

## Article

# Early Childhood Teachers' Fertility Willingness Under China's 'Third-Child' Policy

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**Abstract:** This study aimed to understand whether Chinese early childhood (EC) teachers are willing to give birth to children to embrace the new 'third-child' policy. Altogether, 1042 participants (44.7% teachers, 55.3% other parents) were sampled and surveyed online. The results indicated that: (1) the teachers demonstrated fertility willingness different from other parents, and a higher percentage of teachers believed that one child would suffice; (2) the teachers highly valued partner's support (family), employers' support (workplace), and societal support (society); (3) their fertility willingness was influenced by the public fertility system and service, economic status and health, family relationships, career development, and emotional needs; and (4) the modern parenting and fertility beliefs, spouses' support, and the struggle between job and parenting commitments significantly predicted the EC teachers' fertility willingness.

**Keywords:** fertility willingness; kindergarten teachers; the third-child policy



**Citation:** Wang, W.; Liang, L.; Luo, J.; Li, H.; Tang, J. Early Childhood Teachers' Fertility Willingness Under China's 'Third-Child' Policy. *Sustainability* **2022**, *14*, 10083. <https://doi.org/10.3390/su141610083>

Academic Editor: Pedro Guilherme Rocha dos Reis

Received: 2 July 2022

Accepted: 12 August 2022

Published: 15 August 2022

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## 1. Introduction

Fertility willingness, or fertility intention, refers to one's intentions and attitudes toward matters concerning childbearing. To a certain extent, it determines a country's fertility level and population landscape [1]. In China, the rapid aging population, low birth rate, and shrinking workforce have cast long-term shadows on the nation's social stability and sustainable development. To fundamentally tackle these issues and curb the undesirable repercussions, the Chinese central government has undertaken, among other countermeasures, a series of adjustments to its family-planning policy over the past decade. Most notably, the central government decided to implement the Universal Two-Child Policy (UTCP) in 2016 in replacement of the previous One-Child Policy (OCP) that had been dictating the country's population regulation, causing a sharp and continuous decline in the country's total fertility rate (TFR) since its enforcement in the late 1970s [2]. The UTCP allows Chinese couples to have two children. Although, to date, there has been no agreement reached regarding the short-term or long-term impact of the 'two-child' policy [3], in May 2021, one year after the country's seventh national population census, the central government took another 'great leap forward' to officially announce the Third-Child Policy (TCP)—an upgrade from its forerunner, which encourages Chinese parents to have three children. With this policy heralding the arrival of the 'third-child era', many questions have emerged and remained to be investigated by empirical research. For example, will Chinese parents welcome this new policy to give a second or third birth? Does the new policy equally affect parents of different social, economic, and professional backgrounds? What factors may affect parents' fertility decision-making? In particular, will early childhood educators embrace this new policy, given that they are likely to have more knowledge, skills, and affection in child-rearing and may have some advantages to access quality childcare services for their own children? This study set out to empirically explore

the fertility willingness of Chinese early childhood teachers under the newly implemented TCP to address these questions. The findings of this study will have significant policy and practical implications for reflecting the appropriateness of the national third-child policy and developing targeted parent-support measures to help parents overcome obstacles in making fertility decisions.

## 2. Literature Review

### 2.1. A Historical Overview of China's Family Planning Policy

The traditional feudal belief that a larger family size symbolizes good fortune and prosperity has dominated Chinese people's family life and their reproduction behavior for thousands of years. Against such deep-rooted cultural tradition, planned fertility and birth control were seen as foreign concepts to most Chinese people when brought to the People's Republic of China (PRC) after 1949—the year PRC was founded [4]. Since then, the Chinese government has launched a succession of campaigns and reforms to promote, shift, and sustain the family planning policy in response to various social, political, and economic crises concerning the fluctuating population growth [5].

In the early 1950s, the stabilized political environment, slowly increasing economic growth, and the improvement of the sanitation and healthcare standard led to a remarkable rise in the population. It prompted the Chinese government to introduce the concept of state-dictated birth control, which has since been adopted as the country's trademark approach to population planning [4,6]. However, given the absence of a concrete family planning policy, the expansion of the population gradually became uncontrollable. By early 1970s, the population crisis became more evident, forcing the central government to launch a series of campaigns aiming to decelerate the over-speeded population growth. In 1973, a national birth planning conference convened by the Leading Group for Family Planning proposed the slogan of '*wan* (late), *xi* (spaced), *shao* (few)', with *wan* indicating late marriage and childbearing, *xi* indicating a minimum of a three-year interval between the first and the second child, and *shao* indicating fertility limitation, i.e., a couple could have two children at most [7]. These principles were later endorsed by the One-Child Policy (OCP), instituted in 1979 and perused relentlessly in the following decades. Although the enforcement of OCP was characterized by its unprecedented width and depth compared to its predecessors [8], given the vastness of this country and the diverse regional social, economic, and cultural circumstances, policy variation was also considerable across different regions. For example, in the less-developed western provinces, the fertility level has traditionally been significantly higher than in the eastern provinces. The stringent enforcement of OCP is usually met with strong resistance from the rural families [9,10] or prompting them to develop various countermeasures such as evasion, collusion, cover-up, or confrontation [11]. In such cases, permission for a second child was granted.

After being in place for more than three decades, the OCP began to see some relaxation in 2002, when couples who were both only children were granted permission to give birth to a second child in some parts of China. In 2013, the government extended this policy to allow parents to apply for certification to have a second child if either of them was an only child. This 'Selective Two-Child Policy' (STCP) was designed to promote sustainable and balanced population development [12]. Before long, the STCP was replaced by its upgraded version, the Universal Two-Child Policy (UTCP), which came into effect in January 2016 while officially putting an end to the OCP. It signals the previous gradual transition from OCP to its substitution has completed, while indicating that China's fertility culture has changed from one of restriction to one of encouragement [13]. According to UTCP, all Chinese parents were encouraged to have two children regardless of their singleton status. However, some scholars have raised the concern that this policy adjustment may have come too late and may not give enough impetus to alter parents' fertility decisions [14], as a result, failing to meet its goal of reversing the falling fertility rate and establishing a more balanced demographic structure. The expected baby boom did not ensue, and births hit a record low in 2018 [15]. Zhang [9] argued that the era of policy-driven fertility

behavior has gone. The UTCP did not turn out to be a game-changer in shaping parents' childbearing practice in the intended direction. To tackle these challenges, shortly after the country's *Seventh National Population Census*, the central government officially announced the 'Third-Child Policy' (TCP) in 2021 to allow all couples to have three children. This policy represents another sharp turn in China's family-planning effort—a sudden transition from a two-child governmental goal to a three-child one. This new policy is designed as the national response to the low birth rate, aging population, shrinking working-age population, and the economic slowdown, among other social problems caused by the OCP [16]. To ensure the success of TCP, the government has devised a package of stimulus measures, for example, initiating the mother–infant health improvement scheme, developing and optimizing the infant-care system, elevating the quality of early childhood education, and ensuring women's rights in the workplace, etc. However, it is still very early to jump to any conclusions regarding TCP's short- and long-term effects. This study, perhaps, could provide some hints.

## 2.2. Fertility Willingness of Chinese Parents under Different Family Planning Policies

A large quantity of research has been conducted to examine Chinese parents' fertility willingness under the nation's shifting birth control policy. In the OCP era, Jiawei [17] adopted the cross-temporal meta-analysis to investigate the longitudinal changes in Chinese parents' fertility intention during the period 1980 to 2011. This study revealed a three-stage change in Chinese parents' ideal number of children (INC): it stood at a high level of 2.13 in the 1980s, then rapidly declined to 2.1 in the 1990s—below the replacement level—and it experienced a further fall and remained stable at a relatively low level (from 1.6 to 1.8) since 2000. In another longitudinal study, Luo and Mao [18] analyzed the fertility intention and behavior of Chinese women who were allowed to bear a second child as per the fertility policy in Jiangsu province from 2007 to 2010. It was found that women's fertility intention was either higher or equal to their fertility behavior, but not lower. Moreover, their fertility intentions mainly focused on one child or two children. This result corroborates Yu et al.'s [19] finding that, compared to parents in Japan and South Korea, a significantly higher proportion of Chinese parents preferred 0–2 children over three or more children. With the introduction of the Selective Two-Child Policy (STCP) in 2013, it was projected that 10 to 12 million extra birth would occur in the subsequent three to four years [20]. Using the *Chinese General Social Survey* (CGSS), Meng and Lyu's [21] investigation suggested that the implementation of STCP has improved residents' short-term two-child fertility intentions between 2013 and 2015, particularly in the younger group. However, between the age of 17 and 49 years—women's main childbearing age—the impact of STCP on two-child fertility intentions displayed a declining trend as women get older. This may have led to some scholars' concern that the main goal of STCP—curbing the declining fertility rate—may not play out quite as expected. In Zhejiang, one of the most affluent coastal provinces and the first to adopt birth control relaxation, the Health and Family Planning Commission calibrated the initially expected birth rate (80,000 extra birth per year) down to one-quarter of it after the STCP went effective [22].

Implementing the Universal Two-Child Policy (UTCP) in 2016 gave rise to a new wave of research on Chinese parents' fertility intentions. Drawing on in-depth interviews of a group of highly educated women and men, Zhou [23] found that having one child remains a near-universal norm even though the one-child limitation has been lifted. Work–motherhood incompatibility and financial affordability are the main hindrances to having a second child. Ji et al.'s [15] research revealed the different attitudes held by grandmothers and women of the young generation (post-1980s and post-1990s) regarding having a second child. While the grandmother generation showed enthusiasm about their children having a second baby, young women had doubts about having more children out of the concern of, among other factors, lower life quality and the distributed love for the additional child. The quantitative method has also been widely adopted to study parents' fertility willingness. Zhang and Zheng's [24] study found that in Lanzhou city—one of the cities in

Western China—although over half of the surveyed women of childbearing age expressed relatively strong fertility willingness, over 80% of them were satisfied with the one child they already had and were less likely to bear a second child. A similar low level of fertility willingness is also evident among parents in Hunan province, with only 32.4% of the urban working women with one child intending to have another child [25]. In a recent study, Zhang, et al. [26] found that in Xi'an, only 50% of the respondents' positive intentions of having a second child led to another birth within three years. This finding corroborates Zhu and Hong's [1] research that although 74.1% of the parents were willing to have two children, less than one-third reported having definite fertility intentions and plans. These findings all suggest that the UTCP, despite being a radical change in the country's fertility policy, may not meet its goal of significantly boosting China's fertility rate. In 2021, the government rolled out the Third-Child Policy (TCP) and other stimulus measures to encourage parents to have a third child. Zhang et al.'s [27] recent study revealed that only 12.2% of participating parents reported having a third-birth intention. However, to date, little do we know about the fertility willingness of Chinese parents under the TCP, in particular, parents of different professional backgrounds. To address this gap, this study attempts to examine the fertility willingness of early childhood (EC) teachers, whose professional practice inextricably links to the nation's fertility policy and its repercussions, yet still face overwhelming workload and below-average payment in the Chinese context [28]. They are the insider of early childhood education and understand its difficulties and expenditure; thus, they tend to make a well-informed decision. An investigation into Chinese teachers' fertility willingness will provide empirical evidence on whether the new policy will have the potential to achieve its target or not.

### *2.3. Factors Associated with Parents' Fertility Willingness*

Prior research has shown that a wide variety of internal and external factors ranging from individual, family, community, and wider social environment affect parents' fertility willingness and decision-making. First, apart from the parent's education and the income level that has been shown to exert a salient effect on their fertility intentions and behaviors [1,23,29–31], the beliefs they hold about fertility and parenthood is another key individual-level factor that has a notable influence on the formation of fertility willingness. For example, the notion that having a baby comes as a natural 'next step' of marriage has been largely taken for granted by Chinese parents. As Zhou's [23] study shows, having one child after marriage remains a strong family norm for most married couples. When questioned about rationality, one respondent answered, 'it is what everybody does'. This aligns with the widely-accepted view that getting married and giving birth to children constitute a normative stage of one's life [32]. The desire for a large family, and son preference, among other cultural factors, contributes to parents' willingness to childbearing [1,33]. Second, with women's increasing educational level and aspirations for pursuing success in their careers, having a baby may cause undesirable consequences to their job security or prospect; such work–family conflict could result in women's unfavorable views toward marriage and parenthood [34]. This is reflected in Schwank et al.'s [35] work that the female interviewees showed their hesitation or prolonged decision-making of having a second child, mainly out of the concern that it may limit their career opportunities such as the delay or cancellation of promotions.

In addition, since having and raising a child involves both parties of the couple and, in some cases, other members of the family—especially grandparents in China—prior research has shown that the sort and magnitude of the support women receive from their husband and parents or parents-in-law can make a difference to their fertility decisions [36,37]. For example, Zhou [23] found that women prefer to bear a child sooner than later after marriage so that the child's grandparents are still young enough to help out with the childrearing. Furthermore, in addition to family members' support, research shows that social structures such as gender equality policies, female-friendly working arrangements, childrearing subsidies, affordable childcare services, and other social welfare services are

all factors parents contemplate when considering fertility decisions. For instance, Chen et al.'s [38] research reveals a positive relationship between the number of kindergartens in the neighborhood and women's fertility willingness since such service can effectively relieve mothers' childrearing burden. Furthermore, since Chinese traditional filial piety belief emphasizes the importance of raising a child to ensure parents are taken care of physically and financially by their children in old age, the social provision of aged care may impact young parents' intention to have multiple children [15]. Specifically, in economically well-off urban areas, where the healthcare and the aged care system is better but raising a child entails substantial cost, parents may have lower intentions to have a second child. In sum, despite prior researchers' substantial efforts in examining the determinants of parents' fertility willingness in the general public, the associated factors and predictors of Chinese EC teachers' fertility willingness remain largely unexplored. Addressing this matter will fill the knowledge gap in the current literature and provide valuable insights for policymakers to develop more targeted policies that tackle the obstacles faced by EC teachers and, in turn, boost their fertility willingness.

Drawing on the above literature review, we proposed two primary research goals for this study, deriving from the research gaps illustrated above. The first goal was to examine whether or not Chinese kindergarten teachers' fertility willingness differs from individuals who work in other occupations. Secondly, this study aimed to explore what factors would be associated with and predict kindergarten teachers' fertility willingness. Accordingly, the following two research questions guided this study:

1. What is the fertility willingness of Chinese kindergarten teachers? Any difference between theirs and the parents of other professions?
2. What are the associated factors of Chinese kindergarten teachers' fertility willingness?

### 3. Materials and Methods

#### 3.1. Sample

This study adopted a convenient sampling technique. The researchers shared the link to the online survey to all potential participants in their close contacts and asked them to further distribute it. The subjects who volunteered ( $N = 1042$ ) to take part in the study were from 18 provinces, with 126 (12.1%) of them from the eastern region, 605 (58.1%) of them from the central region, and 311 (29.8%) of them from the western region. Among the three regions, the eastern region has the most advanced general socioeconomic environment, whereas the central and the western region demonstrate great within-region variations in that regard. As Table 1 shows, the total sample constituted 466 (44.7%) kindergarten teachers and 576 (55.3%) subjects from other occupations (i.e., professions that are irrelevant to early childhood education). The participants' age ranged from 20 years or below to 41 years or above, with female participants taking a much bigger share than male participants (75.05% female vs. 24.95% male, respectively). In addition, the cohort was divided into three groups based on their educational attainment, with 61 (5.9%) of them holding a high school degree or below, 869 (83.4%) of them holding a junior college or bachelor's degree—constituting the majority of the sample—and 112 (10.7%) of them holding a master's degree or above.

**Table 1.** Characteristics of participants.

Demographic Characteristics	N	%
Eastern region	126	12.1%
Central region	605	58.1%
Western region	311	29.8%
Occupation		
Kindergarten teachers	466	44.7%
Others	576	55.3%



**Table 1.** *Cont.*

Demographic Characteristics	N	%
Education background		
High school or below	61	5.9%
Junior college or bachelor's degree	869	83.4%
Master's degree or above	112	10.7%
Age		
20 years or below	126	12.1%
21–30 years	593	56.9%
31–40 years	223	21.4%
41 years or above	100	9.6%

### 3.2. Measure

The researcher-designed questionnaire was used to investigate the participants' fertility willingness. The questionnaire consisted of four sections. Section 1 aimed to collect demographic information from the participants, including age, gender, marriage status, education background, working experience, place of residence, family structure, etc. Section 2 aimed at eliciting information regarding the participants' current fertility status via such questions as the number of children, the gender of the children, and the physical condition of the children. The participants' fertility willingness, including the ideal number of children (INC) and whether or not to have more children in the future, was explored in Section 3. Lastly, 27 potential impact factors of participants' fertility willingness were presented in Section 4 by reviewing relevant literature on both the macro level (public service and fertility policy) and micro level (family relationship and economic situation, career development, and individual emotion) facilitating and/or constraining factors. Each survey item was scored on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). These factors included: the respondent's attitude toward fertility, the relationship between fertility plan and career development, the workload of childcare, the fertility cost, the respondent's physical condition, the availability of fertility insurance, the policy of maternity leave, the social security system, the current education system, the current medical system, etc.

### 3.3. Procedure

Prior to the data collection, a pilot study was conducted with 200 conveniently recruited participants to verify the reliability and validity of the questionnaire in October 2021. The excellent reliability was obtained using Cronbach's alpha (0.93). Meanwhile, the Kaiser–Meyer–Olkin (KMO) results (0.93) indicated excellent validity of the research instrument. Based on the respondents' feedback, three ambiguous survey items were removed to improve the comprehensibility of the questionnaire. The main survey was conducted between November and December 2021. All potential participants received an invitation and an explanation of the research project. Upon receiving their consent, the link to the questionnaires was sent out to them via Wenjuanxing.com (accessed on 20 December 2021), the largest and leading online survey platform in China. All participants were not exposed to any harm or unpleasant situation. They were all granted full freedom to choose to participate willingly in or withdraw from the study at any point without negative consequences. This is in line with the best practice suggested by Petousi and Sifaki [39].

### 3.4. Data Analysis

To address the research questions, we conducted a series of statistical analyses. For RQ1, descriptive analysis and crosstab analysis were conducted to identify the characteristics of fertility willingness of kindergarten teachers and those working in other occupations (Section 4.1). For RQ2, first, we conducted a descriptive analysis and a set of independent *t*-tests to examine and contrast the associated factors of the participants' fertility willingness

(Section 4.2). Second, an additional set of independent *t*-tests was conducted to explore the between-group differences among kindergarten teachers regarding the associated factor of their fertility willingness (Section 4.3). Third, we performed exploratory factor analysis (EFA) to explore the underlying structure of the associated factors of kindergarten teachers' fertility willingness (Section 4.4). Fourth, binary logistic regression analysis was performed to explore the influence of the potential predictors of the kindergarten teachers' fertility willingness (Section 4.5). IBM SPSS (version 24) statistical software package was used for all data analyses.

## 4. Results

### 4.1. Comparison of Fertility Willingness of Kindergarten Teachers and Other Participants

The majority of the respondents (64.3%) reported having no children currently, and only a minority of them (0.97%) have three or more children. Approximately one-third of the family's (30.6%) monthly income is below 5000 Chinese yuan (about 750 US dollars), and another one-third of the family's monthly income exceeds 10,000 Chinese yuan (about 1500 US dollars). Only 18.7% of the participants reported that both themselves and their partners are the single children of their respective families. In addition, more than 70% of the participants have a permanent job.

The crosstab analysis showed that 42.7% of the early childhood teachers and 49.7% of the other participants are willing to give birth to more than one child ( $\chi^2 = 17.92, p < 0.001$ ). Specifically, 41.2% of the teachers and 46.0% of the other participants intend to have two children. However, 42.1% of the teachers and 33.5% of the other participants believed that one child would suffice ( $\chi^2 = 13.00, p < 0.05$ ); there are only 1.5% of the teachers and 3.6% of the other participants who intended to have three or more children. In addition, 5.2% of the teachers and 16.8% of other participants have no plan for childbearing.

### 4.2. Factors Associated with Fertility Willingness of Kindergarten Teachers and Individuals Working in Other Occupations

Our analysis revealed that participants scored the lowest on the factor 'fertility is necessary for my family' ( $M_{\text{kindergarten teacher}} = 2.26, SD = 1.09; M_{\text{others}} = 2.59, SD = 1.18$ ) and 'children will help with parent's elderly care' ( $M_{\text{kindergarten teacher}} = 2.45, SD = 1.05; M_{\text{others}} = 2.62, SD = 1.14$ ). Such a result is somewhat counter-intuitive in the Chinese context as it indicates that Chinese parents do not hold having a child as an absolute necessity for the family, and the traditional belief that 'raising a child is insurance for old age' is no longer taken for granted among all parents. Moreover, the analysis indicates that for all participants, their health level ( $M_{\text{kindergarten teacher}} = 4.12, SD = 0.88; M_{\text{others}} = 4.05, SD = 0.89$ ), their spouse's health level ( $M_{\text{kindergarten teacher}} = 4.04, SD = 0.92; M_{\text{others}} = 3.97, SD = 0.96$ ), and the economic burden that comes with raising a child ( $M_{\text{kindergarten teacher}} = 4.02, SD = 0.96; M_{\text{others}} = 3.97, SD = 0.99$ ) ranked as the top three factors that affect their fertility willingness.

A series of independent sample *t*-tests were performed to explore the difference between teachers and the other participants in terms of the factors impacting on their fertility willingness (see Table 2). We found that the other participants scored significantly higher than the teachers on a number of factors, which included 'fertility is necessary for my life',  $t(1040) = 3.35, p < 0.001$ ; 'fertility is necessary for my family',  $t(1040) = 4.74, p < 0.001$ ; 'children will help with parent's elderly care',  $t(1040) = 2.48, p < 0.05$ ; 'fertility could facilitate family relationships',  $t(1040) = 4.79, p < 0.001$ ; and 'employment issue would impact the fertility intention',  $t(1040) = 2.29, p < 0.05$ . On the contrary, the teachers scored higher than the others on factors including 'support of employers would impact my fertility intention',  $t(1040) = -2.38, p < 0.05$ ; 'support of my husband would impact my fertility intention',  $t(1040) = -2.58, p < 0.05$ ; 'vacation policy for fertility would impact the fertility intention',  $t(1040) = -3.26, p < 0.01$ ; and 'childcare service would impact the fertility intention',  $t(1040) = -2.05, p < 0.05$ .

**Table 2.** Comparison of fertility willingness between kindergarten teachers and other occupations.

IF Code	Impact Factors	Kindergarten Teachers		Other Occupations		<i>t</i>	<i>p</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
IF1	I like children	3.81	0.94	3.75	1.05	−0.94	0.35
IF2	I think fertility is necessary for my life	3.28	1.20	3.56	1.29	3.53	0.00 ***
IF3	I think fertility is necessary for my family	2.26	1.09	2.59	1.18	4.74	0.00 ***
IF4	I think children will help with parent’s elderly care	2.45	1.05	2.62	1.14	2.48	0.01 *
IF5	I think fertility could facilitate family relationships	3.03	1.02	3.35	1.15	4.79	0.00 ***
IF6	I refuse to fertilize due to the excessive working pressure	3.53	1.05	3.51	1.15	−0.30	0.76
IF7	I think the support of employers would impact my fertility willingness	3.47	1.05	3.30	1.15	−2.38	0.02 *
IF8	I think fertility could affect women’s employment and career development	3.65	1.01	3.58	1.08	−1.09	0.28
IF9	I think the support of my husband would impact my fertility willingness	3.48	0.93	3.32	1.00	−2.58	0.01 *
IF10	I refuse to fertilize due to much time to take care of children	3.89	0.91	3.86	0.98	−0.57	0.57
IF11	I think the support of my parents would impact my fertility willingness	3.48	1.01	3.38	1.11	−1.58	0.12
IF12	I think the pricey housing would impact my fertility willingness	3.83	1.00	3.79	1.06	−0.66	0.51
IF13	I refuse to fertilize due to the economic burden	4.02	0.96	3.97	0.99	−0.74	0.46
IF14	I think the health level of my parents would impact my fertility willingness	3.79	0.99	3.79	1.05	−0.05	0.96
IF15	I think the health level of my husband would impact my fertility willingness	4.04	0.92	3.97	0.96	−1.22	0.22
IF16	I think my health level would impact my fertility willingness	4.12	0.88	4.05	0.89	−1.37	0.17
IF17	I think the fertility policy would impact the fertility willingness	3.37	1.05	3.32	1.12	−0.85	0.40
IF18	I think the medical insurance system would impact the fertility willingness	3.77	0.92	3.68	1.00	−1.59	0.11
IF19	I think the pension insurance system would impact the fertility willingness	3.64	0.96	3.63	1.01	−0.14	0.89
IF20	I think the fertility insurance system would impact the fertility willingness	3.68	0.95	3.57	1.01	−1.81	0.07
IF21	I think the medical service of fertility would impact the fertility willingness	3.75	0.94	3.63	1.00	−1.96	0.05
IF22	I think the vacation policy for fertility would impact the fertility willingness	3.83	0.96	3.63	1.03	−3.26	0.00 **
IF23	I think the childcare service would impact the fertility willingness	3.81	0.95	3.68	1.03	−2.05	0.04 *
IF24	I think the nursery service would impact the fertility willingness	3.71	0.99	3.66	1.04	−0.73	0.47
IF25	I think the kindergarten service would impact the fertility willingness	3.60	1.05	3.63	1.06	0.37	0.71
IF26	I think basic education would impact the fertility willingness	3.64	1.04	3.69	1.03	0.73	0.46
IF27	I think the employment issue would impact the fertility willingness	3.48	1.05	3.63	1.06	2.29	0.02 *

Note: IF = Impact factor. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .



#### 4.3. Between-Group Differences in Kindergarten Teachers' Fertility Willingness

To gain a deeper understanding of the associated factors of the kindergarten teachers' fertility willingness, we performed another set of independent *t*-tests (see Table 3 below) to explore the between-group differences among the teachers of different household registration statuses (place of registration of personal identity), marital status, and residence features (permanent address).

Overall, our analysis indicated that most factors did not exert a differentiated influence on the fertility willingness of kindergarten teachers of different household registration, marital status, and residence features. However, it is notable that our analysis showed that the respondents scored highly on factor 16 ('health level would impact my fertility intention') across all types of household registration ( $M_{rural} = 4.13$ ,  $SD = 0.83$ ;  $M_{urban} = 4.12$ ,  $SD = 0.94$ ), marital status ( $M_{single} = 4.15$ ,  $SD = 0.84$ ;  $M_{married} = 4.05$ ,  $SD = 1.00$ ), and residence features ( $M_{rural} = 4.05$ ,  $SD = 0.74$ ;  $M_{urban} = 4.14$ ,  $SD = 0.92$ ). In contrast, the respondents scored a relatively low level on factor 3 ('children will help with parent's elderly care') across different types of household registration ( $M_{rural} = 2.21$ ,  $SD = 1.08$ ;  $M_{urban} = 2.31$ ,  $SD = 1.11$ ), marital status ( $M_{single} = 2.16$ ,  $SD = 1.04$ ;  $M_{married} = 2.54$ ,  $SD = 1.18$ ), and residence features ( $M_{rural} = 2.25$ ,  $SD = 1.06$ ;  $M_{urban} = 2.26$ ,  $SD = 1.10$ ).

In addition, the analysis showed that the teachers with household registration in the urban area demonstrated a significantly higher score than their counterparts registered in the rural areas in the following factors: 'I like children',  $t(464) = 4.05$ ,  $p < 0.05$ ; 'fertility is necessary for my life',  $t(464) = 4.13$ ,  $p < 0.05$ ; and 'I refuse to fertilize due to much time to take care of children',  $t(464) = 7.87$ ,  $p < 0.01$ . Meanwhile, married teachers scored a significantly higher level than single teachers in the following impact factors: 'I like children',  $t(464) = 10.85$ ,  $p < 0.001$ ; 'fertility is necessary for my life',  $t(464) = 49.45$ ,  $p < 0.001$ ; 'fertility is necessary for my family',  $t(464) = 11.08$ ,  $p < 0.001$ ; 'I think the support of my parents would impact my fertility intention',  $t(464) = 6.55$ ,  $p < 0.05$ ; and, 'I think the medical insurance system would impact the fertility intention',  $t(464) = 3.94$ ,  $p < 0.05$ . Furthermore, the teachers who live in urban areas scored significantly higher than those who live in the rural area on the following factors: 'I like children',  $t(464) = 4.00$ ,  $p < 0.05$ ; 'children will help with parent's elderly care',  $t(464) = 4.62$ ,  $p < 0.05$ ; and 'I refuse to fertilize due to much time to take care of children',  $t(464) = 13.23$ ,  $p < 0.001$ .

#### 4.4. Exploratory Factor Analysis of the Associated Factors of Fertility Willingness

As shown in Table 4, the results of the principal component analysis using the sample of kindergarten teachers ( $n = 466$ ) revealed the underlying structure of the associated factors of the respondents' fertility willingness. First, the adaptability of the predicted data (KMO = 0.93, Bartlett spherical test  $\chi^2 = 9184.60$ ,  $p < 0.001$ ) indicated the data were suitable for exploratory factor analysis. Second, the Varimax method of principal component analysis yielded a five-factor model, which explained 28.5%, 16.8%, 8.7%, 8.4%, and 6.3% of the data variances, separately, with 68.7% of the total variation. The eigenvalues were 7.4, 4.4, 2.3, 2.2, and 1.6 for each subconstruct. Third, the factor loadings of the five constructs ranged from 0.47 to 0.86. Therefore, the influencing factors' five principal components were categorized: the public fertility system and service, economic status and health, family relationships, career development, and emotional needs.

**Table 3.** The differences in kindergarten teachers' fertility willingness.

IF Code	Household Registration	N	M	SD	t	p	Marital Status	N	M	SD	t	p	Residence	N	M	SD	t	p
IF1	Rural	244	3.73	0.94	4.05	0.05 *	Single	345	3.72	0.93	10.85	0.00 ***	Rural	93	3.63	0.91	4.00	0.05 *
	Urban	222	3.90	0.95				121	4.05	0.95				Urban	373	3.85		
IF2	Rural	244	3.18	1.18	4.13	0.04 *	Single	345	3.06	1.13	49.45	0.00 ***	Rural	93	3.25	1.16	0.10	0.75
	Urban	222	3.40	1.21				121	3.91	1.15				Urban	373	3.29		
IF3	Rural	244	2.21	1.08	0.92	0.34	Single	345	2.16	1.04	11.08	0.00 ***	Rural	93	2.25	1.06	0.01	0.94
	Urban	222	2.31	1.11				121	2.54	1.18				Urban	373	2.26		
IF4	Rural	244	2.43	1.07	0.07	0.80	Single	345	2.45	1.05	0.04	0.84	Rural	93	2.66	1.11	4.62	0.03 *
	Urban	222	2.46	1.04				121	2.43	1.06				Urban	373	2.39		
IF5	Rural	244	2.94	1.01	3.42	0.07	Single	345	2.91	0.96	18.62	0.00 ***	Rural	93	3.01	0.99	0.03	0.87
	Urban	222	3.12	1.02				121	3.36	1.10				Urban	373	3.03		
IF6	Rural	244	3.59	1.03	1.59	0.21	Single	345	3.61	1.00	8.66	0.00 **	Rural	93	3.62	0.95	0.97	0.32
	Urban	222	3.46	1.06				121	3.29	1.14				Urban	373	3.50		
IF7	Rural	244	3.49	1.00	0.23	0.63	Single	345	3.49	0.99	0.71	0.40	Rural	93	3.43	0.89	0.13	0.71
	Urban	222	3.44	1.09				121	3.40	1.19				Urban	373	3.47		
IF8	Rural	244	3.68	0.97	0.66	0.42	Single	345	3.68	0.99	1.18	0.28	Rural	93	3.60	0.89	0.24	0.63
	Urban	222	3.61	1.06				121	3.56	1.08				Urban	373	3.66		
IF9	Rural	244	3.47	0.91	0.03	0.86	Single	345	3.50	0.87	0.45	0.51	Rural	93	3.47	0.90	0.00	0.95
	Urban	222	3.49	0.96				121	3.43	1.10				Urban	373	3.48		
IF10	Rural	244	3.78	0.90	7.87	0.01 **	Single	345	3.86	0.88	1.85	0.17	Rural	93	3.59	0.84	13.23	0.00 ***
	Urban	222	4.02	0.91				121	3.99	0.98				Urban	373	3.97		
IF11	Rural	244	3.49	0.97	0.02	0.88	Single	345	3.41	0.96	6.55	0.01 *	Rural	93	3.44	0.84	0.22	0.64
	Urban	222	3.48	1.06				121	3.69	1.11				Urban	373	3.50		
IF12	Rural	244	3.84	0.95	0.07	0.79	Single	345	3.85	0.94	0.25	0.62	Rural	93	3.78	0.78	0.27	0.61
	Urban	222	3.82	1.05				121	3.79	1.15				Urban	373	3.84		
IF13	Rural	244	4.05	0.90	0.43	0.51	Single	345	4.06	0.89	2.07	0.15	Rural	93	3.99	0.77	0.10	0.75
	Urban	222	3.99	1.02				121	3.91	1.15				Urban	373	4.02		
IF14	Rural	244	3.75	0.96	1.00	0.32	Single	345	3.79	0.93	0.02	0.88	Rural	93	3.66	0.80	2.12	0.15
	Urban	222	3.84	1.02				121	3.80	1.16				Urban	373	3.82		

Table 3. Cont.

IF Code	Household Registration	N	M	SD	t	p	Marital Status	N	M	SD	t	p	Residence	N	M	SD	t	p
IF15	Rural	244	4.05	.85	0.13	0.72	Single	345	4.06	0.86	0.42	0.52	Rural	93	3.95	0.76	1.17	0.28
	Urban	222	4.02	0.99			Married	121	3.99	1.08			Urban	373	4.06	0.96		
IF16	Rural	244	4.13	.83	0.00	0.95	Single	345	4.15	0.84	1.18	0.28	Rural	93	4.05	0.74	0.74	0.39
	Urban	222	4.12	0.94			Married	121	4.05	1.00			Urban	373	4.14	0.92		
IF17	Rural	244	3.46	1.01	3.42	0.07	Single	345	3.39	1.01	0.27	0.60	Rural	93	3.42	0.89	0.22	0.64
	Urban	222	3.28	1.09			Married	121	3.33	1.15			Urban	373	3.36	1.09		
IF18	Rural	244	3.76	0.90	0.09	0.76	Single	345	3.72	0.90	3.94	0.05 *	Rural	93	3.68	0.82	1.29	0.26
	Urban	222	3.79	0.94			Married	121	3.92	0.97			Urban	373	3.80	0.94		
IF19	Rural	244	3.61	0.95	0.34	0.56	Single	345	3.60	0.94	1.51	0.22	Rural	93	3.52	0.87	1.79	0.18
	Urban	222	3.66	0.97			Married	121	3.73	1.01			Urban	373	3.66	0.98		
IF20	Rural	244	3.68	0.92	0.01	0.92	Single	345	3.66	0.93	0.55	0.46	Rural	93	3.62	0.86	0.41	0.52
	Urban	222	3.68	0.98			Married	121	3.74	1.01			Urban	373	3.69	0.97		
IF21	Rural	244	3.72	0.92	0.44	0.51	Single	345	3.72	0.93	1.11	0.29	Rural	93	3.72	0.84	0.11	0.74
	Urban	222	3.78	0.96			Married	121	3.83	0.98			Urban	373	3.76	0.97		
IF22	Rural	244	3.81	0.95	0.16	0.69	Single	345	3.83	0.93	0.06	0.81	Rural	93	3.78	0.92	0.23	0.63
	Urban	222	3.85	0.99			Married	121	3.81	1.07			Urban	373	3.84	0.98		
IF23	Rural	244	3.76	0.92	1.48	0.22	Single	345	3.78	0.93	1.28	0.26	Rural	93	3.76	0.83	0.27	0.60
	Urban	222	3.86	0.97			Married	121	3.89	0.99			Urban	373	3.82	0.97		
IF24	Rural	244	3.68	0.98	0.35	0.56	Single	345	3.68	0.97	1.05	0.31	Rural	93	3.66	0.85	0.30	0.59
	Urban	222	3.73	1.00			Married	121	3.79	1.05			Urban	373	3.72	1.02		
IF25	Rural	244	3.57	1.02	0.58	0.45	Single	345	3.58	1.03	0.70	0.40	Rural	93	3.54	0.93	0.42	0.52
	Urban	222	3.64	1.07			Married	121	3.67	1.08			Urban	373	3.62	1.08		
IF26	Rural	244	3.57	1.03	2.60	0.11	Single	345	3.61	1.03	1.05	0.31	Rural	93	3.55	0.93	0.97	0.32
	Urban	222	3.73	1.05			Married	121	3.73	1.08			Urban	373	3.67	1.07		
IF27	Rural	244	3.44	1.01	0.83	0.36	Single	345	3.43	1.02	2.55	0.11	Rural	93	3.46	0.94	0.04	0.85
	Urban	222	3.53	1.09			Married	121	3.61	1.13			Urban	373	3.49	1.08		

Note: IF = Impact factor; Residence = permanent address; Household registration = place of registration of personal identity. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

**Table 4.** Exploratory factor analysis of kindergarten teachers' fertility willingness.

IF Code	Impact Factors	Factor Loading				
		1	2	3	4	5
<b>Factor 1: Public fertility system and service</b>						
IF26	I think basic education would impact the fertility willingness	<b>0.86</b>				
IF21	I think the medical service of fertility would impact the fertility willingness	<b>0.86</b>				
IF24	I think the nursery service would impact the fertility willingness	<b>0.86</b>				
IF25	I think the kindergarten service would impact the fertility willingness	<b>0.85</b>				
IF23	I think the childcare service would impact the fertility willingness	<b>0.85</b>				
IF22	I think the vacation polity for fertility would impact the fertility willingness	<b>0.79</b>				
IF20	I think the fertility insurance system would impact the fertility willingness	<b>0.78</b>				
IF18	I think the medical insurance system would impact the fertility willingness	<b>0.76</b>				
IF27	I think the employment issue would impact the fertility willingness	<b>0.75</b>				
IF19	I think the pension insurance system would impact the fertility willingness	<b>0.70</b>				
<b>Factor 2: Economics and healthy</b>						
IF13	I refuse to fertilize due to the economic burden		<b>0.82</b>			
IF15	I think the health level of my husband would impact my fertility willingness		<b>0.75</b>			
IF16	I think my health level would impact my fertility willingness		<b>0.74</b>			
IF12	I think the pricey housing would impact my fertility willingness		<b>0.74</b>			
IF14	I think the health level of my parents would impact my fertility willingness		<b>0.72</b>			
IF11	I think the support of my parents would impact my fertility willingness		<b>0.57</b>			
IF10	I refuse to fertilize due to much time to take care of children		<b>0.52</b>			
<b>Factor 3: Family relationships</b>						
IF4	I think children will help with parent's elderly care			<b>0.85</b>		
IF3	I think fertility is necessary for my family			<b>0.83</b>		
IF5	I think fertility could facilitate family relationships			<b>0.61</b>		
<b>Factor 4: Career development</b>						
IF7	I think the support of employers would impact my fertility willingness				<b>0.81</b>	
IF8	I think fertility could affect women's employment and career development				<b>0.74</b>	
IF6	I refuse to fertilize due to the excessive working pressure				<b>0.69</b>	
<b>Factor 5: Emotional needs</b>						
IF1	I like children					<b>0.88</b>
IF2	I think fertility is necessary for my life					<b>0.60</b>
IF9	I think the support of my husband would impact my fertility willingness					<b>0.47</b>

Note:  $N = 466$ ; IF= Impact factor. The extraction method was principal axis factoring with an oblique rotation. Factor loading above 0.4 is in bold.

#### 4.5. Predictors of Kindergarten Teachers' Fertility Willingness

We conducted the logistic regression to examine which associated factors can significantly predict kindergarten teachers' fertility willingness. As Table 5 shows, the analysis revealed a small number of significant predictors, which included: factor 2, 'fertility is necessary for my life' ( $p = 0.03$ ); factor 9, 'the support of my husband would impact my fertility willingness' ( $p = 0.00$ ); and factor 10, 'I refuse to fertilize due to much time to take care of children' ( $p = 0.00$ ). However, other factors did not turn out to be significant predictors of the respondents' fertility willingness. Therefore, this model showed an acceptable level of predictability, as indicated by the Hosmer–Lemeshow statistic of 0.21.

**Table 5.** Regression analysis of fertility willingness.

Variable	B	95% CI for B		SE	$\beta$	$p$
		LL	UL			
IF1	0.93	0.71	1.20	0.13	−0.08	0.56
IF2	1.30	1.03	1.65	0.12	0.26	0.03 *
IF3	0.94	0.73	1.22	0.13	−0.06	0.64
IF4	1.16	0.89	1.52	0.14	0.15	0.27

Table 5. Cont.

Variable	B	95% CI for B		SE	$\beta$	p
		LL	UL			
IF5	0.98	0.76	1.27	0.13	−0.02	0.87
IF6	0.84	0.66	1.08	0.13	−0.17	0.18
IF7	1.16	0.88	1.53	0.14	0.15	0.30
IF8	0.83	0.62	1.11	0.15	−0.19	0.21
IF9	2.25	1.70	2.99	0.14	0.81	0.00 ***
IF10	0.64	0.48	0.87	0.15	−0.44	0.00 ***
IF11	0.95	0.71	1.27	0.15	−0.06	0.71
IF12	0.94	0.65	1.36	0.19	−0.06	0.75
IF13	0.91	0.59	1.39	0.22	−0.10	0.65
IF14	0.75	0.52	1.09	0.19	−0.29	0.13
IF15	0.87	0.52	1.46	0.26	−0.14	0.60
IF16	1.65	0.97	2.78	0.27	0.50	0.06
IF17	1.29	0.98	1.70	0.14	0.25	0.07
IF18	0.93	0.57	1.54	0.26	−0.07	0.78
IF19	0.76	0.49	1.17	0.22	−0.27	0.22
IF20	1.16	0.68	1.98	0.27	0.15	0.59
IF21	1.20	0.68	2.12	0.29	0.18	0.53
IF22	0.75	0.49	1.16	0.22	−0.29	0.20
IF23	1.32	0.73	2.41	0.31	0.28	0.36
IF24	0.65	0.40	1.08	0.26	−0.42	0.10
IF25	1.04	0.64	1.68	0.25	0.04	0.87
IF26	1.09	0.63	1.88	0.28	0.08	0.77
IF27	1.06	0.76	1.49	0.17	0.06	0.72
Constant	0.46	-	-	0.75	−0.78	0.30
Cox and Snell R <sup>2</sup>				0.20		
Nagelkerke R <sup>2</sup>				0.27		
Hosmer and Lemeshow				10.88 (0.21)		

Note:  $N = 1042$ . IF = Impact factor; CI = confidence interval; LL = lower limit; UL = upper limit. \*  $p < 0.05$ , \*\*\*  $p < 0.001$ .

## 5. Discussion

### 5.1. Differed Fertility Willingness between Kindergarten Teachers and Others

One of the main objectives of this study was to compare the fertility willingness of Chinese early childhood teachers and those who work in other occupations. Our analysis indicated that compared to individuals from other professional fields, a higher percentage of teachers believe that one child is enough for the family, even though they believe that fertility is a must for one's life and that children could facilitate harmonious family relationships. This could be attributed to kindergarten teachers' generally lower-income level than other professionals in the Chinese context. The financial burden that comes with having more children may cause to delay or forfeit the plan of having the second (or third) child. Those who prefer having more children would usually need to obtain a better family economical condition. This agrees with Boivin et al.'s [40] research that husbands' support can significantly impact teachers' fertility willingness. Another interesting finding is that kindergarten teachers are more concerned about the vacation policy and employers' support than individuals from other occupations. This reflects the tremendous pressure that early childhood teachers face in their work, which has been well-documented in previous research [28,41,42]. Being able to take vacations and receiving support from the employer can improve the wellbeing of kindergarten teachers, which may lead to a favorable attitude toward childbearing. Additionally, the present study appears to align with McQuillan et al.'s [43] finding that early childhood teachers tend to be more interested in childcare services. Given their educational and working experiences, early childhood teachers, compared to others, are naturally more familiar with the childcare policies and the quality of the relevant services. As 'insiders', they are more



likely to spot benefits and deficiencies of the given childcare service, which may affect their fertility willingness and decision-making. Furthermore, the participants who work in other occupations stressed the importance of having children for their own lives and their family. This reflects the wide-accepted Confucian belief about the filial duties of the next generation [32]. However, people from other professional fields showed concerns about their employment opportunities after childbirth. Such concerns may have been caused by the commonly found employment discrimination against female employees who are undergoing three different phases (三期女工): pregnancy phase, fertility phase, and breastfeeding phase [44].

### 5.2. Associated Factors and Predictors of Kindergarten Teachers' Fertility Willingness

Another objective of this study was to explore the factors associated with Chinese kindergarten teachers' fertility willingness. The exploratory factor analysis (EFA) revealed a five-factor structure that consists of an individual's emotional needs, economic status and health, family relationships, career development, and public fertility system. It appears that despite this study purposefully focusing on kindergarten teachers, the factors influencing their fertility willingness from a macro- to microstructure have been widely identified by prior research involving the general public [45], with factors of the individual [30], family [31,36], community [38], and the social structure aspect [46,47] jointly influencing Chinese parents' fertility willingness. These findings are consistent with the multifactorial conceptual framework Holton, et al. [48] proposed, which emphasizes that an individual's fertility intentions and behaviors are not always rational or voluntary. The childbearing determinants are either perceived or actual circumstances, which encompass biological, psychological, and social factors interacting across the individual, familial and societal levels. Our analyses also showed that the participant's health, their spouses' health, and the economic burden of raising a child were the top three factors that strongly affected their fertility willingness. This indicates Chinese parents' growing concern for raising a healthy child and ensuring they receive a quality upbringing to secure a strong start in life. However, the Chinese early childhood education (ECE) sector has long been disturbed by the '3A' problem—affordability, accessibility, and accountability [49]. The high-quality ECE service is scarce and entails a high cost. Thus, as kindergarten teachers themselves, the 'insider' of the early childhood profession would perhaps render them taking more meticulous considerations when making fertility decisions that are most appropriate to their family.

Our analysis also showed similarities and discrepancies in the factors affecting the fertility willingness of kindergarten teachers of different demographic characteristics. Regarding similarities, the teacher parents of different types of household registration, residency location, and marital status all considered their health status matters significantly to their fertility intention. In contrast, the traditional belief that children are responsible for taking care of their elderly parents was assigned relatively less important as an influencing factor of fertility. It is likely that given teachers' low intention to have more than one child it is extremely important to them to raise a healthy baby to avoid the substantial parenting and caregiving burden should the child have physical or mental illness [50]. Therefore, parents' health status becomes a crucial factor to be considered. This may also partially explain their general tendency to shift away from the belief that 'raising a child is an insurance for old'—despite it being a traditional filial piety value—as parents are now more mindful about staying in good health and having better access to various social welfare provision (e.g., aged care center, pension insurance system). Regarding the different effects the influencing factors have on the teachers, our study revealed that the participants' individual-centered beliefs (e.g., 'liking the child', 'fertility is necessary for my life') and the perceived career–parenting conflict exert more pronounced influence on teachers residing in an urban area (or having their residency registered there) than those from a rural area. This finding suggests that compared to rural teachers, those from urban areas appear to hold more progressive ideologies about parenthood and are less influenced by the tradi-

tional fertility belief, which rarely views childbearing as a personal and individual choice; rather, it is commonly taken for granted as the couple's responsibility for the sake of the whole family. Such urban–rural difference corroborates Xie et al.'s [32] research that rural parents are more traditional than those from urban families in terms of their perspective of parenting. It reflects contemporary Chinese parents' shifting attitudes toward parenting due to their increased exposure to Western childrearing beliefs. In the current literature, other perceived reasons for having a child for Chinese parents include, but are not limited to, children's contribution to a happy and complete family, a meaningful life, or as simple as relishing the children's 'cuteness' [51].

In addition, the regression results showed that the modern parenting and fertility beliefs ('fertility is necessary for my life'), spouses' support, and the struggle between job and parenting commitments significantly predicted kindergarten teachers' fertility intentions. This finding stresses the important role of parents childbearing ideologies in affecting their reproduction intentions, such as whether to have children or not, when to have children, and how many children they plan to have in the future [48]. Moreover, in line with Liu and Lummaa's [36] research, this study underlined the importance of supportive family members, especially the husband's support—either the sharing of housework or emotional support plays a crucial role in predicting women's childbearing intentions. This might be even more so for females working as kindergarten teachers, whose job involves extensive physical and emotional labor. Furthermore, our finding also aligns with Schwank, Gu, Cao, Andersson, Jiang, Ding, and Lindgren [35] that the career–family clash may cause parents' hesitation in making fertility decisions, especially for those parents striving to maintain relatively high living standards in the urban context, where childrearing commonly involves considerable time cost and parenting cost [52].

## 6. Conclusions

To conclude, the present study has yielded three major research findings. First, Chinese kindergarten teachers demonstrate distinctive and different fertility willingness from those working with other professionals: a higher percentage of kindergarten teachers believe that one child would be enough for the family. Our analysis also indicated that kindergarten teachers' fertility willingness is more saliently influenced by various factors than individuals from other professions. In brief, these factors can be summed up as the kindergarten teachers' perceived immediate support from the family (i.e., husband's support), workplace (employers' support), and society (i.e., maternity leave policy and childcare service provision). Second, the influencing factors of kindergarten teachers' fertility willingness form a five-component model, including factors relevant to the public fertility system and service, economic status and health, family relationships, career development, and emotional needs. Third, our analyses revealed three significant predictors of kindergarten teachers' fertility willingness: the modern parenting and fertility beliefs, spouses' support, and the struggle between job and parenting commitments.

While this study has the undeniable merit of offering valuable insights into the Chinese kindergarten teachers' fertility willingness, it has limitations. The first limitation relates to the unbalanced sample size between the male and female kindergarten teachers. Future research should strive to establish a more gender-balanced national kindergarten teacher sample to allow gender-sensitive analyses to be performed. The second limitation is that we did not examine parents' fertility behavior, which does not always go hand in hand with their fertility willingness (intentions). The evidence showing discrepancies between parents' fertility willingness and fertility behavior is abundant [53,54]. Such a belief–practice gap deserves to be explored by further empirical investigation with a special focus on kindergarten teachers working in a different context. Third, future research should include more individual-level factors (e.g., past fertility experience) to investigate whether and how do they shape parents' fertility willingness. Fourth, future research should take more caution in developing the survey items to better avoid causing respondents' misunderstandings.

The present study contributes to the field's understanding of the various workforces that affect a nation's sustainable development. Furthermore, as the first empirical study conducted with a special focus on kindergarten teachers, the findings of this study have several practical implications worth mentioning. First, the educational department and other governmental bodies on family planning should coordinate their collaboration to increase the availability and quality of the public fertility system to ensure kindergarten teachers' childbearing and childrearing needs are adequately met. This could give rise to the kindergarten teachers' willingness to have more children and devote more effort to their professional practice. Second, the need to increase kindergarten teachers' income level should be meticulously addressed by such means as raised monthly salary, housing allowance, and provision of other welfare benefits. Finally, as our findings indicate, support from the employer should be enhanced to create a more female-friendly working condition that upholds and protect their free will to have more babies without suffering damage to their career opportunities.

**Author Contributions:** Conceptualization, W.W., L.L. and J.L.; Formal analysis, W.W. and J.L.; Funding acquisition, W.W.; Methodology, W.W. and J.T.; Supervision, H.L.; Writing—original draft, W.W. and L.L.; Writing—review and editing, H.L. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by Hubei University of Arts and Science. Grant number CX2022003. The APC was funded by the Teaching and Research Project of Innovation and Entrepreneurship in Education.

**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Research Ethics committee of the Hubei University of Arts and Science (PN-2021-021, approval date 9 June 2021).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data are available upon request to the corresponding author.

**Acknowledgments:** The authors thank all participating parents for their cooperation in the data-collection.

**Conflicts of Interest:** The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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