

An Empirical Study on the Impact of Number of Children on the Happiness of Married and Parenting Individuals

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Abstract

In the context of China's evolving fertility policies, the influence of offspring count on the subjective well-being of married individuals with children has emerged as a pivotal indicator for assessing policy efficacy and family welfare. Utilizing data from the 2021 Chinese General Social Survey (CGSS2021), this study focuses on the cohort of married individuals who have at least one biological child. An ordered Logit model is employed, complemented by non-linear tests and stratified regression analyses, to systematically investigate the underlying mechanisms through which offspring count impacts subjective well-being. The findings reveal that offspring count exerts a statistically significant and positive influence on subjective well-being, with this effect being particularly pronounced in families with three or more children. No evidence of diminishing marginal returns is observed. This impact is more salient among male respondents and those residing in rural areas. The robustness of these conclusions is validated through variable substitution and ordered Probit model sensitivity analyses. The study's results provide novel empirical insights into the determinants of family happiness during the fertility policy transition period and offer valuable references for re-fining supportive measures for the three-child policy, advancing gender equality, and constructing a comprehensive family support system.

Keywords

Subjective Well-being; Number of Children; Married and Parenting Population; Fertility Policy

1. Introduction

1.1. Research Background: Policy Transformation and the Reorientation of Family Structure

In recent years, with the continuous development of China's economy and society, enhancing the subjective well-being of the nation's citizens has become an im-

portant value pursuit in the national development process. The 20th National Congress of the Communist Party of China emphasized the need to ensure and improve people's livelihoods in the development process and to meet the people's aspirations for a better life through joint efforts. [1]The 14th Five-Year Plan also formulated a series of specific measures to promote the comprehensive development of individuals in areas of public concern such as education, elderly care, and housing. These policy trends fully demonstrate that the study and enhancement of well-being have become an important research topic in China at present.

Based on the current demographic situation and the need to realize the people's vision for a better life, China's fertility policy has undergone a series of significant adjustments. Starting with the "double-only-child" two-child policy in 2010, followed by the "single-only-child" two-child policy in 2013, and then the "universal two-child" policy in 2016 and the "universal three-child" policy in 2021, the fertility policy has achieved a historic shift from restricting to encouraging childbirth. This transformation not only reflects the government's high concern for low fertility rates, population aging, and changes in family structure but also highlights the critical role of the number of children in influencing individual quality of life, subjective well-being, and overall social welfare.

Despite the pro-natalist orientation of fertility policies, a significant gap exists between the policy intentions and the lived experiences of married individuals with children. For families with children, the impact of childbirth extends far beyond the decision of whether to have children, focusing more on the number of children to have and the ensuing issues of family responsibility distribution, resource allocation, and cultural expectations. In real life, especially for female family members, the challenges of high childcare costs, difficulty in balancing work and family, unequal distribution of caregiving responsibilities, and socio-cultural pressures are ever-present. These factors, closely related to the number of children and family environment, continuously and profoundly influence individual subjective well-being and serve as crucial criteria for evaluating the social effectiveness of fertility policies.

Although numerous studies have examined the relationship between the number of children and subjective well-being, there are still areas that need improvement. Current research predominantly focuses on the linear relationship between offspring count and well-being, with limited consideration of potential non-linear characteristics. Moreover, few studies systematically examine differences across gender and urban-rural groups, making it difficult to fully reveal the underlying mechanisms through which the number of children affects well-being in different populations. This neglect of non-linear relationships and group differences means that our understanding of the complex link between offspring count and well-being remains incomplete.

In light of the aforementioned contradictions and research gaps, a core question

demands an answer: How does the number of children in married and parenting families influence the subjective well-being of different groups in contemporary China's socio-cultural and policy context? To gain a deep understanding of this issue, it is necessary to focus on this population and construct a multi-dimensional analytical framework to more comprehensively reveal the complex mechanisms at play.

1.2. Research Objectives

Based on the 2021 Chinese General Social Survey (CGSS2021) data, this study targets the population of married individuals who have at least one biological child. Against the backdrop of profound changes in fertility policies and family structures, this research aims to systematically reveal the complex mechanisms through which the number of children in a family influences subjective well-being (SWB) via multi-dimensional analysis. Specifically, the research objectives are outlined in the following three aspects:

Firstly, focusing on the dimension of offspring count, this study systematically explores the relationship and association patterns between the number of children and SWB among married and parenting individuals, with particular attention to potential non-linear characteristics. Secondly, from the perspective of social group differences, this study systematically compares the heterogeneous manifestations between different genders and urban-rural groups, providing a theoretical basis for accurately grasping the impact of family policies on different populations.

1.3. Research Significance

This study achieves multi-dimensional innovation in both theoretical and methodological aspects. First, by empirically examining the non-linear relationship and group structural differences between the number of children and subjective well-being, it accumulates empirical evidence for understanding the complex interactive mechanisms between modern family practices and individual subjective well-being. Second, focusing on internal group differences, it systematically identifies the heterogeneous manifestations of different genders and urban-rural groups in the process of how the number of children affects well-being, enriching the theoretical pathways of structural analysis in individual welfare studies.

In terms of practical application, the findings of this study hold significant guiding value. On the one hand, by revealing the differences in subjective well-being influenced by the number of children across different groups, the study can precisely identify the populations significantly affected by subjective well-being within the current social system and cultural environment. This provides empirical evidence at the micro level for the development of supporting measures for the "three-child policy," such as improving childcare support systems, promoting gender equality, and strengthening care for the elderly. On the other hand, based on the study of cultural preference effects between the number of children and subjective well-being, it offers data support for local governments to optimize family support policies and

advance gender equality practices, facilitating the transition of public policies from a "one-size-fits-all" approach to a more "differentiated" and "targeted" direction. This effectively enhances policy implementation outcomes and overall social welfare.

2. Literature Review and Commentary

2.1. Subjective Well-being: Concept, Measurement, and Influencing Factors

Subjective Well-being (SWB) is commonly defined as an individual's subjective evaluation of their overall life situation, encompassing cognitive dimensions (life satisfaction) and affective dimensions (positive and negative emotional experiences) [2]. This concept has been widely adopted in psychology, sociology, and economics to measure individual welfare levels and perceptions of subjective quality of life.

In terms of measurement, internationally accepted and widely used scales include Bradburn's (1969) Affect Balance Scale (ABS) and Campbell's (1976) Index of Well-Being. [3][4]The "general happiness level" in the CGSS2021 survey is a typical example, employing a 5-point and 7-point Likert scale to assess individual happiness levels.

Regarding influencing mechanisms, existing studies have revealed the multidimensional determinants of SWB from micro, meso, and macro levels. At the micro level, individual characteristics such as age, gender, and health are closely related to well-being. Research indicates that well-being follows a U-shaped curve with age, with middle-aged groups reporting relatively lower levels, while females typically report higher levels of happiness [5][6]. Health status is also a key variable, with physical and mental health directly enhancing well-being [7]. At the meso level, life resources such as income level, family structure, and children's status, as well as social capital, widely influence individual life satisfaction. Some studies have pointed out that within a certain threshold, income is positively correlated with well-being [8]. Tang Jinqian (2016) analyzed the impact of intergenerational support on the mental health of the elderly from the perspective of age group differences and found that both receiving and providing intergenerational support significantly promote the mental health of the elderly[9]. At the macro level, institutional factors such as urban-rural disparities, government public services, and social security expenditures also play significant roles. A robust social security system and investments in education and healthcare can effectively enhance residents' sense of gain and happiness[9] [10][11][12].

In summary, SWB is influenced by a combination of social, economic, and cultural factors. A thorough investigation of its influencing mechanisms can provide a basis for understanding group welfare disparities and formulating relevant policies.

2.2. The Cultural Symbolism and Realistic Mechanisms of Offspring Count: A Dual Perspective of Quantity and Gender

In traditional Chinese society, a larger number of offspring symbolized family pros-

perity and old-age security, embodying the cultural logic of "the more children, the more blessings" [13]. However, with the acceleration of social modernization, the costs of family upbringing have significantly increased (in education, housing, healthcare, etc.), and the original motivations for childbirth have encountered practical constraints. The relationship between offspring count and well-being has become increasingly complex. In academic research, the relationship between the number of children and parental well-being also remains inconclusive, with three main viewpoints. Some scholars argue that parental life satisfaction is positively correlated with the number of children. For example, Mu Zheng and Xie Yu (2014) suggest that the more children one has, the greater the father's confidence in his career and future, and the higher the overall life satisfaction and social skills of the mother, who thus feels happier about the future[14]. Other scholars argue that parental life satisfaction is negatively correlated with the number of children. For example, Zheng Xiaodong and Fang Xiangming (2018), based on data from the 2013 China Health and Retirement Longitudinal Study, concluded that parental well-being is negatively related to the number of children[15]. This is due to the "quantity-quality" trade-off among children, as people no longer pursue quantity but rather the quality of their children. Chen Yili (2016) also argues that an increase in the number of children raises the cost of raising them, thereby reducing people's well-being[16]. Many scholars also believe that the impact of offspring count on parental well-being is not linear. For example, Zhu Yaru et al. (2017), using microdata from the 2013 Chinese General Social Survey (CGSS), analyzed the relationship between fertility and subjective well-being in China and found an inverse U-shaped curve relationship between the number of children and residents' well-being[17]. As the number of children increases, residents' well-being first increases and then decreases.

In summary, the relationship between offspring count and subjective well-being is shaped by multiple factors, including social structural transformation and socio-cultural concepts. Existing studies have provided three explanatory paths: positive, negative, and non-linear, reflecting the dynamic balance between "child-rearing pressure" and "family meaning" for parents. This study aims to systematically examine the association between offspring count and subjective well-being among married and parenting individuals using CGSS 2021 data: Is it a continuously rising positive relationship, a negative relationship that suppresses well-being, or an inverse U-shaped curve relationship?

2.3. Heterogeneity in the Impact of Offspring Count on Subjective Well-being

Existing research indicates that the effect of offspring count on subjective well-being is not uniform across all populations but is significantly moderated by factors such as gender and urban-rural background.

From a gender-difference perspective, studies on the impact of offspring count on

maternal well-being have reached diverse and even conflicting conclusions. On the one hand, several scholars, based on empirical analyses, have found that an increase in offspring count can enhance mothers' psychological satisfaction through increased emotional support and intergenerational interaction [14][18]. On the other hand, Li Jing (2022) has proposed an opposing view, arguing that mothers, due to bearing more child-rearing responsibilities, may experience a decrease in well-being, highlighting the negative impact of child-rearing pressure on mothers' subjective feelings[19]. In terms of urban-rural heterogeneity, research conclusions on the impact of offspring count on the well-being of the elderly also vary. One perspective suggests that rural parents, due to a stronger reliance on their children for old-age support, experience a more significant impact of offspring count on their well-being[20][21]. In contrast, urban families focus more on the quality and emotional value of their children, resulting in a weaker fertility effect[22]. However, other studies have indicated no significant difference in the well-being of urban and rural elderly people in terms of offspring count [23]. Nevertheless, the existing literature as a whole still has the following shortcomings: First, the number of relevant studies is limited, and they are mostly concentrated on the elderly population. Second, the research perspectives are relatively fragmented, lacking a unified examination of background variables such as gender and urban-rural status. Third, most of the relevant studies are based on relatively early data samples. Based on this, this paper uses the CGSS 2021 data, focuses on the offspring count variable, and employs grouped regression methods to systematically examine the differences in gender and urban-rural background, striving to provide more practically relevant empirical references for current family policies and fertility support.

3. Variable and Model Description

3.1. Data Source

This study employs micro-level data from the 2021 Chinese General Social Survey (CGSS). The survey utilized a stratified sampling method for in-home interviews. The primary reasons for selecting this dataset are as follows: First, the CGSS questionnaire includes the question "Overall, how happy do you feel your life is?" This study uses the responses to this question to represent the subjective well-being of the respondents, which aligns closely with the research theme of this paper. Second, the CGSS 2021 contains a rich set of family structure variables, allowing for a comprehensive construction of the core independent variables required for this study. Third, the dataset also provides information on respondents' gender, age, income status, household registration nature, and health status, enabling in-depth analyses across multiple heterogeneous dimensions. Finally, as the most recently released national survey data, the CGSS 2021 has strong timeliness and can adequately reflect the current state of family structure and subjective well-being in China, offering significant practical reference value.

3.2. Variable Settings

The subjective well-being variable is derived from Question A36 in the CGSS: "Overall, how satisfied are you with your current life?" For the core explanatory variable of subjective well-being, this study measures it based on Question A36 in the CGSS 2021: "Do you generally feel happy?" The original variable is an ordinal variable with five levels, ranging from "very dissatisfied" to "very satisfied." Some samples use the D1 variable as a substitute (for data supplementation). After uniform recoding, a new variable is constructed as a 5-level ordinal categorical variable, where higher values indicate higher levels of happiness: 1 for very unhappy, 2 for somewhat unhappy, 3 for neutral, 4 for somewhat happy, and 5 for very happy. Additionally, in the robustness test, this study further dichotomizes the happiness variable into (satisfied and above = 1, dissatisfied = 0) for use in the Logit regression model. The number of children, as the core independent variable, is constructed by integrating the number of sons (A68a_1) and daughters (A68a_2) from Question A68a in the CGSS questionnaire: "How many (biological) children do you have (including deceased children)?" The total number of children is calculated by summing these two variables to create the "number of children" (child_num) indicator. Considering that outliers in the data may interfere with the analysis results, the study specifically screens the samples, excluding those with more than 15 children and those with no children, to ensure the validity and representativeness of the data.

For the other control variables, this study refers to existing research, and the selection and meanings of the main control variables are shown in Table 1.

Table 1. Descriptions of Control Variables

Control Variable	Variable Name	Description
Gender	gender	Derived from "A2. Gender," with male = 1 and female = 0
Age	age	Derived from "A3. What is your date of birth?" Calculated as 2021 minus the year of birth
Household Registration	residence	Derived from "A18. What is your current household registration status?" Rural household = 1, Urban household = 0
Health Status	health	Derived from "A15. How would you rate your current health condition?" Very unhealthy = 1, Somewhat unhealthy = 2, Average = 3, Somewhat healthy = 4, Very healthy = 5
Income Level	income	Derived from "A8a. What was your total personal income for the last year (2020)?" This study takes the natural logarithm of this variable to smooth out extreme values

3.3. Model Specification

This study aims to investigate the impact of offspring count on the subjective well-being of married and parenting individuals, employing the Ordered Logit model as the core analytical method. Given that the dependent variable, subjective well-being (happiness), is an ordinal variable ranging from 1 to 5, the Logit modeling approach not only retains the ordinal nature of the information but is also suitable for estimating marginal effect trends. The overall modeling strategy includes the main model, non-linear test model, heterogeneity model, and robustness regression model, with specific settings as follows:

3.3.1 Offspring Count and Happiness

The baseline model aims to estimate the basic impact relationship between offspring count and happiness, with the model specified as follows:

$$\text{happiness}_{ij}^* = \beta_0 + \beta_1 \cdot \text{child_num}_{ij} + \mu' X_{ij} + \epsilon_{ij}$$

where:

- happiness_{ij}^* is the latent happiness score, corresponding to the observed ordinal variable ranging from 1 to 5;
- child_num_{ij} represents the number of children individual i has;
- X_{ij} is a vector of control variables, including gender, age, household registration type, health status, income, etc.;
- ϵ_{ij} is the error term, assumed to follow the standard Logistic distribution.

At the same time, to test whether there is an inverse U-shaped relationship between the number of children and happiness, the squared term of the number of children (centered) is introduced. The model is specified as follows:

$$\text{happiness}_{ij}^* = \beta_0 + \beta_1 \cdot \text{child_center}_{ij} + \beta_2 \cdot \text{child_sq}_{ij} + \mu' X_{ij} + \epsilon_{ij}$$

where:

- child_center_{ij} is the number of children after centering,
- child_sq_{ij} is its squared term.
- If $\beta_1 > 0$, $\beta_2 < 0$, then the inverse U-shaped hypothesis is supported.

3.3.2. Heterogeneity Models: Gender and Urban-Rural Group Analysis

To identify structural differences across groups, this study conducts separate regression analyses for the offspring count model and gender structure model across two dimensions: gender and urban-rural residence. The models are specified as follows:

$$\text{happiness}_{ij}^* = \delta_0 + \delta_1 \cdot \text{child_num}_{ij} + \mu' X_{ij} + \epsilon_{ij}$$

3.3.3. Robustness Models: Alternative Tests for Dependent Variables and Modeling Methods

To ensure the robustness of the empirical conclusions, this study employs two common methods to conduct robustness tests on the regression results of the "number of children" variable:

1. Alternative Dependent Variable Method: The subjective well-being variable is re-coded into a binary dummy variable , with a value of 1 indicating "happiness ≥ 4 ", and the Logit model is used for estimation:

$$\Pr(\text{happy_dummy}_{ij} = 1) = \text{Logit}^{-1}(\beta_0 + \beta_1 \cdot \text{child_num}_{ij} + \mu' X_{ij})$$

2. Alternative Modeling Method: Treating happiness as a continuous variable, we employ an Ordinary Least Squares (OLS) model for linear regression to examine whether the estimation direction and significance are consistent with the main model:

$$\text{happiness}_{ij}^* = \alpha_0 + \alpha_1 \cdot \text{child_num}_{ij} + \mu' X_{ij} + \epsilon_{ij}$$

To identify the continuous impact of the number of children and gender structure, this part further constructs their squared terms to test the potential non-linear inverse U-shaped relationship. The regression model is specified as follows:

$$\text{happiness}_{ij}^* = \alpha_0 + \alpha_1 \cdot \text{child_center}_{ij} + \alpha_3 \cdot \text{child_sq}_{ij} + \mu' X_{ij} + \epsilon_{ij}$$

The multi-model and multi-strategy setup aims to systematically identify the mechanisms through which the number of children affects subjective well-being, and to enhance the reliability and generalizability of the study through heterogeneity and robustness tests.

3.4. Descriptive Statistics

Based on the CGSS 2021 data and focusing on the married and parenting population, this study obtained a total of 5,071 valid samples after data cleaning and variable construction. The following section presents the descriptive statistical analysis of the distribution of the core variables and control variables.

Table 2. Descriptive Statistics of Variables.

Variable	Mean	Minimum	Maximum
Subjective Well-being of Married and Parenting Population	4.036285	1	5
Number of Children	1.890683	1	12
Age	54.33859	21	94
Gender	0.450660	0	1
Household Registration	0.716565	0	1
Health Status	3.438448	0	5
Income Level	8.171181	0	16.12

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The overall analysis of the happiness situation among the married and parenting population, as shown in Table 3, indicates that 82.76% of the married individuals clearly feel happy. Specifically, 27.15% of the respondents reported feeling "Very Happy." However, there is still a small proportion of 1.38% who feel "Very Unhappy."

Table 3. Descriptive Statistics of Variables.

	Very Happy (5)	Somewhat Happy (4)	Neutral (3)	Somewhat Unhappy (2)	Very Un- happy (1)	Total
Frequency	70	179	625	2820	1377	5071
Percentage (%)	1.38	3.53	12.32	55.61	27.15	100

4. Empirical Results and Analysis

4.1. The Effect of Offspring Count on the Happiness of Married and Parenting Individuals

The ordered Logit regression results based on the CGSS 2021 data indicate that the number of children has a significant positive effect on the subjective well-being of married and parenting individuals. After controlling for key variables such as health, income, gender, and urban-rural household registration, the regression coefficients show that an increase in the number of children by one unit significantly enhances the level of subjective well-being ($\beta = 0.256, p < 0.001$).

Table 4. The Effect of Offspring Count on the Happiness of Married and Parenting Individuals.

VARIABLES	happiness
child_num	0.256*** (0.030)
health	0.417*** (0.027)
income	0.025*** (0.007)
gender	0.056 (0.057)
residence	-0.430*** (0.063)
N	5,071

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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income, gender, and urban-rural household registration, the regression coefficients show that an increase in the number of children by one unit significantly enhances the level of subjective well-being ($\beta = 0.256, p < 0.001$)

Table 5. Test Results of the Inverse U-shaped Relationship between Offspring Count and Happiness among Married and Parenting Population

VARIABLES	happiness
child_center	0.261*** (0.037)
child_sq	-0.003 (0.012)
Observations	5,071

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Further tests using the centered variable and its squared term to examine the "inverse U-shaped" relationship are shown in Table 5. The coefficient of the centered offspring count variable is 0.261, which is significantly positive at the 1% level. However, the coefficient of its squared term is -0.003 and is not significantly negative, indicating that an obvious "inverse U-shaped" relationship was not observed.

Table 6. Group-wise Test Results of the Impact of Offspring Count on the Happiness of Married and Parenting Population

VARIABLES	happiness
Two Children	0.049 (0.063)
Three Children	0.532*** (0.092)
Four or More Children	1.041*** (0.124)
Observations	5,071

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Using the happiness level of married and parenting individuals with one child as the reference group, the results of the group-wise tests are shown in Table 6. The findings indicate that the happiness of married and parenting individuals with three or more children is significantly higher than that of those with only one child. Moreover, the increase in happiness for families with four or more children is even greater than that for families with three children. In contrast, there is no significant difference in happiness between families with one child and those with two children. This further confirms that the impact of the number of children on happiness does not exhibit diminishing marginal returns but rather shows an increasing tendency in larger families. This may be related to stronger emotional bonds, richer family interaction experiences, or higher expectations of intergenerational support within larger families.

4.2. Heterogeneity Analysis of the Impact of Offspring Count on the Happiness of Married and Parenting Population

Table 7. Heterogeneity Analysis Results of the Impact of Offspring Count on the Happiness of Married and Parenting Population

VARIABLES	male happiness	female happiness	rural happiness	urban happiness
child_num	0.332*** (0.045)	0.191*** (0.040)	0.251*** (0.034)	0.267*** (0.063)
health	0.422*** (0.042)	0.416*** (0.036)	0.418*** (0.031)	0.401*** (0.058)
income	0.015 (0.014)	0.029*** (0.009)	0.021** (0.008)	0.046*** (0.017)
residence	-0.487*** (0.092)	-0.385*** (0.087)		
gender			0.060 (0.068)	0.047 (0.107)
Observations	2,287	2,784	3,634	1,437

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Further heterogeneity analysis was conducted, and the results are shown in Table 7. The gender-specific regression results revealed significant differences: the positive impact of offspring count on male happiness is notably stronger than that on female happiness (coefficient for males is 0.332, while for females it is 0.191). This finding suggests that although offspring count has a positive effect on both males and females, under the traditional family gender division of labor, females may experience a diminished positive happiness return due to their greater responsibility for child-rearing and household chores.

In the urban-rural groups, the positive effect of offspring count is present in both (coefficient for rural group is 0.251, $p < 0.001$; for urban group it is 0.267, $p < 0.001$), with no substantial difference in effect size. Meanwhile, the income variable shows a clear divergence between urban and rural areas, with a significantly stronger positive impact on the happiness of urban residents (coefficient is 0.046, $p < 0.001$), compared to a relatively weaker effect in rural areas (coefficient is 0.021, $p < 0.05$).

From a relative effect perspective, in the rural group, the positive impact of offspring count on happiness is significantly higher than that of income, indicating that "having more children" as a form of family capital allocation not only provides potential old-age security but may also enhance emotional support and social identification within the family. In the urban group, the impact of offspring count on happiness remains higher than that of income, but the effect of income is significantly stronger, approximately 2.2 times that of the rural area. This highlights that while family structure remains an important source of happiness for urban families, economic resources play a more prominent role in enhancing the happiness of urban residents, especially against the backdrop of high living costs.

In summary, offspring count has a significant positive impact on the subjective well-being of married and parenting individuals, especially in larger families. This effect is robust across different genders and urban - rural groups, though mechanisms differ. The gender analysis shows a more significant effect for males, suggesting that females, burdened with more childcare responsibilities, may not experience the same happiness boost. The urban - rural analysis shows similar regression coefficients, indicating the universality of the offspring effect. In rural areas, offspring count is relatively more important than income. Overall, offspring count remains a key factor in family happiness, with the "more children, more blessings" concept still having a strong empirical basis, though its pathways show structural differences across groups.

4.3. Robustness Tests

To enhance the robustness of the empirical results, this study employs two alternative approaches to re-examine the impact of offspring count on the happiness of married and parenting individuals: the alternative variable method and the model transformation method.

Table 8. Robustness Test Results Using Binary Variable Method

VARIABLES	happy_dummy
child_num	0.184*** (0.0427)
health	0.449*** (0.0360)
income	0.0528*** (0.00933)
gender	-0.0790 (0.0808)
residence	-0.565*** (0.0995)
Constant	-0.193 (0.184)
Observations	5,071

Standard errors in parentheses

* p < 0.05, ** p < 0.01, *** p < 0.001

The subjective well-being variable was dichotomized (with ratings ≥ 4 considered as "higher happiness") for the alternative test. The results show that the number of children still has a significant positive impact on happiness ($p < 0.001$). The direction of the effects of control variables such as health status and income level remains consistent, preliminarily confirming the robustness of the main model's conclusions.

Table 9. Robustness Test Results of the Main Model Using Model Transformation Method.

VARIABLES	happiness
child_num	0.144*** (0.0170)
health	0.238*** (0.0152)
income	0.0154*** (0.00410)
gender	0.0367 (0.0327)
residence	-0.257*** (0.0368)
Observations	5,071

Standard errors in parentheses

* p < 0.05, ** p < 0.01, *** p < 0.001

To verify the robustness of the aforementioned regression results, this study employs the model transformation method, replacing the Ordered Logit model in the main model with an Ordered Probit model to re-examine the impact of offspring count on subjective well-being. The results are shown in Table 9. The impact of offspring count on happiness remains significantly positive at the 1% level (coefficient = 0.144), consistent with the conclusions of the main model. This indicates that an increase in the number of children helps enhance the subjective well-being of married and parenting individuals.

Table 10. Robustness Test Results of the Inverse U-shaped Relationship Using Model Transformation Method.

VARIABLES	happiness
child_center	0.146*** (0.0210)
child_sq	-0.00128 (0.00680)
health	0.238*** (0.0152)
income	0.0154*** (0.00410)
gender	0.0365 (0.0328)
residence	-0.258*** (0.0371)
Observations	5,071

Standard errors in parentheses

* p < 0.05, ** p < 0.01, *** p < 0.001

Further verification of the non-linear relationship revealed that the centered offspring count still has a significant positive impact on happiness ($\beta = 0.146$, $p < 0.001$), while the squared term remains insignificant. This confirms the robustness of the main model and reiterates that no "inverse U-shaped" relationship between offspring count and subjective well-being is evident in the current sample.

In summary, the results from the Ordered Probit model are generally consistent with the main model, thereby validating the robustness of the regression conclusions.

5. Discussion and Future Work

5.1. Summary and Discussion of Key Findings

Based on the CGSS 2021 data, this study systematically examined the impact of offspring count on the subjective well-being of married and parenting individuals. After controlling for key variables such as health, income, gender, and household registration, the results indicate that offspring count has a significant positive impact on happiness, particularly in families with three or more children, without a significant diminishing marginal effect. This finding suggests that, in the current social context, offspring count remains an important factor influencing family happiness, and the notion of "more children, more blessings" still has a basis in reality for certain groups.

The specific reasons for this consistently positive relationship warrant further investigation. Current academic explanations for the potential increase in happiness with more children often focus on emotional connections, social support, or expectations of old-age support, but these explanations are rather macroscopic and lack empirical tests of mediating mechanisms. Additionally, considering the relatively low proportion of large families in the sample, it is necessary to be wary of the potential interference of "selection bias"—that is, families with stronger resource bases and higher fertility motivations may inherently have higher levels of happiness. Furthermore, the age structure of the sample should be particularly noted as a limitation for interpreting the conclusions. The married and parenting population in the CGSS 2021 is generally older, with a lower proportion of young parenting groups. This means that the study results mainly reflect the happiness evaluations of middle-aged and older groups after their "completed fertility stage," which may be positively influenced by long-term factors such as family structure stability, feedback from adult children, and social support. In contrast, young families in the peak of parenting stress are underrepresented in the sample, and their perception of the relationship between offspring count and happiness may significantly differ. Therefore, the current conclusion that "larger families have higher happiness" is more applicable to the evaluation logic in the later stages of the family life cycle and should be applied to younger family groups with caution. Future research should also conduct more detailed analyses based on fertility stages or age stratification.

The results of the heterogeneity analysis show significant differences in the impact mechanisms of offspring count on happiness across different groups. In the gender groups, the effect is more pronounced in males, suggesting that men are more likely to experience an increase in happiness in larger families. This result may reflect that men typically take on fewer parenting responsibilities in the family and thus more

fully enjoy the emotional connections and family identification brought by children. It may also point to the deeply rooted symbolic value of "progeny continuation" for men in traditional patriarchal structures. In contrast, women, who often bear the brunt of parenting and family care responsibilities as offspring count increases, may not experience a corresponding positive emotional return.

In terms of urban-rural differences, although offspring count has a positive impact on happiness in both urban and rural areas, the degree and pathways of this impact vary slightly. In rural groups, the importance of offspring count is relatively higher. In the context of an imperfect social security system where old-age support is still highly dependent on family internal support, children not only represent emotional bonds but also serve as a form of "old-age insurance." Against this backdrop, the notion of "more children, more blessings" has a stronger basis in reality. In urban groups, although offspring still have a significant impact on happiness, the role of economic income in enhancing happiness is more pronounced, reflecting that under the modern pace of life and high living costs, material foundations have become an important safeguard for happiness. The above urban-rural heterogeneity not only reflects differences in economic structures but also shows the reconstruction of the "meaning of children" in different socio-cultural contexts.

5.2. Policy Recommendations

Based on the empirical analysis of the impact of offspring count on subjective well-being, this study reveals a significant positive correlation between the number of children and happiness. In light of the current demographic policies and family structure transformations in China, the following four policy recommendations are proposed to better address the actual needs of families and enhance individual well-being.

1. Optimize Economic and Service Support Systems for Large Families*

Although research indicates that large families tend to have higher levels of happiness, this positive effect is likely contingent upon families with relatively stronger resource bases. Therefore, differentiated fiscal support should be implemented, such as tiered child-rearing subsidies and educational burden reductions based on the number of children, to alleviate the parenting pressure on low- and middle-income families and ensure the equality and sustainability of fertility choices.

2. Improve Public Childcare Services to Reduce Family Care Burden

The heterogeneity analysis finds that the increase in happiness for women in large families is relatively limited, reflecting their greater responsibility for childcare. Thus, policies should focus on the social transfer of family care responsibilities by expanding the coverage and quality of inclusive childcare services, developing flexible childcare mechanisms, expanding early childhood education resources, and building community childcare centers. This will ensure that childcare responsibilities are no longer a personal burden for women but a shared societal safeguard.

3. Promote Gender Role Reconstruction and Shared Responsibility within Families

The gender differences in family happiness partly stem from the inequality in traditional family division of labor. Therefore, institutional measures should be taken to encourage male participation in childcare. This can be achieved through mandatory or incentive-based paternity leave policies and fostering a cultural environment that encourages male involvement in family affairs, thereby achieving gender balance in family responsibilities and creating foundational conditions for enhancing overall family happiness.

4. Coordinate Urban-Rural Differences and Advance Regional Coordination of Family Support Policies

The study shows that rural families have a stronger "happiness dependency" on the number of children, indicating relatively weaker social support and elderly care systems. Therefore, efforts should be made to strengthen the basic support systems for rural elderly care, healthcare, and education, and promote the balanced allocation of public resources to reduce the functional dependence of rural families on the number of children. This will help shift the sources of happiness from "structural" to "diverse."

In summary, enhancing family happiness requires a comprehensive approach that addresses the reduction of parenting stress, the balancing of responsibilities, and the strengthening of services to meet the diverse needs of different populations. In the current critical period of policy transition from "encouraging fertility" to "supporting parenting," only through the comprehensive evolution of parenting systems can we truly achieve a positive interaction between individual well-being and family functionality.

5.3. Research Limitations and Future Work

Despite the systematic examination of the relationship between offspring count and happiness based on the CGSS 2021 data, this study still has certain limitations.

Firstly, in terms of data, this study uses cross-sectional data, which makes it difficult to establish causal relationships between variables. Future research could utilize panel data, such as the China Family Panel Studies (CFPS), to further test the causal pathways and dynamic effects.

Secondly, regarding variable measurement, this study only examines the number of children and does not delve into specific characteristics (such as gender structure, cohabitation status, education level, employment status) and their impact on happiness. Additionally, the sample is generally older, with fewer young families, meaning the results mainly reflect the happiness evaluations of middle-aged and older groups after the parenting stage, which may be influenced by factors like children's feedback and old-age expectations. The conclusion that "larger families are happier" may not hold for younger populations and should be interpreted with caution. Future research could incorporate a life-course perspective to examine the re-

relationship between offspring count and happiness among married and parenting individuals at different life stages, further revealing stage-specific differences and change mechanisms.

Thirdly, in terms of methodology, although the ordered Logit model and heterogeneous group regressions used in this study are robust, they do not include mediation or interaction term analyses. Future research could combine structural equation modeling or hierarchical regression to explore mediating mechanisms (such as social support, relationship quality) and moderating effects (such as family structure, cultural orientation) to better explain why having more children still leads to sustained happiness. Also, considering the small sample size of families with a high number of children, potential selection bias should be controlled in the analysis to avoid "survivor bias" affecting the accuracy of causal identification. Moreover, the psychological motivations and cultural identification mechanisms behind the notion of "more children, more blessings" also need further exploration. Future research could introduce subjective variables such as "fertility intentions" and "fertility satisfaction" to discuss the interactive relationship between fertility choices and happiness evaluations.

Lastly, in terms of research recommendations, this study focuses on the relationship between offspring count and individual happiness and has not extended to the family level or intergenerational interactions. Future research could further combine qualitative studies and multi-generational data to deeply explore the family dynamics and cultural logic behind offspring count, thereby gaining a more comprehensive understanding of the association mechanisms between fertility and happiness in contemporary China.

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