

Balancing Fertility Intention and Economic Status of Female College Students in Contemporary Social Difficulties

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Abstract: At present, the aging of Chinese society is becoming increasingly severe, and the education level of women is gradually improving. In this context, it is of great significance to study the balance between the economic status and fertility intentions of female college students. Female college students are an important group that determines the national birth rate, and their fertility intention and behavior have a crucial impact on the change of population structure. This article conducts a detailed analysis of various factors influencing the economic status and fertility intentions of female college students, aiming to explore their impact on the balance between economic independence and fertility choices among this group. It is found that the fertility intention of female college students is at a moderate to low level. Meanwhile, they place a high value on economic independence. This indicates that in modern society, socio-economic factors play an important role in their reproductive choices. This conclusion provides a new perspective for understanding the current population size and low fertility rate. It also offers a foundation for formulating relevant policies and social support measures in the future.

Keywords: fertility intention, economic status, female college student

1. Introduction

Against the backdrop of the increasingly serious aging problem, changing labor demand, and economic downturn in contemporary society, the data from the National Bureau of Statistics shows that the gross enrollment rate of women in higher education in China was 60.2% in 2023, and the proportion of women among students receiving higher education worldwide exceeded 50% [1]. Meanwhile, it is predicted that from 2022 to 2026, China's annual birth rate will decrease by 0.117%, and China will face a nationwide fertility crisis [2]. The global Gross Domestic Product (GDP) growth rate has slowed down, which has intensified the pressure and anxiety of youth employment competition, especially for women facing gender wage gaps [3, 4]. The demand for unconventional skills in female workers' occupations after childbirth has significantly decreased. It is not conducive to their sustained accumulation of human capital [5]. After the government issued the two-child policy, women's wages in the workplace continued to decline [6]. As the cost of raising children continues to rise, the three-child policy brings greater economic pressure to women. In this context, the tension between investment in human capital and reproductive obligations is manifest. Women face a paradox in that, although their unprecedented education has increased their competitiveness in the labor market, the "motherhood penalty" still exists, forcing many women to postpone or give up childbirth [7, 8]. The economic status of educated women, especially female college students, has become a key

determinant of population sustainability. The trade-off between the female college students' economic status and their desire to have children has become a topic of great concern.

The study conducts an in-depth analysis of the perspectives and attitudes of young female college students. Young female college students are an important force for the future development of society. Their ideas and choices profoundly influence social structure and family patterns. Studying their fertility intentions can help to gain early insight into demographic trends. It also provides forward-looking references for addressing social issues such as population aging and optimizing the labor market, ultimately promoting social harmony and stable development. Accurately grasping the understanding of young female college students' economic status and workplace security can not only help the government formulate more targeted employment policies but also provide data support for women's rights protection policies. These help policymakers optimize resource allocation, create a fair employment environment, and improve the birth support system.

2. Methodology

2.1. Questionnaire design

This paper collects data in the form of a questionnaire and divides the questions into several parts regarding the balance between female college students' fertility intention and their economic status. One part is to inquire about the personal information of female college students, such as grade and major, and the other part is to address their future fertility issues. One of the key questions is to study their fertility intentions, and the other is to study their perception of economic status. The questionnaire asks the respondents about their identification with "giving up fertility to pursue economic status" and their attitude towards balancing fertility and career development, specifically measuring the fertility intentions of female college students. The questionnaire specifically measures the perceived economic status of female college students by asking them about their expectations for future economic independence and whether the society should provide more economic support to women, based on their perception of their main source of income after marriage. Another part is to inquire about the career plans of female college students and explore their thoughts on balancing childbirth and economic status.

2.2. Variables and empirical model

The two main issues that this article aims to study are the influencing factors of contemporary female college students' fertility intentions and the determinants of their economic status.

The first key issue is the fertility intention (FI), which is the main dependent variable, measured by the average score of two questions. The first is about the degree of identification with "giving up childbirth and pursuing economic status," with 1 representing strongly agreeing with the statement and 5 representing strongly disagreeing. The second focuses on the degree of preference for "balancing attitudes towards fertility and career development," with 4 representing child-centeredness, 3 representing family priority, 2 representing balanced, and 1 representing career priority. The higher the score, the stronger the willingness of female college students to have children.

The second key issue is the economic status perception (ESP), which is the other main dependent variable, measured by the average score of two questions. The first is about the degree of importance of main sources of income after marriage, with 5 representing one's own income, 4 representing investment returns, 3 representing inherited property, 2 representing the spouse's income, and 1 representing others. The second is about the degree of agreement with the statement that the society should provide more economic support and job security for women after childbirth, with 1 representing very unnecessary and 5 representing very necessary. The higher the score, the stronger the recognition of economic status.

This model also controls for grade, major, attitudes to career planning (CP), perception of fertility impact (PFC) and social environment perception (SEP) as the independent variables in this model. In order to study the impact on fertility intention, this study estimates equation (1) below, and to study economic status perception, this study estimates equation (2). Considering that FI and ESP are both ranked categorical variables, the paper also conducts Ordered Logistic analysis in addition to Ordinary Least Squares (OLS).

$$FI_i = \alpha_0 + \alpha_1 Grade_i + \alpha_2 Major_i + \alpha_3 CP_i + \alpha_4 PFC_i + \alpha_5 SEP_i + \alpha_6 ESP_i + \mu_i \quad (1)$$

$$ESP_i = \beta_0 + \beta_1 Grade_i + \beta_2 Major_i + \beta_3 CP_i + \beta_4 PFC_i + \beta_5 SEP_i + \beta_6 FI_i + \epsilon_i \quad (2)$$

3. Results

3.1. Descriptive statistics

Table 1 shows the descriptive statistical analysis, that the mean fertility intention is 2.214, indicating that the fertility of female college students is at a medium to low level.

Table 1: Summary statistics

Variable	N	Mean	Standard Deviation	Maximum	Minimum
Fertility Intention	173	2.214	0.848	4.5	1
Economic Status Perception	173	3.708	0.939	5.0	1
Career Planning	173	3.310	0.712	4.0	1
Perception of Fertility Impact	173	3.770	1.057	5.0	1
Social Environment Perception	173	2.880	0.939	4.0	1

The average value of economic status perception is relatively high, at 3.708, indicating that female college students attach great importance to economic independence. Female college students have a moderately high level of awareness of career goals and the impact on fertility. The SEP indicates that female college students believe that social attention on women's economic status after childbirth is generally moderate. Table 2 illustrates that the respondents are mainly in their sophomore, junior, and senior years and are mainly majoring in science and engineering.

Table 2: Frequency distribution of grade and major

Grade	Frequency	Percent
Freshman	17	9.83%
Sophomore	47	27.16%
Junior	58	33.53%
Senior	48	27.75%
Postgraduate and above	3	1.73%
Major		
Humanities and social sciences	27	15.60%
Science and engineering	92	53.18%
Medical science	28	16.18%
Art	14	8.09%
Other majors	12	6.94%

3.2. Regression results

Table 3 shows the results that female college students' perception of the impact from fertility has a significant influence on their fertility decisions.

Table 3: Regression results of OLS model

Variable	FI	FI	ESP	ESP
Grade	0.039 (0.045)	0.033 (0.045)	-0.062 (0.066)	-0.054 (0.065)
Major	0.009 (0.040)	0.009 (0.045)	0.008 (0.059)	0.010 (0.058)
CP	0.082 (0.064)	0.057 (0.066)	-0.273** (0.094)	-0.257** (0.094)
PFI	-0.567*** (0.047)	-0.533*** (0.051)	0.376*** (0.068)	0.0269** (0.093)
SEP	-0.052 (0.054)	-0.070 (0.055)	-0.205* (0.078)	-0.215** (0.078)
ESP		-0.089 (0.053)		
FI				-0.190 (0.112)
Observation	173	173	173	173
F-statistics	39.646	33.885	8.769	7.866
Adjusted R ²	0.529	0.534	0.184	0.193

Notes: *p<.05; **p<.01; ***p<.001; standard error is in parentheses.

That is, for every 1 unit increase in their awareness of the negative impact on fertility, fertility intention decreases by 0.567 to 0.533 units. This indicates that when women realize that childbirth may hinder career development (such as delayed promotion or decreased income), they will proactively lower their fertility intention to prioritize safeguarding their economic status. The grade of female college students, major, career planning, social environment perception, and economic status perception do not have a direct and significant impact on fertility intention. Due to the complexity of fertility intention and the interweaving of multiple factors, variables such as grade and major may indirectly affect fertility intention through other variables. High-grade students may indirectly reduce their fertility intention through their understanding of fertility impact due to clearer career planning. The college students have not yet at the critical decision-making stage of giving birth, and the impact of factors such as grade and major on fertility intention has not yet been significant.

When ESP is used as the dependent variable, regardless of whether fertility intention is added as the independent variable, female college students' career planning has a significant impact on economic status perception, that for every 1 unit increase in career planning clarity, the ESP decreases by 0.273 units. Students with high economic status perception pay more attention to income, investment, and other immediate returns, and may prefer to choose popular but competitive industries (such as finance and the Internet). The career paths in these fields are complex and dynamically changing, making it difficult for students to form clear plans during the exploration process. Female college students also have a significant negative impact on their perception of social environment and economic status. The society's attention to the economic status of women after childbirth may create a phenomenon of "valuing women's economic independence," but the actual support measures (such as parental leave and childcare services) are insufficient, resulting in a gap between the perceived

social environment and the reality of their own economic security. Female college students' understanding of fertility impact also has a significant effect on their perception on economic status. When women realize that childbirth may lead to career interruption or income decline, they will actively strengthen their economic status perception, such as being more inclined to choose high-paying industries, improve vocational skills, or increase savings.

Table 4: Regression results of ordered logistic model

Variable	FI	FI	ESP	ESP
Grade	0.021 (0.153)	0.022 (0.153)	-0.007 (0.149)	-0.002 (0.149)
Major	-0.054 (0.131)	-0.046 (0.131)	0.086 (0.127)	0.088 (0.127)
CP (haven't considered)	1.424 (1.264)	1.540 (1.276)	1.631 (1.136)	1.699 (1.140)
CP (unclear direction)	-0.649 (0.543)	-0.558 (0.551)	1.238* (0.539)	1.155* (0.542)
CP (approximate direction)	-0.311 (0.304)	-0.286 (0.307)	0.601* (0.298)	0.568* (0.299)
PFI (very unfamiliar)	7.970*** (1.118)	7.732*** (1.153)	-4.225*** (0.867)	-3.594** (1.034)
PFI (unfamiliar)	5.071*** (0.876)	4.942*** (0.882)	-1.484* (0.793)	-1.056* (0.881)
PFI (general familiar)	3.806*** (0.484)	3.687*** (0.497)	-1.748*** (0.401)	-1.485** (0.475)
PFI (familiar)	1.774*** (0.404)	1.726*** (0.406)	-0.762* (0.366)	-0.651* (0.379)
SEP (almost no attention)	1.049 (0.577)	1.097 (0.581)	0.934 (0.562)	1.003 (0.566)
SEP (general attention)	-0.077 (0.525)	0.052 (0.546)	2.113*** (0.537)	2.110* (0.537)
SEP (more attention)	0.597 (0.369)	0.616 (0.371)	0.285 (0.354)	0.329 (0.356)
ESP		-0.157 (0.172)		
FI				-0.267 (0.245)
Observation	173	173	173	173
F-statistics	1020.410	1292.113	1337.359	1439.250
Pseudo-R ²	0.560	0.562	0.285	0.290

Notes: *p<.05; **p<.01; ***p<.001; standard error is in parentheses.

Table 4 shows the output from Ordered Logistics regression analysis, through which it can be concluded that the overall degree of social attention on women's postpartum economic status has a significant impact on ESP. Female college students may feel that the society does not provide sufficient support and are forced to strengthen their personal economic abilities to cope with risks. Female college students with lower economic status perception may underestimate their career development potential, believing that "childbirth will not significantly affect income," thereby

reducing their economic concerns about childbirth. Female college students who have unclear and rough career directions have a significant impact on their economic status. It indicates that they are in the stage of exploring career goals and development paths. Their expectations for future economic income are often unstable and vague due to the lack of clear career goals and development paths, and they tend to choose more conservative ways to improve their economic status. However, at this stage, they have a preliminary expectation for future career development and begin to plan their economic income from a longer-term perspective. They will pay more attention to the potential for career development and future economic returns and are willing to make efforts for long-term economic status improvement.

3.3. Discussion

The research results indicate that contemporary female college students attach great importance to their own economic status, while also suggesting that childbirth may face conflicts with economic development. Moreover, in the current social environment, economic factors have a significant impact on female college students' decision-making regarding childbirth. This indicates that the contradiction between childbirth and career development is particularly prominent in the current employment environment. In the process of pursuing economic status, female college students face the challenge of career planning, and it is difficult to strike a balance between career choices and economic returns. There is a gap between society's attention to women's postpartum economic status and actual support, which has a significant negative impact on the perception of economic status among female college students. Studying the fertility intentions of female college students can help to gain early insight into population trends. By understanding the influencing factors of their reproductive decisions, forward-looking references can be provided for addressing population aging and optimizing population structure.

This year, China also proposed that enterprises should create "fertility-friendly positions" through benefits such as maternity allowances, flexible work arrangements, and parental leave to reduce the pressure of the workplace on family childbirth. Multiple government work reports will plan to extend maternity leave as a livelihood project. These are all improvements to China's fertility policy support system. At present, research mainly studies the impact of socio-economic factors on fertility intentions, as well as using a binary perspective to study the relationship between the economic intentions of both spouses [9, 10]. This article mainly focuses on female college students, predicting their future willingness to have children and balancing their economic status. It also revealed the problems that female college students have in terms of fertility intentions and prospect economic status, and clarified the key impact of female college students' perception on fertility, providing important reference for policy formulation and social development.

4. Conclusion

Against the complex backdrop of an aging population, changing labor demand, and economic downturn, the participation of women in higher education worldwide is constantly increasing. At the same time, the global GDP growth rate is slowing down, and women face issues such as gender wage gaps and "maternal punishment" in employment. The accumulation of human capital after childbirth is hindered, and the cost of raising children continues to rise. These factors have highlighted the contradiction between human capital investment and reproductive obligations. In this case, this article conducted a questionnaire on female college students to analyze the balance between their economic status and fertility intentions. The paper finds that female college students have a low to moderate level of fertility intentions and place a high emphasis on economic independence. The perception of fertility has a significant negative impact on fertility intentions, while career planning has an impact

on perceived economic status. At present, the government should further improve employment and fertility support policies, optimize resource allocation, and create a fair employment environment to alleviate the contradiction faced by female college students between their economic status and fertility intentions.

From an objective perspective, this article still has some limitations. The sample size was relatively small, and the scope of female college students covered is relatively narrow, mainly influenced by regional economy, which may make the research results unable to accurately reflect the real situation of all female college students. Future research can conduct surveys in a wider range of regions in China, expand the sample size, and enhance the representativeness of the study. Meanwhile, more influencing factors can be included for comprehensive analysis, such as parents' marital status, family background, and medical-related factors, to further explore the potential relationship between these factors and the economic status and fertility intentions of female college students. In addition, in the research process, more attention should be paid to the subjective will of the respondents, and more scientific survey methods and analytical tools should be adopted to explore this complex issue more deeply and comprehensively, providing more valuable references for solving related social problems.

References

- [1] Correa, A., Glas, M.G. and Opara, J. (2025) *Females in higher education and leadership: insights from a multi-method approach*. *Frontiers in Education*, 9, 1485395.
- [2] Zhang, Y. (2024) *Modeling and Prediction of Birth Rate in China*. *Advances in Economics, Management and Political Sciences*, 59(1), 12-21.
- [3] Li, C. and Gao, Y. (2024) *Characteristics of college students' social mentality under the pressure of academic and employment competition – an analysis based on data from the 2023 China College Student Tracking Survey*. *Youth Exploration*, (05), 17-24.
- [4] de Castro Romero, L., Barroso, V. M. and Santero-Sánchez, R. (2025) *Gender wage gap in hospitality management: The evidence in Europe*. *Annals of Tourism Research Empirical Insights*, 6(1), 100169.
- [5] Qu, X. and Wang, X. (2024) *The Dynamic Effects of Childbearing on Female Employment and Career Transition - An Analysis Based on the Event Study Method*. *China Population Science*, (06), 59-77.
- [6] Chen, Y. and Wang, Z. (2024) *The dilemma between fertility and work: How did the Universal Two-Child policy affect Chinese women's labor income?* *Plos One*, 19(8), e0308709.
- [7] Liu, Y. (2023) *Parenting Costs, Fertility Culture and the Willingness of Parents with 0-5-Year-Old Children to Reproduce*. Chongqing Technology and Business University, Master's thesis.
- [8] Kalabikhina, I.E., Kuznetsova, P.O. and Zhuravleva, S.A. (2024) *Size and factors of the motherhood penalty in the labour market: A meta-analysis*. *Population and Economics*, 8(2), 178-205.
- [9] Brolinson, M.G., Boedeker, D., Campedelli, A., Yu, R., Raiciulescu, S., Devine, K., Hill, M.J., Decherney, A. and Spitzer, T. (2023) *Do socioeconomic factors influence the decision to pursue fertility preservation?* *Fertility and Sterility*, 120(4S), e257.
- [10] Matera, C., Dommermuth, L., Bacci, S., Bertaccini, B., Minello, A. and Vignoli, D. (2022) *Perceived Economic Uncertainty and Fertility Intentions in Couples: A Dyadic Extension of the Theory of Planned Behaviour*. *Journal of Family and Economic Issues*, 44(4), 790-806.