Research Article

Beliefs and Mental Health in Today's China: A Study of Rural Adults

Jie Zhang, PhD[1,2]; Yilin Ye, MA[1]

[1]Central University of Finance and Economics, China
[2]State University of New York Buffalo State University, USA

*Corresponding author: **Jie Zhang, PhD**

Central University of Finance and Economics, China.
Email: zhangj@buffalostate.edu

Abstract

Background and the aim of the study: The relationship between beliefs and mental health of the Chinese people has been understudied. There are basically three types of beliefs in China today: religion, folk belief, and political belief. Religion is not a mainstream social value in China, where folk belief is more popular than religion, and the political belief in the Chinese Communist Party (CCP) has a position in the Chinese belief system. This study aims to look into the disparities in mental health among the three types of believers.

Methods: Data for study were from China Family Panel Studies (CFPS) of 2018, which had a total of 14,499 Chinese adults (males = 7,245 and females = 7,254) aged 16 years and over. Beliefs were in three categories, and mental health was measured by CES-D (Center for Epidemiological Studies – Depression).

Findings: The believers of a religion were more depressed than non-believers of religion. The Chinese folk believers were also found more depressed than no-believers. On the other hand, the political believers such as the Chinese Communist Party (CCP) members were less likely to be depressed than non-members of the CCP.

Conclusion: The Chinese belief system is different from what is found in the West. The spectrum of beliefs in rural China is composed of religion, folk, and politics. With only about 3.16% of the population, religion is not as popular in China as in the West. Stereotype, stigma, prejudice, and discrimination can be explanations for the Chinese religious believers' deviance. More people prefer to believe in folk beliefs due to their traditional culture. Unfortunately, the folk believers are not psychological healthy as much as those Chinese Communist Party (CCP) members. The Strain Theory is used to account for these observations.

Keywords: Chinese; Religion; Beliefs; Depression; The Strain Theory

Introduction

Mental health is a topic that we all must pay attention to, because it is closely related to each individual and even social stability. With the rapid development of economy, the accelerated pace of life, the dramatic social changes and the integration and collision of eastern and western cultures, people's mental health problems are increasingly prominent, and suicide behaviors caused by too much pressure and psychological problems are not uncommon. However, this topic has not attracted enough attention in China. Chinese people do not have enough understanding of depression and other mental and emotional disorders as well as suicide behavior. They are easy to be ignored in daily conversation and behavior, or even taboo. In this context, it has become an important responsibility to promote people's attention and understanding of mental health issues.

In addition, Chinese spiritual belief, especially religious beliefs, is not as popular as most western countries. In China, only a small number of people (15%) admit they are religious believers [25]. The true reason is the western religious market is exceedingly mobilized, whereas the Chinese religious market is seriously underdeveloped [19]. Furthermore, when studying the mental health problems of Chinese people, it is rare to include spiritual belief such as religion into the scope of independent variables to explain.

Citation: Zhang J, Ye Y. Beliefs and Mental Health in Today's China: A Study of Rural Adults. Austin J Public Health Epidemiol. 2024; 11(1): 1159.

There have been many studies on mental health and public health in western countries, but this is developing slowly in China. Due to the different historical development, social structure and social culture of the East and the West, many phenomena and conclusions in the West are not fully applicable to China. Therefore, it is necessary to study the mental health of Chinese people based on the local theory and practice.

On people's mental health and its influencing factors, domestic and international scholars have carried out a number of discussions and researches from the aspects of socioeconomic status, population migration, survival pressure, social capital and spiritual belief.

In the study of urban vulnerable groups in China, the researcher has found that these groups, due to the relatively serious sense of deprivation and strong frustration, are likely to suffer mental illness, resulting in psychological inferiority, impatience, pessimism, disappointment or emotional instability and other negative effects and mental disorders [26]. Liu Dong has pointed out that there was a significant negative correlation between the structural constraints of the current urban social system and the mental health of the migrant population [12]. Someone have analyzed the main threats to the mental health of migrant workers from the perspectives of social and economic status, migration pressure and social capital [6]. Specifically, Lei et al. have found that there was a significant correlation between depression symptoms and self-education and per capita expenditure in the study of middle-aged and elderly people aged 45 and above, and the lower the socioeconomic status, the higher the degree of depression [9]. Qin et al. [13] have analyzed the data of CFPS 2012, and found that women, elderly groups and people living in the Midwest and rural areas are more likely to be depressed, and there are significant socioeconomic differences in mental health. The higher the level of education and income, the lower the possibility of depression [13].

In terms of people's mental health and religious beliefs, most of the research results have showed that religious beliefs may be related to better mental health and do not directly cause the improvement of mental health level, but related activities such as prayer have the possibility of promoting mental health [1]; as the research conclusion of Stack and Lester said: Catholicism has nothing to do with suicidal ideation. In contrast, the higher the attendance rate of church, the lower the suicidal intention [18]. Similarly, Koenig and Larson have pointed out that many studies have shown that religious participation is often associated with greater well-being, less depression and anxiety [5].

Green and Elliott have compared the effects of religious beliefs on health and happiness. They evaluated the impact of religious beliefs on Residents' health and well-being, job satisfaction, economic status, etc. based on the data of the 2006 General Social Survey (GSS) in the United States. The results showed that religious people were healthier and happier regardless of religious beliefs, religious activities, work and family, social support, or financial status [4]. Elliott also found that the positive association does not always exist and in certain instances, religiosity is harmful to psychological well-being [2].

Some researchers have found that religious beliefs, spiritual maturity and self-transcendence can effectively predict mental health, including lower levels of depression, anxiety, obsessive-compulsive disorder, and higher levels of self-esteem, identity integration, moral self-recognition and the meaning of life.

These conclusions are consistent with many previous studies that have found that religious beliefs are related to better psychological state and positive social psychological function [15]. Son and Wilson have also proved that religious people have more psychological resources and better physical health, so religion has a long-term positive impact [16].

But in England, King has found people who profess spiritual beliefs in the absence of a religious framework are more vulnerable to mental disorder [8]. Furthermore, there exists finding that the stronger the spiritual or religious belief at baseline, the higher the risk of onset of depression [10]. It is same to most study conclusions of beliefs and mental health in China. A study has discussed the influence of religion and superstition on Chinese women's suicide intent from the perspective of socio-psychological traits, and has found that the higher the degree the religiosity and superstition on metempsychosis, the stronger the suicide intent Chinese women had [24]. Similarly, for rural women, believing in Christ may be the only hope and way to help them resist diseases and difficulties in daily life [14]. Zhang et al. have found that when exploring the relationship between religious beliefs and mental health of Chinese college students, religious believers of them tend to have higher self-esteem and social support than non-religious believers, but compared with atheist students, they are more likely to feel depressed and want to commit suicide [25]. Jia et al. have found that the prevalence of anxiety in the elderly with religious beliefs was higher than that in the elderly without religious beliefs, and the single net factor and multi-factor analysis were statistically significant [7]. In addition, there are more detailed studies on spiritual belief (religion and folk belief) and mental health in China. By exploring the relationship between College Students' spiritual belief and mental health, Song has concluded that spiritual belief has a certain role in mental health. Among them, supernatural belief has a positive effect on interpersonal sensitivity, obsession, depression and anxiety (Song, Jin, & Li, 2004). Li et al. has reached similar conclusions in the relevant research on postgraduates [11]. Religious and folk believers had higher depression and more suicidal ideation than did the CCP members [25]. The above shows that religious and folk beliefs do not protect believers when they are only the minority. So based on previous studies in the literature, we have done the following three hypotheses:

H1: In rural areas of China, religious believers are more likely than non-believers of religion to be depressed.

H2: In rural areas of China, folk believers are more likely than non-believers of folk beliefs to be depressed.

H3: In rural areas of China, the believers are more depressed than non-believers, except for the CCP members.

To sum up, in this study, we will use the data of CFPS 2018 to focus our vision on people over 16 years old in rural areas of China. Based on the experience summary of existing research, combined with the research theme and the characteristics of the database used, we will focus on exploring the relationship between the group's religious and other spiritual belief and mental health status, and use the Strain Theory of Suicide and Mental Disorder (Jie Zhang, 2005) to explain the research results and to verify the relationship between religious beliefs and mental health in China, an atheist country.

Methods and Procedures

Data Source

In this study, the national large sample data collected by China Family Panel Studies (CFPS) which is a national longitudinal general social survey project in 2018, administered by Peking University's Institute of Social Science Survey (ISSS). CFPS focuses on both the economic and non-economic well-being of the Chinese people, covering substantive areas such as economic activities, educational attainment, family relationships and dynamics, population migration, and physical and mental health.

CFPS implemented its baseline survey in 2010 and continued full sample follow-up surveys every two years. The survey object of the project is all family members in 25 provinces / municipalities / autonomous regions in China (excluding Hong Kong, Macao, Taiwan, Xinjiang Uygur Autonomous Region, Tibet Autonomous Region, Qinghai Province, Inner Mongolia Autonomous Region, Ningxia Hui Autonomous Region, Hainan Province) representing 95% of the Chinese population. Therefore, although there are many ethnic minorities in China, and almost all of them have their long-held beliefs, which may lead to inconsistent conclusions with the general situation in other regions, the samples of these regions are not included in the database. So, there is no need to deal with this in a special way, nor will it affect the final results and conclusions.

The Inclusion and Exclusion Criteria

In the previous research on beliefs and mental health problems in China, it was found that suicide rate in rural areas is higher than that in cities [26]. Therefore, we select samples from rural areas, hoping to attract people's attention to mental health of rural Chinese. In the past, most of the research groups focused on rural women, the elderly and students and other vulnerable groups, but after China's reform and opening up, it quickly integrated into the wave of globalization. With the rapid development of economy and the dramatic changes of society, people are facing the changeable social environment, and the sources of life pressure are also increasing, and the mental health risks of all classes and age groups are likely to increase. Therefore, the research object cannot be limited by the previous research choice, and should pay attention to the mental health and its changes of various groups. So in this study, the over 16 years old population in rural China are included in the scope of analysis, to compare the specific performance of different groups in the risk of depression and whether there are differences.

In addition, in the past, the explanation of mental health disorders of Chinese mainly focused on socioeconomic status, intergenerational relations, population migration and social changes, ignoring the influence of people's beliefs, a cultural and spiritual factor. In the CFPS database, there are eight items about religious and folk beliefs, which can be discussed in-depth on beliefs and its details to make up for some shortcomings of previous studies.

The Variables

The dependent variable is the depression of rural Chinese over 16 years of age, which is mainly reflected by 8 items in CES-D scale. After testing, the scale has been proved to have good reliability and validity in Chinese rural population [21]. The scores of the 8 items are added as the total score of depression, and other variables were combined for statistical analysis.

The independent variables are various beliefs which include: "Do you believe in Buddha or Bodhisattva?" "Do you believe in immortals?" "Do you believe in Allah?" "Do you believe in God?" "Do you believe in Jesus Christ?" "Do you believe in ancestors?" "Do you believe in ghosts?" "Do you believe in Fengshui?" and "Are you a member of the CCP?" They respectively represent belief in Buddhism, Daoism, Muslin, Catholics, Christianity, Ancestors, Ghost, Fengshui and the CCP.

The control variables are demographic information, which mainly include gender, age, marital status, physical health status, education level and total annual income.

Data Processing

Using the data of CFPS 2018, there are eight items in CES-D, including: "I feel depressed," "I feel hard to do anything," "My sleep is not good," "I feel lonely," "I feel sad," "I feel unable to continue my life," "I feel happy" and "I live happily." According to the actual situation, respondents are required to indicate the frequency of various feelings or behaviors in the past week. There are four options: almost none (less than a day), sometimes (1 to 2 days), often (3 to 4 days), most of the time (5 to 7 days). Their corresponding scores are respectively 1-4 points, and the total scores range from 1-32 points. Two of the positive items were coded in the opposite direction in order to be consistent with the logic of other items. CES-D scale is widely used in the test of depression degree in general population (Jie Zhang et al., 2017). The higher the score is, the stronger the depression is, that is to say, the worse the mental health is. Through Stata statistical software (version 15.0), t-test, analysis of variance, contingency table analysis, multiple linear regression model and other methods were used to process the data.

After processing the samples, a total of 14,499 samples were included in the analysis, all of which were 16-year-old and above population in rural areas. And the sex ratio was 1:1, the female code was 0, and the male code was 1.

The scores of 8 items of CES-D were added as a measure of depression, that is, dependent variable. The mean is (13.99 ± 4.16), the minimum is 6, and the maximum is 32. After using logarithm to transform variables, the distribution of the variables is approximately normal.

There are five categories of marital status: "Unmarried," "Married (with spouse)," "Cohabitation," "Divorced" and "Widowed." According to whether you have a spouse, "Married (with spouse)" and "Cohabitation" were listed as "Living with spouse," with a code of 1, and other status as "Living without spouse," with a code of 0. In terms of physical health status, "Extremely healthy," "Very healthy" and "Relatively healthy" were listed as "Healthy," recoded as 0, "Average healthy" as 1, and "Unhealthy" as 2. As the education level, it was coded as the following way: 0, no education; 1, illiterate/semiliterate; 2, primary school; 3, junior high school; 4, senior high school; 5, college; 6, university; 7, master. According to whether you are a CCP member, it can be divided into two categories: "the CCP member" and "non-CCP member," with the codes of 1 and 0 respectively. Each belief was divided into two categories according to "believe" and "not believe," which were recoded as 1 and 0 respectively. Recode "whether a member of a religious group" as 1= yes, 0= no. Eight items of religious and folk beliefs and "whether a member of a religious group" were added to obtain the continuous variable "belief level." Five religion items were added to obtain a variable "Religion," which were coded as 0, "non-believers of religion"; 1-5, "religious believers." Three folk items were added to obtain a variable "Folks," which were coded as 0, "non-believers of folk beliefs"; 1-5, "folk believers."

Results

Descriptive Presentation of the Sample

Table 1 illustrates the characteristic distribution of the samples for gender comparisons. We found that the distribution of male and female in all demographic information have a significant difference. Females in the sample tended to be unhealthy, low educational level and low income. Females are more likely to live with their spouses. In addition, the proportion of middle-aged people in the sample is relatively large, the vast majority have spouses, and most of them are in good physical condition and didn't accept higher education.

Table 1: Demographic Characteristics of the Sample with Gender Comparisons.

Variables	Total (n=14,499) ƒ (%) or x̄ (SD)	Male (n=7,245) ƒ (%) or x̄ (SD)	Female (n=7,254) ƒ (%) or x̄ (SD)	t	P
Age	47.79±16.62	48.12±16.72	47.46±16.52	-2.40	0.0166
Living with Spouse				3.68	0.0002
Yes	11,477 (79.16%)	5,645 (77.92%)	5,832 (80.40%)		
No	3,022 (20.84%)	1,600 (22.08%)	1,422 (19.60%)		
Physical Health Status				13.10	<0.001
Healthy	9,828 (67.79%)	5,233 (72.24%)	4,595 (63.35%)		
Average	1,852 (12.78%)	908 (12.53%)	944 (13.02%)		
Un-healthy	2,817 (19.43%)	1,103 (15.23%)	1,714 (23.63%)		
Education level	2.60±1.41	2.72±1.31	2.49±1.51	-6.84	<0.001
Total Annual Income (RMB)	11437.87±24772.23	15364.05±29456.24	7516.56±18146.07	-19.32	<0.001

Table 2 shows the number and proportion of people who believe in all kinds of beliefs. We found that although some people in rural areas of China have their own beliefs, only 3.16% of the people really recognize themselves as members of religious groups and members of female religious groups are higher than that of male. The fact that the number of people who recognize themselves as members of religious groups is less indicates that religious beliefs are not common in rural areas of China.

In rural China, the proportion of people who have beliefs is from high to low: Ancestry (62.06%), Fengshui (48.46%), Buddhism (34.57%), Daoism (22.72%), Ghost (9.86%), the CCP (7.21%), Christianity (6.21%), Catholicism (4.97%) and Muslim (4.36%), which shows that the proportion of people who believe in Buddhism and Daoism is far greater than that of Muslim, Catholicism and Christianity believers. The largest number of people worship their ancestry and Fengshui. The low proportion of the CCP in rural Chinese shows that people's political awareness and enthusiasm for political participation are not high, especially women.

We can find it has a significant difference in beliefs among different age, gender, marital status, physical health status, education level and income. It can be seen from the table that, in terms of gender, the proportion of female in rural Chinese who believe in all beliefs is higher than that of male, except the CCP. In terms of marital status, for all beliefs, the proportion of people who lives with spouse is greater than the proportion who does not, except for those who believe in ghosts. In terms of physical health status, people with poor physical condition are more likely to have religious or folk beliefs. The lower the education level is, the more possible the people belief in religion and folk beliefs; the education level is higher among the CCP membership than religion and folk believers. People with religious and folk beliefs also earn less than those with political beliefs. While the proportion of religious and folk believers among the CCP members is also lower than that of non-CCP members.

Table 2: Demographic Distributions of the Believers.

	RELIGION					FOLKS			POLITICS
	Buddhism (n=5,006) ƒ (%) or x̄ (SD)	Daoism (n=3,290) ƒ (%) or x̄ (SD)	Muslim (n=631) ƒ (%) or x̄ (SD)	Catholicism (n=719) ƒ (%) or x̄ (SD)	Christianity (n=899) ƒ (%) or x̄ (SD)	Ancestry (n=8,987) ƒ (%) or x̄ (SD)	Ghost (n=1,428) ƒ (%) or x̄ (SD)	Fengshui (n=7,013) ƒ (%) or x̄ (SD)	The CCP Membership (n=1,046) ƒ (%) or x̄ (SD)
Age	48.82±16.06	51.64±15.65	51.80±16.26	52.95±15.47	51.07±16.50	49.64±15.84	43.94±17.61	47.38±16.09	51.74±16.69
Gender									
Male	2,144 (29.65%)	1,262 (17.45%)	273 (3.77%)	292 (4.04%)	361 (4.99%)	4,660 (64.44%)	580 (8.02%)	3,365 (46.56%)	801 (11.06%)
Female	2,862 (39.65%)	2,028 (27.98%)	358 (4.94%)	427 (5.89%)	538 (7.42%)	4,327 (59.70%)	848 (11.70%)	3,648 (50.39%)	245 (3.38%)
Living With Spouse									
Yes	4,051 (35.35%)	2,670 (23.29%)	484 (4.22%)	578 (5.04%)	719 (6.27%)	7,385 (64.44%)	1,019 (8.89%)	5,620 (49.08%)	879 (7.66%)
No	955 (31.62%)	620 (20.54%)	147 (4.87%)	141 (4.68%)	180 (5.96%)	1,602 (53.06%)	409 (13.56%)	1,493 (46.19%)	167 (5.53%)
Physical Health Status									
Healthy	3,250 (33.12%)	1,989 (20.26%)	401 (4.08%)	455 (4.63%)	569 (5.79%)	5,903 (60.15%)	918 (9.35%)	4,630 (47.19%)	757 (7.70%)
Average	693 (37.46%)	459 (24.82%)	66 (3.58%)	79 (4.28%)	110 (5.95%)	1,250 (67.60%)	196 (10.60%)	965 (52.36%)	126 (6.80%)
Unhealthy	1,063 (37.74%)	841 (29.90%)	164 (5.84%)	185 (6.58%)	220 (7.82%)	1,834 (65.15%)	314 (11.16%)	1,418 (50.48%)	163 (5.79%)
Education level	2.34±1.43	2.01±1.43	1.73±1.44	1.87±1.41	2.32±1.52	2.39±1.37	2.50±1.47	2.52±1.42	3.47±1.68
Total annual income	10517.71±22983.25	8057.06±21076.93	7274.48±17842.31	8594.45±20554.97	9977.12±21635.83	10615.12±24102.43	11950.25±23784.91	11480.09±24210.25	15348.38±31712.48

Univariate Analysis

Table 3 shows that compared with the group with or without any beliefs, the depression scores are higher for the believers of all the types of religion and folk beliefs, but the CCP.

First, we analyzed the dependent variable depression score and each independent variable. There were significant differences in different gender (t = 15.126, P < 0.001), whether you were a CCP member (t = 6.625, P < 0.001); there also existed significant differences in different physical health status (F = 829.130, P < 0.001), but the reliability was not high; there was no significant difference between the presence or absence of spouse (t = 1.9443, P = 0.0519). In terms of all the types of beliefs, whether they believe in Buddhism (t = -8.485, P < 0.001), Daoism (t = -11.298, P < 0.001), Muslim (t = -8.314, P < 0.001), Catholicism (t = -8.519, P < 0.001), Christianity (t = -5.615, P < 0.001), Ancestry (t = -3.987, P < 0.001), Ghost (t = -7.637, P < 0.001), Fengshui (t = -9.696, P < 0.001) and the CCP (t =6.625, P <0.001) all had significant effects on depression. And there was a significant correlation between belief level and depression score.

Table 3: Depression Scores of the Believers and Non-Believers: A Univariate Analysis (n=14,499).

Independent Variables	Believers (M±SD)	Non-Believers (M±SD)	t/F	P
Religion				
Buddhism	14.39±4.29	13.77±4.07	-8.485	<0.001
Daoism	14.76±4.49	13.76±4.02	-11.298	<0.001
Muslim	15.48±4.68	13.91±4.12	-8.314	<0.001
Catholicism	15.33±4.62	13.91±4.12	-8.519	<0.001
Christianity	14.78±4.51	13.93±4.13	-5.615	<0.001
Folks				
Ancestry	14.09±4.18	13.81±4.11	-3.987	<0.001
Ghost	14.76±4.24	13.90±4.14	-7.637	<0.001
Fengshui	14.31±4.19	13.68±4.10	-9.696	<0.001
Politics				
The Communist Party	13.20±3.80	14.05±4.18	6.625	<0.001

Multiple Linear Regression Analysis

Multiple linear regression model was adopted for analysis, and the following is the model:

$$y = a + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_i x_i + \varepsilon \ (i = 1, 2, \ldots, n)$$

Taking depression score as the dependent variable, age, gender, marital status, physical health status, education level and total income as the control variables, and three types of beliefs as independent variables, then they were included in multiple regression models. It can be seen from the above that in univariate analysis, most of the variables are significantly related to depression. Multiple linear regression model showed that depression was still related to beliefs when other variables were controlled. The correlations between them are as follows: under the control of other variables, compared with those who do not believe in religion and folk beliefs, the logarithm of depression scores of the groups who believe in them is more 0.0333 (t=5.27, p<0.001), 0.0359 (t=5.35, p<0.001) units on average, but compared with those who do not have political belief, the logarithm of depression scores of the groups who believe in it is less 0.0053 (t=-0.39, p=0.694) units on average. And the higher the belief level is, the higher the logarithm of your depression score (t=7.27, p<0.001). The Adjusted R-squared is about 9% and it can be concluded that the religious and folk beliefs have a positive effect on depression, that is, people with religious and folk beliefs are more likely to develop depression, the same as the results of the previous univariate analysis. On the contrary, it indicated that the CCP members were less likely to have depression, that is, the psychological health of them was more positive.

Conclusion

The major and unique contribution of this study is that it proposes three types of beliefs of the Chinese societies today, and their effects on mental health. In this study we focused on Chinese rural adults over 16 years of age and tried to find if there is a correlation between beliefs and mental health as found in other societies.

Table 4: Multiple linear regression models (n=14,499).

	Model 1				Model 2				Model 3				Model 4			
	β	Std.	t	p	β	Std.	t	p	β	Std.	t	p	β	Std.	t	p
Age	-0.0003	0.0003	-0.96	0.339	-0.0002	0.0003	-0.81	0.419	-0.0002	0.0003	-0.76	0.444	-0.0003	0.0003	-0.91	0.365
Gender (Male)	-0.0207	0.0063	-3.30	0.001	-0.0242	0.0063	-3.86	<0.001	-0.0229	0.0063	-3.64	<0.001	-0.0216	0.0063	-3.45	0.001
Living with Spouse	-0.0126	0.0074	-1.70	0.089	-0.0152	0.0074	-2.06	0.040	-0.0122	0.0074	-1.65	0.099	-0.0135	0.0074	-1.83	0.067
Physical Health Status (Healthy)																
General	0.1082	0.0100	10.79	<0.001	0.1071	0.0100	10.68	<0.001	0.1094	0.0100	10.92	<0.001	0.1070	0.0100	10.67	<0.001
Unhealthy	0.2160	0.0104	20.75	<0.001	0.2153	0.0104	20.69	<0.001	0.2159	0.0104	20.72	<0.001	0.2144	0.0104	20.61	<0.001
Education level	-0.0146	0.0027	-5.46	<0.001	-0.0153	0.0027	-5.74	<0.001	-0.0162	0.0027	-6.02	<0.001	-0.0135	0.0027	-5.05	<0.001
Total Annual Income (RMB)	1.93e-07	1.12e-07	1.71	0.087	1.99e-07	1.13e-07	1.77	0.077	2.03e-07	1.13e-07	1.80	0.071	1.95e-07	1.12e-07	1.73	0.083
Religion	0.0333	0.0063	5.27	<0.001												
Folk Belief					0.0359	0.0067	5.35	<0.001								
Political Belief									-0.0053	0.0134	-0.39	0.694				
Belief Level													0.0132	0.0018	7.27	<0.001
Constant	2.5935	0.0149	174.24	<0.001	2.5858	0.0153	169.31	<0.001	2.6105	0.0147	177.98	<0.001	2.5796	0.0151	170.46	<0.001
F	90.20				90.55				86.73				93.30			
p	<0.001				<0.001				<0.001				<0.001			
Adj R-squared	8.96%				8.99%				8.62%				9.26%			

Through the previous analysis, we can find that, first of all, religion has not been popular in rural areas of China, has not been widely recognized and formed a universal religious culture, which is quite different from the West. In addition, in rural China, the proportion of believers is quite different, and the majority of people believe in folk beliefs such as Ancestry, Fengshui, and Buddhism, Daoism. Moreover, female, living with spouse, bad physical health status, lower education level and non-CCP members in rural China account for a larger proportion of religious and folk believers. We analyze the following may be the reasons:

First of all, China is deeply influenced by the traditional Confucian culture. The concept of filial piety advocated by this culture makes people pay special respect to their elders [22]. They shoulder the responsibility of returning and supporting their parents, and also hold various memorial ceremonies to remember their ancestors. Secondly, as a kind of culture, folk belief is deeply rooted in Chinese consciousness, especially in rural areas, because it has the penetration and integration of culture itself. It is the folk belief that can constantly decompose, absorb and transform the essences and doctrines of various religions. Although it has never been accepted as the mainstream and authoritative belief, it is attached to the traditional Chinese Confucianism, Buddhism and Daoism, and becomes an important part of Chinese culture to spread more widely among the people [3]. Besides, people often think that the emphasis on Ancestry and Fengshui is related to the perfect and smooth life or work in the future; thirdly, Buddhism and Daoism are introduced to China earlier than Western religions such as Catholicism and Christianity, and are integrated with Chinese local culture, with a deep mass foundation. Moreover, compared with other people, female, the one without spouse, the lower-educational and the unhealthy are the vulnerable groups. They are more likely to be on the edge of the society and feel powerless in life, so they are more easily to be in an uncoordinated position. Because of their regional and own limitations, they tend to place their desire to get rid of this terrible situation on their belief in gods, so they turn to religion for comfort. The CCP members have lower religious and folk beliefs than the non-CCP members may because the CCP is the governing party of China and it has imposed control and limitations on religious suppliers [19]. So its members should not have other beliefs.

By calculating the CES-D score, we can see that there is a big hidden danger in the depression of people in rural areas of China. Therefore, it is of great significance and urgency to face up to the mental health problems of Chinese people, especially the mental health of farmers. Because the level of social and economic development in rural areas is relatively backward compared with that in urban areas, people are limited by income, education level, leisure mode, etc., once mental health problems occur, it is difficult to solve them in time. According to previous studies, the suicide rate in China is significantly higher than that in western countries, and the suicide rate in rural areas is three times higher than that in cities [22]. So we should pay more attention to the mental health problems of Chinese people in case of worse consequences.

Through univariate analysis, we found that there were significant differences between most independent variables and depression. Using multiple linear regression model for further analysis, we can see that under the control of other variables, there was a positive relationship between depression and beliefs, except for the CCP members. Compared with the group without religious and folk beliefs, the group with them have a higher depression score and are more likely to show depressive symptoms. This result is consistent with our hypothesis 1 and 2, that is, the believers in rural China are more depressed than non-believers, except for the CCP. And the coefficient value of belief level is 0.0132 that shows the higher the score of people's belief level is, the deeper the depression level, which supports our hypothesis 3. We will explain the relationship between beliefs and depression symptoms of rural population in China by using the Strain Theory of Suicide. The theory, developed by Durkheim's Social Anomie Theory, is used to explain people's cognitive psychological experience when they are faced with two conflicting social factors and need to make decisions. If they can't give up any of the two conflicting factors, they will feel anxious, painful or even desperate. There are four main sources of pressure that people usually experience: (1) two differential cultural values, (2) discrepancies between aspiration and reality, (3) perceived differences between one's own status and that of others, and (4) a crisis situation and lack of coping abilities [23].

First of all, in the rural areas of China, most believers are female, poor physical health status, lower education level and living without spouse. They generally have a low socio-economic status and are marginalized in family life and work, so the risk of depression is relatively high.

For female, with the promotion and spread of the concept of equality between male and female, more and more rural women want to pursue the same equality status as men, no matter in family or career. But the reality is that Chinese society has been influenced by Confucian traditional culture for a long time, Confucian culture has strict requirements on women, "female subordination" is one of the three core ethics of it [22], this conflict of values causes women to have certain psychological pressure and unhealthy psychological state. And religion can be their good emotional sustenance, because religion and folk beliefs advocate equality between male and female, and encourage giving women equal value and dignity with men. With the development of various religions, they pay more and more attention to female ethics, which is a great progress and concern for women.

For those rural Chinese with lower education level, they tend to be gradually aware of the important impact of education on income, social status and so on. They may desire to acquire more wealth and higher socioeconomic status, but it is difficult for them to reach an ideal state due to the limitation of their own knowledge level. As a result, they experience a lot of life stress and depression. So, they will seek the comfort from different beliefs.

For the group with poor physical health status, due to the decline of physical quality, they will encounter difficulties in daily life and work that other people do not have. In the face of these negative events, if they lack the preparation and skills to deal with the crisis, they will form uncoordinated pressure between these crises and appropriate methods, thus posing a threat to mental health. Therefore, it's easy for them to consider religion and think that the gods are powerful, which can help them to solve problems and get through the declining days.

For those who do not have spouses, they face another incongruous pressure. Although young people are not eager to consider marriage, when they enter the society, their expectations of life and work do not match their abilities. They tend to expect

too much, which leads to a conflict between wishes and reality. As they grow older, they will face the pressure brought by relatives and elders, as well as the pressure brought by the comparison with friends who live and work well around them, and they are prone to the pressure of inconsistent values or relative lack. As a result, both groups are likely to shift their perceived dissonance to religious and folk beliefs.

Some of them are divorced or widowed. They need to face the different views of others and the pressure of living alone. They may feel lost both financially and psychologically. So the more likely they are to get mental disorders. Focusing on religion and folk beliefs can help alleviate some of the depression.

As for the performance of the CCP members in religious and folk beliefs and depression, we can find that the CCP members are more cautious in religious and folk beliefs than non-CCP members, and their proportion is generally lower than the latter. This may because the CCP members have their firm political belief, so they do not need to believe in religions like Buddhism and Christianity in order to help them solve problems. However, their belief in Ancestry worship and Fengshui is still relatively high, which may be influenced by traditional concepts. Confucianism pays attention to filial piety, and people's behaviors also stress luck and chance, so they still believe that. In addition, compared with non-CCP members, the CCP members have less depression. The possible explanation is that they have lofty faith in the CCP of China and believe that the party can help them solve difficulties and realize the "Chinese dream." Therefore, they are more confident in their hearts and have sufficient motivation to fight and confront problems in life.

There are some limitations of the study. Because the selected database recorded cross-sectional data, and did not permit to use the data of years before and after for comparative analysis of time sequence, it is impossible to find out whether there is a cause-and-effect relationship between beliefs and depression, only to roughly verify the correlation between them. We hope to continue to carry out more in-depth research in the future. In addition, in the analysis of the influence of belief and depression, we have not made a more detailed and comprehensive description and explanation. In the future, we must step up our study and hope to continue relevant work as soon as possible.

Author Statements

Autobiographical Note of the Corresponding Author

Jie Zhang, Ph.D. in sociology, SUNY Distinguished Professor, has been serving at State University of New York Buffalo State for over 20 years. His primary areas of research are social theories, religion, mental health. He teaches classical theories, sociological methods, social psychology, and mental health. Dr. Zhang is especially interested in studying religious and other belief behaviors in Chinese culture.

Research Involving Human Participants and/or Animals

We used data collected by a state organization in China that involved human subjects.

Informed Consent

The data collection agency in China provided informed consent to all the subjects involved.

Funding

Conflict of Interest

There is no conflict of interest for the authors of the paper.

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