Why are Female Professors Willing to Have a Second Child in China? A Case Study of Chengdu

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Abstract
This study explores female professors’ willingness to have a second child in Chengdu. Based on a qualitative study, this article focuses on those who have had at least one child and examine their fertility intentions, childbirth behavior and influencing factors of second-child fertility according to their occupational characteristics and academic achievements. In-depth interviews with 24 female professors in Chengdu were conducted in 2018–2020. It finds that their reproductive choices are the cross-effect result of state policy, external support and personal condition. Their educational experience also plays an important role in deciding their choice of having two children. This research aims to shed light on Chinese women’s reproductive intention and fertility behavior and tries to offer policy suggestions under the two-child policy in China.

Keywords
Fertility behavior; influencing factors; female professor; Chengdu.

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1. Introduction

China’s fertility rate has continued to rise, the population has surged, and the country’s economic development has slowed. Against this background, the Chinese Communist Party (CCP) has carried out family planning programs aimed at controlling the rapid population growth since the 1970s. At the same time, the Party-state has vigorously promoted contraceptive and birth control strategies. The family planning policy did not encounter much resistance during the implementation process, because it was connected with many personal preferential policies and disciplinary measures (Cao, Yan and Li, 2003). While this policy was strictly implemented in most urban areas, it only served as a “one-and-a-half” (一孩半) policy in rural areas of some provinces, which means that if the couple’s first child is a girl, then they can have the other child with approval. The total fertility rate of the Chinese population has dropped from 5.8 in 1970 to 2.6 in 1981, and even dropped to 2.1 in the early 1990s (Zheng, 2019). The low fertility rate has reduced the maternal mortality rate, women have benefited from fewer pregnancies and births, received more social benefits, with an acceleration of movement towards gender equality, and low fertility has also increased women’s opportunities for well-paid jobs and career development (Zeng and Hesketh, 2016). However, the implementation of the family planning policy has brought about more problems, making the national demographic dividend gradually disappear. Chinese society has begun to experience social problems such as population aging, working-age population declining, gender imbalance (Yang and Pu, 2018), “missing girl” problems (Jiang, Li and Feldman, 2005), increased pressure on the national pension insurance fund (Zeng, Zhang and Liu, 2017), and spoiled single-child (Cheng, 2013).

The emergence of these problems called for the reform of China’s family planning policy. After 2010, the Party-state started to implement the “double two children alone” (双独二孩) policy, that is, when both spouses are the only child of their family, if they require reproduction, they can have a second child upon approval. Yet this policy has not played a very effective role in alleviating social problems caused by the family planning policy. The failure of policy adjustment to achieve the desired results showed that the factors affecting fertility intention are complex and diverse. Then in 2013, the “selective two-child” (单独二孩) policy was proposed and implemented, that is, couples can have a second child if one of them is an only child in their family. Given the subtle effect of this policy, in 2016, the
Chinese government officially launched a new family planning policy that allows a couple to have two children without additional conditions. The policy is also called as “universal two-child” policy, making the entire Chinese families step into the “post-one-child era”. Under this policy, women of childbearing age have more reproductive options than in the past or their mothers’ generation.

With the rapid improvement of the educational level of Chinese women, women with university degrees, particularly in urban area, have become the main female labor force in most big cities. In 2019, 67.3% of employed women in Beijing, 48.4% of employed women in Tianjin, and 55.6% of employed women in Shanghai held college or higher degrees, while the data in the west of China is not low as well, 19.9% of employed women in Sichuan, 15.4% of employed women in Guizhou and 15% of employed women in Yunnan held a college or higher degree (National Bureau of Statistics, 2020). The number of female teachers in Regular Institutions of Higher Education in Sichuan Province is also on the rise. In 2010, there were only 29,297 female teachers in Regular Institutions of Higher Education, 39,740 in 2015, and the figure increased to 42,924 in 2018 (Sichuan Provincial Bureau of Statistics, 2019). It is obvious that with the rapid development in women’s educational levels in China, the number of female teachers in Regular Institutions of Higher Education has also increased significantly, having a college degree is quite common in major Chinese cities. In this paper, female professors refer to those who work in Regular Institutions of Higher Education with doctoral degrees.

The number of female professors in Chinese universities is increasing year by year with the rapid development of the social economy and the improvement of educational level. Female professors not only play the role of teachers, but also act as the mother in the family. Particularly, under the “universal two-child” policy, what are the characteristics of female professors’ career development? How are their fertility intention and childbirth behavior? What are the factors that affect their reproductive choices? Through the method of qualitative in-depth interviews, this research conducted 24 interviews with female professors who play the dual role of teacher at school and mother at home with at least one child, exploring their fertility intentions, childbirth behavior, the influencing factors of second-child fertility and how their fertility decisions are connected to their occupational characteristics and academic achievements.
2. Fertility Intentions and Childbirth Behavior in China

In the recent two decades, the low fertility rate in many countries has attracted academic attention to the factors influencing people’s reproductive decision-making. Recent studies on influencing factors of fertility desire mainly focus on the meaning of fertility desire and the influencing factors of fertility desire of child-bearing age people. Particularly, the “three-dimension of fertility desire” studies birth behavior from the number of births, gender, and time, which launches a three-dimension of fertility desire, i.e. the desired fertility number, the desired childbearing time and the intended birth gender (Gu, 2011). There are huge differences between women’s fertility intentions and actual childbirth behavior. The transformation of fertility intention into childbirth behavior is also affected by many subjective and objective factors. According to a study, 40% of women’s fertility intention is higher than that of childbirth behavior, and 60% of women’s fertility intention is equal to that of childbirth behavior (Mao and Luo, 2013). A two-child ideal has become nearly universal among women in all parts of Europe (Sobotka and Beaujouan, 2014), this is also in line with the Chinese society’s desire for “both sons and daughters” (儿女双全) (Yang, Li and Shang, 2011). In urban areas of China, most couples do not have a special gender preference. They believe that boys and girls are equal and some families even prefer girls (Li, 2003). However, in Chinese rural areas, most people prefer to have boys (Liu and Gu, 1998). Except for unintended pregnancy, the motivation of many couples to have a second child is due to their belief that two children can rely on each other in the future, reduce the pressure of caring for the elderly at home and deepen the relationship between husband and wife (Chen and Gu, 2020).

Scholars have indicated that reproductive decision-making is a complex exercise subject to the influences of both macro-level and micro-level factors in Italy (Bernardi, 2003). China is no exception, childbirth in China is by no means a woman’s personal decision, but is closely affected by the state, the society and their families (Yang, 2020). Scholars have different opinions on the influencing factors of second-child fertility. Although some of them believe that the policy has an obvious effect on the “two-child bearing willingness” (Feng, 2018), other scholars believe that the effect of the two-child policy has declined after the first two years of implementation, indicating that the policy’s driving force for fertility is gradually declining, so the policy is not the dominant factor of the Chinese population’s
willingness to give birth (Xu, 2019). Nearly all scholars agree that economic factors are the key factors affecting people’s fertility intention and higher-income families are more likely to have a second child (Yang and Shi, 2020; Cao, 2017). This is also the case in other countries, during the economic recession, people’s willingness to have a second child was lower in Italy. In contrast, the proportion of intending to “stop at one” increased, with more mothers giving economic constraints rather than personal preferences as their main reason for intending not to have another child (Fiori, Graham and Rinesi, 2018).

In addition, grandparents’ support (Zhang and Hou, 2016), social childcare services, and spouses’ occupational flexibility (Begall and Mills, 2011) are all positively correlated with women’s intention to have two children. Yet there are controversies about how educational level of husband and wife and the relationship between husband and wife affect their willingness to have a second child. Some scholars believe that as the level of education increases, the gender preference for childbirth will become weaker (Song and Wen, 2014) and the willingness and proportion of having a second child will decrease (Shi and Yang, 2014). However, different views argue that women with a high level of education are more likely to favor sons over daughters (Chen, Gu and Cai, 2008) and have a second child (Zhang and Cui, 2020). Most scholars believe that the better the relationship between husband and wife, the higher the willingness to have a second child. Yet still others argue that people with medium-level relationship quality could have the highest childbearing rates, because those who are very happy with their partner relationship might be afraid that having another child may have negative consequences on their relationship (Rijken and Thomson, 2011). Social welfare, satisfaction with the number of current children, physical health, peer pressure, and the nature of hukou (Afridi, Li and Ren, 2015) are all important factors that cannot be ignored.

With the improvement of China’s education level, the number of women with higher education has been increasing year by year. Compared with other professions, the work of university teachers is characterized by flexibility and stability. The improvement of educational level and the ability to empower women to participate in market labor have made

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1 *Hukou* refers to the household registration system in China. Every citizen was legally bound to register his or her single permanent place of residence.
Chinese women more and more go out of the family and directly participate in social labor (Zhao, 2019). Highly-educated women tend to hold stable jobs in the public sector and be more confident than their less-educated counterparts. They also hold a more positive attitude towards new things and a stronger awareness of accepting new things (Li, Tan and Lu, 2016). Nevertheless, female professors still face the problem of gender division of labor. Many studies have shown that women spend less time on careers than men due to family and care responsibilities, it has often been shown that women do much more household labor than men. In other words, compared with men, female professors are stuck with the responsibility of domestic and caring issues (Press and Townsley, 1998; John, 1988; Rafnsdottir and Thamar, 2013; Jill, Dorothy and Ilana, 2001). Women with spouses and children are forced to work less or entirely forsake demanding professions like academia (Wolfinger, Mason and Goulden, 2008). In urban China, women are usually expected to take on most of the responsibility for childrearing and household chores while also having full-time jobs, leading to greater work-family conflict and lower fertility intention (Zhao and Zhang, 2019). Although fathers are spending more time with their children now, they continue to regard themselves as secondary caregivers to mothers (Harrington, Fraone, Lee and Levey, 2016), thus creating a gender traditional (mother-caretaker, father-breadwinner) co-parenting relationship (Patty, Volling and Gonzalez, 2018). Moreover, women with postgraduate degrees make reproductive choices that are directly or indirectly related to their academic achievements (Shen and Jiang, 2020). They are more concerned with career development. For instance, some female professors believe that having children before obtaining tenure is detrimental to their career prospects (Armenti, 2004). In most countries, women who are well-educated or who hold jobs that require lengthy training periods are less likely to leave paid work (Bernhardt, 1986; Desai and Waite, 1991; Ellingsæter and Rønsen, 1996; Klerman and Leibowitz, 1999; Wenk and Garrett, 1992). While others find that the presence of children has no significant effect on women’s research productivity (Cole and Zuckerman, 1987).

In summary, existing literature on factors affecting the fertility intention almost all regard women of childbearing age in China as the research objects, ignoring the individual occupational and regional differences of them. There are few studies specifically focused on female professors.
Second, the current literature rarely captures how occupational characteristics shape or reshape female professors’ childbirth behavior. Extant studies on fertility intentions and childbirth under the two-child policy, although important and typical, still do not fully explain the reasons why some professional women are willing to have a second child. Given these problems, this paper focuses on the informal conversations and observations on female professors’ reproductive behavior and the role they may play in reproductive choices. By fully combining with the professional characteristics of female professors, it explores and analyzes the influencing factors of female professors’ second childbearing willingness, uncovers how the fertility decisions of female university professors are connected to their occupational characteristics and academic achievements under the “universal two-child” policy in China.

3. Research Method and Data

Qualitative in-depth interviews were performed in this study to document the influencing factors of female university professors’ second childbirth. The fieldwork was conducted in Chengdu, Sichuan Province from 2018 to 2020. Women in Chengdu are chosen for three reasons. First, in 2017, the province had a population of 1.021 million births, with a birth rate of 11.15%, of which the proportion of second children increased from 24.5% in 2013 to 40.62% in 2017, the number is typical in China (Bendibao, 2008). Second, the population receiving undergraduate and postgraduate education of Sichuan is the largest in the western region, which is representative of the research (National Bureau of Statistics, 2020). Third, existing study on higher education women’s willingness to have a second child mainly focuses on Shanghai (Shen and Jiang, 2020), one of the most prosperous cities in China, which is not sufficient to explain the situation in the western region and is not widely representative. In contrast to this, Sichuan Province is located in western China and ranks first in the economy of this area. The socio-economic development of Chengdu can fully reflect the level of medium-sized, second-cities in China.

The authors interviewed 24 female professors in Chengdu with at least one child. Access to these female academics was facilitated by research assistants in Sichuan Universities, particularly for introducing eight key informants. The key informants introduced friends and colleagues who fit
the informant profile for interviews. All of the interviews were conducted face-to-face or online through WeChat, phone and other social software. They were all one-to-one, with each interview duration between two and three hours. Most of the interviews were conducted in Mandarin. Since the research assistants are from Sichuan, the Sichuan dialect was occasionally interspersed during the interview. A semi-structured interview outline guided the informants in discussing three topics: fertility intention under the universal two-child policy, family situation (such as family income, spouse situation, grandparents support, intra-family collaboration in daily childcare), work situation (stress level, time arrangement, etc.) and personal situation (i.e. existing job title, occupational goals, physical health). The open and unstructured format of the interviews allowed the respondents to go back to points that had already been touched upon, and to enrich with

Table 1. Basic Information of Interviewees.

| No. | Date     | Interviewees | Age | Title                  | Discipline |
|-----|----------|--------------|-----|------------------------|------------|
| 01  | 2018.01  | A1           | 32  | Assistant Professor    | Sports     |
| 02  | 2018.03  | A2           | 32  | Associate Professor    | Management |
| 03  | 2018.04  | A3           | 38  | Associate Professor    | Law        |
| 04  | 2018.08  | A4           | 33  | Assistant Professor    | Management |
| 05  | 2018.09  | A5           | 38  | Associate Professor    | History    |
| 06  | 2018.10  | A6           | 42  | Professor              | Literature |
| 07  | 2018.12  | A7           | 44  | Associate Professor    | Science    |
| 08  | 2019.02  | A8           | 31  | Assistant Professor    | Literature |
| 09  | 2019.03  | A9           | 34  | Associate Professor    | Education  |
| 10  | 2019.04  | A10          | 32  | Assistant Professor    | Management |
| 11  | 2019.06  | A11          | 37  | Associate Professor    | Economic   |
| 12  | 2019.08  | A12          | 42  | Associate Professor    | Law        |
| 13  | 2020.01  | A13          | 30  | Assistant Professor    | Management |
| 14  | 2020.03  | A14          | 37  | Associate Professor    | Law        |
| 15  | 2020.04  | A15          | 37  | Associate Professor    | Economic   |
| 16  | 2018.02  | A16          | 36  | Associate Professor    | Science    |
| 17  | 2018.05  | A17          | 33  | Assistant Professor    | Science    |
| 18  | 2018.07  | A18          | 35  | Assistant Professor    | Engineering|
| 19  | 2018.07  | A19          | 38  | Associate Professor    | Engineering|
| 20  | 2018.07  | A20          | 41  | Professor              | Law        |
| 21  | 2018.08  | A21          | 39  | Associate Professor    | Science    |
| 22  | 2019.03  | A22          | 34  | Assistant Professor    | Economic   |
| 23  | 2019.08  | A23          | 37  | Associate Professor    | Science    |
| 24  | 2020.04  | A24          | 31  | Assistant Professor    | Engineering|
further considerations what had been said. All of the interviews were tape-recorded and fully transcribed by the research assistants, first as separate documents, and then in relation to each other. The original analysis was conducted in Chinese, and then translated into English.

4. Findings

4.1. Having a stable source of income

Some of our interviewees mentioned that one of the primary reasons for having the second child was that they have a stable source of income. Household savings and disposable income have a greater impact on having one or two children. Only the middle class or higher family has the financial ability to raise children in a city where childrearing cost has become increasingly expensive. Educational level has a positive effect on wages, the higher the educational level and the longer the years of education, they get the higher the income level of people (Li, 2003). Almost all of the interviewees have their first baby after the age of 30. On the one hand, for

| Table 2. Factors Influencing Female University Professors’ Fertility Behavior. |
|---------------------------------|---------------------------------|
| Self-Narrated Influencing Factors | Deep Mechanism |
| Occupational Conditions | Having a stable source of income | Financial ability is the basis of fertility behavior under “universal two-child” policy |
| | Stable work, flexible time | Have more autonomy in balancing life and work, easy to take care of children |
| | Positive attitude towards children | Highly-educated women are calmer, more confident and better at time control |
| External Conditions | Fear of affecting the rate of publishing | The impact of reforming the “up or out” system |
| | Intergenerational support and support from husband | Sharing parenting and housework |
| | Fear of losing the only child | *Shidu (失独) is prevalent under the “one-child” policy |
| | Moderate price, suitable for Living | Cost-benefit theory |

*Shidu (失独) (losing the only child) is prevalent under the “one-child” policy.
women, education is always associated with delayed marriage; on the other hand, by the time they got their doctorates, most of them have been 29 years old or over. Women with late childbearing can accumulate more human capital in the critical period of their career development (Miller, 2011). Late childbearing also means that women have more “free time”, which helps them concentrate on their work, thus delaying age at first birth also means women can improve their income to a certain extent. As university professors, their salaries are stable and generous, which makes them at least the middle class in China. Besides, most of the females who have good educational attainment are more likely to choose to marry a man whose educational level and economic strength are equal to or superior to themselves (Yue, 2017). 95% of our respondents have their own houses and cars in Chengdu and their husbands’ financial ability is not low as well. Compared with less-educated women, they are more likely to be financially prepared when they have their first baby. Chen is a professor in Chengdu, she is the only child in her family while her husband is not. Their first son is eight years old and they are planning to have the second baby when we interviewed her. She said frankly that

My husband and I do not worry too much about money. I am a university teacher, so is he, and his current professional title is not low. Our income is very stable, and we don’t have a very extravagant requirement for life, so we have no obstacle to have a second child. Why we did not have a second child in the previous few years was because that I was in an administrative post before, so I needed to work in the office at a fixed time every day.

4.2. Stable work and flexible time

Women with a higher level of work control are more likely to intend to have a second child, while higher levels of job strain significantly lower fertility intentions (Begall and Mills, 2011). Generally speaking, female professors have a high level of control over their work compared to other jobs. On the one hand, it comes from the nature of university work, on the other hand, it is because many years of learning experience has trained their ability to master their personal work and lifetime. Universities in China belong to public institutions, which are characterized by stable
work with *bianzhi* (Brodsgaard, 2002). Working in public institutions means that it is easier to have job security. For example, Wang, pointed out that

> Working in the university makes me feel safe. I know that as long as I can achieve my research goals every year, I will not be fired. This is different from many other kinds of jobs. My friend works in a private company and because she was pregnant and gave birth to a child, she was fired by the company for various reasons. Such things would not happen in our university. Due to the nature of the university, it will never dismiss any employee for fertility reasons.

Being a university professor nowadays usually requires a doctorate’s degree, as Xia mentioned, “a doctor’s degree has become a stepping stone to a university teaching position.” For example, in a recruitment requirement of law school of a university, it is shown that candidates need to have a doctoral degree, be able to teach in foreign languages proficiently and carry out publications and international academic exchanges. The respondents’ efforts before 30 years old directed them to the work in university. During the interview, when the respondents were asked about the advantages of being a university professor, living in a learning environment, flexible working times, convenient coordination and a high degree of freedom are the keywords they mentioned most. For example, Cheng, who was teaching at the school of Economics, revealed that

> Except for the fixed time for class and meetings on campus, I can arrange most of my time freely. When my children were relatively young, to coordinate with her father and take care of my career, sometimes I would arrange work hours at night to do research and write papers at home. Although it cannot be said that my work directly led me to the idea of having a second child, the flexibility and stability of my work characteristics provided me with the basic conditions for reproduction.

Of course, not all of the interviewees believe that university teacher is a very satisfying career, especially in the context of the current university

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2Bianzhi means the establishment of posts in China, which indicates stable positions offered by the work unit.
system reform as many universities have implemented a competitive strategy represented by the “up or out (非升即走)” system for new teachers. In this system, only those who complete the assessment targets within a specified period can switch to the employment system. For teachers who cannot be promoted within the specified period, the contract will not be renewed, which indicates that the management mode of university teachers in China is gradually changing from the unit system to the appointment system. This has directly increased the pressure for new teachers. As Huang complained that, “when I entered the campus, I was very busy every day, thinking about completing scientific researches and publishing papers, how could I have the mind to have children”?

4.3. Positive attitude towards children

The findings show that higher educational levels lead to a higher level of eudaemonic well-being, hedonic well-being, positive affect, and reduced psychological distress for Australian women, highlighting a non-monetary benefit of education (Tran, Pham and Nguyen, 2021). This is also the case in China. From the narratives of the respondents, it shows that their doctoral experience has enabled them to develop the ability of critical thinking, independent judgment, clear organization and reasonable time arrangement. These abilities all affect their reproductive choices. Particularly, critical and independent thinking offer female professors comparatively the most suitable parenting/educational idea for their children, rather than following the social trend. Raising children is by no means an easy thing, especially for female professors as they have to balance working and kid-raising. Although the number of women receiving higher education is increasing, it still does not change the fact that female professors spending more time on domestic chores than their male counterparts. Hence, the ability to control time is particularly important for female professors, as professor, He said,

*When I was a child, my parents would urge me to study, so I lacked the concept of time management but only focus on study. Yet the experience of graduate study has trained my ability to control my personal life, and I know what to do at what time. I believe that the ability I developed in my doctoral education enables me to better control my personal life and work nowadays.*
Other interviewees also added that they became calmer, more rational, more talkative, more confident, more targeted because of the doctoral education. Professor He added that, “I am very calm about my children’s education. Although I am looking forward to their achievements in the future, I will not force my children to do things they don’t like, I will give them the right of personal choice. Children are an important part of my life, but I will not regard them as the only things in my life.” In addition, compared with women who are less-educated, female professors with higher educational level have different reasons for choosing to have a second child, and they are not easily affected by the people around them. In traditional Chinese thought, a boy is a must in the next generation so that the family can continue their line while girls are going to join other families when they grow up. Yet in nowadays China, most of our respondents said that they did not care about the gender of the child, but only hoped that the child would grow up healthily.

4.4. Fear of affecting the rate of publishing

It is controversial whether having a second child will affect the career development of female professors in universities. Some female professors believe that having children before obtaining tenure is detrimental in that delivering babies will affect their publication. A woman who leaves the academy for long periods to care for children may suffer from cumulative disadvantages across her career. For instance, Fan, a professor of law school, recounted the following story:

Our parents do not live with us, we live in different cities, so our children are taken care of by me, my husband and the nanny. When my son was young, he really depended upon me so much. I feel that after I give birth to a child, the time for my research has decreased greatly, and the number of publications has also reduced.

While other researchers hold opposite views that the presence of children has no significant effect on women’s research productivity. Some of our respondents said that they regarded the process of giving birth and raising children as a kind of relaxation for them, which helped them to balance their work and made their life better since raising a child was like a mediator in life which brought more happiness to the dull life. In fact, the
reasons for respondents to hold opposite views on having a second child lie in their disciplinary characteristics, their psychological factors and whether they can get enough external support. More specifically, this difference is due to the variation of research productivity between disciplines (natural sciences have higher publication rates) and ranks (assistant professors have more difficulties in publishing papers than associate professors and professors). Yet female professors who are positive and can get more sufficient assistance from their parents, husbands, or nannies are more willing to have a second child. On the contrary, those who are affected by negative moods and cannot get enough external support tend to not have a second child.

4.5. Family support

Child care is central to social reproduction in all societies. Arranging child care is never a simple decision as it is formed by the gender ideology, parenting practice, care structure and resources available in the society (Peng and Wong, 2016). With sustainable support from their parent, women are more likely to have a second child. Intergenerational support can not only reduce childcare costs and ensure that women are able to return to work in time, but also avoid the occurrence of “nanny abusing children”. Lack of parental support does inhibit people’s fertility intention. As most of the interviewees of this study are originally from Sichuan. After obtaining a PhD degree in other provinces or foreign countries, they came back to work in Chengdu. When they were asked why they chose to go back to their hometown, most of them said that it was because of the living environment and intergenerational support since most of the respondents either lived with their parents or very close by. For instance, Li, a female professor who was born in Chengdu, said

I grew up in Chengdu and went to study in other places when I was in university. After graduation, I finally decided to return to Chengdu. On the one hand, I am very familiar with the environment here and living in Chengdu is very comfortable for me; on the other hand, because my parents are in Sichuan, it is convenient to take care of them if I work here. After the birth of my first child, my mother came to Chengdu and moved into my flat to help me. To be honest, my mother helps me a lot because my
husband and I are both very busy at work, and my mother picks up the children and cooks for my baby. Without the support of my mother, I would definitely not think about having a second child.

Intergenerational support exists in family structures all over the world. For example, there is evidence that intergeneration transfers of both time and money are still prevalent in the United States, especially among low-income families. According to the U.S. Census, approximately 7.5 million (10%) children under age 18 lived with a grandparent in 2010 (Ho, 2015). Intergenerational support is especially obvious in the child-centered Chinese society too, most of our respondents were born in the “one-child” policy era. The limited number of children that the interviewees’ parents raised makes it possible for them to provide support for their only child. The more parental assistance she has, the greater the willingness of a woman to have a second child. For families without parents’ support, they have to seek help from childcare institutions. But it is obvious that childcare institutions fail to make them feel at ease as their parents do. For some working mother professors such as Xia, she and her husband gave up the idea of having a second child due to the lack of intergenerational support.

In addition to intergenerational support, husband support is also a key factor in the choice of bearing the second child. It has often been shown that women do much more household than men so that they have less time to devote to their careers when their domestic responsibilities include family and children. Female professors also spend more time on domestic chores than their male counterparts. Therefore, if the external support from husband is sufficient, women can spend less time in child-rearing and housework, then they are more likely to choose to have a second child, which is consistent with what our interviewees said. As Prof. Liu explained, “my husband is willing to share the housework with me, which is one of the reasons why I am willing to have two children.”

4.6. Fear of losing the only child

Most of the interviewees expressed that their fear of losing their only child was an important driving force for them to have a second child. Shidu (失独) will bring great mental and psychological damage to parents. The event of losing the only child makes parents’ self-attachment gradually alienated and confused, and finally fall into the role of anxiety (Xu, Zhang
and Shi, 2017). In face of major changes, they tend to be more vulnerable. For instance, Prof. Peng is a female professor of law, her daughter is in second grade. After watching a movie about Shidu, she and her husband decided to have a second child. The leading actor and actress were extremely pained after losing their only child, which touched them a lot and motivated them to have a second child.

I had the idea of having another baby with my husband before. But it was not firm enough because the cost of having a child was too high, either economic or time. What changed my mind was that I once read the news and watched a movie which was all about one family who lost their children who were approaching adulthood. At that time, the parents had lost the fertility so they could not have another one. My husband and I were deeply touched by this story and we were fear of experiencing things like that. That is why we decided to have one more child.

According to the China Aging Career Development Report 2013 released by China National Committee on Aging, there are more than one million families losing their only child in China, with an annual increase of 76,000 families. Shidu is a unique phenomenon in China, which is related to China’s one-child policy. Losing the only child is an extremely distressful life event for parents and the shidu parents were more vulnerable to develop post-traumatic stress disorder (PSTD) (Wang, Zhang, Wang, Jing, Zhou, Qi, Wang and Zhou, 2021). Besides, child is the center of the family in Chinese culture, shidu parents will experience significant challenges when they are getting old, including psychosocial problems, financial difficulties, and loss of care later in life. In the background of a universal two-child policy, the respondents’ fear of losing the only child and the desire to have the second child can be regarded as a family strategy to deal with daily risks and uncertainties.

4.7. Moderate price and suitable for living

As one of the most developed cities in Western China, Chengdu has a superior geographical environment. Compared with Beijing, Shanghai, Shenzhen and other mega cities, Chengdu’s overall consumption level is low and quite suitable for living. Studies have shown that if buying a house does not reduce the living standards of the couples and couples do
not have to bear excessive burdens, the willingness and number of childbirth will increase (Song, Liu and Gong, 2017). For every 1% increase in house prices, the willingness to give birth to the second child will be significantly reduced by 3.6%, and low-income families will be more affected by this. According to the respondents’ narratives, moderate housing prices and living costs in Chengdu give them the courage to make the decision to have a second child, so their reproductive choices are related to and enhanced by the living cost. For example, Ms. Wang pointed out that

*We used to live in a house with an area of 80 square meters. After we had a second child, we decided to change to a house with a slightly larger area so that we could have bigger space. I have to admit that Chengdu’s house price is moderate in big cities. Compared with our friends who are living in Beijing, Shanghai, Shenzhen and other places, our life pressure is relatively small, otherwise we can not afford to change houses and probably we will not have a second child.*

Parental expenditure on children is often presumed to be one of the main ways that parents invest in their children and also a main reason why children from wealthier households have more advantages. Parental spending can buy children experiences that build human and cultural capital. Investment in children’s education includes material investment and time investment. Studies have shown that as parental education improves, investment in children’s study and time interacting with children will increase (Qi, 2013). Women who have received higher education usually hope to train their children to receive the same or higher education as them. As a group with higher educational level, female professors are usually more willing to invest in their children’s education in order to cultivate their learning ability. The moderate price of education investment indirectly affects the decision of female professors to have two children. As Prof. Li said, “Living in Chengdu will not directly lead me to have the idea of having a second child. But compared with other cities, the price of learning and extracurricular tutoring in Chengdu’s education market is relatively moderate, which is within the range of our family’s affordability, so we dare to have a second child.” Li’s narratives also conform to the
cost-utility principle. When the utility exceeds the cost, the willingness to bear children will increase.

5. Discussion and Conclusion

This study explores how the fertility intention and childbirth behavior of female university professors are shaped by their occupational characteristics and academic achievements and the factors influencing their reproductive choices. This is one of the first studies focusing on how Chinese female professors make their choice of having a second child under the new family planning policy, i.e. the two-child policy, and their long-term educational experience. The finding shows that there is no absolute positive or negative correlation between education level and having two children, and a doctoral degree is not enough to explain some reproductive behavior. The decision of female professors to have a second child is affected by the living cost, family income level, support from parents and husbands, fear of losing their only child, and professional characteristics. With social development in China, women’s educational level tend to be higher and higher, and their autonomy of making choices is greater and greater. Yet their reproductive choices are not dependent upon the state power and family factors, but affected by these two aspects in various ways. It also finds that as a rational economic man, the process of choosing to have the second child for a female professor also confirms Lebenstein’s “cost-benefit theory” that when the opportunity cost of a woman of childbearing age after having a second child is greatly reduced, they are more likely to choose to have a second child.

Economic situation has a decisive effect on reproductive choice. The lack of intergenerational support can be made up of by the public childcare support system, and the pressure of scientific research publication and teaching tasks can be alleviated by campus policies. Hence, in order to encourage female professors to actively respond to the two-child policy and stimulate their fertility intention and behavior, the Party-state should vigorously develop a public childcare support system, rectify the extremely high housing price and alleviate child abuse problems. At the same time, universities should allow postponing academic tasks so as to reduce the burden of teaching and scientific research for female professors of the birthing year.
The key aim of implementing the “two-child” policy in China is to increase the fertility rate. Yet fertility intention is the premise of fertility behavior to a large extent. Based on the characteristics of different occupations, women often have inconsistent considerations when they make the choice of having a second child. As the representative of highly educated ones, the work of female professors in universities is flexible and stable. The study of this group of women has theoretical and practical significance to explain the fertility intention of high-educated women of childbearing age. The qualitative research sheds light on factors affecting Chinese women’s reproductive intention and behavior in different occupations.

However, more studies need to be done to investigate the complexity of female professors’ fertility willingness, especially under the newly implemented three-child policy, whether they are willing to have a third child or not and what factors contribute to their choosing the third child deserve academic attention. For instance, the relationship between occupational characteristics and reproductive choices still needs to be supported by statistical evidence. And since this study has selectively focused on women as its main informants, it is necessary to include a gender perspective on social influence by considering the role of partners in reproductive behavior.

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