

To what extent does living with descendants affect the subjective well-being of the elderly?— Taking northern China as an example

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Abstract:

The purpose of this study is to investigate the importance of different living patterns for the subjective well-being of older people. This study referred to the results of previous literature in the same field, such as studies of the elderly in urban and rural areas of the north. As a result of performing an analysis of variance and correlation analysis on the data collected to ensure the realistic and scientific validity, it was found that living with children does not affect the well-being of the elderly; However, living with grandchildren improves the well-being of the elderly. In addition, respect for the privacy of seniors living with children was a key factor in increasing their well-being. Moreover, the analysis showed that the frequency of participation in social activities and the physical condition of the elderly were also factors that influenced their well-being. Based on this, there are several suggestions on how to enhance the well-being of the elderly. First, it strengthens emotional relationships in the family and encourages effective communication between the children and the elderly. Secondly, society should provide more public places for older people to play and provide better services for the elderly to allow them can better participate in social activities. Thirdly, children should focus on the mental and physical health of older people and strengthen healthcare.

Keywords: the subjective well-being of the elderly; living arrangement; intergenerational co-residence; influence factor.

1. Introduction

According to the “World Population Prospects 2019” report (2019) released by the United Nations Department of Economic and Social Affairs, in 2019, about 9% of the world’s population was over 65 years of age, and this proportion will reach 16% by 2050. Against the background of the ageing of the global population, the quality of life of the elderly seems to have become the focus of social attention. The well-being is a core factor in measuring the quality of life; the elderly’s sense of well-being shows clearly how they feel about their lives and what they think inside. Among the many factors that affect the subjective well-being of the elderly, the living pattern plays an important role. In the world, it is a common pattern for the elderly to live with family members: in China, under the influence of filial piety culture, it is common for generations to live under the same roof(Xiao, 2012). Family-based elderly care also dominates in Japan (Kawakami & Son, 2015). Although they are very independent Americans, it is not uncommon for the elderly to live near their families because they need to be taken care of (Kim *et al.*, 2020). This universality makes the impact of “who to live with the elderly” on the well-being of the elderly have a high research value, which has become a key entry point for understanding the quality of life of the elderly.

The impact of cohabitation with children on the well-being of the elderly has been discussed in many studies, but the conclusions are contradictory. The literature (Zhang, Zhang & Li, 2020) has shown that living with children can effectively improve the well-being of older adults through increased social interaction and emotional support. However, at the same time, the literature by (Danielsbacka, Křenková & AnttiO, 2022) also emphasized that general well-being of older people who live with their children and grandchildren is lower than that of those who do not. Because their daily activities are limited when they live with their children and grandchildren. There are many factors that affect the well-being of the elderly, including economic situation, health level, social interaction, living environment and so on. Among them, the extent to which living with descendants has an impact on the well-being of the elderly is worth studying. In-depth exploration of this degree of influence will help us to improve the quality of life of the elderly, and also promote the harmony of family relations and the stable development of society.

By studying the unique cultural background and personal circumstances, and adopting a quantitative research method, to comprehensively and deeply explore the specific impact of living with children on the subjective well-being of the elderly. It also explores the specific experiences of the elderly living with their grandchildren in this region, in order to help enhance the well-being of the elderly.

2. Literature review

2.1 Definition of well-being

The definition of well-being varies greatly. It doesn’t have a fixed definition because each researcher has their own unique interpretation of well-being. The definition of well-being given in Merriam-Webster Dictionary is the state of being happy, healthy, or prosperous(Merriam-Webster, 1995). Many researchers have their own different understandings of the concept of well-being. For example, Diener (2000) suggested happiness refers to people’s subjective evaluation of their satisfaction with their current life. Norrish and Vella-Brodrick (2008) point out that happiness is not only about the satisfaction with one’s life in general, but it is also associated with one’s psychological change of increasing positive aspects while decreasing negative aspects. Chyi and Mao (2011) posit that traditional concept of happiness among the elderly in China is to be able to “play with grandchildren, have sugar in their mouths and enjoy life carefree”. Nonetheless, the well-being of the elderly may be a really complicated concept, and we need to measure it by focusing on the satisfaction level of the intrinsic needs of the elderly. It is also necessary to consider the well-being of the elderly from external factors, which is a comprehensive reflection of different dimensions.

2.2 Factors affecting the well-being of the elderly

2.2.1 External influences affecting the well-being of the elderly

The well-being of the elderly is affected by various external factors. In recent years, many researchers have analysed detailed studies on the external factors of well-being of the elderly from different perspectives. Among them, social activities have a positive effect on the subjective well-being of the elderly (Luo, Gu & Gu, 2025). Also, good marital and family relationships can effectively improve the well-being of the elderly (Luo, Gu & Gu, 2025). The data collection method and statistical analysis approach of this study are worth learning. However, this study only considered two external factors, ignored other influencing factors, and the sample source of this study was relatively single, only considering one region. In addition, the living environment can also affect the well-being of the elderly. The average level of well-being of elderly people living in cities is higher than that of elderly people living in rural areas (Wang *et al.*, 2024). However, this literature was too simplified in the division of urban and rural areas. This document does not take into account the impact of the economic level of the elderly in both urban

and rural areas on the well-being of the elderly, so it may not accurately reflect the differences in the well-being of the elderly in different regions. There is a significant positive correlation between the frequency of watching videos by the elderly in rural areas and their sense of well-being. The higher the frequency of using short videos, the higher the happiness index of the rural elderly (Lu, Zhang & Li, 2025).

2.2.2 Internal influences affecting the well-being of the elderly

The well-being of the elderly is not only influenced by external factors, but also deeply affected by their internal factors. First of all, a healthy body is an important factor that cannot be ignored for the well-being of the elderly, because having a healthy body is an important guarantee of people's happiness (Xu, 2022), the better people's health, the higher their happiness (He, 2023); on the contrary, higher levels of depression and anxiety symptoms means the lower levels of well-being of elderly (Hill *et al.*, 2023). The elderly can increase their subjective well-being by doing regular physical exercise (Luo, Gu & Gu, 2025). Moreover, self-efficacy and self-esteem were key determinants of well-being among elderly people (Babazadeh *et al.*, 2025). According to Arjmand-sangani *et al.* (2024), given that higher self-efficacy can enhance the autonomous control of the elderly, thereby increasing their sense of well-being. The elderly's high recognition of their own values can significantly improve their subjective happiness (Shamsikhani *et al.*, 2022).

2.3 The influence of descendants on the well-being of the elderly

2.3.1 The influence of the gender, number and order of descendants on the well-being of the elderly

Among the many factors that affect the well-being of the elderly, the influence of descendants is particularly important. The number, structure and gender of offspring all have a profound impact on the well-being of the elderly. At present, there are significant differences in the conclusions about the impact of the number of children on well-being. Studies have shown that having children can enhance the subjective well-being of the elderly (Sun & Lai, 2020). However, from Zhang's (2023) research, he pointed out that having many children does not make the elderly feel happier. On the contrary, financial support provided by children tends to increase the subjective well-being of the elderly. The order structure of children also has some impacts on the well-being of the elderly (Zhang, Zhang & Li, 2020). For families with two or one children, an increase in the number of daughters can enhance the well-being of the elderly, while the birth or-

der of children has no effect on their well-being. Families with three children, when the first child is a son, the third child is a daughter, or the first child is a daughter and the second child is a daughter, both of them have a significant positive impact on the pension capital, thus improving the happiness of the elderly (Zhang, Zhang & Li, 2020). At the same time, the number of grandchildren is also closely related to the well-being of the elderly. Grandparents with more grandchildren have a higher level of life satisfaction. However, the age of grandchildren is also a variable that cannot be ignored. The increase in the number of young offspring will decline the well-being of older people, which is shown as a decrease in life satisfaction or an increase in depression (Li, Dong & Zhang, 2021). The differences in the origin of grandchildren can also have more or less influence. Children who take care of their sons usually enhance the well-being of the elderly, while children who take care of their daughters generally only enhance the well-being of their grandfathers (Song, Li & Li, 2008).

2.3.2 The influence of the living situation of descendants and the elderly on the well-being of the elderly.

A large number of studies have shown that the family responsibilities borne by the elderly can affect their well-being. The elderly live together with their descendants. If they have to take on the long-term responsibilities of taking their grandchildren to school, taking care of housework, and providing daily care, the well-being of the elderly will be significantly reduced. The excessive consumption of time and energy will occupy their personal leisure and social space, and their personal social activities will be restricted (Danielsbacka, Křenkova & Tanskanen, 2022). Meanwhile, the contradictions and conflicts between generations cannot be ignored (Song, 2022). Liu (2025) found through research that the differences in ideas and concepts among different generations lead to the amplification of discrimination against the elderly by young people, thereby reducing subjective well-being. The influence of children's economic factors on the well-being of the elderly is bidirectional. If the elderly rely on their children's finances, it will cause anxiety and guilt in the elderly, thereby affecting their mental health (Wang & Cheng, 2023). However, when descendants have the financial support ability, it helps to improve the quality of life and sense of security of the elderly (Yin & You, 2020).

2.4 Summary

Existing studies have shown that living with grandchildren has both positive and negative effects on the elderly. On the one hand, the elderly living with their grandchildren can receive emotional support and companionship,

which can improve their happiness of the elderly and reduce their loneliness. (Li & Gan, 2023). On the other hand, some studies show that the responsibility of caring for grandchildren may sometimes lead to increased stress, especially if the elderly have to take on important caregiving roles. At the same time, the physical condition, family relationships, living environment and economic situation of the elderly will all have an impact on their sense of well-being. However, there are also gaps in the existing research. For instance, there are a few studies that mainly focus on the relationship between the well-being of the elderly in northern regions and factors related to their descendants. So this study focuses on northern China.

3. Methodology

3.1 Research topic focus and data collection strategies

This study adopts a hybrid research method that combines reading second-hand literature and a questionnaire survey. Secondary research can sort out the research achievements of predecessors at the theoretical level and lay a theoretical foundation for this research. The data of first-hand information is mainly collected through questionnaires to obtain the real feelings and living opinions of the elderly about living with their children and living alone, and to analyze the research problems as comprehensively as possible.

3.2 Secondary research

The searched literature mainly focuses on keywords such as “intergenerational life of the elderly”, “well-being” and “the impact of intergenerational relationship on the well-being of the elderly”, and is comprehensively searched in authoritative academic databases at home and abroad, such as China Knowledge Network and Google. Due to the limited number of literature on this topic and ensuring the timeliness of the literature, the publication time span of the literature is set to nearly 30 years, and about 50 pieces of literature have been carefully read. Literature analysis adopts qualitative analysis methods and critical analysis methods. By sorting out different viewpoints in secondary literature and summarizing the main research achievements of predecessors in the field of subjective well-being of the elderly. Further analyse the differences between each research in terms of research methods, research objects, research conclusions and so on, and fill the gaps in the current research. Meanwhile, critical thinking was employed to evaluate the viewpoints and research methods mentioned in the literature, providing references for the design and implementation of this

study.

3.3 Questionnaire

The questionnaire design is based on Memorial University of Newfoundland Happiness Scale (Wang *et al.*, 2022) and the Warwick Edinburgh Happiness Scale (Taggart *et al.*, 2013). The overall structure of the questionnaire is mainly divided into four parts: The first part is personal information, including basic information such as the gender, age, marital status, and educational level of the respondents, and hierarchical variables are set, providing a data basis for the comparative analysis of subjective well-being data of the elderly with different characteristics; The second part is about personal residence and family situations, covering whether living with children and grandchildren, the number of descendants living together, the duration of cohabitation, satisfaction with living space, whether to undertake housework, and the frequency of interaction with descendants. The aim is to deeply explore the specific daily life of intergenerational cohabitation. The third part measures the self-well-being of the respondents. It designs nine questions based on the Memorial University of Newfoundland Happiness Scale and the Warwick Edinburgh Happiness Scale, allowing participants to judge their current life satisfaction. The questionnaire is scored on a five-point scale, with 1 point indicating strong disagreement and 5 points indicating strong agreement. The fourth part is other influencing factors, which are researched from three dimensions: health status, social participation, and the quality of intergenerational relationships, to gain a comprehensive understanding of the current situation of well-being among the elderly. Furthermore, open-ended questions were set up in the fourth part, inviting respondents to share the problems they are facing in their current living situation and the impact of such problems on their subjective well-being.

In terms of the questionnaire format, a combination of multiple-choice questions, scale questions and open-ended questions was adopted. The main reason is that multiple-choice questions and scale questions facilitate quantitative analysis, while open-ended questions can provide an in-depth understanding of the subjective thoughts and emotional conditions of the respondents. Subsequently, the data collected by one-way analysis of variance and correlation analysis were applied. This questionnaire was compiled and distributed by the online Questionnaire Star platform, and the entire research process strictly adhered to academic ethics norms. To ensure privacy protection and data security, all interview data have been anonymized. This study takes northern China as an example. All samples are from northern China. Combined with the targeted push of social platforms and the assistance

of community leaders, they are filled in based on the real feelings and subjective thoughts of the interviewed elderly. A total of 218 questionnaires were distributed in this survey, among which 99 elderly people over 60 years old filled out the questionnaires.

4. Finding and results

4.1 The relationship between whether the elderly live with their descendants and the subjective well-being of the elderly

4.1.1 Cohabitation with grandchildren is related to the subjective well-being of the elderly

Table 1 shows whether the elderly live with their grandchildren

Results of Analysis of Variance				
	Whether the elderly live with their grandchildren(average \pm standard deviation)		<i>F</i>	<i>p</i>
	NO(n=89)	YES(n=10)		
well-being	34.10 \pm 6.01	39.40 \pm 5.48	7.108	0.009

One-way analysis of variance was used to investigate the influence of “whether to live with grandchildren” on well-being. The results showed that there were significant differences in well-being scores among different groups; the value of *F* was 7.108, and the value of *p* was 0.009. It indicates that the living status has a statistically significant impact on the subjective well-being of the elderly. The average well-being of the group that does not live with their grandchildren was

34.10, significantly lower than 39.40 of the group living with their grandchildren, suggesting that the cohabitation status might be associated with higher subjective well-being. Therefore, the level of subjective well-being of those living with their grandchildren is significantly higher than that of those living separately.

4.1.2 Whether the elderly cohabit with their children has nothing to do with the subjective well-being of the elderly

Table 2 shows whether the elderly live with their children

Results of Analysis of Variance				
	Whether the elderly live with their children(average \pm standard deviation)		<i>F</i>	<i>p</i>
	NO(n=76)	YES(n=23)		
well-being	34.41 \pm 6.37	35.39 \pm 5.37	0.450	0.504

The results of this analysis of variance showed that among the groups of well-being, living with children (35.39 \pm 5.37) and not living with children (34.41 \pm 6.37), the *F* value was 0.450, the value of *p* was 0.504, which is greater than 0.05, and there was no significant statistical difference. That is, whether to live with children has no significant impact on the well-being of the elderly.

4.2 The relationship between the specific living situations of the elderly and their descendants and the subjective well-being of the elderly

4.2.1 The respect for the personal space of the elderly is related to their sense of well-being

Table 3 shows whether the elderly feel that their personal space and privacy are respected

Results of Analysis of Variance				
	When the elderly live with their families, do they feel that their personal space and privacy are respected? (Mean \pm standard deviation)		<i>F</i>	<i>p</i>
	YES(n=87)	NO(n=12)		
well-being	35.16 \pm 5.96	30.83 \pm 6.35	5.474	0.021

It can be seen from table 3 that single-factor variance analysis is used to study the difference between the privacy of the elderly and their own well-being. Data analysis shows that the p-value of less than 0.05 means that when the elderly live with their families, they feel that their personal space and privacy are respected. The sample is different for well-being. The specific analysis shows that when the elderly live with their families, when their personal space and privacy are respected, the average well-being of the elderly is higher. When descendants live with the elderly,

the privacy of the elderly is respected, and they can feel safer and more comfortable, which is beneficial to their mental health, thus improving their well-being; on the contrary, the invasion of privacy is likely to cause psychological stress and reduce well-being. Therefore, the privacy of the elderly is also one of the key factors affecting the well-being of the elderly.

4.2.2 The duration of communication between the elderly and their descendants has nothing to do with well-being

Table 4 shows the relationship between the duration of communication between the elderly and their offspring and well-being

Results of Analysis of Variance							
	The time that the elderly spend communicating with their descendants (average ± standard deviation)					F	p
	1-2hours (n=16)	15-30mins (n=27)	2hours or more (n=8)	30-60mins (n=26)	less than15mins (n=22)		
well-being	34.88±5.75	34.07±6.10	36.50±6.59	36.62±7.17	32.14±4.18	1.900	0.117

It can be known from table 4 that using one-way variance to analyze the difference in the daily communication duration between the elderly and their descendants for the well-being of the elderly, it can be seen from table 4 that samples with different daily communication durations between the elderly and their descendants do not show significance for all of them. The value of p was 0.117, which

is greater than 0.005. Therefore, the duration of communication between the elderly and their descendants has nothing to do with the subjective well-being of the elderly.

4.2.3 The household responsibilities that the elderly undertake during cohabitation with their descendants have nothing to do with their own well-being

Table 5 shows whether the elderly need to take on family responsibilities

Results of Analysis of Variance				
	Do the elderly need to take on family responsibilities, such as picking up and dropping off children, cooking at home and cleaning?(Mean ± standard deviation)		F	p
	NO(n=50)	YES(n=49)		
well-being	34.88±6.50	34.39±5.82	0.158	0.692

Table 5 shows that by using variance to analyze the differences in the subjective well-being of the elderly on whether they need to undertake family responsibilities, it can be observed from the table 5 that the value of p is 0.692, and the value of F is 0.158. Also, different samples of whether the elderly need to undertake household responsibilities when living with their descendants do not show signifi-

cance for all of well-being , meaning that whether the elderly do housework or not will not affect their well-being.

4.3 Other factors affecting the subjective well-being of the elderly

4.3.1 The physical health of the elderly is related to their own subjective well-being

Table 6 shows the physical fitness of the elderly

• results of correlation analysis	
	well-being
To what extent are the elderly affected by sleep difficulties, loss of appetite, unexplained pain, restlessness and other conditions	-0.417

It can be seen from table 6 that the study conducted correlation analysis on the well-being of the elderly and their own physical conditions, and used the Pearson correlation coefficient to represent the strength of the correlation. To be specific, the analysis shows that the correlation value between well-being and the physical condition of the

elderly is -0.417. Therefore, it indicates that there is a significant negative correlation between well-being and their health.

4.3.2 The frequency of the elderly's participation in social activities is related to their sense of well-being

Table 7 shows the frequency of elderly participate in social activities each week

Results of Analysis of Variance						
	The frequency with which elderly participate in social activities each week (average ± standard deviation)				F	p
	1-2times(n=48)	3-4times(n=26)	more than or equal to 5 times(n=10)	never(n=15)		
well-being	33.90±5.71	38.00±6.06	33.20±5.61	32.13±6.14	4.224	0.008**

It can be known from table 7 that using one-way analysis of variance, it was found that the frequency of the elderly participating in social activities per week was different for well-being. It can be seen from table 7 that the value of p was 0.008, and the value of F was 4.224. It means that samples of different frequencies of participating in social activities every week have differences in the well-being of the elderly. Specific analysis shows that the average score

of well-being in the "3-4 times" group in the data is significantly higher than that of other groups. This indicates that social activities with a moderate frequency, such as 3-4 times per week, may be more conducive to enhancing well-being. Excessive high or low frequency may weaken the effect of enhancing well-being.

4.3.3 The level of education has nothing to do with well-being of old people

Table 8 shows the education background of the elderly

Results of Analysis of Variance						
	Educational background of the elderly (mean ± standard deviation)				F	p
	junior high school (n=42)	University and above (n=16)	Primary school and below (n=17)	senior high school (n=24)		
well-being	33.69±6.03	35.25±5.25	35.59±6.64	35.21±6.67	0.583	0.627

It can be known from the table 8 showed that there was no significant difference in the well-being score among different educational backgrounds (junior high school, university and above, primary school and below, high school), where the value of F was 0.583 and the value of p was 0.627, which is greater than 0.05. That is, there is no obvious relationship between educational background and well-being, and the well-being scores of each educational attainment group are similar.

4.4 Conclusion

In conclusion, the subjective well-being of the elderly living with their grandchildren is significantly higher than that of those not living with their grandchildren, while whether they live with their children has no significant impact on the well-being of the elderly. When the elderly and their descendants live together, whether the personal

space and privacy of the elderly are respected is crucial to their well-being. Respected privacy can enhance their sense of self-worth and thereby increase their sense of well-being. The daily communication time between the elderly and future generations has no significant impact on their well-being. One of the reasons may be that social activities, online short videos and so on have replaced the function of family communication to help the elderly relieve stress. About the housework, traditional concepts have led some elderly people to regard housework as a responsibility rather than a source of stress. Therefore, the weight of household chores has no significant impact on well-being. Good health is the foundation of the well-being of the elderly. Elderly people with good physical fitness feel more at ease, and their well-being is enhanced. Meanwhile, those who frequently participate in social activities have a higher sense of well-being, which is re-

lated to the emotional satisfaction and self-actualization brought by integrating into society.

5. Discussion

5.1 The similarities between the research results and the conclusions of other studies

This study found that the well-being of elderly people living with their grandchildren was significantly higher than that of those not living with their grandchildren, while whether or not they lived with their children had no significant impact on their well-being. This conclusion is consistent with those of many previous studies. From the living with grandchildren, the results of this study are similar to the results of Cheng and Ariyo's research (2023), that is, living with grandchildren has a significant impact on their well-being. The main reason for the research conclusion might be that grandchildren can provide emotional value to the elderly and enrich their lives, so they will feel happier and improve their well-being. In terms of privacy, this study concludes that respecting the personal space of the elderly can raise their well-being, which is similar to that of Shamsikhani *et al.* (2022). Both studies employed the method of analysis of variance and found that enhancing the sense of self-worth of the elderly could increase their sense of well-being. Furthermore, this study confirmed that good health is the foundation of well-being, and high-frequency social activities, through social integration, increase the recreational time of the elderly to enhance their sense of well-being, which is consistent with the research conclusion of Chen Pei (2022). The conclusion of the elderly has stronger physical fitness, so they worry less is similar to Liu's (2022) research. Meanwhile, regularly participating in social activities can help the elderly develop hobbies, thereby enhancing their subjective well-being, which is consistent with the research results of Hou's (2023) study. In conclusion, cross-disciplinary research evidence collectively indicates that the positive effects of grandchildren living together stem from emotional connections and role values, while children living together reflects that elderly lack effective communication with their children, providing theoretical support for optimizing intergenerational housing policies.

5.2 The differences between the research results and the conclusions of other studies

Some research results of this study are also quite different from the conclusions of previous similar studies. The conclusion of this research is the daily communication time between the elderly and their descendants will not affect the well-being of the elderly. However, Wang Bin's (2022)

research points out that the intergenerational support provided by children to the elderly is an important influencing factor in exploring the well-being of the elderly. Therefore, that daily communication time between the elderly and their descendants will directly affect the well-being of the elderly. The main reason why the two results are different is that the Internet has developed rapidly in recent years. Nowadays, most elderly people use short videos on the Internet to replace the time spent communicating with their descendants and gain well-being from it. The point of view that the influence of the elderly on housework and their well-being is different from Zhang Jie's (2024) conclusion. Mutual help and support between the elderly and children in housework has a significant and obvious impact on the subjective happiness of the elderly (Zhang, 2024). One of the reasons for the different research results might be the rapid development of technology. Nowadays, the number of household robots is increasing, so these can help old people reduce the burden of housework. As a result, the amount of housework for some elderly people has decreased, so the relationship between the amount of housework and the well-being of the elderly is becoming less and less obvious. In conclusion, the differences in conclusions essentially reflect the variations in cultural values, individual needs, and intergenerational interaction patterns.

6. Evaluation

6.1 Highlights and values of this research

In the context of population aging, it is very important to study the well-being of the elderly. This research that pays attention to the offspring-related factors affecting the well-being of the elderly has unique value. A detailed distinction between whether the elderly live with their grandchildren or with their children can clearly reveal the impact of different living situations on the well-being of the elderly. The questionnaire is collected by the snowball sampling method, and the data recovered by variance analysis and correlation analysis are used to gain conclusions, so that the conclusions are both scientific and convincing. In the process of data analysis, the privacy of the respondents is respected. This kind of research not only provides data support to clarify the complex relationship between the form of residence and well-being, but also provides a relatively accurate reference for the design of family intergenerational communication mechanisms and the optimisation of community services suitable for the elderly in the community, so as to further achieve the positive ageing goal of improving the quality of living and well-being.

6.2 Limitations and future improvement

The survey group in this study is limited to the north, and there is a lack of data from the south. It is difficult to fully reflect the relationship between the well-being of all elderly people in China and the living conditions of their children and grandchildren. The main reason is that there are significant differences in family education methods and environment between the north and the south of China. Meanwhile, this study did not focus on the impact of the economic aspect on the well-being of the elderly. In the follow-up research on similar topics on the well-being of the elderly, researchers can collect data from the south to compare the north and the south, or focus on analysing the data from the south. In addition, more control variables can be added, or in-depth research on the impact of the economic aspect on the well-being of the elderly.

7. Conclusion

This study focuses on the impact of the elderly living with their descendants on well-being. During the questionnaire collection process, the snowball sampling method was used. In the data analysis, the main methods used are analysis of variance and correlation analysis to determine whether these factors have an impact on the well-being of the elderly. This research results show that living with grandchildren significantly improves the subjective well-being of the elderly, while living with children has no significant effect on the subjective well-being of the elderly. Privacy respect, physical health and social participation of the elderly are key variables for this research, but household chores and communication duration for the elderly have no significant impact on the subjective well-being of the elderly. This study fills the gap in the detailed research on the well-being of the elderly at the level of children and grandchildren, and provides a reference price for optimising community elderly services. In the future, people who study this field can compare the differences in the subjective well-being data of the elderly in northern and southern China. Also a longitudinal data exploration mechanism can be introduced, and the impact of the economic background on intergenerational interaction can be explored to deepen the research on the living conditions and well-being of the elderly in the context of an aging population.

8. References

Arjmand-sangani, M. *et al.* (2024) ‘Investigating the relationship between aging perception and self-efficacy in the older adults: A cross-sectional study in eastern Iran’, *BMC Geriatrics*, 24(1). doi:10.1186/s12877-024-05231-7.

Babazadeh, T. *et al.* (2025) ‘Self-efficacy, self-esteem, and happiness in older adults: A cross-sectional study’, *PLOS ONE*, 20(3). doi:10.1371/journal.pone.0319269.

Cheng, X. and Ariyo, T. (2023) ‘Grandparenting and life satisfaction among Chinese elderlies: A study of possible mechanisms’, *BMC Geriatrics*, 23(1). doi:10.1186/s12877-023-04540-7.

Chen, P. (2022) ‘Research on happiness and influencing factors of the elderly under the background of aging—empirical research based on CGSS2017 data’, *Advances in Applied Mathematics*, 11(05), pp. 2891–2899. doi:10.12677/aam.2022.115307.

Chyi, H. and Mao, S. (2011) ‘The Determinants of Happiness of China’s Elderly Population’, *Happiness Stud*, (13), pp. 167–185. doi:10.1007/s10902-011-9256-8

Danielsbacka, M., Křenková, L. and Tanskanen, A.O. (2022) ‘Grandparenting, health, and well-being: a systematic literature review’, *European Journal of Ageing*, pp. 341–368. doi:10.1007/s10433 - 021 - 00674 - y.

Diener, E. (2000) ‘Subjective well-being: The science of happiness and a proposal for a national index.’, *American Psychologist*, 55(1), pp. 34–43. doi:10.1037/0003-066x.55.1.34.

He, Q. (2023) ‘Does health status affect residents’ subjective well-being?—analysis from CGSS2021 Data’, *Operations Research and Fuzziology*, 13(04), pp. 2872–2877. doi:10.12677/orf.2023.134287.

Hill, M.M.Y.S.H.M.Y.S. *et al.* (2023) ‘An exploration of happiness, anxiety symptoms, and depressive symptoms among older adults during the coronavirus pandemic’, *Psychology of Aging*, 14. doi:10.3389/fpsyg.2023.1117177.

Hou, J. (2023) ‘Research on the impact of social activities on the subjective well-being of old people’, *Sustainable Development*, 13(02), pp. 441–448. doi:10.12677/sd.2023.132046.

Kawakami, A. and Son, J. (2015) ‘“I don’t want to be a burden”: Japanese immigrant acculturation and their attitudes toward non-family-based elder care’, *Ageing International*, 40(3), pp. 262–276. doi:10.1007/s12126-015-9220-8.

Kim, B. *et al.* (2020) ‘Long-term sequences of intergenerational living arrangements among older Americans’, *Innovation in Aging*, 4(Supplement_1), pp. 109–109. doi:10.1093/geroni/igaa057.359.

Li, Q., Dong, J. and Zhang, X. (2021) ‘The Effects of Children’s Quantity and Quality on Parental Subjective Well-being’, *Journal of East China Normal University (Philosophy and Social Sciences)*, 53(4), pp. 150–165. doi:10.16382/j.cnki.1000-5579.2021.04.014.

Li, R. and Gan, T. (2023) ‘The impact of intergenerational cohabitation on life satisfaction among older adults—the

- mediation effect of the intergenerational emotional support', *Advances in Psychology*, 13(10), pp. 4498–4505. doi:10.12677/ap.2023.1310567.
- Liu, L. (2025) 'Intergenerational bridges or high walls of conflict?—a study of intergenerational communication patterns and conflict resolution in Family aging', *Aging Research*, 12(05), pp. 426–439. doi:10.12677/ar.2025.125059.
- Liu, M. (2022) 'Influencing factors of life satisfaction of urban elderly under the background of high quality life', *Advances in Applied Mathematics*, 11(08), pp. 5823–5830. doi:10.12677/aam.2022.118614.
- Lu, J., Zhang, Y. and Li, S. (2025) 'Study on the Influence Mechanism of Use of Short-Form Video Usage on the Life Satisfaction of Middle-Aged and Older People in Rural Areas', *population and development*, 31(1), pp. 127–149.
- Luo, Q., Gu, Z. and Gu, J. (2025) 'Research on the influencing factors of elderly happiness under the background of aging: based on the survey and analysis of Zhonglutian Town, Baiyun District, Guangzhou City', *Psychological Monthly*, 20(02), pp. 224–227. doi:10.19738/j.cnki.psy.2025.02.066.
- Norrish, J.M., Vella-Brodrick, D.A. Is the Study of Happiness a Worthy Scientific Pursuit?. *Soc Indic Res* 87, 393–407 (2008). <https://doi.org/10.1007/s11205-007-9147-x>
- Shamsikhani, S. et al. (2022) 'Meaning of respect for older people in family relationships', *Geriatrics*, 7(3), p. 57. doi:10.3390/geriatrics7030057.
- Song, L., Li, S. and Li, L. (2008) 'The Impact of Care for Grandchildren on Psychological Well-being of the Rural Elderly', *Population and Development*, (3), pp. 10–18.
- Song, Y. (2022) 'An analysis of intergenerational conflict in the context of aging', *Advances in Social Sciences*, 11(06), pp. 2409–2418. doi:10.12677/ass.2022.116331.
- Sun, X. and Lai, K. (2020) 'Gender of Children and subjective Well-being of the Elderly', *YOUTH STUDIES*, 434.
- Taggart, F. et al. (2013) 'Cross Cultural Evaluation of the warwick-edinburgh mental well-being scale (WEMWBS) -a mixed methods study', *Health and Quality of Life Outcomes*, 11(1), p. 27. doi:10.1186/1477-7525-11-27.
- The Marriam Webster Dictionary (no date) Vanguard Books. Available at: <https://www.vanguardbooks.com/book/the-marriam-webster-dictionaryclear-and-easy-to-use/> (Accessed: 29 July 2025).
- United Nations, Department of Economic and Social Affairs, Population Division (2020). World Population Ageing 2019 (ST/ESA/SER.A/444)
- Wang, B. (2022) 'Research on the influence of capital endowment and intergenerational support on the happiness of the elderly—empirical analysis based on CGSS(2017)', *Operations Research and Fuzziology*, 12(03), pp. 896–905. doi:10.12677/orf.2022.123095.
- Wang, J. et al. (2024) 'Evaluation of the Importance of Influencing Factors on the Happiness of the Elderly and Analysis of Urban-Rural Differences', *Population & Development*, 30(3), pp. 144–160.
- Wang, Q. and Cheng, X. (2023) 'Research on intergenerational support and health of the elderly in the context of population aging—empirical analysis based on CHARLS 2018', *Aging Research*, 10(04), pp. 1106–1114. doi:10.12677/ar.2023.104145.
- Wang, Z. et al. (2022) 'Investigation and Research on Subjective Well-being of the Elderly and Its Influencing Factors', *Chinese Journal of Social Medicine*, 39(3), pp. 319–323. doi:10.3969/j.issn.1673-5625.2022.03.020.
- Xiao, B. (2012) *An Introduction to Chinese Filial Piety Culture*. Beijing, China: People's Publishing House.
- Xu, J. (2022) 'Study on the influence of health status on life satisfaction of young elderly under active aging', *Advances in Applied Mathematics*, 11(09), pp. 6207–6214. doi:10.12677/aam.2022.119655.
- Yin, J. and You, J. (2020) *Journal of Huazhong Agricultural University (Social Sciences Edition)*, 148, pp. 117–126. doi:10.13300/j.cnki.hnwkxb.2020.04.013.
- Zhang, H. (2023) 'Can more kids still have more blessings? the impact of the number of children on the subjective well-being of the elderly—an empirical analysis based on CGSS 2021 data', *Operations Research and Fuzziology*, 13(06), pp. 6401–6410. doi:10.12677/orf.2023.136631.
- Zhang, J. (2024) 'A study of the effect of intergenerational support on the subjective well-being of the elderly', *Aging Research*, 11(01), pp. 152–161. doi:10.12677/ar.2024.111022.
- Zhang, R., Zhang, D. and Li, S. (2020) 'The Impact of the Number, Gender Structure, Birth Order of Children on Old-age Security Capital and Differences between Urban and Rural Elderly: Evidence from the CLASS 2014 Data', *Population and economics [Preprint]*, (4). doi:10.3969/j.issn.1000-4149.2020.00.011.