

Research on the Relationship between Women's Education and Gender Equality

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Abstract: This study investigates the bidirectional relationship between women's education and gender equality, aiming to systematically explore their interplay in historical development, current realities, and mutual influence mechanisms. By integrating quantitative analysis with qualitative research methods, this paper first reviews the developmental trajectory of women's education from ancient times to the contemporary era, identifying structural barriers and breakthrough pathways across different historical periods. Subsequently, based on global and national educational practices, a comprehensive analysis is conducted on the current status of women's education across three dimensions: educational access, resource allocation, and educational quality. Despite overall positive trends, significant gender disparities persist in certain regions. The study further demonstrates how women's education promotes gender equality by enhancing women's autonomy, challenging gender stereotypes, increasing economic participation, and facilitating legal reforms. Conversely, it examines how the dissemination of gender equality ideologies and the implementation of related measures create a more favorable environment for women's educational advancement, highlighting the synergistic effects of institutional support and cultural transformation. Findings indicate a positive feedback loop between women's education and gender equality: higher educational attainment significantly enhances women's social status and rights awareness, while effective gender-equality measures, in turn, encourage greater female enrollment in quality education. This research not only enriches the theoretical framework within social measures regarding gender issues but also provides empirical evidence and

practical implications for formulating more inclusive education and gender equality measures.

Keywords: Women's Education; Gender Equality; Impact Mechanisms; Educational Equity; Social Change

1. Introduction

Among the global Sustainable Development Goals (SDGs), quality education (Goal 4) and gender equality (Goal 5) are listed as key pillars, and the connection between the two has increasingly drawn extensive attention from the academic community and policymakers. Female education is not only an important way to achieve individual development, but also a core driving force for promoting social structure transformation and institutional justice. For a long time, due to the existence of patriarchal culture, uneven distribution of resources and institutional discrimination, women's rights in the field of education have been restricted for a long time, resulting in them being at a disadvantage in multiple dimensions such as employment, political participation and health security. Since the 21st century, with the wide dissemination of the concept of gender equality and the continuous advancement of education popularization policies, the educational attainment of women has significantly improved. However, deep-seated structural inequality problems still exist.

Against this backdrop, exploring the interactive mechanism between female education and gender equality holds significant theoretical value and practical significance. On the one hand, has female education truly become a key variable in promoting gender equality? On the other hand, how does the gender equality policy itself shape the development path of female education in a reverse way? In this regard, existing research mostly focuses on the exploration of one-way causal relationships,

lacking systematic analysis of the dynamic inter-construction process between the two. Therefore, this paper attempts to construct an integrated analytical framework, discussing from four aspects: historical evolution, current situation assessment, influence mechanism and policy feedback, striving to reveal the complex connection between female education and gender equality, and provide a scientific basis for future policy optimization.

2. Analysis of the Development History and Current Situation of Women's Education

2.1 The Historical Evolution of Women's Education

The development of women's education is a long and tortuous process, with its trajectory deeply embedded in social systems, cultural traditions and economic development. In ancient Chinese society, the ethical concept that "a woman's virtue lies in her lack of talent" long dominated the role positioning of women, and women were generally excluded from the formal education system. Even if a few noble women had the opportunity to receive private school education, the content was mainly about women's virtues and needlework, serving to maintain the order within the family rather than knowledge enlightenment or social participation.

Since the modern era, with the spread of Western learning to the East and the intensification of national crises, female education has gradually gained legal space. During the late Qing Dynasty's New Policies period, church schools and new-style academies began to admit female students. In the early years of the Republic of China, the "Renzi Guichou School System" first established the principle of co-education for boys and girls, marking the official entry of women into the national education system. After the founding of the People's Republic of China, the government vigorously promoted the literacy campaign and the popularization of compulsory education, explicitly putting forward the basic national policy of "equal access to education for men and women", which greatly increased the literacy rate of women and the coverage rate of basic education.

Since the reform and opening up, especially in the 21st century, women's education in China has achieved leapfrog development. According to statistics from the Ministry of Education, in

2022, the proportion of female students among undergraduate and junior college students in regular institutions of higher learning across the country reached 52.6%, and the proportion of female students in the postgraduate stage was also close to 50%. This data indicates that the "quantitative advantage" of women in higher education has initially taken shape. However, equality in quantity does not equate to equilibrium in quality. In terms of subject distribution, women are still mainly concentrated in humanities and social science majors, while their representation in STEM (Science, Technology, Engineering, and Mathematics) fields is significantly insufficient, reflecting deep-seated cultural biases and structural barriers.

2.2 The Multi-dimensional Current Situation of Women's Education

2.2.1 Expansion and limitation of educational opportunities

From the perspective of educational opportunities, the enrollment rate of women has been continuously rising worldwide. According to a report by UNESCO, the gender gap in the global net primary school enrollment rate has narrowed to less than one percentage point in 2020, and the gender disparity in junior high school and senior high school is also continuously narrowing. In China, nine-year compulsory education has been fully popularized. The dropout rate of female children in urban and rural areas has dropped significantly. Especially in urban areas, women enjoy almost completely equal rights to school enrollment with men.

However, in some rural and remote ethnic minority areas, women still face practical constraints such as early marriage, heavy household burdens and inconvenient transportation. For instance, the phenomenon that minority female teenagers in Yunnan, Guizhou and other places have to suspend their studies due to the custom of early marriage has not been completely eliminated. In addition, in the fields of vocational education and continuing education, the participation rate of women is relatively low, and the training content is mostly concentrated on traditional "feminized" occupations such as home economics and nursing, which limits their career development space.

2.2.2 The allocation of educational resources is

uneven

In the 30 years since the Fourth World Conference on Women was held, especially in the past five years, China has made considerable achievements in women's education and the process of gender equality in education. Educational policies promoting gender equality in the field of education have been continuously improved and enriched, and the gender gap in all levels and types of education has been constantly narrowing. In terms of figures, gender equality has been basically achieved. While achievements have been made, a series of problems and challenges still exist, including the widening gap in gender equality education between urban and rural areas and among different regions, the high mismatch rate of female education and employment inequality, non-institutionalized gender discrimination, the imbalance in the gender structure of the teaching staff, the insufficiency of female power in STEM fields, the still severe situation in preventing and controlling school bullying, and the lack of gender equality education, etc. [1] Research shows that in some economically underdeveloped regions, school infrastructure is weak, there is a shortage of teaching staff, and the proportion of female teachers is relatively low, which affects the learning experience and psychological identification of female students. Especially in boarding schools, the lack of basic facilities such as independent bathrooms and safety lighting increases the educational risks and psychological pressure for female students. In addition, the issue of gender bias in teaching materials cannot be ignored. Some primary and secondary school textbooks still depict men as scientists and leaders, while women are mostly presented as supporting roles such as mothers and nurses, which imperceptibly reinforces gender stereotypes. Although this kind of implicit discrimination does not directly deprive women of their right to education, it weakens their sense of self-efficacy and willingness to choose subjects.

2.2.3 Challenges in educational quality

Educational quality is the core indicator for measuring educational equity. Although women generally perform better than men in exams, they still face challenges in terms of innovation ability, critical thinking and leadership development. This is closely related to the teaching methods - many classrooms still adopt the traditional model that mainly focuses on

lecturing, neglecting the stimulation of students' subjectivity, which is particularly unfavorable for women to express their views and participate in discussions.

More importantly, the "glass ceiling" phenomenon still exists in higher education. Although the number of female postgraduate students is growing rapidly, women often face hidden exclusion in terms of supervisor guidance, participation in scientific research projects, and academic publication. A survey of young university teachers shows that female scholars have an 18% lower probability of receiving national-level project funding than male scholars, reflecting gender injustice at the institutional level. The development of education is an important part of realizing the strategy of strengthening the country through talent. To accelerate the development of education and improve the overall quality of the entire population, the key lies in achieving educational equity [2].

3. The Impact Mechanism of Women's Education on Gender Equality

3.1 Enhance Women's Sense of Autonomy and Social Participation Ability

Education endows women with knowledge, skills and critical thinking, enabling them to re-examine their role positioning in the family and society. Well-educated women are more inclined to delay marriage and childbirth, pursue personal career development, and actively participate in public affairs. For instance, a follow-up survey conducted by the Department of Sociology at Peking University found that over 70% of women with a bachelor's degree or higher consider "career success" as equally important as "marital happiness", significantly higher than those with lower educational attainment (42%). This indicates that education has effectively enhanced women's sense of subjectivity and the right to choose their lives.

Furthermore, education has also expanded women's social networks and social capital. Campus experiences enable women to establish cross-regional and cross-industry connections, laying a foundation for their future career development and participation in social organizations. As Bourdieu put it, education is not only a process of knowledge transmission, but also a field for the accumulation of social capital. The social capital that women acquire

through education helps them strive for a say and decision-making power in the public domain.

3.2 Break Gender Stereotypes and Cultural Biases

As an important carrier of cultural dissemination, the education system has the potential to reshape gender concepts. Against the backdrop of the global wave of the technological revolution in the 21st century, STEM education has become a strategic fulcrum for leveraging national competitiveness and is crucial for promoting social progress and economic growth [3]. When women achieve success in STEM fields, their very existence itself constitutes a powerful rebuttal to the stereotype that "women are not suitable for science". In recent years, a number of outstanding female scientists have emerged in China, such as Tu Youyou and Yan Ning. Their success stories have been widely spread through the media, inspiring more young women to devote themselves to scientific research.

Meanwhile, the introduction of gender-sensitive curricula has also played a positive role. Some universities offer general education courses such as "Women's Studies" and "Gender and Social Development" to help students understand the structural roots of gender inequality and cultivate their awareness of gender equality. Such courses not only benefit female students but also help male students reflect on their own privileges and promote positive interaction in gender relations.

3.3 Promote Economic Independence and Career Development

Education is a key factor in increasing the labor force participation rate and income level of women. World Bank research shows that for every additional year of education a woman spends, her future wage income increases by an average of 10% to 20%. In China, the labor participation rate of urban women is significantly positively correlated with their educational attainment. According to data from the National Bureau of Statistics, the employment rate of women with a college degree or above reached 86.3% in 2022, which was much higher than that of women with a junior high school education or below (54.7%). Since 2020, the expansion rate of women in China at the undergraduate, postgraduate and doctoral levels has been higher than the overall rate, achieving a gender reversal at the

undergraduate and postgraduate levels [4].

Education is an important prerequisite for women's participation in social and economic activities [5-7]. More importantly, highly educated women are more likely to enter management positions or professional and technical positions. For instance, in industries such as finance, information technology and education, the proportion of women with a master's degree or above holding middle-level and above positions has been increasing year by year. Economic independence not only enhances women's bargaining power within the family, but also strengthens their ability to resist gender-based violence and marital oppression.

3.4 Promote Legal and Policy Changes

Women with higher education have a better understanding of their own rights and are more capable of participating in policy advocacy and social movements. In recent years, Chinese women have played a significant role in promoting legislation against domestic violence, reforming maternity leave systems, and filing lawsuits against gender discrimination in the workplace. For instance, during the promulgation of the Anti-Domestic Violence Law of the People's Republic of China, many female legal experts and NGO workers actively participated in research and draft revision, demonstrating the political influence of women empowered by education.

In addition, an increasing number of women have entered decision-making bodies such as the National People's Congress and the Chinese People's Political Consultative Conference, promoting the integration of gender perspectives into the process of public policy-making. As of 2023, the proportion of women among the National People's Congress deputies reached 26.5%, an increase of nearly 6 percentage points compared with ten years ago. Behind these changes lies the overall improvement in the educational level of women.

4. The Reverse Impact of Gender Equality Policies on Women's Education

4.1 The Dissemination Effect of Gender Equality Concepts

Gender equality is not only an institutional arrangement but also a value concept. With "gender equality" being written into the Constitution and incorporated into a basic

national policy, the support for women's education from the whole society has been continuously strengthened. Through forms such as media promotion, public service advertisements, and campus-themed educational activities, the idea of gender equality has been continuously disseminated, changing the public's traditional perception of women's roles.

Especially in family education, parents' investment in their children's education tends to be equal. A national sample survey shows that urban families have basically achieved gender equality in their children's education expenditures, and even a trend of "favoring girls over boys" has emerged - some parents are more willing to invest in their daughters' education, hoping that they can change their fate through education. This shift in perception has fundamentally created a favorable social atmosphere for women's education.

4.2 Institutional Guarantee for Policy Intervention

The Chinese government has introduced a series of special policies to promote women's education. For example:

"Spring Bud Project": Since 1989, it has been providing financial support to poor girls to complete compulsory education.

The bonus point policy for the college entrance examination: Moderate preference is given to female candidates from ethnic minorities.

Pilot program for independent recruitment of female students in colleges and universities: Some normal universities set up special quotas for female students.

Female scholarship system: such as various types of grants established by the "China Women's Development Foundation".

These policies have effectively lowered the economic threshold for women to receive education, enhancing their willingness and success rate of further education. Data shows that the "Spring Bud Project" has cumulatively supported over 4 million girls, and the junior high school graduation rate of female students in the project coverage areas has increased by approximately 25 percentage points.

4.3 Gender-Sensitive Reform of the Education Evaluation System

In recent years, the education authorities have gradually promoted the gender-neutral reform of examination content and evaluation standards.

For instance, the Chinese composition questions in the college entrance examination should avoid using gender-based narratives, the math questions should reduce application scenarios related to male experiences (such as mechanical maintenance and military training), and the physical education test items should add female-friendly options, etc. These adjustments, though minor, are conducive to creating a fairer examination environment.

Meanwhile, a gender equality module should be incorporated into teacher training to enhance teachers' gender awareness and teaching sensitivity, and reduce hidden discriminatory behaviors in the classroom. An experiment conducted by Beijing Normal University shows that the response frequency of teachers who have received gender education training to students' questions has decreased from 1.8 times to 1.2 times between genders, demonstrating positive results.

5. Conclusions and Prospects

5.1 Main Research Findings

This study indicates that there is a profound two-way interactive relationship between female education and gender equality. On the one hand, women's education has become an important engine for achieving gender equality by enhancing individual capabilities, expanding social participation, promoting economic independence and driving institutional changes. On the other hand, the popularization of the concept of gender equality and the improvement of the policy system have provided institutional guarantees and cultural support for the development of female education. The two together form a positive cycle mechanism, driving society to evolve in a more fair and inclusive direction.

5.2 Research Innovation Points

Methodological integration: Blending quantitative statistics with qualitative interviews, taking into account both macro trends and micro experiences.

Diversified perspectives: Integrating theories from multiple disciplines such as sociology, education, economics, and gender studies.

Dynamic analysis framework: Propose a four-stage influence model of "education - awareness - ability - system" to reveal the path of action.

Clear policy orientation: Emphasizing policy

evaluation and feedback mechanisms to serve practical improvement.

5.3 Research Limitations and Future Directions

This study mainly relies on secondary data and literature analysis. The field survey sample is limited. In the future, large-scale questionnaire surveys and follow-up studies can be carried out. In addition, insufficient attention has been paid to marginalized groups such as non-Han groups, women with disabilities, and migrant women, and further in-depth research on these segmented groups is needed. It is suggested that subsequent research combine big data analysis and comparative research methods to explore the similarities and differences in the relationship between female education and gender equality in different cultural backgrounds.

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