



# The Influence of Intergenerational Support from Children on Life Satisfaction of the Elderly: The Mediating Effect of Self-efficacy

Wei Peng<sup>1,2</sup>(✉)

<sup>1</sup> School of Economics and Social Welfare, Zhejiang Shuren University, Hangzhou, Zhejiang, China

[pw8322260@126.com](mailto:pw8322260@126.com)

<sup>2</sup> Zhejiang Research Center of Modern Service, Hangzhou, Zhejiang, China

**Abstract.** This paper is intended to investigate the influence of intergenerational support from children on the life satisfaction of the elderly and explore the mediating effect of self-efficacy. A total of randomly-selected 615 elderly people from Zhejiang and Jiangsu Provinces were measured by a general information questionnaire, life satisfaction scale, children's intergenerational support scale, and self-efficacy scale. With statistical regression analysis and mediating effect test respectively conducted through SPSS21.0 and Process macro programs, significant differences ( $P < 0.05$ ) have been found in age, spouse, household registration, and pension concerning the life satisfaction score of the elderly. Intergenerational support from children is positively correlated with life satisfaction ( $r = 0.27$ ,  $P < 0.01$ ) and self-efficacy ( $r = 0.13$ ,  $P < 0.01$ ), and life satisfaction shares a positive correlation with self-efficacy ( $r = 0.39$ ,  $P < 0.01$ ). The results of regression analysis showed that self-efficacy had a significant partial mediating effect on the influence of intergenerational support from children on life satisfaction. Both intergenerational supports from children and self-efficacy constitute important factors affecting the life satisfaction of the elderly, and self-efficacy can partially mediate the influence of intergenerational support from children on the life satisfaction of the elderly.

**Keywords:** The Elderly · Life Satisfaction · Intergenerational Support from Children · Self-efficacy · Mediating Effect

## 1 Introduction

Recent years have witnessed the further deepening of aging in China. According to the data released by the 7th census, the population aged 60 and above in China reaches 264.02 million, accounting for 18.70% (of which, the population aged 65 and above is 190.64 million, accounting for 13.50%). How to make the elderly enjoy independence and entertainment, to guarantee the majority of the elderly a happy twilight life, and to ensure the life quality of the elderly have become current issues of great concern. Life

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satisfaction is the subjective standard for the elderly to evaluate a good life, the overall cognitive evaluation of the individual's quality of life most of the time according to the self-selected criteria, and is a subjective experience [1]. Social support can positively predict the life satisfaction of the elderly. Companionship, caring, and support, in particular, can most contribute to the increasing life satisfaction of the elderly [2]. It has been suggested that financial and caregiving support from children exerts a significant influence on the life satisfaction of the elderly [3] and intergenerational support from children proves to be effective in enhancing life satisfaction [4]. Self-efficacy serves as another important factor affecting the life satisfaction of the elderly [5]. Self-efficacy refers to an individual's presumptions and judgments about his or her ability to perform a certain behavior based on the successes and failures of previous experiences [6]. The elderly with high self-efficacy tend to experience higher levels of life satisfaction. Some research has pointed out that social support also has a positive effect on self-efficacy, and the more social support the elderly has received, the more social resources they will have, and the more confident they will become in completing a task. In other words, they have a higher sense of self-efficacy [7]. However, there is still a lack of research related to how intergenerational support from children affects the life satisfaction of the elderly through self-efficacy.

Therefore, the influence of intergenerational support from children on the life satisfaction of the elderly and its internal mechanism is explored in this paper to provide a theoretical basis and empirical reference for elevating the life satisfaction of the elderly.

## 2 Subjects and Methods

### 2.1 Research Subjects

The random selection method was used to conduct a questionnaire survey of the elderly over 60 years old living in Hangzhou, Ningbo, Jiaxing, Wenzhou, Taizhou, and Quzhou, Zhejiang Province, and Nanjing and Xuzhou, Jiangsu Province. The actual number of people in this research was 650, among which 615 was valid. In this research, 1) voluntary acceptance of this questionnaire research; 2) ability to understand the requirements of this research and without any mental illness; 3) ability to complete this research questionnaire independently or with the help of the researcher were set as the inclusion criteria for the valid samples.

### 2.2 Research Tools

(1) General information questionnaire, including the elderly's gender, age, presence of a spouse, place of residence, engagement in labor production activities, and pension. (2) Children's intergenerational support scale, a scale developed based on previous research [8] measures four aspects, namely financial support, life-caring support, frequency to meet the children, and frequency of contact with children. The financial support is measured by the question, "How much money did your child give you on average each month in the past 6 months?" (1 means never while 4 means more than 3,000 yuan under a four-level scoring); the question of life-caring support is "Does your child often

keep house for you?"; the frequency to meet and contact with children are respectively measured by "How often do you see your child?" and "How often does your child contact you?". The question items for life-caring support, frequency to meet children, and frequency of contact with children are all scored on a 4-point scale (1 for never and 4 for almost daily). The sum of the scores of the four measurement indexes equals the score of children's intergenerational support scale, and the higher the score is, the higher the level of intergenerational support from children is. And the internal consistency of intergenerational support from children in this paper reaches 0.78. (3) Self-efficacy scale [9], a scale developed by Schwarzer et al. and then translated and revised by Zhang Jianxin et al. contains 10 items under a four-point scoring scale. A higher score indicates a higher sense of self-efficacy in the respondent. And the internal consistency of the self-efficacy scale in this paper is 0.90. (9) Life satisfaction scale [10], which was developed by Diener et al. With 5 items contained and a 7-point scoring scale adopted, a higher score stands for a higher level of life satisfaction. And the internal consistency of the life satisfaction scale in this paper is 0.87.

### 2.3 Research Methods

The elderly were randomly selected by uniformly-trained personnel to implement the research. Under the consent of the interviewees, questionnaires were distributed with unified instruction. Then the interviewees filled out the questionnaires according to their actual situations and real experience. With a total of 650 questionnaires distributed for this research, 615 (94.62%) were returned.

### 2.4 Statistical Treatment

While SPSS 21.0 software was used to conduct descriptive analysis, Pearson correlation analysis, *t*-value and regression analysis, Process macro programs were adopted to test mediating effects. What was involved was to compare the differences in life satisfaction of the elderly in demographic variables, explore the correlations among the three variables of life satisfaction, intergenerational support from children, and self-efficacy, as well as verify the mediating effect of self-efficacy between intergenerational support from children and life satisfaction.

## 3 Results

### 3.1 Difference Comparison of Life Satisfaction Scores of the Elderly in Demographic Variables

After the life satisfaction scores of the elderly were tested for differences in demographic variables, significant differences appear in age, spouse, household registration, and pension ( $p < 0.05$ ). The results are detailed in Table 1.

**Table 1.** Test for Differences in Life Satisfaction Scores of the Elderly in Demographic Variables (*t*-value)

Item	Category	<i>n</i>	Life Satisfaction Score	<i>T</i> -value
Gender	Female	349	23.00 ± 5.74	0.27
	Male	266	23.23 ± 5.49	
Age	60–69	276	23.41 ± 5.73	4.23*
	70–79	267	23.26 ± 5.54	
	> 80	72	21.31 ± 5.31	
Spouse	Yes	451	23.89 ± 5.14	35.15***
	No	164	20.93 ± 6.31	
Household	Rural	372	22.43 ± 5.84	13.68***
Registration	Urban	243	20.13 ± 5.13	
Pension	Yes	418	23.78 ± 5.46	19.38***
	No	197	21.67 ± 5.72	

\*  $P < 0.05$ , \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$ , the same below.

**Table 2.** The Correlation among Intergenerational Support from Children, Self-efficacy, and Life Satisfaction of the Elderly (*r*-value)

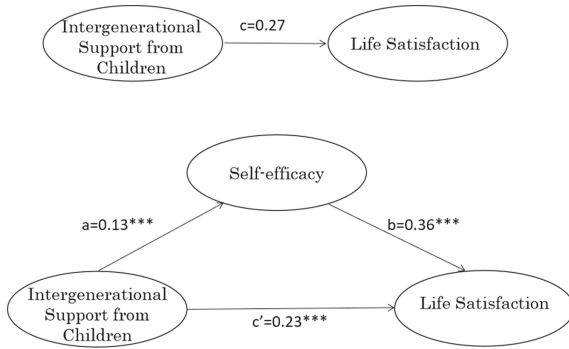
Dimension	Intergenerational Support from Children	Self-efficacy	Life Satisfaction
Intergenerational Support from Children	1.00		
Self-efficacy	0.13**	1.00	
Life Satisfaction	0.27**	0.39**	1.00

### 3.2 The Scores and Correlation Among Intergenerational Support from Children, Self-efficacy, and Life Satisfaction

In this research, the scores for intergenerational support from children, self-efficacy, and life satisfaction are respectively 11.59 + 2.58, 27.31 + 4.50, and 23.10 + 5.63. Intergenerational support from children is positively correlated with life satisfaction ( $r = 0.27$ ,  $P < 0.01$ ) and self-efficacy ( $r = 0.13$ ,  $P < 0.01$ ), and the life satisfaction of the elderly shares a positive correlation with self-efficacy ( $r = 0.39$ ,  $P < 0.01$ ) (Table 2).

### 3.3 The Mediating Effect Test of the Self-efficacy of the Elderly Between Intergenerational Support from Children and Life Satisfaction

Following the method of Wen Zhonglin et al. to test mediating effects, step 1 refers to a regression analysis conducted with intergenerational support from children as the



**Fig. 1.** The Mediating Effect of Self-efficacy between Intergenerational Support from Children and Life Satisfaction

independent variable and life satisfaction as the dependent variable, the results of which show that intergenerational support from children can significantly and positively predict life satisfaction ( $\beta = 0.27, t = 7.06, p < 0.001$ ); In step 2 where intergenerational support from children acts as the independent variable and self-efficacy as the dependent variable, the results show that intergenerational support from children is a significant positive predictor of self-efficacy ( $\beta = 0.13, t = 3.32, p < 0.001$ ); When it comes to step 3, the regression analysis with both intergenerational support from children and self-efficacy as independent variables and life satisfaction as dependent variable shows that both intergenerational support from children and self-efficacy can positively predict life satisfaction ( $\beta = 0.23, t = 6.21, p < 0.001$ ), ( $\beta = 0.36, t = 10.00, p < 0.001$ ). The mediating effect value ( $a \times b$ ) of self-efficacy is  $0.13 \times 0.36 = 0.05$ , the gross effect is 0.27, and the ratio of the mediating effect to the gross effect is  $0.05/0.27 \times 100\% = 18.52\%$ , and the results are shown in Table 3 and Fig. 1.

To further test the mediating effect model of the elderly’s self-efficacy between intergenerational support from children and life satisfaction, the Process macro programs were run in SPSS 21.0 software using Model 4 [11], and the mediating model was constructed with intergenerational support from children as the independent variable, life satisfaction as the dependent variable, and self-efficacy as the mediating variable. The Bootstrapping method was then used to test mediating effects, and the number of replicate samples was 5000.

The results of the test are shown in Table 4: the gross effect of intergenerational support from children on life satisfaction is 0.60 ( $P < 0.001, 95\% CI: 0.43–0.76$ ), the direct effect is 0.49 ( $P < 0.001, 95\% CI: 0.34–0.65$ ), and the indirect effect is 0.11 ( $P < 0.001, 95\% CI: 0.03–0.17$ ), accounting for 19.40% of the gross effect. As the standardized confidence intervals (95%) exclude 0, it indicates that self-efficacy mediates significantly between intergenerational support from children and life satisfaction, and that self-efficacy partially mediates between intergenerational support from children and life satisfaction.

**Table 3.** The Regression Analysis of Intergenerational Support from Children, Self-efficacy, and Life Satisfaction

Step	Outcome Variable	Predictor Variable	<i>R</i>	<i>R</i> <sup>2</sup>	<i>F</i>	$\beta$
Step 1	Life Satisfaction	Intergenerational Support from Children	0.27	0.74	49.80	0.27
Step 2	Self-efficacy	Intergenerational Support from Children	0.13	0.16	11.00	0.13
Step 3	Life Satisfaction	Intergenerational Support from Children	0.45	0.20	78.96	0.23
		Self-efficacy				0.36

## 4 Discussion

### 4.1 Difference Comparison of Life Satisfaction of the Elderly in Demographic Variables

The life satisfaction scores of the elderly remain at a moderate level, which is generally consistent with the data results of the elderly in the United Kingdom (20.2 + 4.1) [12] and the United States (22.85 + 8.28) [13] measured by the same scale. Difference tests further unveil significant differences in age, spouse, household registration, and pension concerning the life satisfaction of the elderly. And the elderly within the low-age group enjoy a notably higher level of life satisfaction than those with advanced ages. The reason behind this may be the difficulty for the elderly with advanced ages to participate in group activities. As their abilities to live and move around decline distinctly, so does their life satisfaction; The life satisfaction of the elderly with spouses is significantly higher than that of those without spouses. Given the decline in physical functions, the support and care from the spouses can improve life satisfaction of the elderly, which is consistent with the existing results [2]; There is also a significant gap between the life satisfaction of the rural elderly and urban elderly. This may be attributed to the lower level of development and inadequacy in infrastructure and institutional security in rural areas, lacking economic and service support, and social support for the elderly [14]. Compared with the elderly living in urban areas, those in rural areas have less access to social resources and external support, leading to a lower life satisfaction [15]; The elderly with pensions also demonstrate significantly higher life satisfaction than those without pensions. Pensions, as a primary social pension insurance benefit, have a positive effect on improving the quality of life and well-being of the elderly.

### 4.2 The Relevant Analysis of Intergenerational Support from Children, Self-efficacy, and Life Satisfaction of the Elderly

In this research, intergenerational support from children is significantly and positively correlated with self-efficacy and life satisfaction, which coheres with the existing results. Emotional support from children can endow the elderly with more spiritual comfort

**Table 4.** The Mediating Effect Check Analysis of the Influence of Intergenerational Support from Children on Life Satisfaction

Path	Effect	SE	95% <i>CI</i> Upper Limit	95% <i>CI</i> Lower Limit
Gross Effect: Intergenerational Support from Children—Life Satisfaction	0.60	0.08	0.43	0.76
Direct Effect: Intergenerational Support from Children—Life Satisfaction	0.49	0.08	0.34	0.65
Indirect Effect: Intergenerational Support from Children—Self-efficacy—Life Satisfaction	0.11	0.04	0.03	0.17

and thus enhance their life satisfaction. It was found by Wang Ping [16] et al. that financial support from children, two-way intergenerational household chores sharing, and emotional support had a positive effect on the life satisfaction of the elderly. Self-efficacy, which is an individual's cognitive evaluation of his or her ability to succeed or cope with difficult situations, is also closely related to the life satisfaction of the elderly. The family support system enables the elderly to gain more positive self-evaluations, increase their love towards life, and experience a greater sense of self-worth and existence through participation in social activities, thus enhancing self-efficacy. These positive experiences, in turn, enhance the elderly's emotional regulation and then life satisfaction. This also suggests that the higher the intergenerational support from children is, the higher the self-efficacy and life satisfaction may be.

#### 4.3 The Mediating Effect Analysis of the Self-efficacy Between Intergenerational Support from Children and Life Satisfaction of the Elderly

A further test of mediating effects concluded that self-efficacy has a partially mediating role in the effect of intergenerational support from children on life satisfaction. This suggests that intergenerational support from children can influence the life satisfaction of the elderly both directly and through the mediating role of self-efficacy. The research by Meknes [17] et al. and Van et al. [18] also showed that self-efficacy was significantly correlated with life satisfaction, and individuals with higher self-efficacy also enjoyed higher life satisfaction. It was pointed out by Zhang Dong's research [19] that the life satisfaction of the elderly was affected by the weakening of physical functions and the decrease in income, but the financial support, life-caring support, and spiritual support from children had a positive impact on the attitude of the elderly toward aging, especially the spiritual comfort brought by the children through daily communication and life interaction with the elderly could enhance the life satisfaction of the elderly. Intergenerational support from children can facilitate the elderly in adapting to the role change and improving their control over their lives, thus increasing their life satisfaction.

## 5 Conclusion

In summary, the life satisfaction of the elderly in this research remains at a moderate level, expecting further improvement. Self-efficacy partially mediates the relationship between intergenerational support from children and life satisfaction, and intergenerational support from children can have an impact on life satisfaction through self-efficacy. In addition, shortcomings still exist in this research. For example, only the elderly from Zhejiang Province and Jiangsu Province were investigated and only the intergenerational support from children and self-efficacy were considered to explore the life satisfaction of the elderly. Combining the survey data from multiple regions and large samples, it is worthwhile to analyze the influencing factors of life satisfaction of the elderly and the methods to improve the life satisfaction of the elderly from multiple aspects.

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