

Research on the Influencing Factors and Enhancement of Citizens' Participation in Voluntary Service in China

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Abstract

With the development of China's social economy, voluntary service activities have been widely carried out. In this context, based on the data of Chinese General Social Survey (CGSS) in 2017, using cross contingency table and binary logistic regression model to conduct an empirical analysis on the influencing factors of citizens' participation in voluntary service. The results showed that: household registration, political status, education, family economic status, and Internet usage are the significant factors affecting citizens' participation in voluntary service, while gender, age, physical health and subjective well-being are not significant. In this regard, the following suggestions are put forward to enhance the development level of voluntary service: promote voluntary service in rural areas, and narrow the gap between urban and rural in voluntary service; improve the health level and well-being of people, and stimulate the enthusiasm of people to participate in voluntary service; promote the development of "Internet plus voluntary service".

Keywords

Voluntary Service; Volunteer Behavior; Logistic Regression Analysis.

1. Introduction

Voluntary service is an important symbol of the progress in social civilization. Many scholars believe that voluntary service is voluntary, public welfare, unpaid, and altruistic (Jiang Xunqing, 2002; Snyder and Omoto, 2008; Wilson, 2012) [1-3], and Wei Na (2013) believes that voluntary service is a public welfare service that volunteers voluntarily provide to society without material remuneration [4]. In order to encourage and standardize the development of voluntary service, the Voluntary Service Ordinance adopted by China on June 7, 2017 defines voluntary service as "volunteers, volunteer organizations and other organizations voluntarily and free of charge to provide public welfare services to the society or others"; defines volunteers as "natural persons who engage in voluntary service with their own time, knowledge, skills, physical strength, etc." [5], and defined their concept in legal form.

With the rapid development of China's social economy, voluntary service activities are widely carried out, which plays an important role in promoting social harmony. The 14th Five-Year Plan in China points out that "support and develop social work service institutions and voluntary service organizations, expand volunteer teams, build more voluntary service platforms and improve the voluntary service system" [6]. According to the data provided by the China Volunteer Service Network, the number of real-name volunteers nationwide has reached 222 million, the number of volunteer teams has reached 1.25 million, and the number of volunteer projects has reached 9.14 million. More citizens are participating in voluntary service activities and realizing their self-value in serving the society. In this context, it is beneficial to promote the development of China's voluntary service and improve the level of social civilization by studying which factors will influence citizens' participation in voluntary service.

2. Literature Review

Participating in voluntary service has a positive effect on personal and social development. In terms of individuals, participating in voluntary service can improve their well-being (Wilson, 2000; Piliavin and Siegl, 2007; Borgonovi, 2008) [7-9], Zhang Wenchao et al. (2021) found that the elderly who participate in voluntary service has a particularly significant improvement in well-being [10]. According to the social capital theory (Coleman, 1988) [11], participating in voluntary service can expand citizens' social network, which is conducive to the accumulation of social capital (Antoni, 2009; Mui, 2010) [12,13]. In terms of social development, Zhu Lingjun (2005) believed that voluntary service can improve social public services [14]; Dang Xiuyun (2011) pointed out that voluntary service plays a positive role in making up for the dual failure of government and market [15]; Qiu Bin (2021) believed that voluntary service is an important way to promote rural civilization and effective governance [16]; Tan Jianguang (2021) pointed out that the development of voluntary service is conducive to the construction of voluntary service system with Chinese characteristics and the promotion of social governance innovation [17].

At the same time, the research on the influencing factors of citizens' participation in voluntary service has gradually increased, and the research objects mainly include two aspects: elderly group voluntary service participation and young college students voluntary service participation. The first is the elderly group voluntary service participation. As elderly people get older, their participation in voluntary service gradually declines (Fischer et al., 1991; Erlinghagen and Hank, 2006; Choi et al., 2007) [18-20]; Chambre (1984) found that married seniors are more likely to participate in voluntary service than unmarried seniors [21]; Xie Lili (2017) found that there is a phenomenon of high willingness but low participation in urban elderly voluntary service in China [22]; Li Yixuan (2019) analyzed relevant data, found that gender, education level, urban and rural distribution, health status have a significant impact on elderly voluntary service participation [23]; Yu Zehao (2019) believed that elderly people with better economic status are more likely to participate in voluntary service [24], while Ding Zhihong (2012) found that the elderly with better economic status have less probability to participate in voluntary service [25]. The second is the young college students voluntary service participation. Wang Hong and Deng Qinghua (2012) investigated college students in different regions of China, found that college students also have the phenomenon of high willingness but low participation in voluntary service [26]; Bian Fei and Liu Zhiwen (2021) summarized the influencing factors of college students' participation in voluntary service as self-factor, organizational factor and social support factor [27], Zhang Bing and Zhu Xiaolei (2018) believed that strong social support will enhance the sustainability of college students' participation in voluntary service [28], Georgina and Clare (2011) investigated some universities in the UK and found that universities will improve the enthusiasm and quality of college students' voluntary service by supporting them to carry out voluntary service activities [29].

In Summary, participating in voluntary service is beneficial to individuals and society. Although the current research on the influencing factors of citizens' participation in voluntary service has achieved certain results, the research objects are mostly concentrated in the two groups of elderly people and young college students, the representation of the overall national situation is poor, and there is a lack of corresponding empirical research. In view of this, the data of Chinese General Social Survey in 2017 used in this paper is well representative, and it has certain theoretical significance and practical value to explore the influencing factors of citizens' participation in voluntary service through empirical analysis of national data.

3. Research Design

3.1. Data Source and Variable Assignment

3.1.1. Data Source

The data used in this paper comes from Chinese General Social Survey (CGSS). Chinese General Social Survey is the earliest nationwide, comprehensive and continuous academic survey project in China, which collects data from multiple levels of society and is widely used by researchers. A total of 12,582 valid samples were collected in CGSS2017, and 4142 valid samples were obtained after processing by further removing some samples that missing important information in this study. According to the relevant variables involved in CGSS2017, with "have you ever volunteered" as the dependent variable, the following types of independent variables were screened out: demographic variables (gender, age, household registration, political status), physical and mental health variables (physical health status, subjective well-being), socioeconomic variables (education level, family economic status, Internet usage).

3.1.2. Variable Assignment and Descriptive Statistics

Table 1. Variable assignment and descriptive statistics

Variable symbol	Variable name	assignment	mean	standard deviation
Y	Have you ever volunteered	No=0; Yes=1	0.13	0.336
X1	gender	Male = 0; Female = 1	0.52	0.5
X2	age	20-29 years = 1; 30-39 years = 2; 40-49 years = 3; 50-59 years = 4; 60-69 years = 5; 70-79 years = 6; 80 years and above = 7	4.01	1.69
X3	Household registration	Urban = 0; rural = 1	0.63	0.483
X4	Political status	Party member = 0; other = 1	0.89	0.312
X5	Physical health	Very unhealthy = 1; relatively unhealthy = 2; general = 3; relatively healthy = 4; very healthy = 5	3.46	1.114
X6	Subjective well-being	Very unhappy = 1; comparative unhappiness = 2; general = 3; comparative happiness = 4; very happy = 5	3.87	0.862
X7	Education level	Elementary school and below = 1; junior high school = 2; high school = 3; junior college = 4; undergraduate = 5; graduate student and above = 6	2.35	1.339
X8	Family economic status	Well below average = 1; below average = 2; average = 3; above average = 4; well above average = 5	2.55	0.751
X9	Internet usage	Never = 1; seldom = 2; sometimes = 3; often = 4; very frequent = 5	2.82	1.72

Table 1 gives the variable assignment and descriptive statistics of related variables. It can be seen from Table 1 that only 13% of volunteers have participated in voluntary service, indicating that the participation rate of voluntary service is low. In the demographic variables, the gender difference is not obvious, 52% female, 48% male; most of them were 50-59 years old (mean 4.01); the type of household registration was mainly rural, accounting for 63%; in terms of political status, party members accounted for 11% and non-party members accounted for 89%. In the physical and mental health variables, most of the physical health status was between "general" and "relatively healthy" (mean 3.46); the subjective well-being was mainly "comparative happiness" (average 3.87). In the socioeconomic variables, the education level

was generally low, mostly in high school or below (mean 2.35); most of the family economic status was at the average level or below (mean 2.55); the frequency of Internet usage is low (mean 2.82).

3.2. Model Building

Since the dependent variable "have you ever volunteered" is a dichotomous variable, there are only two possible results: "yes" and "no", binary logistic regression method is adopted to analyze the influencing factors of citizens' participation in volunteer service. The basic form of logistic regression equation is:

$$\text{Logit}(P) = \ln\left(\frac{P}{1-P}\right) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_i X_i \quad (1)$$

$$P = \frac{\exp(\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_i X_i)}{1 + \exp(\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_i X_i)} \quad (2)$$

In formula (2), P represents the probability that the dependent variable is 0 (citizens have not participated in voluntary service) or 1 (citizens have participated in voluntary service), α is the constant term, $\beta_1, \beta_2, \dots, \beta_i$ is the coefficient of independent variable X .

4. Empirical Analysis

4.1. Cross Contingency Table Analysis

Cross contingency table was used to analyze the frequency distribution of voluntary service participation under different circumstances with different variables.

First, gender. It can be seen from Table 2 that the frequency distribution of male and female in voluntary service participation is flat, indicating that there is no significant difference between male and female in voluntary service participation. With the development of times, more females participate in voluntary service and realize their own value in serving the society.

Second, age. From Table 2, citizens aged 20-29 participate in voluntary service most frequently, and with the increase of age, the frequency of voluntary service participation has a certain downward trend. It can be inferred that young people are more energetic and enthusiastic about voluntary service.

Third, household registration. From Table 2, the frequency of urban registered population in voluntary service participation is about twice that of rural registered population. There are more voluntary service organizations in urban, and the supporting facilities related to voluntary service are better, so the frequency of voluntary service is higher.

Fourth, political status. From Table 2, the frequency of party members in voluntary service participation is more than twice that of non-party members, reflecting that party members play the exemplary vanguard role in voluntary service.

Fifth, physical health. It can be seen from Table 2 that people with poorer health status have lower frequency of participating in voluntary service. Moreover, the number of people with poor health status who have not participated in voluntary service is significantly higher than the number of people who have participated in voluntary service. People who are in poor health have declined physical function and are less likely to volunteer.

Sixth, subjective well-being. It can be seen from Table 2 that people who think their life is happier are more likely to participate in voluntary service than those who think their life is less happy.

Table 2. Cross contingency table analysis results

Influencing factors	Factor characteristics	Frequency of volunteered	Frequency of not volunteered	subtotal
gender	male	259(13.0%)	1738(87.0%)	1997
	female	278(13.0%)	1867(87.0%)	2145
age	20-29 years	77(23.9%)	245(76.1%)	322
	30-39 years	108(18.0%)	493(82.0%)	601
	40-49 years	105(16.0%)	552(84.0%)	657
	50-59 years	83(9.5%)	794(90.5%)	877
	60-69 years	74(9.2%)	729(90.8%)	803
	70-79 years	60(10.4%)	515(89.6%)	575
	80 years and above	30(9.8%)	277(90.2%)	307
Household registration	urban	286(18.6%)	1251(81.4%)	1537
	rural	251(9.6%)	2354(90.4%)	2605
Political status	Party member	109(24.0%)	345(76.0%)	454
	other	428(11.6%)	3260(88.4%)	3688
Physical health	Very unhealthy	8(3.7%)	206(96.3%)	214
	Relatively unhealthy	50(7.5%)	619(92.5%)	669
	general	128(12.7%)	883(87.3%)	1011
	Relatively healthy	227(15.1%)	1278(84.9%)	1505
	Very healthy	124(16.7%)	619(83.3%)	743
Subjective well-being	Very unhappy	6(8.7%)	63(91.3%)	69
	Comparative unhappiness	22(7.5%)	271(92.5%)	293
	general	71(12.9%)	481(87.1%)	552
	Comparative happiness	319(13.2%)	2106(86.8%)	2425
	Very happy	119(14.8%)	684(85.2%)	803
Education level	Elementary school and below	95(6.7%)	1315(93.3%)	1410
	Junior high school	117(10.0%)	1053(90.0%)	1170
	High School	119(15.6%)	642(84.4%)	761
	Junior college	73(20.6%)	281(79.4%)	354
	undergraduate	119(29.7%)	282(70.3%)	401
	Graduate student and above	14(30.4%)	32(69.6%)	46
Family economic status	Well below average	19(5.4%)	331(94.6%)	350
	Below average	138(9.3%)	1339(90.7%)	1477
	average	315(15.5%)	1711(84.5%)	2026
	Above average	64(22.7%)	218(77.3%)	282
	Well above average	1(14.3%)	6(85.7%)	7
Internet usage	never	101(5.8%)	1646(94.2%)	1747
	seldom	30(12.9%)	203(87.1%)	233
	sometimes	45(14.8%)	259(85.2%)	304
	often	132(17.5%)	622(82.5%)	754
	Very frequent	229(20.7%)	875(79.3%)	1104

Seventh, education level. From Table 2, people with higher education level are more likely to participate in voluntary service. People with higher education have a higher sense of social responsibility, and can obtain more voluntary service information through the Internet.

Eighth, family economic status. From Table 2, people with better family economic status are more likely to participate in voluntary service. People with better family economic status do not have to worry about basic livelihood, and have more energy and capital to devote to voluntary service.

Ninth, Internet usage. From Table 2, people who use the Internet more frequently are more likely to participate in voluntary service. By using the Internet, you can get more voluntary service information in time, and you can join the online volunteer communities to facilitate communication.

The above analysis has preliminarily explained which factors may have an impact on the citizens' participation in voluntary service. Binary logistic regression analysis was used below to further test the validity of the above cross contingency table analysis results.

4.2. Binary Logistic Regression Analysis

SPSS19.0 was used for binary logistic regression analysis. Table 3 shows the results of regression analysis. According to the Sig. in Table 3, at the significance level of 0.05, there are five significant factors affecting citizens' participation in voluntary service: household registration, political status, education level, family economic status and Internet usage. The five significant factors were put into the binary logistic regression model again for testing, and the fitting results were shown in Table 4.

According to Table 4, the binary logistic regression model can be concluded as follows:

$$P\{Y = 1\} = \frac{\exp(-3.345 - 0.215X_3 - 0.397X_4 + 0.179X_7 + 0.283X_8 + 0.212X_9)}{1 + \exp(-3.345 - 0.215X_3 - 0.397X_4 + 0.179X_7 + 0.283X_8 + 0.212X_9)}$$

Table 3. Binary logistic regression analysis results

variable	B	S. E.	Wald	df	Sig.	Exp(B)
gender	0.130	0.097	1.801	1	0.180	1.139
age	-0.029	0.041	0.517	1	0.472	0.971
Household registration	-0.251	0.112	5.019	1	0.025	0.778
Political status	-0.458	0.143	10.249	1	0.001	0.633
Physical health	0.056	0.054	1.108	1	0.293	1.058
Subjective well-being	-0.002	0.064	0.001	1	0.977	0.998
Education level	0.163	0.048	11.485	1	0.001	1.177
Family economic status	0.271	0.073	13.901	1	0.000	1.311
Internet usage	0.189	0.042	20.583	1	0.000	1.207
Constant term	-3.274	0.478	46.912	1	0.000	0.038

According to B and Exp(B) in Table 4, it can be seen that household registration is negatively correlated with citizens' participation in voluntary service, the possibility of rural household registration to citizens' participation in voluntary service is 0.807 times that of urban household registration. There is a negative correlation between political status and citizens' participation in voluntary service, the possibility of non-party members to citizens'

participation in voluntary service is 0.672 times that of party members. There is a positive correlation between education level and citizens' participation in voluntary service, the possibility of high education level to citizens' participation in voluntary service is 1.197 times that of low education level. There is a positive correlation between family economic status and citizens' participation in voluntary service, the possibility of good family economic status to citizens' participation in voluntary service is 1.327 times that of poor family economic status. There is a positive correlation between Internet usage and citizens' participation in voluntary service, the possibility of high frequency in Internet usage to citizens' participation in voluntary service is 1.236 times that of low frequency in Internet usage.

Table 4. Fitting results

variable	B	S. E.	Wald	df	Sig.	Exp(B)
Household registration	-0.215	0.106	4.104	1	0.043	0.807
Political status	-0.397	0.133	8.859	1	0.003	0.672
Education level	0.179	0.045	15.785	1	0.000	1.197
Family economic status	0.283	0.070	16.476	1	0.000	1.327
Internet usage	0.212	0.036	34.787	1	0.000	1.236
Constant term	-3.345	0.275	148.474	1	0.000	0.035

5. Summary and Prospect

5.1. Summary and Suggestions

By investigating demographic variables, physical and mental health variables, socioeconomic variables, and using cross contingency table and binary logistic regression analysis, this paper obtained the significant influencing factors of citizens' participation in voluntary service. In this regard, the following conclusions are drawn.

First, among the demographic variables, household registration and political status are significant factors affecting citizens' participation in volunteer service, urban registered population and party members are more likely to participate in voluntary service. Gender and age have no significant impact on citizens' participation in volunteer service. Although the analysis results of cross contingency table showed that younger people are more likely to participate in voluntary service, this conclusion is not significantly supported by binary logistic regression model.

Second, among the physical and mental health variables, both physical health status and subjective well-being have no significant impact on citizens' participation in volunteer service. Although the analysis results of cross contingency table showed that people with better physical health and happier life are more likely to participate in voluntary service, the conclusion is not significantly supported by binary logistic regression model.

Third, among the socioeconomic variables, education level, family economic status and Internet usage all have significant impact on citizens' participation in volunteer service. People with higher education, better family economic status and more frequent Internet usage are more likely to participate in voluntary service.

In view of above research conclusions, the following suggestions are put forward to promote the development of voluntary service.

First, promote the development of voluntary services in rural areas, and narrow the gap between urban and rural areas. Rural areas need to establish voluntary service organizations and improve the relevant supporting facilities of voluntary service.

Second, ensure and improve living standard through development, constantly improve the health level and well-being of people, and stimulate the enthusiasm of people to participate in voluntary service.

Third, promote the development of "Internet plus voluntary service". Support the development of online voluntary service activities to meet the growing needs of the public for online voluntary service. Improve the national voluntary service information system to promote service quality and efficiency.

5.2. Research Insufficiencies and Prospect

This paper preliminarily discusses the influencing factors of citizens' participation in voluntary service in China. However, the actual influencing factors are much richer and more complex than the situation reflected by the current indicators. Therefore, a more systematic and perfect influencing index system needs to be built. At the same time, this paper only selects the data of 2017 for analysis, and the yearly change of citizens' participation in voluntary service is not reflected in the paper, which needs to further enrich the research content in time scale. Therefore, the future study can further deepen the research from the above problems, so as to more citizens to participate in voluntary service, form a good social atmosphere for voluntary service, and build a harmonious society.

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