

Developmental Barriers of Chinese Female Students in Undergraduate Education

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ABSTRACT

Developmental barriers that Chinese female students meet at the undergraduate stage are various, which has triggered wide discussion. The barriers occur at the starting point, the duration of higher education and after graduation. After reviewing existing literature, this paper reveals that the equality of education is not satisfactory. At first, traditional concepts and family background deprive females of the opportunities of obtaining higher education. A separation in majors that enforces the stereotypes of “male fields” and “female fields” also affects female students choosing majors. Even if females overcome the obstacles at the starting point, more are plaguing them in the education process, including the patriarchal culture in physical space, gender differences in campus culture, and unreasonable allocation of resources and curriculum. The influence extends to the after-graduation. Employment opportunities, career choices, promotion, and salary, are not so smooth as those of males.

Keywords: *Female students, Higher education, Developmental barriers, Undergraduate education.*

1. INTRODUCTION

Topics of gender equality in education area is always a widespread prevalence worldwide. Since the beginning of patriarchal societies, females have always had a low social status and have not received equal education chances as males.

As we enter the modern world, experts and society are calling for the fight for female’s rights, especially female’s right to education. In the past decades, female’s access and rights to education have improved significantly. However, today, females still encounter developmental difficulties caused by inequality in education, especially at the higher education level. Higher education is a significant way to improve female’s literacy and viability. Guaranteeing female’s access to higher education could help to promote social development and stabilize the social order. Therefore, promoting gender equity in higher education also helps to eliminate poverty and promote gender equality.

Since the 18th National Congress of the Communist Party of China, the “Thirteenth Five-Year Plan for the

Development of Education in the Country” formulated by the state clearly stated that it is necessary to protect further the equal rights of females and children to education. Under the complete protection of these laws and regulations, the education status of females has been continuously improved, and females from ethnic minorities and girls in remote and impoverished areas have more equitable access to educational resources [1]. Ma and Yang believe that education promotes gender equality and embodies social progress [2]. A female’s higher education level is an essential criterion for measuring a female’s social status in modern society. Females receiving higher education have higher quality among the female group, which is a concentrated expression of the image of the female in the new era. They receive higher education, improve their quality, form an independent ideology, and promote their full potential and personality. Therefore, in higher education in China, the development of females’ higher education is constantly being promoted.

But for Chinese female students, the journey of undergraduate education is full of developmental barriers. Significant differences are shown in school enrolment

opportunities of undergraduate education for males and females [3].

Previous studies have been done about Chinese female students' developmental barriers in undergraduate education. From the social norm perspective, Chen and Zhao's research regards traditional gender stereotypes, women's gender consciousness and modern male-centered higher education as the main barriers for female students in undergraduate education [3].

The discussion of Shuang assumes that the unequal gender power in higher education can be explained by campus sexual harassment and campus gender culture [4]. Du listed several factors of females' developmental problems in higher education, which has argued that traditional society consensus always put females in a lower status than males due to the idea that females are helpers at home [5].

In the perspective of disproportional allocation of resources, Jiang found in Professor Ma's research project "A Survey on the Problems and Causes of Women's Education in Urban and Rural China" that the gap between urban and rural areas also affects female's higher education. Compared with rural areas, urban women can get more opportunities to receive higher education due to economic conditions, family environment, and traditional biases against females. [6].

The view of Liu and Li believes there are obvious obstacles to female students from the opportunities of higher education, the isolation between subjects and majors of higher education, the allocation of teaching resources in colleges and universities, teaching materials and teaching contents, the organization and activities of students, campus culture and employment of college graduates [7].

Also, in the perspective of social-economic status, according to a survey conducted by Beijing University in 2004, the work completion rate of boys is 9.6 percentage points higher than that of girls; the proportion of male students entering state-owned enterprises is higher than that of female students by 4.7 percentage points [8]. Guo from Peking University used family economic and cultural capital theories to prove that these two factors significantly impact access to educational opportunities [9].

Simultaneously, Pan proved that many female workers would drop out of school after junior high school for work to support the tuition fees of their younger, older brothers or their families [10]. Zhang concluded that parents' education level is directly proportional to children's education level, which showed another aspect of females in higher education [11]. In addition, according to statistics analyzed by Shi, a better socioeconomic background has a stronger influence on females than males [12]. This becomes the third powerful

factor of females' developmental problems in higher education.

Most existing studies in China mainly analyze gender inequality in higher education from educational equity theory or social gender perspective. However, there is little systematic arrangement combining the two perspectives. Therefore, this paper aims to systematically organize all of the different views about the development barriers of Chinese female students in undergraduate education, based on the time sequence of starting point, process and result.

2. BARRIERS IN EDUCATION STARTING POINT

2.1. Traditional Factors

Experts highly focus on the embodied state. A conventional idea inherited by families from ancient years influences female students' possibilities to get into universities or colleges. Du has indicated that traditional society consensus always puts females in a lower status than males because females are helpers at home [5]. The patriarchal society in ancient times was so strong that many people still maintain this kind of idea nowadays. Females are usually limited at home to raise kids and do housework. They are confined to the home and disconnected from society and others. Feminists strongly believe that male dominance is still powerful and deeply embedded in Chinese culture, which is invisible in social development. Females are more likely to fail to get into higher education without support from family.

In addition, a study shows "The traditional concepts of "male superiority over female" continue to weaken the female's sense of self-worth is generally lower, they tend to underestimate their abilities and aspirations and lose self-confidence [13]." Nowadays, many firms only employ males, keeping females outside career life. More and more female freshmen begin to believe that "it is better to marry well than work well". They lose the desire to get higher education because of the cruel society reality.

2.2. Family factors

The institutionalized state is influential as well. The institutionalized state is usually presented in the form of diplomas and certificates. Zhang takes CGSS2008, which is called Chinese General Social Survey 2008, in detail, as samples and concluded that parents' education level is directly proportional to the education level of children [11]. That means the lower parents' education level, the lower the education background the children are likely to have. This situation is influential in many places, especially in rural and small cities, which develop slowly. Higher education background allows parents to progress faster both in opinion and assets. They see female

education more clearly and believe that females should get equality in higher education. Zhang praised the enrollment expansion in higher education which benefited more females since 1999 [11]. Higher education's enrollment expansion is a policy carried out in 1999 that aims to increase higher education possibilities. This policy increased 230,000 places at the start of 1999, and then, the government suddenly decided to increase enrollment to 337,000. There are already 1.53 million new students after the policy [14].

According to statistics analyzed by Shi, a better socioeconomic background has a more substantial influence on females than males [12]. Females have the attempts of higher expectations of themselves if they have support from parents. Recently studies state that a higher family socioeconomic background enables females to reach better academic achievement and this females population tends to be admitted into better universities.

In addition, Tan indicates that regional economic development also affects females' access to higher education. Families in rural areas with high economic burdens are less likely to have females in higher education [15]. By contrast, with the development of cities, economic differences between cities and countryside are widened apparently. Females in families of cities are more competitive than those of rural areas in terms of access to higher education.

It is worth mentioning that the authority decided to close primary schools in villages and consolidate several school's students and teachers together. To some extent, these actions prevent students from getting formal education due to long-distance and higher transportation costs. The inequality in elementary school leads to inequality in higher education.

2.3. Higher education major problems

Scholars have argued that "gender segregation" and "gender streaming" at the tertiary level are very evident [7]. This phenomenon is mainly found in professions such as nursing and teaching, where the occupational prestige associated with female caregiving roles is not very high. Professions with high occupational prestige such as computing and engineering are often seen as "male domains". It can be seen obviously that majors choosing is related to a traditional social idea like the public always believe only female teachers could give kids kind care. Females' power and distinctive abilities have not been promoted efficiently through networks and authorities in this contemporary era. This factor results in females' disadvantages at the start of higher education and even leads to developmental problems.

Overall, the suppression of traditional attitudes, parents' educational background, the amount of investment in education, and the urban-rural divide all

influence females' access to higher education. The Chinese government has invested more in education in less developed areas and rural areas to promote equality in educational resources. However, deep-rooted traditional attitudes influence parents' attitudes toward their daughters' higher education and females' perceptions of higher education. Many examples show that even when parents do not oppose their daughters' pursuit of higher education, the daughters themselves set limits on themselves. Therefore, it is believed that changing perceptions is more important than anything else.

3. BARRIERS DURING THE EDUCATION PROCESS

Even some Chinese female students have conquered those developmental barriers at the starting point, several new barriers in the education process still bother them.

3.1. Gender discourse of campus public space and culture

University campus public space is an objective entity form containing physical space and cultural ideologies containing various norms and values. In other words, campus culture and campus physical environment both have an impact on students.

3.1.1. Patriarchal thought in physical space

Campus natural environment and architectural design of public space are called campus physical environment, which is regarded as the university's spirit and has a subtle effect on students. Gendered space image and space design represent the traditional gender image, strengthen the gender power, and construct the campus gender culture that is unfriendly to female students.

As for physical space, one of the facts is that most campus architecture and space designers are male; their gender identity and position make them take the needs and interests of males as the first consideration, and lack of thinking about females' s demands [4]. Dormitories are spatial distribution based on physiological gender but often lack gender sensitivity in practice. In order to ensure the safety of female students, Chinese universities have formulated corresponding management systems for female dormitories. Some schools strictly stipulate the time for girls to enter and leave the dormitory and has special supervision, but boy's dormitory, even if there is time limitation, often, in fact, can also 24 hours of random access. Schools protect girls as the weak from subjective consciousness, but to some extent, it causes shackles and restrictions on girls' learning and life [7].

3.1.2. Gender differences in campus culture

Research has made statistics on the decoration of celebrities' famous sayings on the campus of a normal university in China. Twenty-two articles are included, except 12 of which are from ancient classics; the rest are male celebrities. Furthermore, the statues and portraits of scientists hanging in some science and engineering colleges are almost male except Mrs. Curie [16]. It is difficult for female students to find an example to motivate themselves from historical culture or subject knowledge. Even if famous Chinese female scholars such as Lin Huiyin, Wu Mingzhu and Tu Youyou also are covered up by the campus environment. Contrary to male students, female students are more likely to find evidence to deny their ability in the environment than motivation.

Traditional gender norms and role stereotypes widely exist in campus media culture, too [7]. China's software Alipay launched its social 'campus diary' function in 2016. Only female college students can publish the dynamic, and other users can appreciate it. If the user is not a female college student, the sesame credit score should reach 750 to comment. After the launch of this function, the dynamic display shows the phenomenon of using sex hint photos as a gimmick to obtain more praise. After two days of operation, Alipay closed this function in fierce public opinion. This affair proves that gender relations in cyberspace are an extension of gender power in the real world, and for female college students in China, they are by no means a beneficial party.

3.2. Gender differences in teaching

3.2.1. Unequal distribution of resources

Investment in educational funds is the primary manifestation of educational resources allocation. According to the relevant statistics of the Department of Science and Technology and the Department of Social Affairs of the Ministry of Education of China, in 2001, the highest amount of science and technology funding for natural science dominated by male students was CNY 6.94 billion, while that for humanities and social science dominated by female students was only CNY 60 million [7]. Gender differences exist not only in the allocation of scientific research funds but also in teaching resources. Tutors are more inclined to let male students head the research group, females as team members.

Because of such division of roles in scientific research activities, males are also in the front and back of females when signing scientific research achievements. However, when participating in the personal assessment, only the first three authors will be included, and the contribution of the female students behind is virtually erased. Although girls and boys have entered universities, there are still significant gender differences and hierarchical systems in the division of gender roles, the

use and mastery of resources, and decision-making in teaching practice.

3.2.2. Male-centered curriculum and teaching materials

Teaching materials and teaching activities are the main contents of school educational activities. Male and female students complete their studies through teaching activities, continue to form their world outlook and grow in socialization. In the teaching activities of colleges and universities, gender differences are also unconsciously copied and inherited [7].

From the gender perspective, it is found that no matter the research methods and interpretation methods of physics, or the gender attributes of physicists, in the gender norms of binary opposition, abstract, objective and rational physics are naturally stipulated as male-specific undertakings [17]. The syllabus and textbooks of physics subject show that physics is a kind of male science inform and show the masculine characteristics in content. This masculine physics is passed to students through the syllabus and textbooks, resulting in difficulties for females to learn physics and the absence of women in physics, making it difficult for females to become part of the physics culture [18].

4. BARRIERS AFTER GRADUATION

Educational equity is not only reflected in educational opportunities and the education process but also reflected in post-graduation. The fairness of educational achievement refers to the fair return after receiving the same education, mainly manifested in employment and personal development. Gender differences in employment mean work or job search process, roughly the same as in the related conditions, even under the conditions of females better than males, for various reasons, access to benefits and opportunities for advancement jobs or positions biased in favor of male phenomenon. It is manifested in the female employment discrimination before employment, the gender occupational segregation formed during employment, and the promotion opportunities and salary treatment of males in the same kind of work are better than females. [19].

4.1. Employment barriers

In recent years, China's higher education has developed rapidly, and the proportion of female college students has increased year by year. However, while males and females are becoming more and more equal in education, we should also be soberly aware that due to many factors, female's disadvantages in employment are becoming more and more apparent. In 2010, the "Investigation Report on Employment and Entrepreneurship of Female College Students" issued by

the Female's Development Department of the All-China Female's Federation pointed out that 56.7% of the interviewed female college students felt "fewer opportunities for female" during the job-hunting process; 91.9% of the interviewed female college students felt the employer's gender bias [20].

4.1.1. Gender segregation causes uneven employment opportunities

The 2010 Survey "Report on Employment and Entrepreneurship of Female College Students" found that male college graduates can get an interview opportunity by sending out 2 to 3 resumes. The female university graduates need to send out an average of 8 to 10 copies of their resume to get an interview opportunity, issuing an average of 44 copies of your resume to get a protocol of intent. The "2016 China Labor Market Development Report" shows that only in the initial employment rate of college students, male college students are 10% higher than female college students in the past two years [21].

From this, we can see that the interview opportunities of male job seekers are significantly higher than that of female job seekers. The advantage of male job seekers in interview opportunities is also one of the reasons why their initial employment rate is higher than that of females. In terms of recruiting talents, companies are more willing to recruit male employees. However, some state agencies and government institutions have also marked those only males recruited in their enrollment brochures in recent years. This fact dramatically increases the difficulties for females in obtaining employment and violates the fairness of employment. Although China has been advocating equality between males and females in employment, the social isolation of gender and occupation has still become an obstacle in female employment.

4.1.2. Factors of occupational gender segregation

Post-employment of female college students, there is gender segregation, that is, the proportion of females in low-level jobs than males, while the proportion of males in management positions and specialized technical positions than females [22]. The proportion of female college students employed in state-owned enterprises is lower than that of male college students. More management, general staff, and clerical posts, and male college students have more professional and technical posts [23].

Compared with males, females may encounter more things that affect work efficiency or labor productivity in their lives. When hiring females, in addition to paying wage costs, employers also must bear "naturally attached costs" [24].

Female's unique physiological structure makes them worse than males in terms of physical strength and endurance. The phenomenon of occupational gender segregation in the occupational field makes the space for female employment very limited. At the same time, because companies consider those female college students seeking jobs will have certain family burdens in the future, such as marriage, childbirth, it will cause interruptions in work and transfer part of the cost to the unit. In order to maximize the benefits, many jobs will directly reject female job applicants. Such an advanced Motherhood Penalty makes it more difficult for female college students to find employment. Under this dual pressure of employment and gender discrimination, they have a certain negative psychology and self-denial attitude, which becomes an obstacle to employment.

4.2. Personal development barriers

In addition to employment barriers, female college students also have to face barriers to future personal development.

4.2.1. Salary difference

In terms of salary, the "2019 Chinese College Graduate Salary Report" shows that the initial salary of male graduates of the new year is 7,383 yuan, while the female salary is 6,387 yuan, a difference of about 1,000 yuan [25]. The professional differences between male and female college students will translate into differences in employment opportunities and income differences when they first enter the labor market [26].

From this, it is not difficult to see that the difference in salary between male and female college students has existed from the beginning. In the initial stage of employment and even in the job-hunting stage, the salary of female college students is significantly lower than that of male college students. This condition has a specific relationship with the occupation and work intensity chosen by male and female college students when they graduate. However, there is also the phenomenon of different pay for equal work. Female college students are more inclined to choose occupations with more flexible working hours and environments, such as secretarial and teachers. Compared with the computer, mechanical, and engineering jobs that most male college students are engaged in, the income level of such jobs that female college students are engaged in is often lower, and there is less room for promotion. Occupational differences make female college students' salaries lower than male college students in future development.

4.2.2. Career development differences

Compared with males, the proportion of females holding senior positions is deficient. Female CEOs of the Fortune Global 500 accounted for less than 5% [27], and

female partners in venture capital institutions accounted for only 6% [28]. Due to social stereotypes, companies will have certain deviations when making some promotion or salary increase decisions, which will cause females to have a certain pessimism about their career development prospects. Gender stereotypes in the professional field have made the public believe that females are more suitable for service positions and males are the leaders and managers in the workplace [26]. Studies have pointed out that female career success is negatively related to their popularity among the public. This unpopularity will negatively affect their career development and hinder their further development [29]. Female's pessimistic attitude towards career development will deepen society's stereotypes of females and strengthen group prejudice, thus forming a vicious circle.

Females undertake the free reproduction function. The absence of fathers and the lack of public support systems have exacerbated the conflict between the gendered division of labor and a modern corporate system where performance and interests are paramount. This situation makes companies reject female employees when recruiting for their interests and unwilling to assign important management positions to female employees. When a man becomes a father, society will think that men should shoulder the responsibility of supporting the family. Companies will feel that male employees have higher job stability and loyalty. There is no burden from the family, and they are more willing to give male promotion opportunities. At the same time, males enjoy more promotion opportunities brought by Paternity Reward.

5. CONCLUSION

The unequal and challenging situation that female students face during their whole education journey is no longer surprising. As for Chinese female students in undergraduate education, developmental barriers show up in various forms, which can be classified into three stages in chronological order.

At the starting point, conventional ideas, family factors and significant problems are the main reasons for the cause of developmental barriers of female students. The experience at the starting stage would change female students' attitudes, influencing their thoughts and actions of the four years. During the education process, patriarchal thought in physical space and gender differences in campus culture hinder the thought and practical life of female students. Unequal distribution of resources and male-centered curriculum and teaching materials also express gender differences in teaching, which directly influences students' academic lives. Moreover, female college students' obstacles after graduation are mainly manifested in the two aspects of employment and personal development. In the employment process, the occupational segregation

caused by gender segregation makes female college students have fewer employment opportunities, and there are specific difficulties in obtaining employment. In the career development of female college students, due to factors such as different physiological or social divisions of labor, promotion and salary increases are far less smooth than that of males. The developmental barriers of Chinese female undergraduate students prove that there is still a certain distance from the actual realization of gender equality in education. In order to eliminate unfair treatment and discrimination, much effort to eliminate those implicit disadvantages should also be made.

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