

Research Progress on Subjective Well-Being in the Elderly

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Abstract: With the acceleration of aging in our country, the study of subjective well-being of the elderly has increasingly become the focus of attention in the fields of psychology, sociology, and gerontology. Subjective well-being is an overall assessment of people's quality of life based on self-defined standards and is an important predictor of mental health. This paper systematically sorts out the subjective well-being assessment tools of the elderly and the multidimensional influencing factors of the subjective well-being of the elderly, and comprehensively analyzes them from three core aspects: internal factors, social factors, and psychological factors, aiming to provide a theoretical basis and practical direction for improving the mental health of the elderly and promoting positive aging.

Keywords: Elderly; Subjective well-being; Influencing factors

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1. Introduction

According to the 2024 National Bulletin on the Development of Aging, the national population aged 60 and above is 310.31 million, accounting for 22.0% of the total population; The national elderly population aged 65 and above is 220.23 million, accounting for 15.6% of the total population^[1]. The dependency ratio of the elderly population aged 65 and above in the country was 22.8%. The average life expectancy in China is 79.0 years. The aging population is in a stage of rapid growth. The acceleration of the aging process has made the mental health and quality of life of the elderly a major social issue^[2]. Studies have shown that subjective well-being is an important predictor of mental health^[3]. At the individual level, subjective well-being is significantly related to physical and mental health, disease recovery and longevity of the elderly. From the social level, the happiness of the elderly is an important indicator to evaluate the effectiveness of pension policies and the perfection of the social welfare system. Improving the subjective well-being of the elderly not only helps to achieve the goal of "successful aging" but also reduces the burden on the medical system and promotes social harmony and stability^[4]. In the context of the rapid aging of Chinese society, the study of how to improve the subjective well-being of the elderly has become an important topic that has attracted much social attention. Therefore, this paper reviews the current

situation and influencing factors of subjective well-being of the elderly, and provides a reference for improving the subjective well-being of the elderly and promoting healthy aging.

2. Related concepts and research tools

2.1. Subjective concept of well-being

The term subjective well-being originated in the 60s of the 20th century and is a hot field of psychological research. Bradburn^[5] proposed the emotional orientation model of happiness assessment in 1969, believing that happiness is the degree of balance between people's positive and negative emotions. Subsequently, Diener^[6] defined subjective well-being as the overall emotional and cognitive evaluation of people's quality of life, including four dimensions: life satisfaction, evaluation of all aspects of life, positive emotions, and negative emotions. Zhao *et al.*^[7] and Long *et al.*^[8] believed that subjective well-being is a subjective and overall self-evaluation of people's quality of life in terms of cognition and emotion, and is a comprehensive indicator for evaluating personal quality of life. For the definition of subjective well-being, scholars at home and abroad have emphasized people's subjectivity, believing that subjective well-being is an individual's comprehensive judgment and cognition of their overall life.

2.2. Subjective well-being assessment tool

The development of measurement tools provides a methodological basis for the study of subjective well-being in older adults. Commonly used assessment scales include the Memorial University of Newfoundland Happiness Scale (MUN-SH), Life Satisfaction Scale (SWLS), and Emotional Balance Scale, which take into account the cognitive characteristics and response patterns of the elderly.

2.2.1. Memorial University of Newfoundland Scale of Happiness (MUN-SH)

This scale was developed by Kozma^[9] based on the theory of emotional balance and is mainly used to measure subjective well-being in the elderly population. Liu *et al.*^[10] modified the original scale and widely used it in the elderly^[11]. It includes four dimensions: positive affection (PA), negative affection (NA), positive experience (PE), and negative experience (NE), with a total of 54 items. Using the three-point scoring method, "yes" is 2 points, "not necessarily" is 1 point, and "no" is 0 points. The scoring method was $PA+NA-(PE+NE)+24$, with a total score of 0–48 points, and the higher the score, the higher the subjective well-being, with good reliability and validity^[12].

2.2.2. Philadelphia Geriatric Center Morale Scale (PGC)

This scale was compiled by Lawton in 1975 to evaluate the confidence of the elderly in their current life from three dimensions: agitation, attitude towards their age, loneliness and dissatisfaction, with a total of 23 items, scored or not, with a total score of 0–23 points, with higher scores indicating higher confidence, i.e., higher subjective well-being^[13].

2.2.3. General Well-being Schedule (GWB)

This scale was developed by the National Center for Health Statistics in the United States and revised by domestic scholar Duan^[14], including 6 dimensions such as individual control of self-emotion and behavior, and concerns about health, with a total of 18 items. It mainly reflects the individual's life satisfaction and inner experience. Among them, 1–14 items were scored using the Likert 6-level scoring method, and 15–18 items were scored using

the Likert 11-level scoring method, with a total score of 120 points, and the subjective well-being was divided into 5 levels of low, low, moderate, high, and very high with critical values of 24, 48, 72, and 96. This scale is a universal scale and is one of the important tools for measuring subjective well-being, and is widely used in various populations such as nurses, students, and the elderly^[15–17].

2.2.4. Subjective well-being scale for Chinese citizens (SWBS-CC20)

This scale was compiled by Xing^[18] and includes 10 dimensions, including target value experience and mental health experience, with a total of 54 items. 6 points are used, from strongly disagree to strongly agree is counted as 1–6 points, and some items are scored in reverse. The total score is 54–324 points, with a critical value of 180, and the higher the total score, the stronger the subjective well-being^[19]. This scale is a universal scale and is suitable for domestic populations. It is important to note that subjective well-being measures are specific in older adults—older adults may be more concerned with emotional balance than strong positive emotions and more with small blessings in daily life than major achievements, which need to be fully considered in study design and interpretation of results.

3. Influencing factors of subjective well-being of the elderly

3.1. Internal factors

The internal factors of the individual include the analysis of the basic characteristics and circumstances of the individual, such as gender, age, family factors, education level, source of livelihood and its security, and health status. When investigating individual internal factors, most scholars at home and abroad believe that it has a greater impact on the well-being of the elderly. However, there are also individual studies that have given different results.

3.1.1. Gender

Gender had no significant effect on the well-being of the elderly. Cao^[20] and other scholars divided the age into three groups: 60–65, 66–75, and >75, low, medium, and high in the test of multiple differences in age. Univariate analysis of variance found no significant difference in overall well-being. Cao *et al.*^[21] found that there was no significant difference between early old age (50–60 years old) and the other three age stages through case interviews and questionnaire surveys, while there was a significant difference between late old age (71–80 years old) and late (81–99 years old). Differences in study results may be due to different study groups or different age classification criteria.

3.1.2. Age

The World Health Organization (WHO) and China's new standards classify the elderly as “young” (60–74 years old), “middle-aged” (75–89 years old), and “elderly people” (over 90 years old), and the differences in well-being in different groups are closely related to physiological decline and changes in social roles. Several studies have shown that the subjective well-being of older adults varies significantly across different age groups^[22]. For example, “young elderly” aged 60–75 are usually more well-being than older people over 75 years old due to better physical function and higher social participation, which may have reduced happiness due to health problems or reduced social support.

3.1.3. Family factors

Family factors mainly include marital status, number of children, and frequency of child visits. Studies have shown that marriage is a protective factor against a decline in happiness, and the subjective well-being of older adults with spouses is higher than that of older adults living alone^[23,24]. Having a partner allows you to take care of each other in life and relieve loneliness. Marriage can bring people a sense of satisfaction and belonging, and different marital conditions will have different impacts on the subjective well-being of the elderly. Scholar Zhang^[25] believed that elderly people with relatively happy marriages are happier than those who are married or divorced and widowed.

Child factors can also affect the subjective well-being of the elderly. Influenced by traditional concepts, there is a significant correlation between the presence or absence of children, the proportion of children, the number of children, and whether they are filial piety, and this situation is more significant in rural elderly people. A large number of studies have shown that the subjective well-being of the elderly with children is much higher than that of the elderly without children, and the overall happiness of the elderly with more than two children is significantly higher than that of the other two groups. Older adults with two or more children have a lower incidence of loneliness and negative emotions^[26]. The degree of respect and love for the elderly by children will also have a certain impact on their subjective well-being. When children are filial and can often show care and support to the elderly, the happiness of the elderly will rise. The higher the frequency of child visits, the happier the elderly, indicating that the support of children brings great spiritual comfort and life support to the elderly^[27].

3.1.4. Education level

As a persistent personal trait, education level affects the subjective well-being of the elderly through various mechanisms. Higher educational attainment is often associated with better health literacy, wider social networks, and greater resilience, which together contribute to the maintenance of well-being. Chen *et al.*^[28] found that highly educated elderly people have higher marital satisfaction and a stronger ability to handle family relationships, which indirectly improves overall life satisfaction. Wang *et al.*^[29] conducted an impact analysis of demographic variables and found that the education level of the elderly group was negatively correlated with loneliness, while loneliness was negatively correlated with the subjective well-being of the elderly. Education also indirectly affects well-being in old age by influencing career trajectories and pension levels. Sun *et al.*^[30] found that the subjective well-being of the elderly who participated in educational activities was higher, and a good educational atmosphere, educational experience, and educational investment had a positive effect on the subjective well-being of the elderly. Educational experience plays a mediating role between the educational investment and the subjective well-being of older adults. The study found that the longer the number of years of education, the higher the degree of education, the stronger the happiness. Further analysis of different groups shows that the happiness brought by men with years of education is slightly higher than that of women. The happiness brought to the group under 45 years old is higher than that of the group over 45 years old. In addition, there are regional differences in the impact of years of education on happiness, which brings higher happiness to rural groups than urban groups, and empirical evidence shows that education can affect happiness through class identity^[31]. It is worth noting that there are gender differences in the impact of education—education often has a higher effect on the well-being of female older adults than men, which may reflect the “liberating effect” of education in helping women overcome the limitations of traditional gender roles.

3.1.5. Sources of livelihood and their security

Sources of livelihood and their security are the main influencing factors of the well-being of the elderly, and the elderly with pensions have less concern about their health and are satisfied with their lives, so their overall happiness is high^[32]. These people are more satisfied with their living conditions and have higher measurement results of subjective well-being. Relevant studies have shown that the subjective well-being of the materially rich elderly is significantly higher than that of the financially constrained elderly. Some studies have also found that the impact of income on the subjective well-being of the elderly is limited. The study shows that income level, as an objective economic indicator, is moderately correlated with the subjective well-being of the elderly. The study reveals two key features of the income-happiness relationship: the threshold effect and the marginal decreasing effect. Before the absolute income reaches the basic living security threshold, the increase in income significantly improves happiness. After exceeding this threshold, the revenue contribution rate decreases. After retirement, the income structure of seniors usually changes, from salary income to multiple channels such as pensions, savings, and child support, which can lead to fluctuations in economic security. It is worth noting that pensions not only have an economic function, but also carry symbolic meaning; higher pensions represent not only better material living conditions, but also suggest social status and lifelong achievements, and this dual value reinforces the impact of income on happiness. A study in Beijing showed that economic status can still significantly predict the subjective well-being of older adults after controlling for health variables, but the explanatory variability is relatively limited, indicating that income indirectly affects well-being through mediating variables (e.g., access to medical care, participation in leisure activities)^[33]. Si *et al.*^[34] conducted a questionnaire survey on 1,907 elderly people who were admitted to 43 medical and nursing institutions in 7 districts of Qingdao. The results showed that the average score of subjective well-being of the surveyed elderly was 3.90 ± 0.908 points, and the average score of income level was 3.29 ± 1.125 points. The results of multiple linear regression analysis showed that the subjective well-being of the elderly in medical and nursing institutions with high income levels was high. Yuan^[23] found that the incidence of low subjective well-being in the financially disadvantaged elderly was 2.76 times higher than that of the economically wealthy elderly. In addition, Kollamparambil *et al.*^[35] found that the increase in pensions is one of the reasons for the increased subjective well-being of older adults. The reason may be that the elderly with better economic conditions do not have basic life pressure, have better medical security, and can better enjoy their old age, thereby improving their quality of life and subjective well-being.

3.1.6. Health status

Health status is one of the most important factors affecting the subjective well-being of the elderly, including physical health and mental health. Tobiasz-Adamczyk *et al.*^[36] used a simplified version of the National Happiness Index Scale (DRM) to study the subjective well-being of 1299 older adults aged 65 years and older in urban and rural areas in Poland, and the results showed that the level of subjective well-being of the elderly decreased with the increase in the number of chronic diseases. Li *et al.*^[37] used the MUN-SH Memorial University of Newfoundland Happiness Scale to investigate the subjective well-being of 275 older adults in Tibet, and the results showed that the total happiness score of the elderly who were in good health was significantly higher than that of the elderly who were in poor health ($P < 0.05$). The reason may be due to poor physical condition, which affects daily life and increases the financial burden of the family and the care burden of the spouse, which can easily lead to a sense of uselessness in the elderly, which in turn affects their subjective well-being. Cao *et al.*^[38] believed that

the physical health status and participation in social life of the elderly have a certain impact on their subjective well-being. Older people who are relatively in good health and are more active in social activities are happier than those who are relatively poor in health and have low participation in social life. This is because the elderly can maintain good social relationships and maintain a positive emotional experience when participating in physical exercise or cultural and recreational activities of interest. Older people in good health are better able to participate in a rich social life.

3.2. Social factors

Social factors are external resources available to the elderly group—social support and social comparisons, such as government funding, friendships, etc. Good social support can give more material and spiritual support to the elderly, which has a great positive effect on the elderly's acceptance of themselves and improves their self-efficacy. When stressful events occur in the lives of the elderly, good social support can play a role in preventing and alleviating them. As an important form of social support, the marginal effect estimation results show that the probability of “very happy” of the elderly with pensions can be increased by 6.60%, and domestic scholars Lu^[39] found that public expenditures such as medical insurance, basic education, and social security have a positive impact on the subjective well-being of individuals. The degree of social support and other factors have a good positive predictive power on the subjective well-being of the elderly, which is consistent with the results of foreign studies.

Liu *et al.*^[40] showed that different elderly care models can make the elderly have different degrees of subjective happiness. The multi-generational home care model can effectively alleviate the depressive tendency of the elderly, and the life satisfaction of the elderly increases, so that the subjective happiness of the elderly also increases.

Some literature^[41,42] deals with Festinger's theory of social comparison. Festinger's social comparison theory has a strong predictive ability for satisfaction judgment in various fields, and social comparison theory believes that from the perspective of longitudinal comparison, the subjective well-being of rural elderly people relative to those whose living conditions have improved five years ago is higher at the level of 1% than that of other rural elderly people, and the same results are obtained in rural elderly people who have better expectations for life in the next five years. From the perspective of horizontal comparison, after comparing their living standards with relatives and friends, the subjective well-being of rural elderly people with poor living conditions is significantly lower than that of other elderly people at the level of 1%. At the same time, the social characteristics of acquaintances in rural areas will simplify the way the elderly living here measure their happiness, that is, mainly by comparison with the surrounding population. This will also have a certain impact on their subjective well-being.

3.3. Psychological factors

Psychological factors refer to a series of factors related to the personality traits of older individuals. Elements such as optimism, mental toughness, and self-efficacy are included.

The subjective well-being of the elderly is highly correlated with personal personality traits, which will affect the positive emotions, negative emotions, and life satisfaction of individuals, thus affecting their subjective happiness. Zhou *et al.*^[43] pointed out that personality traits and life experiences have a more significant impact on subjective well-being than objective environmental factors. Individuals with neurotic tendencies are more likely to experience negative emotions, while extroverted and open-minded older adults tend to report higher levels of well-

being. These personality differences continue to play a role in old age, shaping individuals' emotional responses and cognitive evaluations of life events^[44]. Studies have shown that extraversion has a positive effect on happiness, positive emotions, quality of life, and perceived health, while neuroticism, on the contrary, has a negative impact on happiness. Studies have shown that the five characteristics of personality (neuroticism, extraversion, agreeableness, conscientiousness, and openness to experience) are strong predictors of subjective well-being^[45]. Studies have found that older adults with stronger extraversion have higher levels of subjective well-being^[46,47]. On the contrary, empty nesters with higher mental quality scores often deal with things negatively, aggravating their loneliness and depression, and then their subjective well-being levels^[48]. Cao *et al.*^[49] also confirmed that the high level of social support of the elderly with stable personalities increases their subjective well-being.

The study by Ardeh^[50] supports a positive association between psychological factors and subjective well-being in older adults. A study of 236 older adults aged 60-85 in Beijing found that general self-efficacy significantly predicted subjective well-being levels (standardized regression coefficient of 0.15), which together explained 16.4% of the total variation in subjective well-being along with social support and health status^[51]. Resilient seniors are better able to adapt to the challenges posed by aging, turning potential stress into opportunities for growth. Optimism provides an emotional buffer for the elderly through positive future expectations and benign life event interpretations.

Fang^[52] found that self-efficacy can have a direct impact on subjective well-being, while other variables, such as social support and health status, indirectly have a major impact on subjective well-being through self-efficacy. It is generally believed that older adults with high self-esteem have higher subjective well-being, and older adults with low self-esteem have lower subjective well-being. Wang *et al.*^[53] found that the sense of control over the physical environment also affects the positive emotions in subjective well-being, and has a predictive effect on positive emotions in subjective well-being.

4. Conclusion and outlook

Based on the methods of literature research, this paper analyzes the influence of personal, social, and psychological factors on the subjective well-being of the elderly. It is found that the influencing factors of the subjective well-being of the elderly are not independent, but interconnected and influenced. So what is the relationship between the factors? How to use influencing factors to improve the subjective well-being of the elderly? The study of these issues has a very far-reaching impact on both theoretical reference and the social level. In the future, we should conduct in-depth research on these problems, further explore the factors affecting the subjective well-being of the elderly, and provide strong theoretical support for our country to achieve a high-quality life in old age.

In terms of research objects, the groups studied by existing scholars are limited in region and scope, and they often ignore the connections and differences between groups, and pay less attention to rural elderly groups and non-home-based elderly care groups.

In terms of research content, the research on the subjective well-being of the elderly at home and abroad mainly focuses on the basic characteristics of individuals, child factors, social support, etc., while there are few studies on psychological factors, which is a major shortcoming in this field. With the gradual diversification of research methods, we can pay more attention to the psychological factors that affect the subjective well-being of the elderly, and use effective psychological means to reduce loneliness and anxiety in the elderly.

In terms of research methods, previous studies were mostly limited to questionnaire methods and rarely

involved observation methods and experimental methods. Next, we should use various research methods to more comprehensively analyze the relationship between various influencing factors and subjective well-being in the elderly. In the research process, more attention should be paid to local and cross-cultural research on the subjective well-being of the elderly.

Disclosure statement

The authors declare no conflict of interest.

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