Study on Factors Impacting Subjective Well-being of the Elderly

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ABSTRACT
Structure of "421" is applicable to most families in China. Low birthrate and longevity are deepening the aging of the Chinese population. This paper attempts to figure out composition and influencing factors of the elderly's subjective well-being through sorting out research findings at home and abroad, and dissects the data of the China Health and Pensions Tracking Survey in 2018 applying SPSS, and probes into the subjective well-being between different types of samples in virtue of descriptive statistical analysis, thereby positioning the main influencing factors and inspiring the corresponding improvement.

Keywords: subjective well-being, the elderly, physical and mental health

1. INTRODUCTION
As mankind embraces a life-time dilation and fertility rate drops amid the booming scientific and technological civilization and the ever-improving social literacy, the aged tendency of population becomes one of the major social problems hampering human development in the 21st century. With a large population, China is in face of severe situation. The Chinese government rolled out the Law of the People's Republic of China on Protection of the Rights and Interests of the Elderly as early as August 1996. It listed detailed rules and regulations on specific issues such as social security, social preferential treatment, and legal responsibilities to support the group. Later policies unveiled proceeding from the reality all targeted at varying aging problems and bettering the life and happiness of the elderly.

This paper explored factors impacting the subjective well-being of the elderly through dissecting data gleaned from 2018 China Health and Retirement Tracking Survey Database (CHARLS2018), which helps locate causes for the subjective well-being of the elderly in different contexts, to provide enlightenment for the public to value the physical and mental health of the elderly, and let more elderly people be supported and looked after.

2. RELEVANT THEORY

2.1 Research on the Subjective Well-Being of the Elderly

Subjective Well-Being¹ (SWB) refers to the overall assessment by the respondents on the quality of their life according to certain standards. SWB, a comprehensive evaluation index affected by diverse factors, is characterized in subjectivity, integrity, and relative stability². SWB comprises three mutually interacted and affected dimensions of positive emotion, negative emotion and the key indicator, life satisfaction, generally believe scholars. This paper assessed the subjective well-being from both positive and negative respects through indicators of depression and life satisfaction.

2.2 Activity Theory and Role Theory

Retired elders are often bothered by different degrees of retirement syndrome as they fail to accept the change of social roles or lack clear self-awareness. They are prone to negative emotions such as depression, nagging, and irritability. "Activity" is an indispensable part of human life, according to the activity theory and role theory. The elderly cannot leave the society just because they leave their jobs. It is significant to help them...
understand and accept the change of social roles. The elderly with mental illness have been significantly improved after physical exercise, found Chen Zhiqiang through surveys on physical exercise. In that case, it is necessary to explore the influencing factors of the subjective well-being of the elderly.

3. MODEL BUILDING

3.1 Data Sources

CHARLS2018 data, a set of cross-disciplinary, multi-dimensional, high-quality nationally representative micro-data, comprehensively reflects the families and individuals of middle-aged and elderly people aged 45 and above in my country, collected by the China Social Science Survey Center of Peking University according to the multi-stage probability proportional sampling method. Applying CHARLS2018 data, this paper screened 6,230 research subjects aged 60 and above after processing the missing values of the sample-related data.

3.2 Variable Description

Variables comprise explained variables and explanatory variables.

The explained variable Y refers to the subjective well-being of the elderly. In this paper, this variable depends on two evaluation indicators, the depression degree Y1 and the life satisfaction Y2, both of which are set as “0-1” dummy variables. If the final satisfaction value is "1" and the depression degree is also "1", it is considered that the elderly have a certain positive subjective well-being, and the explained variable Y is "1"; in other cases, it is considered that It has a negative subjective well-being, and the explained variable Y takes the value of "0".

Degree of depression Y1 is measured by ten questions in the depression scale in the questionnaire, including two positive measures and eight negative measures. Each question has four related options, If you choose two options with a severe degree of depression, it is defined as depression, otherwise it is not depressed. If there are six or more questions that are defined as depression, the overall definition is depression, and the value is "0"; Correspondingly, if there are five questions and above defined as not depressed, the overall definition is not depression, and the value is "1". Life satisfaction Y2 is measured by the survey of respondents' life satisfaction in the questionnaire. If one of the two options of "not very satisfied" and "not satisfied at all" is selected, it is defined as dissatisfaction, and the value is "0"; if one of the three options of "extremely satisfied", "very satisfied" and "relatively satisfied" is selected, it is defined as satisfied, and the value is "1".

Affected by the complexity of the questionnaire design, the study has processed the explanatory variables as follows to facilitate subsequent data processing and analysis:

| Variable          | Variable meaning and assignment description                                                                 |
|-------------------|-------------------------------------------------------------------------------------------------------------|
| Gender            | male=0, female=3                                                                                        |
| Age               | 60-74 years old = 0, 75 years old and above = 1                                                           |
| Urban-rural       | Rural=0, Non-rural=1                                                                                      |
| Education         | Elementary school and below = 1, junior high school = 2, senior high school and above (including technical secondary school) = 3 |
| Self-assessed health status | Good = 2, General = 1, Poor = 0                                                                        |
| Marital status    | No spouse = 0, Spouse = 1                                                                                 |
| Sleeping time     | <6 hours or >9 hours = 0, 6 to 9 hours = 1                                                                 |
| Residence         | Family home = 1, Other = 0                                                                               |
| Pension           | No = 0, Yes = 1                                                                                            |
| Self-care ability | Impaired = 0, Impair-free = 1                                                                             |
| Social activity   | Yes = 1, No = 0                                                                                            |
4. VARIABLES DESCRIPTIVE STATISTICAL ANALYSIS

4,452 elders (71.5%) reported positive subjective well-being while 1,778 of negative samples were collected accounting for 28.5%, revealed the descriptive analysis. A mean value of 0.71 suggested that most of the elderly in China believe were relatively happy, they believed. Samples composed of 45.3% of male and 54.7% of female, with an average value of 0.55, indicated a balanced gender distribution and convincing data. Of the elderly aged over 60, 4,963 elders aged 60-74, accounting for 79.7%, while the senile elderly were less of only 1,267 people, accounting for 20.3%. The elderly in rural areas accounted for 26.7%, while 73.3% came from urban or town center areas, urban-rural or town-rural combined areas, and special regions. Most of the seniors only received primary school education and even lower, and fewer were well educated. Most listed their health status as average or poor, and fewer registered their health status good. 76.0% of the elderly live with their spouses, while the resting 24.0% were divorced, widowhood, separated or never married. 54.4% of the respondents slept 6 to 9 hours. 98.3%, that is, 6,127 elders lived at home, and very few lived in nursing homes and institutions, hospitals or other places. 90.5% had pensions, and only a small number do not have any pensions, creating a large gap. 3,549 people were able to take care of themselves, accounting for 57.0%, and 2,581 people of 43.0% suffered from disablement. 3,016 respondents showed in social activities, accounting for 48.4%, while 3,214 participated in no social event, with an average value of 0.48, indicating an even distribution.

Table 2 Variables Descriptive Statistical Analysis Table

| Variable                      | Sample Size | Proportion (%) | Mean value | Standard Deviation |
|-------------------------------|-------------|----------------|------------|--------------------|
| Subjective well-being        |             | 0.71           | 0.452      |                    |
| Positive                      | 4,452       | 71.5           |            |                    |
| Negative                      | 1,778       | 28.5           |            |                    |
| Gender                        |             | 0.55           | 0.498      |                    |
| Male                          | 2,820       | 45.3           |            |                    |
| Female                        | 3,410       | 54.7           |            |                    |
| Age                           |             | 0.20           | 0.403      |                    |
| 60-74 years old               | 4,963       | 79.7           |            |                    |
| 75 and over                   | 1,267       | 20.3           |            |                    |
| Urban-rural difference        |             | 0.73           | 0.442      |                    |
| Rural                         | 1,664       | 26.7           |            |                    |
| Non-rural                     | 4,566       | 73.3           |            |                    |
| Education                     |             | 1.33           | 0.630      |                    |
| Elementary school and below   | 4,748       | 76.2           |            |                    |
| Junior high school            | 930         | 14.9           |            |                    |
| Senior high school and above  |             |                | 552        | 8.9                |
| (including technical secondary school) |  | | | |
| Self-assessed health status   |             | 0.81           | 0.694      |                    |
| Good                          | 1,018       | 16.3           |            |                    |
| General                       | 2,997       | 48.1           |            |                    |
| Poor                          | 2,215       | 35.6           |            |                    |
| Marital status                |             | 0.76           | 0.427      |                    |
No spouse & 1,496 & 24.0  
Spouse & 4,734 & 76.0  

| Sleep time | <6 hours or >9 hours | 6 to 9 hours | 0.54 | 0.498  
|------------|---------------------|--------------|------|--------  
|            | 2,839 | 45.6 | 3,391 | 54.4  

| Residence | Family home | 98.3 | 6,127 | 0.98 | 0.128  
|-----------|-------------|------|-------|------|--------  
| Other     | 103 | 1.7 |      |      |         

| Pension | No | 592 | 9.5 | 0.90 | 0.293  
|---------|----|-----|-----|------|--------  
| Yes     | 5,638 | 90.5 |      |      |         

| Self-care ability | Impaired | 43.0 | 2,681 | 0.57 | 0.495  
|-------------------|----------|------|-------|------|--------  
|                   | Impair-free | 57.0 | 3,549 |      |         

| Social activity | Yes | 48.4 | 3,016 | 0.48 | 0.500  
|-----------------|-----|------|-------|------|--------  
| No              | 51.6 | 3,214 |      |      |         

5. DISCUSSION

Analysis given above revealed a gender differences in subjective well-being. That is, the female elderly earns a significantly higher subjective well-being than that of males. Affected by the discrepant probability of death between genders, the number of elderly females is higher. The probability of female widowhood was also higher. As a result, more elderly women are unpartnered. Due to psychological gender difference, the male elderly generally live without other family members and keep an appropriate distance. While the female elderly women usually live with their children after the death of their spouses. Taking care of grandchildren enables them to integrate into their children's family. That’s why the overall well-being of older females is higher.

The elderly became happier as they aged. Generally, an older age comes with richer social experience and a more peaceful mind. Life stress is gradually relieved as the children get married and start a career, coupled with the company of grandchildren. Such inter-generational support aids their living conditions. That holds the conclusion, an order age brought about a higher subjective well-being.

Urban residents showed a higher subjective well-being than those living in rural areas, since they have more stable earnings and a relatively developed living environment to develop interests and hobbies; in the meantime, most of the latter group live alone away from their children. They spent much of time farming and household duties, and rarely have a chance for entertainment. Coupled with the fact that many young people in rural areas now go out as migrant workers, the elderly are more likely to suffer from depression for being ignored and neglected. It doesn’t say that rural areas are not suitable for the elderly, as the state has vigorously carried out activities to support farmers and agriculture, called on young people start businesses at their hometowns, boost rural revitalization, reduce the number of empty-nest elderly in rural areas, support township health centers, thereby backing the medical and health care of the rural elderly and stabilizing their lives.

The subjective well-being of the elderly with a spouse was significantly lower than those without a spouse. Marriage is an essential relationship for most people. A poor marriage and family dissensions impair the happiness in old age. Love may no longer be a necessity for couples married for many years. Retirement, illness, and separation affect a marriage. While the single elderly may enjoy a better mental state from social and financial independence and closer contacts with children.

The aged slept 6 to 9 hours showed higher subjective well-being than those who slept too little or too much. 28% of the elderly suffered from sleep disorders[6], found the study. Sleep time directly mirrors their living conditions, and indirectly assesses the perfection of China's pension system. The optimal sleep time for the elderly is 6-7 hours at night, and no more than one hour during the day[6]. Scarcity of sleep time is a liable cause for headache, fatigue, memory loss, and even a series of psychological problems such as anxiety and depression[6]. A long-term insomnia increases the incidence of heart and cerebrovascular diseases. That explains why the
elderly with a good sleep quality enjoy a higher subjective well-being.

A higher subjective well-being was found in the elderly without pension. Meanwhile, those live off themselves and their child outperformed people living on social security in terms of subjective well-being.

Those participated in social activities reported lower subjective well-being than those had active social lives. Social contacts cost time and energy and face risks of information leakage and being judged by others. Topics chart course for socializing. When that comes to the elderly, most of the topics center on their achievements and children, which can easily cause inappropriate comparison. Meanwhile, bringing up grandchildren and keeping a pet can also win the elderly psychological satisfaction. Social interaction is not the sole path.

Education, self-assessed health status, residential type and self-care ability impact the subjective well-being of the elderly to a certain extent.

This paper is yet to be furthered. Specific groups such as empty nester and widowed elderly await intensive efforts, so does longitudinal comparison of factors impacting the subjective well-being of the elderly. In addition, lots of dummy variables cited in this paper may slightly hamper the micro-analysis of certain variables. Efforts should be invested in figuring out whether there are other to-be-confirmed aspects affecting the subjective well-being of the elderly, such as inter-generational support, illness, whether they are still working after retirement, etc. These issues require farther works for subsequent research.

6. CONCLUSION

This study charted course for improving the subjective well-being of the elderly, inspired individuals, the public, and the government in rolling out and landing relevant policies, and calls on the attention of the state and society to provide for the aged in China. Mental health constitutes concerns of sons and daughters, in addition to the physical status. The community can offer more interest classes for the elderly and open sports and cultural facilities and venues. While related government departments ought to unveil and perfect policies for respecting and preferential treatment of the elderly, defend their legitimate rights and interests, support basic medical treatment, and pay close attention to the problem of left-behind elderly in rural areas. Geriatric service industry now demands prompt solution upon the arrival of the 5G era. There may come a late-model community that integrates social interaction, elderly care, physical exercise, etc., which will better serve the varying living needs of the elderly and improving their subjective well-being through resource sharing.

Fund

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REFERENCES

[1] Wu Mingxia. Theoretical Development of Subjective Well-Being in the West in the Past 30 years [J]. Psychological Dynamics, 2000(04): 23-28.

[2] Xing Zhanjun. Review of Measurement of Subjective Well-being [J]. Psychological Science, 2002(03):336-338.

[3] Chen Zhiqiang. Correlation between Physical Exercise and Mental Health of the Elderly [J]. Chinese Journal of Gerontology, 2016, 36(16): 4092-4093.

[4] Lv Xuexuan. Sleep Disorders: 45% of People in the World Lack Sleep [J]. Modern Health, 2020, 20(21): 14-15.

[5] Guan Beibei, Chen Changxiang. Sleep Quality and Its Influencing Factors of the Elderly in the Community [J]. Chinese Journal of Gerontology, 2020, 40(02): 419-422.

[6] Tang Zhifeng. Five Best Ratios for Health Preservation for the Elderly [J]. Happy Family, 2016(08):58.