

Original Research

## The Impact of Intergenerational Support on the Elderly's Life Satisfaction in China: A Comparison of Males and Females<sup>1</sup>

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### Abstract

This paper examines whether different types of intergenerational support have different effects on life satisfaction among the elderly, and whether a gender difference exists in the effect of intergenerational support on the elderly's life satisfaction. Data from the *China Longitudinal Aging Social Survey* (CLASS) were used for this study. The study sample consisted of 10,801 cases. A logit regression model was used for empirical verification. All types of intergenerational support were found to have effects on life satisfaction among the elderly. However, a gender difference existed in the relationship between intergenerational support and elderly life satisfaction. Findings suggest that intergenerational support has distinctive patterns on the life satisfaction of the elderly. Thus, policies and programs should develop

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different intergenerational support models to improve their life satisfaction of elderly males and females.

### **Keywords**

Intergenerational support; life satisfaction; gender difference; the elderly; China

## **1. Introduction**

According to *World Population Prospects 2024*,<sup>2</sup> the biannual round of population forecast data published by the United Nations, people aged 60 years or older accounted for 20% of China's total population that year, a significant increase from 10% in 2000. Moreover, it predicted that China's elderly would reach 40% of the population by 2050. With people living increasingly long lives,<sup>3</sup> the problems of the elderly have received increasing attention and discussion around the world. Due to improvements to China's social security system for the elderly [1], the family's function in caring for them has gradually shifted, and security for elderly people has moved from a family model to a social model [1]. Some scholars [2] have pointed out that connections between parents and children remain strong, although with continuous modernization in China, family living patterns are changing, and increasingly, the elderly and their children are living separately. Nevertheless, the elderly and their children still connect to each other through material and social exchanges. Although the function of the family remains important for the well-being of the elderly, the relative importance of specific types of behaviors on life satisfaction among elderly males and females is less clear.

### **1.1 Life Satisfaction among the Elderly**

People's sense of life satisfaction is an important subjective evaluation of their lives. Life satisfaction is a comprehensive, active, and subjective measurement index of an individual's life quality [3]. Satisfaction with life is related to mental health concerns such as anxiety [4], having a sense of meaning, and being able to adapt well (See [5]). Given these consequences, it is critical to understand the predictors of satisfaction with life. When determining satisfaction with life, individuals compare their living situations with an ideal living mode with regard to both emotional and cognitive aspects [6, 7]. The results of an individual's self-evaluation depend on his or her subjective emotional reaction to the actual situation. Current research on the life satisfaction of the elderly shows that factors affecting it include demographic characteristics, income level, health status, and social support (e.g., [8-11]).

Among these factors, disagreement remains regarding the impact of gender and age on the elderly's life satisfaction. On the one hand, some scholars have found that gender [12] and age [13] have no significant relationship with the life satisfaction of the elderly. Conversely, other scholars have pointed out that life satisfaction varies among elderly people of different genders and ages. Some studies have shown that among the elderly, females have a lower level of life satisfaction compared with males [14]. Moreover, life satisfaction among the elderly has been found by some

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<sup>2</sup> Data resource: [population.un.org/wpp/](https://population.un.org/wpp/).

<sup>3</sup> Data resource: [population.un.org/wpp/](https://population.un.org/wpp/).

to decline with age and the deterioration of physical functions [8, 11]. Compared with younger elderly people, older elderly have been found to have lower levels of life satisfaction, and the elderly are more likely to feel unhappy with their lives after retirement [15, 16]. Other studies, however, have argued that the elderly's life satisfaction levels increase with age. This may be because the oldest have a lower life expectancy, and life pressures and goals are more easily met [17]. Other factors predicting greater life satisfaction among the elderly include economic factors [10, 18], health status [19, 20], marital status [21, 22], education level [23], and social support [9, 24]. One important, informal form of social support is intergenerational support.

### **1.2 The Relationship between Intergenerational Support and Life Satisfaction**

Intergenerational support refers to the exchange relationship among different generations, which is similar to the functional unity of intergenerational solidarity theory—that is, resources exchanged and mutual help formed between different generations. Research on intergenerational support in China began with Fei [25], who emphasized the “feedback mode,” in which the exchange of resources plays a central role in intergenerational support. Since then, scholars have successively elaborated and explained intergenerational support. Zhang [26] divided intergenerational support into three aspects: financial support, support with housework, and emotional intimacy. However, Zhang [26] considered only intergenerational support given by children to elderly parents; more recent work indicates that intergenerational support from the elderly to their children is also important. Mu [27] added parental support to children on this basis, emphasizing that intergenerational support includes not only the support that children given to parents, but also the support that parents give to children. In short, intergenerational support comprises economic support, support with housework, and emotional intimacy, and this support includes both children-to-parents support and parents-to-children support.

Current research on the relationship between intergenerational support and the life satisfaction of the elderly has shown that accepting and giving support have a significant impact on the elderly's life satisfaction [28]. The more elderly people give or accept support, the happier they feel [28, 29]. However, accepting and giving intergenerational support affects the life satisfaction of the elderly to varying degrees. Compared with providing support, accepting intergenerational support has been found to have a greater effect on the elderly's well-being [30]. Others have found that accepting and providing intergenerational support both contribute to the elderly's life satisfaction by providing a sense of self-esteem or reducing loneliness, and they have direct effects on the life satisfaction of elderly people [31].

### **1.3 Accepting and Providing Economic, Housework, and Emotional Support**

Regarding the economic aspect of support, accepting economic support from children can improve the elderly's level of life satisfaction [32] by providing certain material guarantees that their living needs will be met, although other research indicates that accepting support has no significant effect on mental health [33]. However, differences of opinion remain on the effect of providing economic support to children on elderly's life satisfaction. Some studies show that giving economic support significantly improves the elderly's life satisfaction by improving their self-efficacy [34, 35]. Nevertheless, the amount of economic support provided by the elderly should remain at a moderate

level [36] Other studies [37] have found the converse: they suggest that giving economic support to children increases psychological pressure on the elderly and reduces their level of life satisfaction.

Adult children's support with housework has generally been found to have either no effect or a negative effect [38, 39]. He [40] argued that when children provide daily housework for the elderly, this limits the elderly's life satisfaction because of differences in care and communication methods between generations. On the other hand, there have been consistent results on the impact of the elderly's provision of housework for their children on the elderly's life satisfaction: it has a positive effect because the productivity that elderly people lose after retirement can be regenerated by providing housework [36]. However, Peng et al. [41] found that the absence of any exchange of support with housework predicted lower levels of life-satisfaction, and that whether parents contributed more or children contributed more to the exchange or whether the exchange was balanced was not important. This suggests that engagement between parents and children is the key factor here.

Finally, many studies have shown that emotional intimacy has a more significant impact on the life satisfaction of elderly people than do either economic or housework support [42]. Emotional intimacy between the elderly and their children can enhance the elderly's life satisfaction by increasing the elderly's self-esteem, and positive experiences and reducing loneliness [22] and is related to lower levels of mental health issues [33].

#### **1.4 The Present Study**

Thus, the effects of intergenerational support on the elderly's life satisfaction are disputed, with conflicting results regarding the impact of economic and housework support. However, there are methodological limitations in the prior research. Specifically, some researchers have continued to treat intergenerational support solely as the unilateral support that children provide to their parents, ignoring the influence of parental support for their children (e.g., [33]). Second, most studies on the relationships between intergenerational support and the elderly's life satisfaction discuss the elderly as one group, although the limited research that has been done indicates that age moderates these relationships [43]. Differences between male and female elderly have also not been fully examined. To fill these research gaps, this paper seeks to answer two related questions: First, how do different types of intergenerational support influence the elderly's life satisfaction? Second, are there any differences between males and females regarding the relationship between intergenerational support and the elderly's life satisfaction?

We propose the following hypotheses:

**H1:** When controlling for age, gender, marital status, education, health, and income, we predict that both accepting and providing financial support and support with housework, and emotional intimacy will positively predict life satisfaction.

**H2:** When controlling for age, marital status, education, health, and income in males, we predict that accepting and providing financial support, accepting support with housework, and emotional support will positively predict life satisfaction. However, because men are traditionally less engaged with housework, we expect that anticipate that it will be more difficult for them to provide support in that area. Therefore, providing support with housework will not predict satisfaction with life.

**H3:** When controlling for age, marital status, education, health, and income, we predict that both accepting and providing financial support and providing support with housework, and emotional

intimacy will positively predict life satisfaction. However, because females traditionally provide housework, we anticipate that it will be more difficult for them to accept support in that area. Therefore, accepting support with housework will not predict satisfaction with life.

## **2. Method**

### **2.1 Participants and Procedures**

Data used for this study came from a large-scale social survey conducted in 2014, the *China Longitudinal Aging Social Survey* (CLASS). This was a baseline survey in China, and stratified multi-stage probability sampling was used to obtain participants 60 years old or older. County was the primary sampling unit (PSU), and village or neighborhood was the secondary sampling unit (SSU) from which the investigators extracted households. One elderly person was randomly selected from each household and was interviewed face-to-face by an investigator. Informed consent was obtained from each participant, and each had the right to refuse the interview or to end it whenever they wanted. In the end, 11,511 elderly persons participated in the survey, which began May and ended in November 2014. Seven hundred and ten participants were not qualified to take the study and were therefore deleted from the final sample, which consisted of 5,151 males (47.69%) and 5,650 females (52.31%).

### **2.2 Measures**

#### **2.2.1 Life Satisfaction**

The dependent variable of this study is “life satisfaction.” Survey respondents were asked: “In general, are you satisfied with your current life?” There were five options: 1 “very unsatisfied,” 2 “unsatisfied,” 3 “average,” 4 “satisfied,” and 5 “very satisfied.” For the purpose of this study, the five options of life satisfaction were recoded as “0 = not satisfied (1, 2, 3)” and “1 = satisfied (4, 5).”

#### **2.2.2 Intergenerational Support**

The independent variable “intergenerational support” includes the three aspects identified by Zhang [26]: financial support, housework support, and emotional intimacy. Financial and housework support were divided into giving support and accepting support. In other words, intergenerational support included financial support-given, financial support-received support, support with housework-given, support with housework-received, and emotional intimacy. These elements of intergenerational support were asked regarding no more than five children in the questionnaire.

Financial support was assessed by two items: “In the past 12 months, what is the monetary value of the cash, food, or gifts that this child/you have given to you/this child?” The options for these two questions ranged from 1 to 9, from “have not provided anything to each other” to “12,000 RMB *yuan* or more.”

Housework support was also assessed by two items: “In the past 12 months, how often have you or your child done housework for each other?” The answers ranged from 1 to 5, from “almost every day” to “almost never.” This study reverse-scored these two variables so that higher values indicate more housework support given or accepted by the elderly person.

Emotional intimacy was measured by the question, “How close do you feel with this child?” Answers ranged from 1 to 3, from “not close” to “close,” and 9, “cannot answer.” This study recoded the value 9 as missing.

We treated all these independent variables as continuous and recalculated them such that each variable’s values were added to include information about every child mentioned by respondents, then divided by the number of their living children to obtain the different types of average intergenerational support of each elderly person. Finally, the higher the value received by the elderly, the more financial and housework support the elderly gave or accepted. Similarly, a higher value of emotional intimacy means that the relationship between the elderly person and his or her children was closer.

### 2.2.3 Control Variables

Control variables in this study include the following: age (from 60 to 113 years old); gender (1 = “male” and 0 = “female”); marital status (1 = “married” and 0 = “unmarried”); education level (1 = “illiterate,” 2 = “private school or literacy classes,” 3 = “primary school,” 4 = “junior high school,” 5 = “senior high school,” and 6 = “college and above”); health status (1= “unhealthy,” 2 = “average” and 3 = “healthy”); personal annual income.

Marital status and health status were re-coded in this study. In the CLASS questionnaire, answers to marital status ranged from 1 to 4, where 1 = “married and living as a couple,” 2 = “widowed,” 3 = “divorced,” and 4 = “unmarried.” We merged the values 2-4 into 0 as “unmarried,” and the status of “married and living as a couple” was reinterpreted as “married.” In the questionnaire, the physical health of the elderly involved six values: 1 = “very healthy,” 2 = “healthy,” 3 = “average,” 4 = “unhealthy,” 5 = “very unhealthy,” and 9 = “cannot answer.” For this study, values 1 and 2 were merged into 1 = “healthy,” value 3 was recoded as 2 = “average,” values 4 to 5 were merged into 3 = “unhealthy,” and value 9 was recoded as missing.

### 2.3 Data Analytic Plan

Data were analyzed and cleaned using SPSS 29.0. Means and standard deviations or frequencies of sociodemographic characteristics were calculated and compared by gender through either t-tests or  $\chi^2$  analyses as appropriate. Similarly, means and standard deviations or frequencies of life satisfaction and intergenerational support variables were also calculated and compared by gender through either t-tests or  $\chi^2$  analyses as appropriate. The three hypotheses were examined through logistic regression analyses. Specifically, Hypothesis One, that when controlling for age, gender, marital status, education, health, and income, both accepting and providing financial support and support with housework, and emotional intimacy will positively predict life satisfaction, was examined through a regression predicting life satisfaction for all participants. Hypothesis Two, that when controlling for age, marital status, education, health, and income in males, accepting and providing financial support, accepting support with housework, and emotional support will positively predict life satisfaction, but providing support with housework will not predict satisfaction with life, was examined through a regression analysis of male participants. Hypothesis 3, that, when controlling for age, marital status, education, health, and income, accepting and providing financial support and providing support with housework, and emotional intimacy will positively predict life

satisfaction, but accepting support with housework will not predict satisfaction with life, was examined through a regression analysis of female participants.

### 3. Results

#### 3.1 Socio-Demographic Characteristics of the Elderly by Gender Group

The socio-demographic characteristics of the elderly by gender are presented in Table 1. There were significant gender differences across all socio-demographic characteristics. Specifically, average age was about 70 years old (SD = 7.981), and elderly females were older on average. Second, almost all elderly people used to be married. There was a higher percentage of currently married female elderly. Third, males reported higher educational level and personal annual income of male elderly than females. Finally, among all elderly people, the number of healthy elderly was greater than the number of those were only average, followed by the unhealthy. The health status of the male elderly followed the same pattern. However, among female elderly, while most were healthy, the unhealthy group came in second.

**Table 1** Comparison of socio-demographic characteristics of elderly by gender group (N = 10,880).

Variables	Total (N = 10,880) Mean ± SD or N (%)	Male (N = 5,151) Mean ± SD or N (%)	Female (N = 5,650) Mean ± SD or N (%)	t/χ <sup>2</sup>	p
Age	70.131 ± 7.981	69.587 ± 7.856	70.600 ± 8.052	6.580	<0.001
Marital status				843.294	<0.001
Married	3,728 (34.30)	1,046 (20.33)	2,646 (46.88)		
Unmarried	7,141 (65.70)	4,100 (79.67)	2,998 (53.12)		
Education	2.232 ± 1.188	2.561 ± 1.170	1.932 ± 1.122	-28.519	<0.001
Health				81.214	<0.001
Unhealthy	2,982 (27.43)	1,213 (23.56)	1,749 (30.98)		
Average	3,226 (29.67)	1,553 (30.17)	1,650 (29.23)		
Healthy	4,665 (42.90)	2,382 (46.27)	2,246 (39.79)		
Personal annual income (log)	8.841 ± 2.088	9.219 ± 1.783	8.485 ± 2.279	-17.552	<0.001

#### 3.2 Intergenerational Support and Life Satisfaction of the Elderly by Gender Group

The life satisfaction of the elderly and the intergenerational support that the elderly accepted or provided are shown by gender in Table 2.

**Table 2** Comparison of intergenerational supports and life satisfaction of the elderly by gender group (N = 10,880).

Variables	Total (N = 10,880)	Males (N = 5,151)	Females (N = 5,650)	t/ $\chi^2$	p
	Mean $\pm$ SD or N (%)	Mean $\pm$ SD or N (%)	Mean $\pm$ SD or N (%)		
<b>Accept support</b>					
Financial support	2.772 $\pm$ 1.999	2.817 $\pm$ 2.055	2.733 $\pm$ 1.945	-2.182	0.029
Housework support	2.431 $\pm$ 1.264	2.395 $\pm$ 1.272	2.467 $\pm$ 1.257	2.940	0.003
<b>Provide support</b>					
Financial support	1.058 $\pm$ 1.865	1.217 $\pm$ 1.976	0.911 $\pm$ 1.742	-8.551	<0.001
Housework support	1.831 $\pm$ 1.269	1.846 $\pm$ 1.251	1.819 $\pm$ 1.290	1.085	0.278
Emotional intimacy	2.839 $\pm$ 0.420	2.838 $\pm$ 0.428	2.840 $\pm$ 0.413	0.294	0.769
Life satisfaction				0.016	0.901
Not satisfied	2,652 (24.37)	1,251 (24.29)	1,378 (24.39)		
Satisfied	8,229 (75.63)	3,900 (75.71)	4,272 (75.61)		

Almost all elderly people were satisfied with their lives (about 75.63%), and few were not satisfied. Overall, there was no significant difference by gender in life satisfaction.

Regarding the elderly’s intergenerational support, accepting support was more frequent than giving support, and the level of emotional intimacy between parents and children was the highest. Accepting financial support, accepting housework support, and giving financial support showed statistical differences across different genders. Males provided or accepted more financial support than did females, but for accepting housework support, it was the opposite. In addition, no statistically significant differences existed regarding the provision of housework support or emotional intimacy between parents and children by gender.

### **3.3 Multivariate Analyses of the Effects of Intergenerational Support on the Elderly’s Life Satisfaction**

Three logistic regression analyses predicting life satisfaction among the overall sample, males, and females were completed (See Table 3). In each regression, the control variables were age, marital status, education, health, and income, and the predictors of interest were the five intergenerational support variables. In the overall sample, gender was also included as a control variable.



**Table 3** Logistic regression analyses of intergenerational support on the elderly’s life satisfaction by sex group.

Variables	Total (N = 9,635)		Male (N = 4,701)		Female (N = 4,934)	
	OR (SE)	<i>p</i>	OR (SE)	<i>p</i>	OR (SE)	<i>p</i>
Age	1.036 (0.004)	<0.001	1.045 (0.006)	<0.001	1.028 (0.006)	<0.001
Gender	0.846 (0.046)	0.002	-	-	-	-
Marital status	1.197 (0.073)	0.003	1.160 (0.112)	0.124	1.172 (0.093)	0.045
Education	1.010 (0.026)	0.704	0.979 (0.035)	0.566	1.036 (0.040)	0.359
<b>Health</b>						
Average	1.458 (0.090)	<0.001	1.497 (0.136)	<0.001	1.410 (0.119)	<0.001
Healthy	3.732 (0.241)	<0.001	3.710 (0.344)	<0.001	3.721 (0.337)	<0.001
Income	1.053 (0.137)	<0.001	1.094 (0.136)	<0.001	1.029 (0.017)	0.081
<b>Accept support</b>						
Financial support	1.060 (0.014)	<0.001	1.071 (0.020)	<0.001	1.045 (0.021)	0.027
Housework support	1.062 (0.023)	0.007	1.094 (0.035)	0.005	1.035 (0.032)	0.269
<b>Provide support</b>						
Financial support	1.050 (0.017)	0.002	1.015 (0.021)	0.463	1.100 (0.028)	<0.001
Housework support	0.937 (0.021)	0.003	0.946 (0.030)	0.080	0.925 (0.029)	0.014
Emotional intimacy	1.992 (0.113)	<0.001	1.949 (0.156)	<0.001	2.063 (0.169)	<0.001

### 3.3.1 Regression 1: All Respondents

Among all respondents, the effects of all socio-demographic factors, except educational level, on life satisfaction were statistically significant. Age, marital status, health status, and personal annual income had positive effects on the elderly's life satisfaction. With increasing age, the elderly were more likely to be satisfied with their lives. The elderly who were married had more life satisfaction than those who were unmarried. Elderly people with good health were more likely to have life satisfaction than were elderly people who were unhealthy. With personal annual income increases of one log unit, the elderly's level of life satisfaction increased 5.3%. However, males' level of life satisfaction was lower than that of females. In other words, female elderly people having a high personal annual income, good health, and old age were more satisfied with their lives than others.

Intergenerational support was associated with the elderly's life satisfaction. Accepting both financial and housework support had a positive influence on life satisfaction; but while providing financial support had a positive influence, providing housework support had a negative influence on the elderly's satisfaction. In addition, the feeling of intimacy between parents and children had a greater effect on life satisfaction than other types of intergenerational support. When emotional intimacy increased one unit, the odds ratio of the elderly feeling happy was 1.992. In other word, the odds ratio of the elderly feeling happy was about two times that of feeling unhappy when the intergenerational relationship was close. The odds ratio of the elderly who received financial or housework support feeling happy was 6%-6.2% higher than those who did not receive either. The odds ratio of the elderly who provided financial support to children feeling happy was 1.05 times that of those who did not provide it. The odds ratio of elderly people who provided housework support to their children feeling happy was 93.7% of those elderlies who did not provide it.

### 3.3.2 Regression 2: Male Sample

Among males, age, health status, and personal annual income were associated with life satisfaction. Older elderly people with high incomes and good health status were more likely to feel happy, while marital status and education had no significant effect on the life satisfaction of males. For intergenerational support, accepting financial support, accepting housework assistance, and feeling intimacy between generations had a significant positive effect on the life satisfaction of males, while the impact of receiving financial and housework support on the life satisfaction of males was not significant.

### 3.3.3 Regression 3: Female Sample

Among females, age, marital status, and health status were associated with life satisfaction. Older, married, and healthier females were more likely than others to feel happy with their lives. Education level and personal annual income had no significant effect on females' life satisfaction. Regarding the influence of intergenerational support on females' life satisfaction, different types of intergenerational support were associated with life satisfaction, except receiving housework support. Accepting or providing financial support and the feeling of intimacy between generations had positive impacts on life satisfaction, while providing housework support had a negative impact.

#### **4. Discussion**

In agreement with prior research (e.g., [28, 29, 41]), among all elderly respondents, intergenerational support was associated with life satisfaction. Specifically, accepting and providing both financial and housework support and emotional support were all individually related to satisfaction with life. Further, as expected, satisfaction with life was related to age, gender, marital status, health, and income, although in contrast with Rajhans [23].

Further, as hypothesized, the effect of different types of intergenerational support on life satisfaction was different between males and females. Overall, females reported accepting slightly more support with housework and less financial support and providing less financial support. Hypotheses two and three were generally supported. That is, accepting financial support and emotional support positively predicted life satisfaction in both males and females. However, providing support for housework was unrelated to life satisfaction in males and accepting support for housework was unrelated to life satisfaction in females. Contrary to our hypothesis, providing financial support was unrelated to life satisfaction in males and providing support with housework was negatively related to life satisfaction in females.

We propose that the positive effects of intergenerational support are related to gender roles. Females, who traditionally are considered caregivers, may feel unaccustomed to and uncomfortable with accepting support with housework whereas males, who traditionally may be less involved with housework, may feel more uncomfortable providing support in that area. Although we had predicted that providing financial support would be related to life satisfaction in males, the lack of a relationship may also be interpreted through a lens related to gender roles: fathers may believe that they should have raised their children to be financially self-sufficient and so providing support may suggest to some males that they have not succeeded at this important task. Similarly, for mothers, being asked to provide support with housework after a lifetime of that support may suggest to them that their children have not learned the skills that they worked to impart.

#### **5. Conclusion**

Based on these findings, the paths to life satisfaction are different for males and females. For elderly fathers, children should provide more economic support and housework assistance and pay more attention to communicating with them. For elderly mothers, children should provide as much economic support as possible and increase the frequency of their communications; moreover, they should reduce the amount of housework assistance that their elderly mothers provide for them.

These results also have implications for public policy. Those working to support the elderly and improve their life satisfaction should recognize the important gender differences in the needs of the elderly. Programs designed to provide emotional, financial, and housework support are likely to benefit life satisfaction. The elderly also have much to contribute through emotional support and, at modest levels, financial support.

By analyzing the role of different types of intergenerational supports on the life satisfaction of the elderly, including by gender, this study has expanded existing knowledge in this area. Nevertheless, this study had some limitations. Because the data used for empirical analysis was cross-sectional, it could not adequately predict the sustained impact of intergenerational support on life satisfaction, and future research should take up this task.

## Author Contributions

Zhang conceptualized the study and located the data. Wang contributed to the data analyses and composition of the paper. Norvilitis made improvements on the study and revised the manuscript. Fang drafted the preliminary version of the paper.

## Competing Interests

The authors have declared that no competing interests exist.

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