

Marriage and subjective well-being: Examining gender disparities in contemporary China



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Abstract In contemporary China, traditional Confucian values still influence gender roles within marriage which potentially leading to unequal experiences for men and women. At the same time, marriage rates have dropped sharply, with official registrations reaching record lows. These socio-cultural conditions underscore the need to reexamine the role of marriage in personal well-being. This study investigates the relationship between marriage and subjective well-being (SWB) in contemporary China, focusing on gender as a moderating factor through the lens of hedonic adaptation theory. Drawing on data from the 2021 Chinese General Social Survey (CGSS), a nationally representative dataset (N = 7,676), the study employed hierarchical ordinary least squares regression analysis. Two hypotheses were tested: that marriage is positively associated with SWB, and that gender moderates this relationship. Robustness checks were conducted using propensity score matching and alternative measurement specifications of the dependent variable. The findings confirm that marriage is positively associated with SWB in the Chinese context, with married individuals reporting significantly higher levels of SWB. More importantly, a significant gender moderation effect was identified, with men deriving greater well-being benefits from marriage than women. Notably, while unmarried men report lower level of SWB than unmarried women, this gender gap effectively disappears among married individuals. The findings contribute to the understanding of how cultural gender stereotypes affect marriage experiences and outcomes in China. The study highlights the utility of hedonic adaptation theory in explaining gender differences in marriage benefits, suggesting that traditional Confucian values continue to influence marital experiences despite ongoing social changes. Research findings have implications for policies aimed at promoting gender equality within marriages and addressing the potentially psychological vulnerabilities of unmarried men in contemporary Chinese society.

Keywords: subjective well-being, marriage, hedonic adaptation theory, gender moderation, confucian values

1. Introduction

Subjective well-being (SWB) has emerged as a significant indicator of individual quality of life and societal development that extends beyond economic measures. Consequently, an increasing number of governments have incorporated SWB metric into their assessment frameworks (Clark, 2018; Diener et al., 2000; Helliwell et al., 2025; Stiglitz et al., 2018). Among the various determinants of SWB, marriage stands as one of the most influential institutions shaping individuals' subjective experiences, though its relationship with well-being presents greater variability than traditionally assumed. While some studies have highlighted marriage's positive effects on subjective well-being (Stack & Eshleman, 1998; Wadsworth, 2016), a growing body of research challenges the assumption that marriage uniformly enhances well-being. Several studies have demonstrated that marriage's beneficial effects are often temporary. SWB tends to increase prior to marriage but drops significantly afterward and continues to decline steadily over time (Clark et al., 2008; Lucas, 2007; Dupuis et al., 2025). Recent cross-cultural research further indicates that the relationship between marriage and well-being is not only temporally unstable but also shaped by cultural context. In particular, cultural expectations significantly influence the relationship between marriage and SWB in collectivist societies (Hu et al., 2024; Kim & Hwang, 2024).

In recent years, China has witnessed significant transformations in both marital behaviors and societal attitudes toward marriage. According to the Ministry of Civil Affairs of the People's Republic of China (2025), marriage registrations in China have reached their lowest level since 1980, with only 6.106 million couples registering in 2024—a sharp 20.5% decline compared to 2023. This decrease continues a consistent downward trend that began in 2013, interrupted only by a brief recovery in 2023. Young adults increasingly delay or forego marriage, viewing it as potentially limiting personal freedom or imposing various burdens (Muraco & Curran, 2012; Blair & Madigan, 2020).

The coexistence of Confucian values and modernization in China calls for closer scrutiny of the relationship between marriage and SWB. Traditional Confucian values have historically shaped gender relations within marriage through concepts such as female subordination (Chan, 2000; Chen et al., 2019). These values position wives as subordinate to husbands and

center female virtue on obedience (Gu & Li, 2023; Jiang, 2009). Such gendered cultural values likely influence how women and men experience marriage, potentially resulting in differential benefits.

The theoretical framework of hedonic adaptation provides a foundational perspective for the present research. Originally proposed by Brickman and Campbell (1971), hedonic adaptation theory suggests that individuals will experience a positive emotional reaction to major life events such as marriage. However, they eventually return to relatively stable baseline levels of happiness as they adapt to their new circumstances. This framework explains why marriage may provide temporary rather than permanent well-being benefits, highlighting how the initial "honeymoon effect" of increased happiness preceding marriage typically gives way to baseline levels of well-being over time (Clark et al., 2008; Lucas et al., 2003). This theory accommodates cultural variations in adaptation processes. Studies have examined such adaptation patterns across different cultural contexts, and may further light on how the relationship between marriage and SWB manifest in China. In societies with strong collectivist orientations and traditional gender norms, individuals may experience different patterns of adaptation to life events. Pretorius et al. (2021) conducted a study on anticipation and adaptation effects in South Africa and found that both men and women experienced increased level of SWB upon marriage. Their findings additionally revealed that men displayed longer anticipation effects before marriage, and both genders adapted quickly after the event. This theoretical perspective allows for an examination of whether marriage enhances subjective well-being in contemporary Chinese society. It also enables exploration of how culturally influenced gender roles may shape the adaptation process following marriage.

Research examining the advantages of marriage has extensively demonstrated its benefits to both physical and mental health through multiple mechanisms. Marriage involves enforceable trust that requires substantially more effort to dissolve than other relationship forms, providing married individuals with security in their spouse's obligation to provide both financial and emotional support during difficult times (DeMaris & Oates, 2021; Perelli-Harris & Styr, 2018; Verbakel, 2012). The trust established in marriage relationships engenders additional social psychological benefits, with married individuals manifesting greater trust in others and feeling more secure in the world (Grover & Helliwell, 2019; Kiecolt-Glaser & Wilson, 2017). Furthermore, married individuals typically embrace healthier and less risky lifestyles, benefit from economies of scale that improve their financial status, and experience enhanced social integration that protects against isolation (Dykstra & Fokkema, 2007; Tan et al., 2020). Despite these demonstrated advantages, the relationship between marital status and subjective well-being appears more complex than initially presumed, with longitudinal evidence indicating that individuals experience short-term increases in happiness following marriage but tend to adapt quickly, returning to baseline levels of well-being over time (Lucas, 2005).

Gender differences in marriage benefits present mixed findings across cultural contexts, with evidence from Confucian societies contrasting sharply with Western patterns. While substantial Western research suggests that marriage effects on well-being are invariant to gender (Bierman et al., 2006; DeMaris & Oates, 2021; Lee & Bulanda, 2005; Soons et al., 2009), or that women benefit more from marriage (Grover & Helliwell, 2019; Stutzer & Frey, 2006), research in contemporary China indicates a male advantage in marriage benefits (Hu et al., 2024). These cultural variations in gendered outcomes highlight the necessity of examining the marriage-SWB relationship within specific cultural contexts.

The current study uses data from the 2021 Chinese General Social Survey (CGSS), a nationally representative dataset, to investigate whether married individuals continue to report higher levels of subjective well-being compared to their unmarried counterparts in contemporary Chinese society, and whether this relationship varies by gender. By integrating hedonic adaptation theory with Chinese cultural context, this research contributes to understanding how cultural expectations and gender roles shape the experience of marriage and its impact on subjective well-being.

This investigation makes several important contributions to the literature. First, it extends our understanding of the marriage-SWB relationship by examining it within the unique cultural context of contemporary China, where traditional values coexist with rapid social change. Second, by identifying gender as a critical moderator of marriage benefits, this research advances theoretical understanding of how culturally embedded gender roles shape adaptation processes described in Hedonic Adaptation Theory. Finally, the findings have important implications for policies aimed at promoting gender equality within marriages and addressing psychological vulnerabilities among unmarried individuals in Chinese society.

Building on this theoretical and empirical foundation, two hypotheses guide the present investigation. Hypothesis 1 proposes that marriage is positively associated with subjective well-being in the Chinese context, with married individuals reporting higher levels of subjective well-being compared to their unmarried counterparts. Hypothesis 2 posits that gender moderates the relationship between marriage and subjective well-being, with men experiencing greater well-being benefits from marriage than women in the Chinese context.

2. Materials and Methods

2.1. Data

This study utilized data from the 2021 wave of the Chinese General Social Survey (CGSS 2021), a nationally representative and longitudinal social survey aimed at capturing multifaceted aspects of Chinese society. The CGSS employs a rigorous multi-stage stratified probability sampling technique, encompassing individuals, households, communities, and

broader social structures across 30 provinces in mainland China. This methodological framework ensures the scientific robustness and representativeness of the dataset.

The CGSS is conducted in accordance with the ethical standards outlined in the Declaration of Helsinki. Ethical oversight and approval are jointly provided by the Ethics Committees of Renmin University of China and the Hong Kong University of Science and Technology. The present study was based on anonymized, publicly available data obtained from the CGSS database (<http://cgss.ruc.edu.cn/>). As the data are de-identified and publicly accessible, further ethical approval and individual informed consent were not required for secondary analysis.

The initial dataset comprised 8,148 respondents. The CGSS 2021 includes comprehensive information on demographic attributes and subjective well-being, thereby providing a robust foundation for the current analysis. To ensure compliance with Chinese legal standards regarding marital eligibility, the analytical sample was restricted to adults aged 20 years and above for women and 22 years and above for men.

Respondents with missing data on core analytical variables, such as SWB and marital status, were excluded from the study. In line with established research practices, several key control variables were incorporated, including household registration, ethnicity, age, self-reported health, negative affect frequency, annual income, social security status, frequency of interaction with friends, and educational level. The respective number of missing observations for these variables was as follows: self-rated health ($n = 4$), negative affect frequency ($n = 29$), annual income ($n = 152$), social security status ($n = 34$), frequency of interaction with friends ($n = 40$), and education ($n = 20$). Given the relatively high proportion of missing values for the annual income variable, multiple imputation was conducted using the Multivariate Imputation by Chained Equations (MICE) method. This approach is recommended when the proportion of missing data is relatively small, typically less than 5% of the dataset (White et al., 2010). For variables with relatively few missing observations, median imputation was employed.

After implementing these data cleaning and imputation procedures, the final analytic sample consisted of 7,676 respondents.

2.2. Measures

2.2.1. Dependent Variable

The dependent variable in this study was subjective well-being (SWB), conceptualized as an individual's personal evaluation of happiness. This operationalization aligns with established frameworks in the literature (Diener, 2000). SWB was assessed through a single-item measure asking respondents, "Overall, do you feel that you are happy in your life?" Responses were recorded on a 5-point Likert scale ranging from 1 (very unhappy) to 5 (very happy), with higher scores indicating greater levels of self-reported happiness.

2.2.2. Independent Variable

Marital status served as the primary independent variable and was coded as a binary variable to distinguish between married and unmarried respondents. Individuals who reported being currently married were assigned a value of 1, while those who were never married, divorced, widowed, or separated were coded as 0.

2.2.3. Moderating Variable

Gender was included as a moderating variable and was coded dichotomously, with male participants assigned a value of 1 and female participants assigned a value of 0.

2.2.4. Control Variables

To enhance estimation precision and account for potential confounding effects, several control variables were incorporated into the analysis. Age was mean-centered and squared to account for nonlinear relationships with the dependent variable, as contemporary research confirms age frequently demonstrates curvilinear associations with various socioeconomic outcomes (Bartram, 2024; Steptoe & Zaninotto, 2020). Ethnicity was dichotomized into Han and other ethnic groups. Household registration status was categorized as rural or non-rural. Annual income values were transformed using the natural logarithm after adding a constant of 1 to accommodate zero values in the dataset, addressing the typically skewed distribution of income data and allowing for proportional interpretation of effects (Chen & Roth, 2023; Feng et al., 2014). Educational level was operationalized based on years of formal education received (Qin et al., 2024). Religious belief was coded as a binary variable (1 = presence of religious belief, 0 = absence of religious belief). Social security status was similarly dichotomized (1 = coverage, 0 = no coverage).

Friends' interaction was measured through frequency of engagement with friends, assessed on a 7-point Likert scale (1 = never, 7 = almost every day), with higher scores representing more frequent social interactions. Self-rated health was measured on a 5-point Likert scale (1 = very unhealthy, 5 = very healthy), with higher scores reflecting better perceived health status. Negative affect frequency was measured by a single question regarding depression or low mood experiences in the past

four weeks, rated on a 5-point Likert scale (1 = never, 5 = always), with higher scores representing more frequent negative affect.

2.3. Analysis strategy

All statistical analyses were conducted using R version 4.4.2. A significance level of $p < .05$ was established for all analyses. Descriptive statistics were reported as means and standard deviations.

The dependent variable, subjective well-being, is measured on an ordinal scale. Although ordinal dependent variables are traditionally analyzed using Order Logit or Order Probit Models, the ordinary least squares (OLS) regression approach was adopted in this study following established methodological precedent. Ferrer-i-Carbonell and Frijters (2004) demonstrated that treating SWB as a continuous variable yields comparable results with minimal bias, and this approach has gained widespread acceptance in the subjective well-being literature. Recent research by Hu et al. (2024) provides additional validation for this methodological choice, successfully employing OLS regression to examine marriage-SWB relationships and demonstrating robust results across alternative SWB measures. Therefore, OLS regression served as our primary analytical method.

To investigate the relationship between marriage and SWB, as well as the potential moderating effect of gender, a three-step hierarchical regression analysis was implemented:

In the first step, Model 1 was constructed including only control variables (e.g., age, education, gender) as represented in Equation 1:

$$SWB_i = \alpha_0 + \alpha_1 X_i + \varepsilon_i \quad (i = 1, \dots, N) \quad (1)$$

In the second step, Model 2 incorporated marriage as the primary independent variable of interest, as shown in Equation 2:

$$SWB_i = \alpha_0 + \alpha_1 X_i + \alpha_2 married_i + \varepsilon_i \quad (i = 1, \dots, N) \quad (2)$$

Where SWB_i denotes the subjective well-being of individual i , $married_i$ represents respondent's marital status. X_i is a vector of control variables including gender, and ε_i is an error term. The association between marriage and individuals' SWB is captured by α_2 .

The change in R^2 from Model 1 to Model 2 was examined to assess the proportion of additional variance in SWB explained by marriage beyond the control variables. A significant increase in R^2 would indicate that marriage contributes meaningfully to explaining variation in SWB.

Finally, to examine whether gender moderates the relationship between marriage and SWB, Model 3 was developed, which included an interaction term between gender and marital status (Equation 3):

$$SWB_i = \alpha_0 + \alpha_1 X_i + \alpha_2 married_i + \alpha_3 (gender_i \times married_i) + \varepsilon_i \quad (3)$$

Where $gender_i$ represents the respondent's gender (coded as 1 = male, 0 = female), and the interaction term $gender_i \times married_i$ captures the potential differential effect of marriage on SWB across gender groups. The coefficient α_3 indicates the magnitude and direction of this moderating effect.

For this final step, the change in R^2 from Model 2 to Model 3 was assessed to determine the additional variance explained by the gender-marital status interaction. A statistically significant change in R^2 , accompanied by a significant interaction coefficient (α_3), would provide evidence of gender's moderating role in the marriage-SWB relationship.

Control variables were consistently included across all models to enhance the reliability of estimation results and account for potential confounding factors.

3. Results

3.1. Descriptive statistical analysis

The descriptive statistics presented in Table 1 provide a comprehensive overview of the sample characteristics, comprising 7,676 observations. SWB demonstrates a mean score of 3.997 (SD = 0.838) on a 5-point ordinal scale (1 = very unhappy to 5 = very happy). This value, approximating 4, suggests that participants generally report being "relatively happy."

Demographic characteristics reveal that 74.5% of participants are married (M = 0.745, SD = 0.436) and 44.2% are male (M = 0.442, SD = 0.497), indicating a slight female majority in the sample. The participants have a mean age of 52.28 years (SD = 16.44), with 40.3% holding rural household registration (M = 0.403, SD = 0.491). On average, participants have 1.739 children (SD = 1.211). The education level variable (M = 2.372, SD = 0.869) indicates that most participants have completed secondary education, with some having received tertiary education. The relatively moderate standard deviation suggests reasonable consistency in educational attainment across the sample.

The logarithm of annual income shows a mean of 8.28 (SD = 4.088), with the high standard deviation pointing to substantial income disparity among participants. In regards with religious belief, only 7.6% of participants report having religious beliefs (M = 0.076, SD = 0.265). Self-reported health averages 3.441 (SD = 1.089), which can be interpreted as

participants generally considering themselves relatively healthy, trending toward the positive end of the health assessment scale. The standard deviation indicates moderate variability in health perceptions.

Table 1 Descriptive Statistics for Study Variables.

Variables	Observations	Mean	SD	Details
SWB	7676	3.997	0.838	Ordinal categorical variables, 1 = very unhappy, 2 = relatively unhappy, 3 = neutral, 4 = relatively happy, 5 = very happy
Marital Status	7676	0.745	0.436	Binary variable, 1 = Married, 0 = Unmarried
Gender	7676	0.442	0.497	Binary variable, 1 = Male, 0 = Female
Age	7676	52.28	16.44	Continuous variable
Household Registration	7676	0.403	0.491	Binary variable, 1 = Rural, 0 = Non-rural
Total children	7676	1.739	1.211	Continuous variable
Education level	7676	2.372	0.869	Multi-categorical variables, 1 = 6 years or less, 2 = 6 to 12 years, 3 = 12 to 16 years, 4 = 16 to 19 years, and 5 = 19 years or more.
Log of annual income	7676	8.28	4.088	Continuous variable
Religious belief	7676	0.076	0.265	Binary variable, 1 = having belief, 0 = having no belief
Self-reported health	7676	3.441	1.089	Ordinal categorical variables, 1 = very unhealthy, 2 = unhealthy, 3 = neutral, 4 = relatively healthy, 5 = very healthy
social security status	7676	0.973	0.162	Binary variable, 1 = Coverage, 0 = No coverage
Negative affect frequency	7676	2.065	1.09	Ordinal categorical variables, 1 = never 2 = rarely 3 = sometimes 4 = often 5 = always
Friends interaction	7676	3.71	1.973	Continuous variables, 1 = never, 2 = one time a year or less, 3 = a few times a year, 4 = about once a month, 5 = a few times a month, 6 = one to two times a week, 7 = almost every day

Social security coverage is exceptionally high at 97.3% ($M = 0.973$, $SD = 0.162$), with the low standard deviation confirming this is consistent across nearly all participants. Regarding psychological well-being, participants report experiencing negative emotions infrequently ($M = 2.065$, $SD = 1.09$). The mean falls on the lower end of the scale, suggesting generally positive emotional states, though the standard deviation indicates noticeable variation in emotional experiences among participants. Social engagement measured through friend interactions ($M = 3.71$, $SD = 1.973$) reveals that participants maintain moderate social connections. The high standard deviation suggests considerable variation in socialization patterns, with some participants likely being highly socially active while others maintain minimal social contact.

3.2. Association Between Marriage and Subjective Well-being

Table 2 summarizes the hierarchical regression analyses evaluating the relationship between marriage and SWB. Model 1, comprising only control variables, accounted for approximately 13.8% of the variance in SWB ($R^2 = .138$). With the addition of marital status in Model 2, the explained variance increased to 14.5%, representing a statistically significant increment ($\Delta R^2 = .007$, $p < .001$). Contemporary methodological research demonstrates that such increments represent meaningful contributions, where individual predictors typically account for modest proportions of variance due to the inherently multifactorial nature of psychological well-being (Funder & Ozer, 2019). Therefore, this 0.7% increase indicates that marital status uniquely contributes to explaining SWB beyond demographic and socioeconomic controls.

Specifically, marital status emerged as a significant predictor in Model 2 ($\beta = .183$, $p < .001$), indicating that married individuals reported significantly higher SWB compared to their unmarried counterparts, controlling for relevant factors such as age, education, income, and health status. These findings robustly support Hypothesis 1, confirming the positive association between marriage and SWB within the Chinese context.

Among control variables, self-reported health status exhibited a strong positive relationship with SWB ($\beta = .092$, $p < .001$), suggesting healthier individuals report higher SWB. Conversely, the frequency of negative affect was negatively related to SWB ($\beta = -.197$, $p < .001$), indicating that frequent negative emotional experiences correspond to lower WB. Age squared revealed a significant positive relationship ($\beta = .0004$, $p < .001$), indicative of a U-shaped age–SWB relationship, where SWB might initially decline in early adulthood and subsequently increase with age. Household registration ($\beta = .092$, $p < .001$) and the total number of children ($\beta = .082$, $p < .001$) were also positively associated with SWB, highlighting the social and familial determinants of well-being. Additionally, interaction with friends was positively related to SWB ($\beta = .013$, $p < .01$), underscoring the importance of social interactions beyond marital relationships.

3.3. Moderation Effect of Gender on the Marriage–SWB Relationship

Model 3 in Table 2 included an interaction term between gender and marital status to explore potential moderating effects. The interaction term was statistically significant and positive ($\beta = .172, p < .001$), indicating a more pronounced positive association between marriage and SWB for men compared to women. These results strongly support Hypothesis 2, suggesting that gender moderates the marriage–SWB relationship, with men deriving greater well-being benefits from marriage.

Table 2 OLS Estimates of the Marriage Impact on SWB.

Variables	Model 1	Model 2	Model 3
Married		0.183*** (0.023)	0.108*** (0.029)
Gender	-0.041* (0.019)	-0.042* (0.018)	-0.169*** (0.036)
Married × Gender			0.172*** (0.041)
Age squared	0.0003*** (0.00003)	0.0004*** (0.00003)	0.0004*** (0.00003)
Household Registration	0.090*** (0.02)	0.092*** (0.020)	0.089*** (0.020)
Total number of children	0.095*** (0.008)	0.082*** (0.008)	0.078*** (0.008)
Education level	0.01 (0.013)	0.008 (0.013)	0.006 (0.013)
Log of annual income	0.005* (0.002)	0.005* (0.002)	0.004 (0.002)
Religious belief	-0.003 (0.034)	0.002 (0.034)	0.005 (0.034)
Self-reported health	0.095*** (0.009)	0.092*** (0.009)	0.093*** (0.009)
social security status	0.04 (0.055)	0.028 (0.055)	0.028 (0.055)
Negative affect frequency	-0.203*** (0.009)	-0.197*** (0.009)	-0.197*** (0.009)
Friends interaction	0.013** (0.005)	0.013** (0.005)	0.013** (0.005)
Ethnicity	0.046 (0.035)	0.046 (0.035)	0.047 (0.035)
Constant	3.633*** (0.083)	3.507*** (0.085)	3.574*** (0.086)
Observations	7676	7676	7676
R-squared	0.138	0.145	0.147
Adjusted R-squared	0.137	0.144	0.146

Note: Individual-level adjusted standard errors are in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Analyses of the interaction effects revealed significant gender differences in the relationship between marriage and SWB. For women, the main effect of marriage on SWB was significant ($\beta = .108, p < .001$). However, the significant negative main effect for gender ($\beta = -.169, p < .001$) indicates unmarried men have lower SWB than unmarried women. The positive interaction effect indicates the benefit of marriage for men is notably greater. Specifically, married men exhibited an overall increase of 0.280 points in SWB compared to unmarried men ($0.108 + 0.172$), highlighting substantial marital benefits for men.

Moreover, the gender disparity observed in unmarried individuals, where men reported significantly lower SWB than women ($\beta = -.169, p < .001$), effectively diminishes among married individuals, reducing to a marginal and practically negligible difference (0.003 points in favor of married men). Although statistically significant, this minimal difference suggests limited practical implications.

Figure 1 visually illustrates these findings, depicting the significant gender moderation effect on the relationship between marital status and SWB. The interaction plot clearly demonstrates a steeper positive slope for men compared to women, reinforcing that marriage confers greater subjective well-being benefits to men. Furthermore, the figure highlights the near elimination of the gender gap in SWB among married individuals.

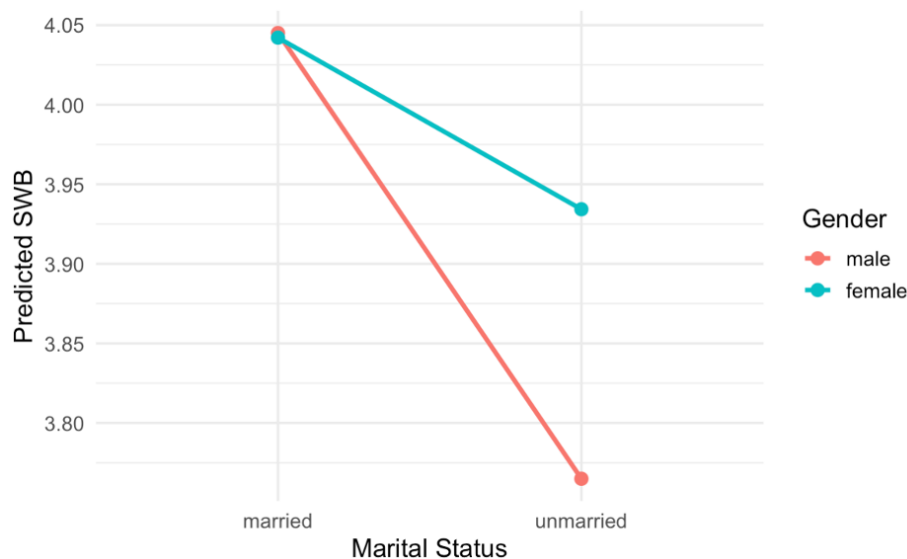


Figure 1 Interaction effect of marital status and gender on SWB.

In summary, these findings substantiate the hypothesis that marriage is positively associated with SWB in China and underscore the critical moderating role of gender. While marriage generally enhances well-being for both genders, the benefits are markedly greater for men, effectively neutralizing the gender gap observed among unmarried individuals.

3.4. Robustness Analysis

To verify the stability and reliability of our primary findings, two distinct robustness tests were conducted. The first employed propensity score matching (PSM) to address potential selection bias, while the second involved an alternative binary measurement specification of the dependent variable (SWB).

3.4.1. Propensity score matching analysis

To address potential selection bias arising from systematic differences between married and unmarried groups, we employed propensity score matching (Rosenbaum & Rubin, 1983). Given our sample distribution (married: n = 5,540; unmarried: n = 1,956), we defined the unmarried respondents as the treated group and married respondents as the control group for matching purposes.

The effectiveness of our matching procedure is confirmed by standardized mean differences (SMD) for all covariates, which were below the conventional threshold of 0.1 post-matching (Figure 2 and Table 3). This finding aligns with the recommendations put forth by Austin (2011), who emphasized that SMD values below 0.1 indicate negligible differences between matched groups. This indicates successful balance across covariates, thereby reducing potential bias arising from observed confounding variables.

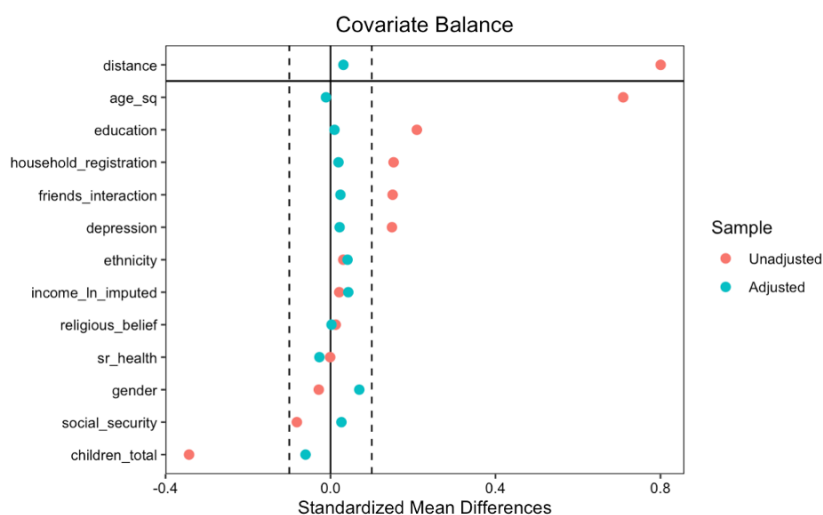


Figure 2 SMD in Covariates Before and After Propensity Score Matching by Marital Status.

Table 3 Covariate Balance Before and After Matching.

Variable	Type	SMD Before	SMD After	Balance Status
Distance	Distance	0.800	0.031	Balanced (< 0.1)
Gender	Binary	-0.029	0.070	Balanced (< 0.1)
Age squared	Continuous	0.710	-0.011	Balanced (< 0.1)
Social Security	Binary	-0.082	0.027	Balanced (< 0.1)
Negative affect	Continuous	0.149	0.022	Balanced (< 0.1)
Self-reported Health	Continuous	-0.001	-0.027	Balanced (< 0.1)
Friends Interaction	Continuous	0.151	0.024	Balanced (< 0.1)
Household Registration	Binary	0.153	0.019	Balanced (< 0.1)
Log Income	Continuous	0.021	0.043	Balanced (< 0.1)
Total number of children	Continuous	-0.343	-0.061	Balanced (< 0.1)
Ethnicity	Binary	0.031	0.041	Balanced (< 0.1)
Education level	Continuous	0.209	0.010	Balanced (< 0.1)
Religious Belief	Binary	0.013	0.002	Balanced (< 0.1)

Post-matching regression analysis as shown in Table 4 (Model PSM) revealed a significant negative association between unmarried status and SWB ($\beta = -0.175$, $SE = 0.029$, $p < .001$). This indicates that unmarried individuals reported significantly lower levels of subjective well-being compared to married individuals with comparable background characteristics. This finding aligns closely with our primary regression results, thereby reinforcing the positive relationship between marriage and SWB through an alternative analytic method.



3.4.2. Alternative Binary Measurement of SWB

In the second robustness test, the SWB variable was recoded into a binary measure. Following the approach employed by Qin et al. (2024), responses originally collected on a five-point Likert scale were dichotomized into two categories: “very unhappy” and “relatively unhappy” (coded as 1), versus “unhappy,” “relatively happy,” and “very happy” (coded as 2). Although binary categorization reduces variability and explanatory power, it provides a stringent test of the robustness of the main results to alternative measurement specifications.

Results from this alternative measurement specification (Model 4, Table 4) confirmed the persistence of a significant positive relationship between marriage and SWB ($\beta = 0.040$, $SE = 0.006$, $p < .001$). Despite a lower overall explanatory power ($R^2 = 0.086$) compared to the primary models, the continued statistical significance and direction of the marital status coefficient confirm the robustness of our primary findings.

Table 4 Robustness test results.

Variables	Model (PSM)	Model 4
Treatment	-0.175 *** (0.029)	
Married		0.040 (0.006)***
Gender	-0.087 ** (0.030)	-0.007(0.005)
Age squared	0.000 *** (0.000)	0.000 *** (0.000)
Household Registration	0.061 (0.033)	0.015 (0.006)*
Total number of children	0.097 *** (0.013)	0.007 (0.002)**
Education level	-0.016 (0.020)	0.008 (0.004)*
Log of annual income	0.004 (0.004)	0.001 (0.001)*
Religious belief	-0.047 (0.056)	-0.009 (0.010)
Self-reported health	0.104 *** (0.015)	0.019 (0.003)***
social security status	0.111 (0.078)	-0.007 (0.016)
Negative affect frequency	-0.199 *** (0.014)	-0.042 (0.003)***
Friends interaction	0.018 * (0.008)	0.006 (0.001)***
Ethnicity	0.076 (0.059)	-0.000 (0.010)
Constant	3.586 *** (0.127)	1.861 (0.024)***
Observations	1563	7676
R-squared	0.162	0.086
Adjusted R-squared	0.159	0.084

Note: Individual-level adjusted standard errors are in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Collectively, these robustness tests provide additional validation for the relationship between marriage and SWB identified in our main analysis. The PSM results confirm that unmarried individuals experience lower SWB compared to their married counterparts, while the alternative measurement specification demonstrates that this relationship holds regardless of how SWB is operationalized. The consistent significance of marriage across different analytical approaches and variable specifications underscores the importance of marriage as a contributor of subjective well-being in the Chinese context.

4. Discussion

The present study examined the relationship between marriage and subjective well-being in contemporary China, with a particular focus on gender as a moderating factor. Drawing on data from the CGSS2021, the results provide empirical evidence supporting both hypotheses. In this section, findings will be discussed within the theoretical framework of hedonic adaptation theory and consider their implications within the Chinese cultural context.

4.1. Marriage and Subjective Well-Being in the Chinese Context

Our results confirm Hypothesis 1, demonstrating a significant positive association between marriage and SWB among Chinese adults. This finding aligns with the established literature on marriage benefits, which consistently shows that married individuals report higher levels of SWB compared to their unmarried counterparts (Grover & Helliwell, 2019; Luhmann et al., 2012; Robles et al., 2014). The robustness of this relationship was confirmed through propensity score matching and alternative measurement specifications, further strengthening confidence in our findings.

The positive relationship between marriage and SWB can be interpreted through the lens of Hedonic Adaptation Theory (Brickman & Campbell, 1971). While this theoretical framework suggests that individuals typically return to baseline levels of happiness following significant life events, our findings align with research by Qari (2014), which challenges the notion of complete adaptation to marriage. The persistent positive association between marriage and SWB observed in the present study indicates that the benefits of marriage may extend beyond a temporary ‘honeymoon effect,’ contributing to a more sustained enhancement of subjective well-being.

Several mechanisms may explain the positive influence of marriage on subjective well-being in China. First, marriage provides individuals with a secure attachment relationship characterized by enforceable trust and commitment (DeMaris, 2018). This security is particularly valuable in the Chinese context, where traditional values emphasize family stability and social integration (Hu et al., 2024). Second, consistent with previous research (Coontz, 2005; Dykstra & Fokkema, 2007), marriage in China expands individuals' social networks through the acquisition of in-laws, providing additional sources of social capital and support. Third, marriage offers economic advantages through resource pooling and economies of scale (Tan et al., 2020), which may be especially beneficial in a society experiencing rapid socioeconomic transitions.

However, it is noteworthy that while statistically significant, the unique variance in SWB explained by marital status was modest ($\Delta R^2 = .007$). This finding echoes research by Lucas and Dyrenforth (2006) and Jebb et al. (2020), who suggested that the well-being advantages of marriage may be overestimated in public perception. The relatively small effect size observed in our study indicates that while marriage contributes to subjective well-being, it is one of many factors influencing SWB in contemporary China.

4.2. Gender as a Moderator: Understanding Differential Marriage Benefits

Our findings strongly support Hypothesis 2, revealing a significant gender moderation effect in the marriage-SWB relationship. Specifically, men derive greater SWB benefits from marriage compared to women in contemporary China. This result contributes to the ongoing scholarly debate regarding gender differentials in marriage benefits, providing evidence for a male advantage in the Chinese context.

The gender moderation effect can be understood through the differential adaptation patterns proposed by hedonic adaptation theory. According to this framework, the adaptation process to marriage, may vary systematically across demographic groups based on contextual factors (Lucas, 2007). In the Chinese context, gendered expectations may lead men and women to experience marriage in distinct ways, influencing how they adapt to marital life.

In traditional Chinese society, Confucian values have long shaped gender roles with men and women and they may experience different patterns of adaptation to marriage. Men often experience slower or incomplete adaptation to the positive aspects of marriage. This slower adjustment may allow them to sustain higher levels of marriage-derived well-being over time. In contrast, women tend to adapt more quickly to marriage benefits. Yet, they may continue experiencing sustained exposure to the challenges related to traditional marital roles, resulting in a less pronounced well-being advantage (Pretorius et al., 2021). Zhang et al. (2025) describe these as a cultural lag effect, where family relationships change more slowly than public institutions. These enduring cultural patterns create the contextual foundation for the differential adaptation processes that generate the observed gender disparities in marriage-derived well-being benefits. These differential adaptation patterns align with our finding that men derive greater SWB benefits from marriage compared to women.

An interesting finding of this study is the significant negative effect of gender on SWB among unmarried individuals. Unmarried men report lower level of SWB than unmarried women. This difference may reflect the greater social pressure and stigma faced by men who remain single. In Chinese society, marriage is often regarded as a key milestone in the life course, especially for men (Raymo et al., 2015). This cultural expectation places men under greater pressure to marry. As a result, remaining unmarried may lead to a well-being disadvantage for men. At the same time, marriage continues to bring substantial benefits for those who are married.

The narrowing of gender differences in SWB among married individuals highlights the distinctive ways in which marriage influences well-being for men and women. While unmarried men experience a well-being disadvantage, marriage effectively neutralizes this gap, bringing men's SWB to levels comparable with married women. This equalization effect suggests that marriage may serve different psychological functions across genders in the Chinese context—potentially operating as a status attainment mechanism for men while providing women with social integration and security, albeit with added role strain.

4.3. Theoretical Implications

Our findings have several important theoretical implications. First, they contribute to the ongoing scholarly conversation about the universality of marriage benefits (Lucas, 2005; Lucas & Clark, 2006; Musick & Bumpass, 2012). While our results confirm a positive association between marriage and SWB, supporting the traditional view of marriage as beneficial, the modest effect size suggests that these benefits should not be overstated. These findings both support and challenge aspects of hedonic adaptation theory (Luhmann et al., 2012). While adaptation processes likely moderate the long-term impact of marriage on SWB, the persistent positive association observed in our study suggests that, for many individuals, marriage may provide sustainable well-being benefits that resist complete adaptation.

Second, our results highlight how gender differences in marriage benefits are shaped by cultural context. Some Western studies report little to no gender difference in the benefits of marriage (Bierman et al., 2006; DeMaris & Oates, 2021). Others even suggest that women benefit more from marriage than men (Grover & Helliwell, 2019; Stutzer & Frey, 2006). In contrast, our study finds that men experience greater well-being benefits from marriage. This male advantage is consistent with findings from other Confucian societies, including China (Jiang, 2009). Such evidence underscores the need to consider cultural context

when examining adaptation processes, as demonstrated by studies examining cross-cultural variations in hedonic adaptation (Pretorius et al., 2021).

Third, our findings deepen the understanding of hedonic adaptation theory by showing that gender can systematically influence adaptation processes. The different patterns of marriage benefits between men and women suggest that adaptation to marriage is not the same for everyone. Instead, it is shaped by sociocultural factors that affect how people experience and respond to marital change. In China, traditional gender norms may lead to unequal patterns of adaptation. Men may show slower or less complete adaptation to the positive aspects of marriage. In contrast, women may adapt more quickly but continue to face stress from traditional marital roles. This asymmetry helps explain the gender differences observed in subjective well-being.

4.4. Practical Implications

In addition to its theoretical value, this study provides practical implications. The identified gender disparity in the benefits of marriage highlights the need to promote greater gender equality within Chinese marital relationships. One effective approach is to increase men's participation in childcare and household responsibilities. This can be supported through policies that extend paternity leave beyond the current minimal provision. Furthermore, introducing parental leave policies that encourage both partners to share caregiving duties could help balance the domestic workload and improve well-being within marriage.

Second, the findings reveal that unmarried men are particularly vulnerable in terms of subjective well-being. This points to the need for targeted mental health services for this demographic group. Urban community centers could develop programs aimed at strengthening social ties and support systems among unmarried men. Furthermore, healthcare providers should incorporate routine mental health screenings into general medical check-ups for unmarried men and establish clear referral pathways to specialized psychological services when necessary.

Finally, marriage counseling and relationship education programs in China should be grounded in evidence-based practices that address gender imbalances in marital outcomes. Such programs might emphasize communication skills and behavioral strategies that promote mutual well-being—such as shared decision-making and equitable distribution of domestic labor. Premarital counseling, delivered through civil affairs bureaus during the marriage registration process, could serve as a strategic venue for disseminating these interventions.

4.5. Limitations and Future Research Directions

While the present study provides valuable insights, several limitations should be acknowledged. First, the cross-sectional nature of our data precludes causal inferences about the relationship between marriage and subjective well-being. Although we employed propensity score matching to address selection bias, longitudinal studies are needed to establish the temporal sequence and adaptation effects in the marriage-SWB relationship across the life course in China.

Second, the binary operationalization of marital status (married versus unmarried) does not capture the diverse relationship configurations in contemporary China, including cohabitation, dating relationships, and various forms of singlehood. Future research should employ more comprehensive categorizations to examine how different relationship statuses influence subjective well-being.

Third, this study does not directly measure adaptation processes over time, which limits our ability to fully test the mechanisms proposed by hedonic adaptation theory. Future research should employ longitudinal designs to track individuals' SWB trajectories before and after marriage, allowing for direct examination of adaptation patterns and how these differ by gender in the Chinese context. Such research could help clarify whether the gender moderation effect observed in our study results from differential adaptation rates, varying baseline levels of well-being, or other mechanisms.

Fourth, this study focused on the contemporary Chinese population, limiting generalizability to other cultural contexts. Cross-cultural comparative research would enhance understanding of how culturally embedded gender norms and expectations shape the relationship between marriage and subjective well-being across diverse societies.

Finally, the measure of subjective well-being, while consistent with established research practices, represents a simplified operationalization of a complex construct. Future studies would benefit from including multiple dimensions of well-being, encompassing both hedonic and eudaimonic aspects, to provide a more comprehensive understanding of how marriage influences different facets of psychological functioning.

5. Conclusions

This study demonstrates that marriage remains positively associated with subjective well-being in contemporary China, with this relationship significantly moderated by gender. Men derive greater well-being benefits from marriage compared to women, a finding that extends our understanding of hedonic adaptation processes by highlighting how cultural context and gender roles can shape adaptation trajectories following marital transitions. These findings contribute to the growing body of literature on the culturally contingent nature of marriage benefits and highlight the importance of considering gender when

examining the psychological consequences of marriage. As China continues to experience rapid social and economic transformation, understanding how traditional institutions like marriage impact well-being across diverse demographic groups remains crucial for developing culturally sensitive policies and interventions aimed at promoting psychological health and social integration.

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Ethical considerations

Ethical approval for this study involving human participants was not required, following local regulations and institutional guidelines. Additionally, in line with national laws and institutional policies, written informed consent from participants or their legal guardians/next of kin was not necessary.

Conflict of Interest

The authors declare no conflicts of interest.

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