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# The Formation Factors Of Middle School Students' Non-Cognitive In Kunming City

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## Abstract:

Today's academic scenario is witnessing a paradigm shift from merely cognitive faculties' measurement to an increasing recognition of non-cognitive abilities. In education, non-cognitive skills broadly encompass the students' character traits, attitudes towards learning, emotional intelligence, and other personal attributes that significantly influence their learning performance. These skills have gained increased attention among educators and policymakers; particularly, their impact on student's learning and high-order cognitive skills development is under continuous examination. This article focuses on middle school students in Kunming city, utilizing differentiated analysis methods and regression analysis methods to explore the factors influencing students' non-cognitive abilities. We have confirmed the identification of core non-linear factors, including socioeconomic background, parental involvement, and personal attributes, which play crucial roles in defining the significant formation process of non-cognitive skills. Emphasizing these identified factors in the formation of non-cognitive abilities highlights their profound impact on students' growth and success. This study provides insights for educators, policymakers, and stakeholders into areas of intervention to enhance the development of non-cognitive skills, potentially boosting students' learning capacities and fostering longer-term academic success.

**Keywords:** Non-Cognitive Abilities, Formation Factor, Middle School Student

## Introduction

The traditional human capital theory proposes that people can improve their ability through education and other ways to improve the future income level. This ability is often referred to as "Cognitive ability", including basic mathematical and literacy skills, production knowledge and technology. But in one study, Bowles et al. looked at educational returns and found that after controlling for some demographic variables, family socioeconomic status, and cognitive ability, about two-thirds of the variance could not be explained. This shows that education affects students not only by cognitive ability, but also by other factors besides cognitive ability, so-called "Non-cognitive ability". In recent years, both the fields of psychology and economics have emphasized the value of non-cognitive abilities. Psychologists argue that individual cognitive abilities (intelligence) exhibit a normal distribution, with the majority falling into the average range, and a smaller number at either extremely high or low levels. Therefore, non-cognitive abilities are considered the key to achieving success in life. Economists believe that non-cognitive factors significantly impact individuals' academic performance, career achievements, mental and physical health, as well as societal indicators such as overall rates of unmarried pregnancies and crime. In certain aspects, non-cognitive abilities are thought to have a stronger influence on individuals than cognitive abilities. These non-cognitive skills are commonly regarded as crucial "soft skills," encompassing the ability to focus attention in the classroom, collaborate in a team, organize and track academic tasks, and exhibit a tendency to seek help from peers or mentors. Empirical literature indicates that non-cognitive skills play a

crucial role in educational achievement, influencing high school graduation rates and college enrollment rates.

Non-cognitive abilities can be cultivated through environmental factors, and parents, as a child's first teachers, play a crucial role in influencing these abilities. High-quality family education can nurture the development of a child's non-cognitive abilities, while unfavorable family environments may hinder a child's future development. Therefore, parents need to acquire scientific parenting knowledge, implement effective educational strategies, and, in daily life, games, and sports, provide scientific guidance through role modeling and emotional communication to effectively promote the development of their child's non-cognitive abilities. The primary aim of this study is to uncover and explain the core factors influencing the formation of non-cognitive abilities. The goal is to address the pressing question: What kind of environment and dynamics impact the development of students' non-cognitive abilities? This research is expected to initiate a shift in the focus of educational stakeholders, prompting them to consider new intervention approaches, motivating them to achieve success in fostering both non-cognitive skills and cognitive abilities within the academic environment.

## **LITERATURE REVIEW**

Non-cognitive skills form the backbone of an individual's personality and are often referred to as social, emotional and character skills, which play a pivotal role not only in academic success but also in life outcomes. Studies by Bae, Choy, Geddes, Sable & Synder (2000) have shown that approximately 60% of college attendees are women, a statistic that has ignited interest from a broad spectrum of individuals. While there has been an increasing recognition of this gap, empirical studies that specifically target the explanation of this phenomenon are still scarce.

In the academic landscape, there has been a categorization of non-cognitive skills into two subsystems mainly represented by school performance indicators such as grades and disciplinary incidents involved by students. A report by Kane (1994) indicated that non-cognitive skills, as distinct from cognitive skills, play a vital role in the attendance rate of colleges and influence employment, occupation choice, and a variety of other labor market outcomes. Well-implemented educational reforms that enhance the non-cognitive skills of students could shape their academic and occupational pathways (Kleinfeld 1998).

There is a dearth of studies conducted to ascertain the formation factors of non-cognitive skills. However, a study (Levy & Murnane 1992) provided an explanation for lower enrollment rates in colleges among males, claiming that low non-cognitive skills among males could be the reason behind this trend. This study purported that these skills could be attributed to the inability to pay attention in class, work with others, organize and keep track of homework, and seek help from others owing to the influence of numerous external factors.

A plethora of studies has validated how non-cognitive skills affect student learning outcomes. Studies by Murphy & Welch (1989; 1992) revealed that these skills might play a larger role in specific domains that are usually dominated by more concrete measures like tests scores. Grades, for instance, have a significant impact on the probability of the student enrolling in college, even after controlling for cognitive ability, family background, and high school achievement. Whether these skills indeed carry more weight is too involved to be explained solely by socio-economic status and cognitive ability remains a subject for further investigation.

### **2.1 Definition and Types of Non-Cognitive Skills**

Non-cognitive skills, characterized by attributes which are not directly associated with academic learning capability or intellectual capacity, play an integral role in the learning process. They encompass a broad spectrum of personal traits, attitudes, and behaviors, such as self-control, persistence, resilience, motivation, and collaboration, which are inherent in an individual's ability to engage effectively in a learning environment.

Such skills can be categorized into five main types - namely, social skills, emotional processes, character, motivation, and metacognition encompasses a panorama of desired learning attributes. Social skills revolve around interaction dynamics, decision making, and communication. Emotional processes encapsulate emotional regulation and resilience to manage setbacks. Character traits, including persistence and self-control, define an individual's approach to a task. Motivation represents an individual's willingness, desire, curiosity, and belief in their abilities to learn, while metacognition refers to the ability to evaluate, regulate, and monitor one's learning.

These specific clusters of non-cognitive abilities culminate in shaping the learning process that equally contributes to conventional cognitive skills like reasoning, memory, and attention. The interplay between these cognitive and non-cognitive abilities is what characterizes a comprehensive learning trajectory.

A thorough understanding of non-cognitive skills is essential, providing a holistic perspective to the learning process. They allow for the exploration of non-linear formation factors and offer an opportunity to establish a favorable learning environment that promotes these skills. Placing equal importance to non-cognitive skills alongside traditional cognitive abilities can potentially enhance the academic success of learners in the long run.

Further, the variation inherent across these types of skills implies that the factors affecting their formation could be interconnected or operate in tandem. Appreciating this multidimensional nature of non-cognitive skills thus serves as a precursor to exploring the heterogeneous factors that impact their formation and consequentially, the learning outcomes of students.

## **2.2 Previous Studies on Formation Factors of Non-cognitive Skills**

Previous research into the formation factors of non-cognitive abilities has centered around the influences of the school environment, family background, and individual attributes (Jacob, 2011). The majority of these studies derive data from surveys such as the National Educational Longitudinal Study (NELS). NELS provides invaluable, comprehensive data gathered over a sustained period, offering crucial information such as family background, school achievement and attitudes towards school. It is also noteworthy that cognitive ability, school achievement, and attitudes towards school are assessed as early as junior high. NELS helps to investigate the formation of these skills longitudinally, building up a more accurate and compelling representation of student development over time in light of several influencing factors.

Four key measures of non-cognitive ability commonly identified in literature involve middle school grades, homework time in the eighth grade, disciplinary incidents, and grade retention in elementary school. The grades earned by students in the middle school, aligned with the time spent on homework, predominantly reflect factors like effort and achievement in school. These measures provide an indicator of a variety of non-cognitive skills such as the ability to follow directions, collaborate effectively in groups, focus in class, and organize class materials effectively. Likewise, student behavior has a significant influence on non-cognitive skill formation as it reflects the ability to successfully adapt to the school environment.

Jacob's research (2011) suggests that grade retention in elementary school is indicative of non-cognitive skills. This premise operates on the understanding that retention decisions are mainly based on teacher perceptions of a student's social maturity and behavior. The research claims that higher non-cognitive skills and college premiums among women account for nearly 90 percent of the gender gap in higher education, thus indicating the role grade retention might play in measuring non-cognitive skills.

However, the factors contributing to non-cognitive skills are not confined to school-related instances only. Family background, associated socio-economic context, and personal attributes also significantly impact the formation of non-cognitive skills. A notable percentage of the observed sample reportedly graduated from high school and attended some form of college. Nevertheless, this data also poses considerable issues such as sample attrition as individuals least likely to attend college have likely dropped out of the study.

In conclusion, existing literature suggests that the formation factors of non-cognitive skills are multifold, spanning personal, familial and school-related aspects. Future research should aim to address these complexities in the formation of non-cognitive skills and their impact on students' learning. In doing so, it is important to acknowledge and cater to the individuality of students; their unique attributes and backgrounds have considerable sway over their non-cognitive abilities and thus their subsequent academic outcomes and success.

### ***2.3 The Impact of Family Environment on Students' Non-Cognitive Abilities***

From Blau and Duncan's status attainment model (Blau & Duncan, 1967) to Bourdieu's theory of cultural reproduction (Bourdieu, 1990), and further to Boudon's theory of primary and secondary effects (Boudon, 1974), a considerable amount of research both domestically and internationally has discussed how family background achieves class reproduction by influencing the educational process of children. As the indirect and unstable effects of family socioeconomic status on the development of offspring abilities have been continually confirmed, it has been observed that, compared to family socioeconomic status, family investment in education is a more direct factor influencing children's ability development. Exploring the impact and mechanism of family educational investment on the development of children's non-cognitive abilities is beneficial for proposing more effective and direct strategies for family educational investment.

Conger and Donnellan (2007) explained the impact of family socioeconomic status on the academic achievement of offspring through the theory of family investment. Studies have shown that high socioeconomic status families often influence the academic achievement of their children by enhancing their investment in education. Similarly, research related to the development of non-cognitive abilities also indicates that parents with higher socioeconomic status pass on various forms of wealth to their offspring. This includes not only material wealth, higher talents, and extensive knowledge but also many aspects of "soft power" that influenced the achievement of the parents themselves, such as confidence, self-discipline, and thoughtful consideration, which we refer to as non-cognitive abilities (Nyhus & Pons, 2005). Parents with higher socioeconomic status are more accurate in understanding, practicing, and implementing the non-cognitive abilities necessary for academic success, as advocated by educational organizations and demanded by the job market. Through educational investment, they can assist their children in achieving educational success and maintaining a relatively advantageous position in intense market competition.

In conclusion, the profound impact of non-cognitive skills on students' learning trajectories and higher education decisions emphasizes the necessity for educators and policymakers to invest appropriate resources in cultivating these skills.

Currently, school education in China primarily focuses on cultivating students' cognitive abilities, with less emphasis on the development of non-cognitive abilities. Therefore, this study investigates the factors influencing students' non-cognitive abilities, with a focus on high school students in Kunming, where the author works. The research employs a questionnaire survey method, with a total of 100 valid responses collected. The questionnaire's effective response rate reached 100%.

The measurement standard of non-cognitive ability is pluralistic, and there is no unified conclusion on the choice of measurement index. In the world, the early researches on the measurement of non-cognitive ability mainly focus on the single dimension, and mainly discuss the individual's self-esteem and self-efficacy. In current international community, the Big-Five Inventory (OCEAN) is mainly used to build the measurement indexes of non-cognitive ability. The OCEAN model divides the personality characteristics of individuals into five parts:

- 1) Openness to experience: Individuals with high score on this normally have better imagination, curiosity and creativity, and are willing to break routine and accept new ideas.
- 2) Conscientiousness: This index is used to measure whether an individual has the quality of concentration, logical, and conscientiousness in completing a task.
- 3) Extroversion: The individuals with high score on extroversion are always more outgoing, enthusiastic and optimistic, and have strong social communication ability.
- 4) Agreeableness: Individuals with agreeableness are often gentle and sympathetic, and keep peace with people.
- 5) Neuroticism: Individuals with high score on neuroticism generally have good ability to self-regulate their emotions, are less over-sensitive and nervous, own strong sense of safety, and never feel sad or depressed in the face of stress.

For the measurement of students' non-cognitive abilities, this study, based on existing research and combined with the obtained data, gathered information from the following questions: ① I can express my opinions very clearly; ② My reaction time is very fast; ③ I can quickly learn new knowledge; ④ I am curious about new things; ⑤ I do not often feel depressed, lost, or in pain. Each question has options ranging from 1=strongly disagree, 2=disagree, 3=agree, to 4=strongly agree.

In addition, this paper identifies individual factors, school factors, and family factors as influencing factors in the development of students' non-cognitive abilities. Based on existing literature on family capital, family capital is categorized into five major types: human capital, social capital, cultural capital, economic capital, and political capital. Family human capital is measured using the highest parental education level; family social capital is measured by referring to Li Chunling's occupational stratification research, categorizing the parents' occupations into upper, middle, and lower layers, with the highest occupational layer of either parent serving as the measurement indicator for the student's family social capital – a higher parental occupational layer indicates more family social capital<sup>1</sup>; family cultural capital is measured by the number of books at home, excluding textbooks and magazines; family economic capital is measured by the family's economic status, categorized into difficult, moderate, and affluent levels. Other variables include student personal factors: gender, 0=male,

1=female; whether the student is a migrant child, 0=no, 1=yes; school factors: the school's location, 0=rural township, 1=urban area; school quality, rated on a scale from 1=very poor, 2=poor, 3=average, 4=above average, to 5=best.

Reliability analysis was conducted using SPSS to examine the reliability and validity of the questionnaire, resulting in the following analysis and conclusions:

Cronbach's Alpha, a measure of internal consistency for a test or scale, was used in this analysis. Cronbach's Alpha values range from 0 to 1, describing the correlation between individual items in the test. A higher value indicates stronger correlations between items, indicating better internal consistency of the scale. In this dataset, Cronbach's Alpha was found to be 0.810, which is a very high value, suggesting excellent internal consistency of the test or scale.

The Kaiser-Meyer-Olkin (KMO) measure was 0.885, close to 1, indicating good correlations between variables and making the data highly suitable for subsequent analysis.

The Bartlett's Test of Sphericity yielded an approximate chi-square value of 1070.987, with 171 degrees of freedom and a significance level less than 0.001. This implies a significant correlation between the variables. Considering both indicators, it can be concluded that the structural validity of the questionnaire is excellent.

**3.3 Analysis of Differences in Non-Cognitive Abilities Among Students with Different Backgrounds**

According to the sample statistical analysis, significant differences exist in students' non-cognitive abilities due to variations in individual, family, and school backgrounds. Table 1 demonstrates that students with different family capital exhibit noticeable differences in non-cognitive abilities. On the family level, higher levels of family human capital, social capital, cultural capital, and economic capital are associated with higher non-cognitive abilities in students. On the individual level, male students show significantly lower non-cognitive abilities than female students, and left-behind children exhibit significantly lower non-cognitive abilities than non-left-behind children. On the school level, students in higher-quality schools demonstrate higher non-cognitive abilities, with urban students exhibiting significantly higher non-cognitive abilities than students from rural townships.

**Table 1: Analysis of Differences in Non-Cognitive Abilities Among Students with Different Backgrounds**

		The Average Score of Non-Cognitive Abilities	Significance Test
family human capital (parental education)	Illiteracy/ Semi-literacy	2	F=7.040 P<0.001
	elementary school	2.4	
	junior high school	2.9	
	high school/ vocational secondary school	3.1	
	higher vocational college	3.3	
	undergraduate program	3.6	



	postgraduate and above	3.8	
Family Social Capital (Parents' Occupation)	Lower class	2.3	F=1.120 P=0.046
	Middle class	3	
	Upper class	3.4	
Family Cultural Capital (Number of Books at Home)	10 books or fewer	2.1	F=2.048 P=0.025
	10 to 50 books	2.7	
	50 to 100 books	3.2	
	100 to 150 books	3.4	
	150 books or more	3.7	
Family Economic Capital (Annual Family Income)	Below 50,000 yuan	2	F=2.272 P=0.023
	50,000 to 100,000 yuan	2.7	
	100,000 to 150,000 yuan	2.9	
	150,000 to 200,000 yuan	3.1	
	Above 200,000 yuan	3.7	
Student Gender	Male	2.84	T=1.072 P=0.039
	Female	3.24	
Whether the student is a left-behind child	Yes	2.71	T=4.706 P<0.001
	No	3.28	
Location of the student's school	Urban	2.28	T=7.056 P=0.029
	Rural	3.27	
School Teaching Quality	Very poor	1.8	T=3.088 P=0.014
	Poor	2.1	
	Fair	2.6	
	Good	3.1	
	Very good	3.8	

**3.4 Analysis of Factors Influencing Students' Non-Cognitive Abilities**

This study establishes the following regression model to analyze the factors influencing students' non-cognitive abilities:

$$Y = F (F, I, S)$$

In the model, Y represents students' non-cognitive abilities, which is a continuous variable; F represents family capital, including family human capital, social capital, cultural capital, and economic capital; I represent individual factors, including student gender and whether the student is a migrant child; S represents school-level factors, including school quality and the school's geographical location.

**Table 2: The Regression Results of Factors Influencing Students' Non-Cognitive Abilities**

Variable Names	Unstandardized Coefficients	Significance
family human capital (parental education)	0.427	0.026
Family Social Capital (Parents' Occupation)	-0.047	0.898

Family Cultural Capital (Number of Books at Home)	0.331	0.035
Family Economic Capital (Annual Family Income)	0.079	0.038
Male (with female as the reference)	-0.162	0.013
Left-behind child (with non-left-behind child as the reference)	-0.101	0.054
School in urban area (with school in rural area as the reference)	0.084	0.686
School teaching quality	0.431	0.022
Sample size	100	

From Table 2, it can be observed that family human capital, cultural capital, and economic capital all have a significant positive impact on students' non-cognitive abilities. In other words, the higher the family human capital, cultural capital, and economic capital, the higher the students' non-cognitive abilities. Family social capital does not have a significant impact on students' non-cognitive abilities. Female students exhibit significantly higher non-cognitive abilities than male students. Non-left-behind children show significantly lower non-cognitive abilities than non-left-behind children. School quality has a significant positive impact on students' non-cognitive abilities, indicating that the better the quality of the school the students attend, the higher their non-cognitive abilities. Different regions (urban and rural) do not have a significant impact on students' non-cognitive abilities.

With an adjusted R-squared of 65.7%, it is evident that 65.7% of the factors influencing students' non-cognitive abilities are captured by the statistical model. This data analysis can be considered relatively successful.

At the family level, higher family human capital, social capital, cultural capital, and economic capital are associated with higher non-cognitive abilities in students. On the individual level, male students exhibit significantly higher non-cognitive abilities than female students, and non-migrant children demonstrate significantly higher non-cognitive abilities than migrant children. At the school level, students in higher-quality schools show higher non-cognitive abilities, and urban students exhibit significantly higher non-cognitive abilities than students from rural townships.

When controlling for other factors, at the individual level, female students' non-cognitive abilities are significantly lower than those of male students, and non-migrant children's non-cognitive abilities are significantly lower than those of migrant children. At the family level, family human capital, cultural capital, and economic capital have a significantly positive impact on students' non-cognitive abilities, meaning that higher family human capital, cultural capital, and economic capital are associated with higher non-cognitive abilities. Family social capital and political capital do not have a significant impact on students' non-cognitive abilities. Regarding school-level factors, school quality has a significantly positive impact on students' non-cognitive abilities, indicating that students in higher-quality schools exhibit higher non-cognitive abilities. The geographical location of different schools does not have a significant impact on students' non-cognitive abilities.



The family is the first socialization environment for a student, and factors such as family support, parenting styles, and family values can have a profound impact on a student's non-cognitive abilities. Parents' educational levels are often closely related to the cognitive and non-cognitive development of students. Parents with higher education levels tend to provide better educational resources and support. The economic situation of the family may influence a student's non-cognitive abilities. A stable socioeconomic status typically provides a better learning environment and opportunities. The social environment, including social interactions and friendships, can influence a student's social skills, emotional management, and collaborative abilities. The educational atmosphere, policies, and teaching quality at a school also play a crucial role in the development of a student's non-cognitive abilities. Using heuristic and interactive teaching methods and designing curricula that contribute to the development of non-cognitive abilities can better stimulate student interest and motivation. Individual experiences, self-reflection on experiences, and awareness of one's own emotions and behaviors play a critical role in developing non-cognitive abilities.

The cultural environment in which a student is situated influences values, social norms, and behavioral habits. Different individuals have varied personalities, talents, and developmental paces, which also impact the formation of non-cognitive abilities. Support systems within schools and communities, including educational resources, counseling services, and mental health support, positively influence a student's development of non-cognitive abilities. These factors are interconnected and collectively shape a student's non-cognitive abilities. Therefore, in educational practice, considering these factors comprehensively and adopting integrated educational strategies can more effectively promote the holistic development of students.

### **1) Attach importance to the role of parent involvement in education**

Family education plays an important role in the growth of students, so we should give more care and attention to students who lack parental participation in their study and life. While the state formulates corresponding education policies to help parents improve their education level, it should also formulate corresponding economic policies to help students with poor social and economic conditions so that education policies and economic and livelihood policies complement each other in order to achieve good results. It is found that sufficient parental participation plays a positive role in promoting the development of children's non-cognitive abilities. To strengthen parental participation in children's learning and growth, multidimensional factors need to be coordinated, such as schools, governments, social institutions and other factors. China has been paying attention to the development of family education and has issued a number of family education policies to help encourage the establishment of a good family education system. Under the leadership of the government and the policy, various education methods can be designated to help foster parents' correct education awareness and strengthen the degree of parents' participation, such as home-school cooperation, active communication and other methods.

### **(2) Schools should emphasize the cultivation of students' non-cognitive abilities.**

Current school education predominantly focuses on developing students' cognitive abilities, such as language, graphics, computational and logical thinking, and problem-solving skills, while placing less emphasis on the cultivation of non-cognitive abilities. Non-cognitive abilities also play a crucial role in students' overall development. These abilities can be nurtured and improved through the educational process, with education significantly influencing students' cooperation, self-management, attention,

and more. Non-cognitive abilities and cognitive abilities complement each other, as non-cognitive abilities can enhance cognitive skills by fostering students' exploratory spirit and open-minded approach to learning. The more positively oriented non-cognitive abilities are, the more they contribute to acquiring cognitive abilities actively and quickly.

- At the same time, strengthening the participation role of parents in education doesn't mean to transfer the responsibility of school education to the family[8]. We should pay attention to clarifying the boundaries of home-school responsibility. With the improvement of modern communication technology, the school has established parents' WeChat group in order to better contact parents. However, with the development of education internalization, the spread of parents' anxiety and the absence of teachers, the development of parents' WeChat group began to deviate from the original intention, and gradually evolved into teachers' "giving orders" to students' parents, which greatly increased the burden of parents' education. Therefore, when formulating the home-school co-education policy system, we should pay attention to clarifying the boundaries of home-school education, definite the responsibilities of all education subjects that parents are not offside and teachers are not absent so as to jointly help students grow healthily.

### **(3) The government should prioritize the cultivation of non-cognitive abilities in rural students and left-behind children.**

In China, there exists an issue of imbalanced and insufficient development in education. Students in rural areas and migrant children have relatively limited access to high-quality educational resources, leading to a disadvantage in the quality of education they receive. The non-cognitive abilities of students from rural areas and migrant children are significantly lower than those of students in urban areas and non-migrant children. However, the impact of their non-cognitive abilities on academic performance and the mediating effect of non-cognitive abilities are higher than those of students in urban areas and non-migrant children. Therefore, enhancing the non-cognitive abilities of students from rural areas and migrant children can help narrow the academic gap between them and students in urban areas and non-migrant children. On the one hand, the government should increase economic support for disadvantaged families to prevent differences in the development of students' non-cognitive abilities due to uneven resources or unequal learning opportunities. Atkinson and Stiglitz (1994) proposed that education is a "publicly provided private good," and inequalities in education can be reduced through public investment in the education sector. Therefore, the government should address the lack of material capital and educational opportunities in disadvantaged families by providing free public services. On the other hand, concerning the development of non-cognitive abilities in the next generation, the government's concern should not be limited to material compensation such as accommodation subsidies and scholarships. It should also focus on the time and opportunities available to parents in disadvantaged families for home education. Low-level jobs often force labor from disadvantaged families to work longer hours and at higher intensity. In response, the government should pay attention to the employment and labor systems for left-behind children, migrant children, and low socio-economic status family labor forces. Opportunities for home education should be provided to these vulnerable groups, encouraging interaction between parents and children to enhance the non-cognitive abilities of the children. Specific measures include providing paid leave and paid travel opportunities for families from disadvantaged groups, allowing parents from disadvantaged families to take paid leave to visit their children in different locations, and implementing these humane measures to meet the educational needs of disadvantaged families, thereby reducing the gap in educational investment in home education.

#### (4) Establishing a Sound Family Education Guidance Service System

Firstly, parents should actively enhance their own educational literacy. Research shows that parents' cognitive level of education affects the development of students' non-cognitive abilities. Therefore, this study encourages parents to understand the physical and mental development characteristics of children at each age stage through reading books, attending educational lectures, or participating in forum discussions. Parents should provide appropriate physical care and support for their children, understand their needs, involve them in decision-making discussions, and listen to their opinions.

Secondly, relevant educational departments should organize professional educational guidance personnel to provide parents with knowledge dissemination and guidance on safety care, mental health, and educational growth. Online consultation services should be provided to address issues that arise in family education, offering personalized guidance. Policies can be implemented to regulate parental education methods, encouraging parents to educate their children in an equal and tolerant manner.

Thirdly, schools and teachers should focus on sharing knowledge about family education and raising parents' awareness of family education. At the same time, schools should actively engage in family education activities through forms such as home visits, parent-teacher meetings, and parent sports events. These activities provide platforms and opportunities for interaction between parents and children, promoting the formation of a positive parent-child relationship.

Fourthly, led by social public welfare organizations, collaboration with various universities should be established to develop more professional family education lectures and learning resources. These resources can cover topics such as psychological counseling, health care, and study guidance, enhancing the quality of family education resources. This initiative aims to create a societal atmosphere that values home education, family, and family ethics.

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