

# Effect of Family Education on Children's Cognitive and Intellectual Development

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**Abstract:** Family education as an important form of human growth, children's cognitive level and intellectual development will be directly affected by family education. In order to strengthen the development level of children's cognition and intelligence in the process of educational innovation and development, the education field should pay attention to family education, and at the same time, the influence degree of family education should be deeply discussed from the perspective of practice, so as to put forward appropriate solutions. Therefore, this paper on the basis of understanding the practical significance of family education, according to the characteristics of children's cognitive and intellectual development, to a primary school students in grade four and grade five as an example, using questionnaires and domestic intelligence scale analysis. The final results show that family education has a profound impact on children's cognitive and intellectual development. Therefore, during the period of education management, we should pay attention to family education and build a high-quality growth environment.

## 1. Introduction

The development of modern society requires talents not only to possess moral culture and ideal of high quality, but also to be good at using their brains and daring to explore. Under this condition, the development of children's cognition and governance is an important weight to gain a foothold in the society, but also the fundamental basis for future creation and success. Bloom, an American psychologist, put forward in the study of practice, human intelligence development, assuming that the 17-year-old intelligence levels as one hundred percent, 4 years old could reach 50%, and increased 30% between the ages of 4 to 8, 8 to 17, belongs to the best of education management stage, finally can realize the education effect of get twice the result with half the effort. As the pioneers of education management, parents have more responsibilities and obligations in the growth of children. Therefore, in order to scientifically cultivate the cognitive and intellectual abilities of children, parents should have a correct understanding of their own tasks while extending and integrating with school education, and finally build a better educational environment.<sup>[1,2,3]</sup> Family education behavior has a positive impact on children's cognitive and governance development, but there are obvious limitations in this field. First, there are many studies on the relationship between family education and children's cognitive and intellectual development, but there are no in-depth discussions on children's personality growth from the perspective of practical development. Secondly, studies on the relationship between family education and children's development mainly focus on the single factor, and there is no systematic research content. Finally, during the research design period, there was no systematic understanding of various factors in the education structure. The actual research results proved that family education had a profound influence on children's cognitive and intellectual development, but it was difficult to verify the specific degree of such influence. Therefore, this paper mainly studies the growth and development of primary school students, to explore the factors of family education and its impact on children's cognitive and intellectual development, so as to improve the structure of family education, enhance the level of family education, and provide scientific basis for children's healthy growth. From the perspective of educational development, as shown in Figure 1 below, family education is not only a

component of general education, but also the basic content of school education and social education implementation. It has the characteristics of lifetime and diversity in practical development.<sup>[4,5]</sup>

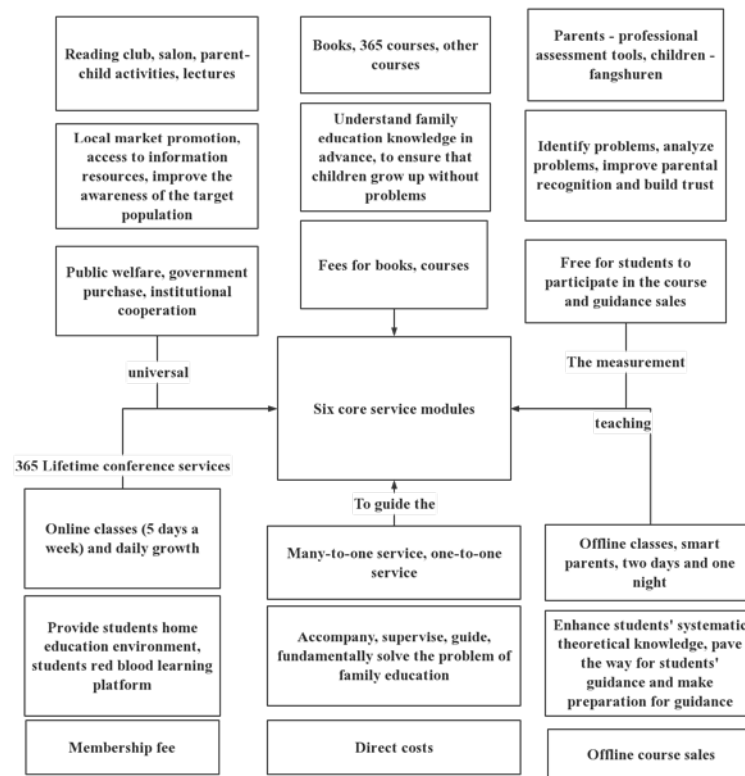


Fig.1 Six Modules of Family Education

From the perspective of the history of human evolution and civilization, family education is not only the first course for children to learn and grow, but also a lifelong learning platform. Due to its natural and original state, it does not have scientific guidance programs and modern technology. Science and technology innovation as the core force of national construction and development, education is the basic platform for human development in the future, and family education is the fundamental guarantee for the realization of future development goals. If the practical significance of family education can not be fully demonstrated and the traditional education model can not be used for guidance, it is difficult to deal with the problems arising from practical education scientifically. Therefore, this paper mainly discusses the influence of family education on children's cognitive and intellectual development, and then puts forward effective countermeasures according to the degree of influence. This can not only build a high-quality family education environment, but also based on the characteristics of children's cognitive and intellectual development, develop a systematic education program.

## 2. Method

### 2.1 Research Objects

The research object of this paper is to select students from grade 5 and 6 of a primary school. 40 students are randomly selected from each grade group, with a total of 80 students, half male and half female.

### 2.2 Research Tools

In this study, students' Family Education Questionnaire (11-18 years old) and Chinese Binet Intelligence Scale prepared by Sha Yuying and Zhang Feng et al were selected. The test method was unified before the test, and guidance and analysis were conducted in strict accordance with the requirements. At the same time, but also on the student's family situation investigation, parents are

required to fill in the relevant questionnaire, which contains children, parents, etc..

### 3. Result Analysis

#### 3.1 Research Results

First, intelligence distribution. According to the above research and analysis, children's intelligence mainly presents the results of normal distribution. About 1.4% of children's intelligence is lower than 79, 15.7% of children's INTELLIGENCE is between 80 and 89, 51% of children's INTELLIGENCE is between 90 and 99, and 28.7% of children's intelligence is between 100 and 109. 3.1% of those with an IQ above 110.

Second, the relationship between gender and intelligence. There is no significant difference between boys and girls, which proves that there is no essential change in the intelligence of boys and girls in family education.

Thirdly, factors affecting cognitive and intellectual development. According to the results shown in Table 1 below, there is a significant relationship between children's birth season and intelligence, among which winter is the lowest and autumn is the highest. According to the analysis results in Table 2 below, the intelligence of children whose mothers are between 20 and 30 years old is the highest, and that of children whose mothers are over 40 years old is the lowest. The relationship between father's childbearing age and intelligence development also shows the same trend. There are also significant differences between parents' educational level and children's cognitive and intellectual development, among which the intelligence of college students is the highest, which can reach  $100.2 \pm 5.9$ , middle school students can reach  $95.2 \pm 6.9$ , and elementary students is  $90 \pm 3$ . There are also significant differences between family income and children's cognitive and intellectual development. The IQ of children whose family income is less than 3000 yuan/month can reach  $91.0 \pm 8.9$ , and that of children whose family income is between 5000 and 8000 yuan can reach  $96.4 \pm 6.3$ . There is a significant difference between children's medical history and their cognitive and intellectual development. Among them, the IQ of children with high fever, convulsions and brain trauma can reach  $95.2 \pm 6.9$ , which is lower than that of children without medical history.<sup>[6,7]</sup>

Table 1 the Relationship Between Birth Season and Children's Intellectual Development

Season of birth	IQ (X±S)	F	P
In the fall	96.4±7		
In the summer	95.3±7		
		2.83	<0.65
In the spring	93.5±6.5		
In the winter	92.2±7.5		

Table 2 the Relationship Between Maternal Childbearing Age and Children's Intellectual Development

Reproductive age	IQ (X±S)	F	P
20~30	96.3±6.6		
31~35	93.4±7.6		
		3.42	<0.05
36~40	93.3±5.9		
40~The following	90.±9.8		

#### 3.2 Educational Countermeasures

First, construct the correct educational goal of children's cognitive and intellectual development. In the cognitive and intellectual development of children, some parents regard academic excellence and maximum achievement as the main goal of talent cultivation, but this model has too single understanding of children's growth and development. Combined with the above educational research results, in order to improve children's cognitive level and intellectual ability in family education, the most important thing is to develop their intellectual potential, so that

children can correctly deal with the problems they face in their growth and learning. According to the analysis of the five items of children's cognition shown in Figure 2 below, it can be seen that in modern talent cultivation, the fundamental purpose of family education is to provide indispensable basic conditions for children's growth. Therefore, in order to continuously optimize children's cognitive level and comprehensively develop their intelligence in family education, corresponding educational goals should be put forward. Only in this way can children be fully and healthily developed.

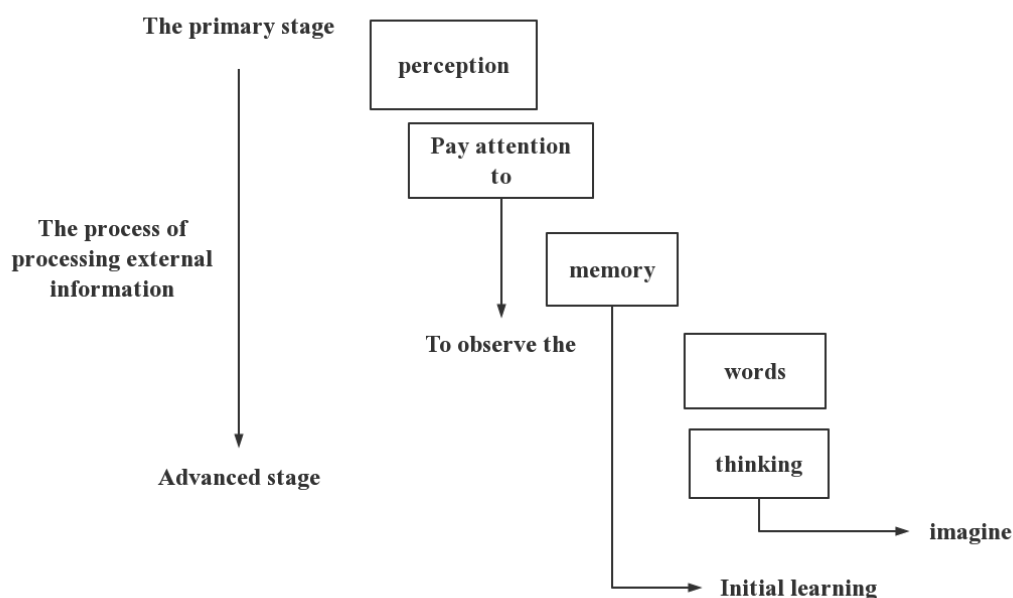


Fig.2 Five Basic Elements of Children's Cognition

Second, science abides by the basic law of children's physical and mental health development. Part of family education is in children's cognition and management development period, often use adult thinking and educational mode to guide, so that children understand the knowledge and truth that parents tell very hard. Therefore, in the future, family education should be based on the understanding of the law of children's growth, and put forward the form and content of education in line with the actual development and intellectual acceptance of children, only in this way can we achieve high quality education effect.<sup>[8,9]</sup>

Third, science guides children to master learning skills. Children do not have a solid grasp of basic knowledge and accumulated social experience is relatively simple, so when carrying out cognitive and intellectual development based on the family education platform, children are guided to understand and master certain skills according to the way of inspiration, so as to realize the goal of education step by step. According to the analysis of the theoretical system structure of family education in the new era as shown in Figure 3 below, it is very important to master the basic skills of practical education. This work needs to start from the perspectives of parental responsibilities, the environment, application methods and emotional changes, which is also the main way of educational innovation.

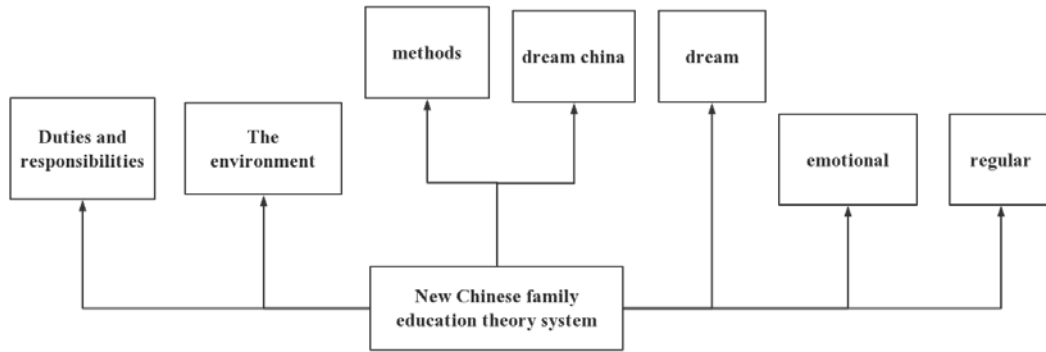


Fig.3 Theoretical Structure of Family Education in the New Era

Fourthly, rational use of family education environment. First of all, when designing children's living environment, we should get rid of the monotonous pattern of traditional white, and build a cheerful and bright color environment for them. For example, living articles and clothing with a variety of colors, can let children place themselves in a colorful environment, fully mobilize their cognitive awareness, continue to develop their intellectual level; Secondly, buy books and toys that promote children's cognitive level and intellectual development, thus guiding them to solve problems in independent thinking. For example, if a string of wind chimes is hung in a room, children will ask questions based on its ringing sound, which can help them develop their intelligence. Toys with characteristics such as inertia or light can also fully mobilize children's desire to explore, which is also the enlightenment of learning natural science; Thirdly, strengthen the cultivation of children's labor operation consciousness. Developed countries in the world pay more attention to the cultivation of children's ability awareness in the process of labor operation while mastering diversified science and technology. However, some parents in China do not let children participate in labor activities and do not realize the positive advantages of children's growth during labor. From the practical point of view, in family education, let children participate in labor practice independently, which is helpful for their brain to get comprehensive development in stimulating development. For example, using your hands stimulates specific, creative areas of the brain that help keep thinking and leadership in harmony. Finally, diversified game activities are designed according to the growth and development needs of children. For example, integrating knowledge cultivation into game activities can not only enrich children's cognitive content, but also develop their intellectual ability. At the same time, in holidays or rest days let children use scientific way to observe and think about problems in life, in order to expand children's knowledge, strengthen their cognitive level, fully develop their intelligence.

#### 4. Conclusion

To sum up, according to the collected data above, the influence of family education on children's cognitive and intellectual development is analyzed, and the problems facing family education are clarified. It can be found that various factors of family education structure have a significant impact on children's cognitive level and intellectual development. The influencing factors involve the intelligence of parents, economic conditions, children's disease history and so on. The influence of these factors on children's cognitive and intellectual development has significant human characteristics. Therefore, in order to fully display the positive role of family education under the trend of educational innovation, it is necessary to grasp the characteristics of children's growth, build the right educational goals, and continue to optimize the family education environment. Only in this way can children's cognitive level and intellectual ability be improved in educational management. At the same time, it is necessary to build a perfect theoretical system for the existing family education system, pay attention to the cultivation of professional education talents, and actively learn from excellent education concepts and training activities at home and abroad, so as to improve the current family education mode and fully show the positive role of the family

environment in the growth of children.

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