

An Empirical Study on the Demand Analysis of 0 - 3-Year-Old Infants' Care Service in China

—Based on a Survey in Province G

Xiuli Zhu, Yanjin Liu

College of Education, Chengdu Normal University, Chengdu, China

Email: zhuxiulizhushuai@163.com

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Abstract

The study adopts the self-made questionnaire of 0 - 3-year-old children's demand for child care, investigating 6564 families with 0 - 3-year-old children in G province by means of cluster probability sampling. The survey shows that most parents' willingness to care is not strong, and the acceptable monthly cost of care is mainly within 2000 Yuan. The main reason for choosing care is to let children receive professional care and education. The main reasons for not choosing nursery are that families can take care of themselves; parents are most concerned about the safety of nursery institutions and the professionalism of the staff; they prefer to choose public nursery institutions. Therefore, we should actively construct a multi-level and multi-level care service system to better meet the demand of care services of 0 - 3-year-old infants.

Keywords

Infants, Care Services, Demand Analysis, Empirical Research

1. The Background of the Case

Since my country implemented the “two-child alone” policy in 2013, the family's demand for infant care services has gradually increased. After the full implementation of the “two-child” policy in 2016, the proportion of the second child in the number of births has gradually increased and has exceeded 50%, and the newly added infants and young children are facing more urgent needs for child-care services (You, 2019). Surveys and studies in many places across the country found that in real life, most infants and children aged 0 to 3 are taken care of by their grandparents. However, with the increase of the second child, the physical and energy of the grandparents who had taken care of their grandchildren were

unsustainable, and some families could not afford to hire a family nanny. This shows that the contradiction between supply and demand of infant care services is becoming more and more prominent. Some experts pointed out that “the demand for childcare for infants and young children aged 0 to 3 years will gradually increase, and they strongly appeal to all sectors of society to actively participate in building a scientific childcare service system” (The Central Committee of the China Association for the Promotion of Democracy, 2018).

Judging from the experience of infant and child care services in developed countries, the main model is that infants and young children aged 0 to 3 are given care by professional nursery institutions. However, my country's current 0 - 3 year old child care service market lacks an effective supervision system. The Education Bureau, the Health and Family Planning Commission, and the Civil Affairs Bureau do not have institutionalized supervision responsibilities; some childcare institutions in the society are not highly specialized and lack strict. The admission standards and systems for professionals in China urgently need to be regulated in terms of professional personnel training or training, health standards, safety guarantees, and the creation of a care and education environment (Wu et al., 2018). Therefore, it is urgent to vigorously develop the childcare service system for infants and young children aged 0 - 3, meet the needs of family childcare services, and balance the relationship between social work and family infant and child care. In his report to the 19th National Congress of the Communist Party of China, General Secretary Xi Jinping emphasized that “to grasp the most immediate and practical interests of the people, do our best and do our best, one thing after another, year after year.”, “Improve the public service system, guarantee the basic lives of the people, and continue to meet the people's growing needs for a better life.” (Xi, 2017). And “the development of a person in the first three years after birth, in its degree and importance, surpasses any stage in the person's entire life. If you look at the changes in life, the adaptation of life, the conquest of the outside world, and the achievements from this point of view, the function of a person from 0 to 3 years old is actually greater than the sum of the stages after 3 years of age until death. From this point of view, we can regard these 3 years as a person's life. Children are the other pole of life.” (Gao, 2003). Based on the above factors, this study investigated and analyzed the needs of infants and toddlers aged 0 to 3 in G province, hoping to provide a reference for the construction of infant and toddler care service systems.

2. Research Objects, Methods and Data Analysis

2.1. Research Object

This study adopted the self-compiled “Questionnaire on the Needs of Child Care Services for 0 - 3 Years Old Children”. A total of 50 questionnaires were distributed in the pre-survey, and the cronbach a coefficient was used to test the reliability of the questionnaire. The conclusion is that Cronbach $\alpha = 0.85$, with good reliability. According to the cluster probability sampling method, the for-

mal survey takes families with infants and toddlers aged 0 to 3 in 12 regions of Province G as the survey objects. The survey regions are divided into regions with good economic development (4) and regions with moderate economic development (4 areas) and relatively underdeveloped areas (4 areas). The survey results of these 12 regions basically reflect the demand for infant care services in the entire G province. The survey is a combination of online and offline. A total of 7000 questionnaires were issued, and 6564 valid questionnaires were retrieved, with an effective rate of 93.8%. Among the respondents, 4704 were mothers, accounting for 71.7%, fathers 1235, 18.8%, and grandpa 62. Participants accounted for 0.9%, grandma 101 parts, 1.5%, grandpa 21, 0.3%, grandma 57, 0.9%, and other 384, 5.9%.

2.2. Research Methods

The survey content mainly includes two parts: basic information and basic questions. The basic information includes the identity of the respondent, the number of children, age, family income, education level, and other family issues. According to Brindley (1989) and Robinson (1991) put forward the demand analysis theory and demand analysis KANO model, the content of childcare service demand is divided into: the situation of infant childcare services near the family, the willingness and influence of infant childcare services Factors such as the age and form of childcare willing to send the child to the nursery, and the ability to bear the cost of childcare services. In addition, there are some open questions, which are convenient for further understanding of parents' views on childcare services and childcare institutions. Type preference, and other suggestions and ideas.

2.3. Data Analysis

The data analysis is carried out by SPSS10 tool. At the same time, in-depth interviews were conducted with some survey subjects. Analyze and reflect on the survey results based on the significance of the interview data.

3. Survey Results and Analysis

3.1. Basic Situation and Analysis of the Survey Object

The survey data of the basic situation shows that the second child accounted for 46.3% of the respondents; among them, 99.2% of the parents had a high school education or above; and 93.5% of the parents were 25 to 35 years old. From the perspective of the total monthly household income (see **Table 1**), there are 656 cases with a total income of less than 3000 yuan, accounting for 10% of the total; 1510 cases with a total income of 3000 - 6000 yuan, accounting for 23%; There were 2429 cases with a total income of RMB 6000 - 10,000, accounting for 37%; 1182 cases with a total income of RMB 10,000 - 16,000, accounting for 18%; 787 cases with a total income of RMB 16,000, accounting for 12%. From the perspective of G province's national economic development and consumption level,

Table 1. Monthly income of survey respondents.

Monthly income	Below 3000 yuan	3000 yuan - 6000 yuan	6000 yuan - 10,000 yuan	10,000 yuan - 16,000 yuan	16,000 or more
Quantity	656	1510	2429	1182	787
Proportion	10%	23%	37%	18%	12%

most of the parents' incomes are at the middle level, have a certain ability to pay, and can afford the corresponding childcare services. From the perspective of parents' educational level, families attach importance to the early education of infants and young children, but the parents are in a busy period of career and cannot personally take care of infants and young children.

3.2. Situation and Analysis of Infant Nursery Services near the Home

A survey on infant childcare services near their homes shows that 24.5% of the respondents are within 15 minutes' walk of the respondent's home, and there are currently no nurseries or nurseries that accept infants from 0 to 3 years old; 12% said they don't know; 35.7% said that within 15 minutes of walking, there is currently 1 nursery or nursery for infants aged 0 to 3; 27.8% said that there are 2 or more nurseries or kindergartens that accept children of 0 to 3 within 15 minutes of walking. This shows that the number of childcare institutions that accept children between 0 and 3 years old is small, and their coverage and radiation are limited. They can only meet the childcare needs of some families, and the penetration rate of infant childcare services needs further development.

The survey on the situation of family infants and young children (see **Table 2**) shows that in families with infants and young children aged 0 to 3, mothers take care of 1181 persons, accounting for 18%; fathers take care of 328 persons, accounting for 5%; Grandparents participated in the care of 2757 people, accounting for 42%; grandparents participated in the care of 1903 people, accounting for 29%; other family members participated in the care of 78 people, accounting for 1.2%; family nanny caring for 99 people People, accounting for 1.5%; 218 people sent their children to childcare institutions, accounting for 3.3% of the total. In summary, it can be seen that most infants and children aged 0 to 3 are taken care of by themselves or their relatives. However, 4593 respondents (70%) in the survey hope that their children can receive professional childcare services, so that they can get along with other infants and young children, cultivate good living habits, and reduce the burden on parents or grandparents.

3.3. Situation and Analysis of the Needs of Family Infants and Young Children Nursery

According to the KANO model of demand analysis, this study divides the family's needs for infant and childcare into parental care willingness, acceptable monthly cost of childcare, factors affecting childcare, forms of childcare services, and parents' concern for childcare The main problem and other aspects.

Table 2. Infant and child care status of survey respondents.

Care subject	Mother	Father	Paternal grandparents	Maternal grandparents	Other family members	Family nanny	Sent to childcare
Quantity	1181	328	2757	1903	78	99	218
Proportion	18%	5%	42%	29%	1.2%	1.5%	3.3%

The survey on parents' willingness to childcare shows that as shown in **Table 3**, 525 are very willing, accounting for 8%; willing to have 1641, accounting for 25%; uncertain, 1904, accounting for 29%; less willing 2035, accounting for 31%; totally unwilling, 459, accounting for 7%; this shows that parents' willingness to take care of childcare is not strong, one is closely related to the traditional Chinese family lifestyle; The understanding of childcare services is not in place, and the concept of childcare services leads the absence.

For the survey of the monthly cost of parental care acceptable to parents, see **Table 4**. There are 2889 parents within 1000 Yuan, accounting for 44%; there are 2297 parents between 1000 - 2000 Yuan, accounting for 35%; 2000 - There are 1050 parents between 3000 Yuan, accounting for 16%; between 3000 and 4000 Yuan, there are 263 parents, accounting for 4%; there are 65 parents above 4000 Yuan, accounting for 1%. From the above data, it can be seen that the price of childcare acceptable to most parents is less than 2000 Yuan. If the cost is too high, parents may choose to abandon childcare, which to a certain extent shows parents' understanding of the value of infant childcare not enough. Second, there may still be some financial burdens.

Regarding the investigation of factors in choosing childcare, see **Table 5**. The main reason is that children can receive professional care and education, accounting for 30.4%; the second is to reduce the burden of family care, accounting for 29.2%; Other children play, accounting for 24.6%; in the end, there is no one to take care of the children, accounting for 15.8%. As for the investigation of the reasons why parents are unwilling to send their children to nursery institutions, see **Table 3**. The main influencing factors are: the cost of childcare is too high; the nursery institution may be unsafe; the conditions and facilities of the nursery institution are not good enough; Xiaoying is taken care of at home, and there is someone at home to take care of. Among them, the highest proportion is children who are too young to be taken care of at home, accounting for 33.2%; secondly, child care institutions are insecure, accounting for 24.7%; the cost is too high, accounting for 24.4%. Conclusions can be drawn from the data. Parents who take care of children generally do not choose childcare, and to a certain extent they have concerns about childcare institutions and do not trust them. However, there are still some parents who are full of expectations for childcare institutions.

See **Table 6** for the investigations of parents' concerns about childcare institutions. The eight issues of greater concern are the safety of childcare institutions, the professionalism and love of nurses and teachers, the sanitary conditions of childcare institutions, and the appropriate environment. And facilities, price

suitability, convenient transportation. Among them, the most concerned issue is safety, accounting for 48.59%; the second is the professional issues of nurses and teachers, accounting for 39.48%; the third is the love of nurses and teachers, accounting for 38.19%; and the type of childcare institutions is also concerned, accounting for 19.8%. Among all types, parents are most inclined to choose public kindergartens and commercial early education institutions, as shown in **Table 7**. Public kindergartens have safety guarantees, while commercial early education institutions are mainly based on the principle of proximity and “high degree of specialization”.

Regarding the content of childcare services that parents hope to receive, see **Table 8**, which mainly includes seven questions about children’s early education, parent-child activities, parenting guidance, full-day care, temporary care, half-day care, and extended care. Among them, what parents expect most is their children’s early education, parent-child activities and parenting guidance, which accounted for 40.1%, 35.3% and 31.6% respectively. This reflects that the parent’s concept of childcare is knowledge-oriented.

Regarding the age survey of infant childcare (see **Table 9**), 21% of parents believe that children over three years old are suitable for childcare; 46% of parents believe that children who are two and a half years old are suitable for childcare; yes 23% of parents believe that two-year-old children can be sent to childcare; 7% of parents believe that one and a half year old children are suitable for childcare; 2% of parents believe that one-year-old children can be sent to childcare; 1% of parents think Children who are six months old can be sent to childcare. Judging from the above data, parents’ early education awareness is not strong, and no scientific concept of parenting has been formed.

Table 3. Family childcare willingness.

Willingness	Very willing	willing	Uncertain	Not very willing	Totally unwilling
Quantity	525	1641	1904	2035	459
Proportion	8%	25%	29%	31%	7%

Table 4. The monthly cost of acceptable childcare.

Price (yuan)	Below 1000 yuan	1000 yuan - 2000 yuan	2000 yuan - 3000 yuan	3000 yuan - 4000 yuan	4000 or more
Quantity	2889	2297	1050	263	65
Proportion	44%	35%	16%	4%	1%

Table 5. Situations of choosing or not choosing childcare.

Select	Professional care and education	Reduce the family burden	No one at home to take care of	Play with other children	Other
Proportion	30.4%	29.2%	15.8%	16.3%	8.3%
Unselect	Someone taking care of	Childcare institutions are not well taken care of	The cost is too high	Inconvenient traffic	Other
Proportion	33.4%	24.7%	25.4%	6.3%	10.2%

Table 6. Which aspects of childcare institutions are more concerned by parents.

Safety	Professionalism	The love of guardians	Health	Surroundings	Price	Traffic	Types of childcare institutions
48.5%	39.4%	38.1%	17%	16%	11%	15.6%	19.8%

Table 7. Parents' choice of types of childcare institutions.

Public nursery	Commercial early education institutions	Community hosting point	Childcare center attached to Maternal and Child Health Hospital	Private nursery
35.5%	20.7%	17.1%	14.8%	11.7%

Table 8. Parents' demand for the content of childcare services.

Early Childhood Education	Family activities	Family parenting guidance	Full day hosting	Temporary care	Extended care	Half-day hosting
40.1%	35.3%	31.6%	21.1%	18.8%	15.3%	12.1%

Table 9. Age situation of infant childcare.

Over three years old	Three to two and a half years old	Two and a half to two years old	Two to one and a half years old	One and a half to one year old	One to six months old
21%	46%	23%	7%	2%	1%

4. Discussion and Reflection

In summary, it is learned from the needs survey and analysis that parents' willingness to childcare is not strong. The monthly cost of childcare acceptable to most parents is less than 2000 Yuan. The main reason for choosing childcare is to allow their children to receive professional care and education. The main reason for not accepting childcare is that the family can take care of it by themselves; the most concerned about the safety of childcare institutions, the professionalism of nurses and the love of nurses; parents are more inclined to public infants and toddlers, and they look forward to the content of nursery is early education. In this regard, we should actively construct a diversified, multi-level nursery service system to fully meet the needs of my country's 0 - 3 year old infant nursery service.

4.1. The Government Should Provide Support from Many Aspects, Improve Relevant Systems and Provide Fertile Ground for the Development of Childcare Services

First of all, the government must clearly establish the main status of the childcare service system. Actively improve relevant laws and regulations on infant childcare, and standardize the industry regulations of childcare institutions. Classify childcare institutions according to profit and non-profit, determine the administrative department, establish professional guidance or leading institutions, and unite the education department, the health care department, the Women's Federation, and the finance department to form a joint force. At the same time, clarify work responsibilities, strengthen management, set unified standards for

admission, supervision, evaluation and punishment, specify unified instruction manuals related to childcare, specify service content, standardize service operations, and clarify site construction standards. The related system is perfect, which provides fertile ground for the development of childcare services, is conducive to standardizing the school thinking of childcare service institutions, and is conducive to promoting the healthy development of childcare service institutions.

Second, the government should provide policy support, emphasize the public welfare nature of infant childcare, and strengthen top-level design. First, a special fund for childcare can be established, and specialized institutions are responsible for fund management. The fund is mainly used to provide support to eligible families in need of childcare services; to support organizations and social forces at all levels to carry out childcare services and improve the coverage of childcare services. Second, provide certain financial assistance to businesses or companies that participate in childcare services; third, set up childcare classes in conditional kindergartens to accept infants and young children older than one year old to meet the childcare service needs of some families. Tongjin should incorporate childcare services into the scope of public services, emphasizing government responsibility and public welfare attributes.

Finally, the government should strengthen the training of professional talents in childcare services. The team of professional childcare personnel is the key to ensuring the quality of childcare services. First of all, nursery education majors should be opened in normal colleges at all levels and various types, and a theoretical and practical curriculum system for cultivating this major should be established to train professional nursery talents. Secondly, through education or skill training, provide professional training to existing nursery service personnel to improve the overall quality of nursery personnel. Finally, promote the nursery qualification certificate system and establish a standardized qualification standard system. Nursery service staff need to hold certificates to work (Yang, 2018).

4.2. Collaborative Innovations Should Be Made by Multiple Parties to Construct a Diversified and Multi-Level Childcare Service System to Meet the Needs of Families for Childcare

A scientific nursery service system requires the collaborative construction of multiple parties. First of all, governments at all levels play a guiding role, and infants' associations play a standard role, introducing various forces from the society to actively cultivate various types of childcare service organizations, and encouraging enterprises and institutions to carry out childcare services for the purpose of serving their employees through various channels. Educational services, and ultimately formed government-led-adhere to the direction of public welfare nursery services; market as the main body-promote the development of market-based childcare services; supplemented by society-innovative institutionalized childcare services Guided by industry associations—strengthening the construction of professional childcare services; relying on the community—improving the supervision system of open childcare services; taking the family as the

basis—guaranteeing the diversification of childcare services Multi-level childcare service system to meet the needs of different levels.

Secondly, on the basis of the law of physical and mental development of infants and young children, for the purpose of promoting the comprehensive development of infants and young children's physical ethics, intelligence and beauty, strengthen the facilities and food supervision of infant nursery service institutions, establish standards for infant nursery services, and strengthen the The training of nursery service personnel improves the professional level of nursery services, guarantees the safety of infants and young children, and promotes their healthy growth.

Finally, improve the insurance mechanism for infant and young child care and ease the risk pressure of infant and young child care service institutions, which is conducive to the construction of a diversified and multi-level child care service system and the healthy development of child care (Feng & Xu, 2018).

4.3. Change Parents' Stereotyped Impressions of Childcare Services, Update Parents' Concepts of Childcare Services, and Achieve Conceptual Guidance

The Global Test Report issued by UNESCO in 2007 stated that “the care and education from birth to primary school has laid the foundation for individual follow-up learning.” Effectively promote childcare services and early childhood education. In addition to publicity through seminars or public accounts, it is more important to encourage parents to change their attitudes and seek more family support for the development of childcare services (Jiang, 2019). To change the attitude of parents to childcare, the first thing is to change the parents' traditional concept of childcare services-childcare services are not only caring for children, but scientific care. Only when the understanding changes, the family can better support the construction of the childcare service system.

In short, according to the analysis of the needs survey of infant childcare services, it is found that the establishment of “government-led; market-based; supplemented by society; guided by industry associations; supported by communities; and family-based” Chinese characteristics and multi-level infant care service system that combines distinctive welfare and public welfare, market operation and family care will become the basic direction of the reform and development of my country's care service system.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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