationality	0.830	0.241	0	1
Urban and rural household registration	RES	0=rural household registration, 1=permanent urban residence certificate	0.529	0.443	0	1
Education level	EDU	1=no education, 2=private school, literacy class 3=primary school, 4=junior high school, technical secondary school, 5=general high school, vocational high school, 6=technical school, 7=junior college, 8=undergraduate, 9=postgraduate or above	3.671	1.752	1	9
Political landscape	PAR	1=Communist Party members, 2=other parties, 3=league members, 4=masses	3.274	0.830	1	4
Marital status	MAT	1=cohabitation, unmarried, 2=first marriage with a spouse, second marriage with a spouse, married,3=separation, 4=divorce, 5=widowed	1.986	0.887	1	5

Other variables are explained for the respondent, including gender, age, marriage, ethnicity, education and so on. Among all explanatory variables, one of the most important factors affecting subjective well-being was the age of the subjects. In comparison, the physical condition of the elderly is relatively poor, for the environment requirements are higher, young people are less demanding; Gender factors may also have a great impact on the surveyor's subjective well-being. Compared with men, women are more sensitive, so they pay more attention to air quality. Other factors also have different effects on residents' subjective well-being. This paper divides ethnic factors into two parts: the first part is Han nationality, and the second part is minority nationality. In general, areas inhabited by ethnic minorities are less polluted than areas inhabited by Han Chinese. Under the influence of national culture, the difference of residents' values will also have different effects on their happiness. In terms of ordinary party members and the masses, party members have higher ideological and political consciousness, so they will pay more attention to the problem of social pollution and have a higher sense of responsibility, which leads to a certain difference between the subjective happiness of party members and the masses. Different marital status will have a certain impact on residents' psychology. After marriage due to family pressure and family membership changes. The scope of consideration for environmental pollution will be more extensive, and more attention will be paid to the impact of pollution and government environmental governance on family life, so it will also cause changes in subjective well-being: The identity difference of urban and rural residents also leads to the difference of subjective well-being. This paper divides urban household registration and rural household

registration to measure the difference of urban and rural subjective well-being. The household registration is a representative indicator of the difference of resident status. Now the serious enterprises in the cities have moved out, which leads to the greater risk of environmental pollution for rural residents. Comparatively speaking, the income of rural residents is not high, so there is not much economic cost to carry out effective environmental pollution. Thus, the impact of environmental pollution on the subjective well-being of residents living in rural areas; Among the factors affecting education level, people with high education can analyze the fundamental problems of environmental pollution and interpret relevant government policies from a scientific perspective due to their spiritual state. All these variables have a great impact on subjective well-being. The contents of variables and statistical results in the table are recorded in detail in Table 1.

2.2. Model Construction

This paper mainly discusses the impact of environmental pollution and environmental treatment effect on subjective well-being, and constructs the following econometric model for testing.

$$HAP = \alpha_0 + \alpha_1 ENV + \alpha_2 AGE + \alpha_3 GEN + \alpha_4 NAT + \alpha_5 RES$$
$$+ \alpha_6 EDU + \alpha_7 PAR + \alpha_8 MAT$$

In the above model, HAP is subjective well-being, ENV is environmental governance, AGE, GEN, NAT, RES. EDU. PAR and MAT are AGE, sex, nationality, urban and rural household registration, education level, political status and marital status respectively, are constant terms. and. is the coefficient of each influencing factor.

3. Empirical Analysis

According to research needs, this paper analyzes the impact of environmental governance on SWB through three regression models. Model 1 is the impact of central government's environmental governance on residents' happiness; Model 2 is the impact of local government's environmental governance on residents' happiness; Model 3 is the impact of both central and local government's environmental governance on residents' happiness. The regression results are shown in Table 2.

Table 2: Regression results of environmental governance on residents' happiness

	(1)	(2)	(3)
	0.0085*** (0.0007)		0.0102*** (0.0011)
		0.0118*** (0.0029)	0.0095*** (0.0005)
AGE	0.0028*** (0.0012)	0.0047*** (0.002)	0.0028*** (0.0004)
GEN	0.0753*** (0.0123)	0.0125*** (0.0011)	0.0521*** (0.0102)
NAT	-0.0688** (0.0264)	-0.0821** (0.0122)	-0.0652** (0.0022)
RES	-0.0028 (0.0201)	-0.0041 (0.0204)	-0.0049 (0.0123)
EDU	0.0325*** (0.0042)	0.0452*** (0.0024)	0.0405*** （0.0044）
PAR	-0.0324*** (0.0071)	-0.0654*** (0.0103)	-0.0429*** (0.0077)
MAT	-0.0329*** (0.0011)	-0.0411*** (0.0025)	-0.0443*** (0.0102)
R2	0.0524	0.0322	0.0448

The regression results show that the environmental governance of central government and local government has a significant impact on residents' happiness. Age, gender, nationality, educational level, political status and marital status also have a significant impact on residents' happiness. Older groups have higher demands on the atmosphere. Among the gender factors, the influence of men on the subjective well-being of air pollution is relatively low. Ethnic minority gathering areas are less affected

by environmental pollution than inland areas, and cultural values have a profound impact on residents' happiness. Party members are more concerned about the government's environmental pollution than the masses, so it has an impact on subjective happiness. After marriage, residents will pay more attention to environmental issues and government policies due to family health and other considerations, which also have an impact on subjective well-being. With the continuous development of China's economy, the per capita income of rural residents has been greatly improved, so the impact of environmental governance on residents' happiness has no significant impact. Residents with a higher education level have a more thorough understanding and analysis of the government's environmental governance policies, which leads to the difference in residents' subjective well-being.

4. Conclusions and Suggestions

In this study, data from the 2015 China General Social Survey were selected to explain the relationship between environmental governance and residents' happiness through empirical modeling analysis. The results show that environmental governance is the main factor affecting residents' happiness, and individual factors such as nationality and education level also have a relatively low impact on the improvement of residents' happiness.

Therefore, the primary task of regional governments is to strengthen their respective environmental governance efforts, improve environmental problems on the premise of cost saving, and continuously improve regional environmental optimization policies in a scientific manner. Due to varying degrees economic development between regions, requires a combination of regions, the existing environment optimization, the rules and policies of the government to accept the supervision of the public, environmental governance needs to let more people involved, the government will also encourage domestic enterprises to adopt modern green production, innovation technology to realize the balance of economic and environmental damage.

Acknowledgements

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