



Baseline Study Report **on Early Childhood Development Project** **for Children Aged 3-6 in Shanghai**

January 31, 2023
Shanghai, China
3-6 ECCD Programme in Shanghai



Save the Children®

IN PARTNERSHIP WITH Shanghai Normal University

Baseline Study of Children Aged 3-6 in Shanghai

Jan, 2023 - China



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Baseline Study of Children Aged 3-6 in Shanghai

Jan, 2023 - China



Acronym

IDELA	The International Development and Early Learning Assessment
ECCD	Early Childhood Care and Development
EF	Executive Function
PSDQ	Parenting Styles and Dimensions Questionnaire
CPIC	Children's Perception of Interparental Conflict Scale
CHAOS	Confusion, Hubbub, Order Scale
PPCR	Parents' Perceptions of the Co-Parenting Relationship
EPIS	Early Parental Involvement Scale
STRS	Student Teacher Relationship Scale

Project Details

Project name: Nurturing Care for Children (0-6 Years Old) Most Impacted by Inequality and Discrimination in Shanghai and the Wider Yangtze River Delta Region

Project locations: Shanghai, China

Start date: January 1, 2022

End date: December 31, 2024

Donor: Save the Children Hong Kong

Total budget: HKD 16,600,000

Thematic areas: Early Childhood Care and Development

Estimated beneficiaries:

- Direct beneficiaries: 3,700 children aged 3-6 and 4,350 adults,
- Indirect beneficiaries: 3,000 children aged 0-6 and 2,000 adults.

Executive Summary

Project Background

The project was designed based on the Nurturing Care Framework of the World Health Organization's (WHO) and Save the Children's (SC) Building Brains, Ready to Learn, and Enabling Teachers Common Approaches. The rationale behind the project is that developing children to their full potential requires a nurturing environment that is respectful and protective. Such environment depends on whether caregivers have the necessary knowledge and skills or not. Caregivers can acquire essential knowledge and related skills through effective community networks, high quality consulting services, and an enabling environment. Thus, for children aged 3-6, the project will focus on building the capacity of caregivers and service providers, and creating an enabling environment to support early childhood development. The project seeks to improve the quality of teacher-child interaction in suburban private kindergartens through teacher training so that migrant children can receive compensatory education outside family. By understanding the family environment of preschool migrant children through research, we can drive the improvement of family parenting environment (mainly parenting style and interparental relationship) to promote the early physical and mental development of this group of children and narrow the development gap between them and children of the same age in urban areas.

Study Purpose and Key Questions

Study Purpose

The baseline study has two main purposes. Firstly, to understand the basic situation of early learning and development of preschool migrant children in the seven kindergartens participating in the project in Shanghai, and to provide evidence for carrying out the early childhood development project in a more targeted manner. Secondly, to explore the concerns of parents and teachers by assessing the current situation of migrant children's parenting environment and the

educational environment of project kindergartens, so as to identify gaps and to determine the focus of short-term interventions.

Report Audience

The primary audiences of this study are: Save the Children Hong Kong; Save the Children China's technical advisors; government stakeholders such as the Education Bureau, the Civil Affairs Bureau, and the Women's Federation, etc.; and beneficiaries such as preschool children, parents and teachers who participated in this project.

The research findings of this project will be used to unlock the full potential of migrant children aged 3-6 in all aspects.

Operating at the levels of kindergartens and teachers, the project endeavors to elevate teachers' proficiency in organizing and guiding activities for young children. This will be achieved through regular teacher training and coaching sessions specifically tailored for kindergartens catering to migrant children. The focus areas include Learning through Play, child safety, and children's social-emotional learning.

At the community level, the project targets enhancing the capabilities of community service workers to curate activities suitable for children aged 3-6. This will involve devising appropriate exercises and conducting tailored training sessions. Simultaneously, at the parental level, the project seeks to augment parental knowledge and skills in scientific parenting through frequent parent lectures and parent groups. Furthermore, on a broader scale, the project aspires to collaborate with diverse stakeholders to foster an environment conducive to early childhood development. The goal is to induce shifts in parental nurturing awareness and behaviors through strategic communication and advocacy initiatives.

Research Questions

The target population of this baseline study included preschool migrant children aged 3-6 years, children's caregivers, teachers, and communities. The preschool migrant children were divided into experimental and control groups. An intervention program will be implemented solely within the experimental groups at a later stage to explore interventions facilitating the optimal development of preschool migrant children. Meanwhile, the control group will not undergo any intervention, serving as a baseline for comparison to assess the effectiveness of the intervention. The baseline study sought answers to the following six research questions:

- **Question #1. What are the early developmental characteristics of preschool migrant children aged 3-6 in both the experimental and control groups?**
- **Question #2. What are the characteristics of the family and kindergarten environments among preschool migrant children aged 3-6 in the experimental and control groups?**
- **Question #3. What are the family and kindergarten environmental factors that affect the development of preschool migrant children aged 3-6?**
- **Question #4. What are the challenges and needs regarding nurturing faced by these families?**
- **Question #5. What are the educational challenges and needs of teachers working with preschool migrant children?**
- **Question #6. What measures and actions within the community can be implemented to promote the early development of migrant children aged 3-6?**

Conclusions

1. Early development status of preschool migrant children aged 3-6 in the experimental and control groups was similar and did not differ significantly.

The early development of preschool migrant children aged 3-6 in both the experimental and control groups showed no significant differences. Across emergent numeracy, emergent literacy, social-emotional development, motor skills, and executive function, no notable variations were observed except for approaches to learning. The experimental group demonstrated higher scores than the control group in this area. However, when considering the overall IDELA scores, no significant differences were found, indicating a similar developmental status between the two groups.



2. Similarities existed in family environment characteristics between the experimental and control groups of 3-6-year-old preschool migrant children, with slight discrepancies in kindergarten environments.

Noteworthy was the absence of significant differences between the experimental and control groups in authoritative and authoritarian parenting styles, interparental conflict, and teacher-child intimacy. However, a significant divergence was identified in teacher-child conflict, which happened more often in experimental group than the control group, and primarily prevalent in the K1 Class (children aged 3-4) rather than the K2 Class (children aged 4-5). This suggests that while family environments were alike, slight variations in the teacher-child relationship might exist, particularly among younger children. The experimental group scored slightly higher in teacher-child conflict compared to the control group, and this variability may only exist in the children in the K1 Class of kindergarten.

3. Authoritative parenting, interparental conflict, and teacher-child intimacy affect the development of preschool migrant children aged 3-6 years.

The family and kindergarten environments can significantly impact children's development. Authoritative parenting was positively associated with emergent numeracy, emergent literacy, and overall IDELA scores, whereas authoritarian parenting was not beneficial to children's development. In addition, interparental conflict indirectly influenced various children developmental aspects – namely emergent numeracy, emergent literacy, motor development, and executive function – through its mediation of parenting styles. Moreover, teacher-child relationships can also impact children's development, primarily because teacher-child intimacy contributes to children's motor development and executive function. In contrast, teacher-child conflict did not positively contribute to children's development.

4. Families of migrant children face several challenges in parenting and aspire to receive support and assistance.

Firstly, parents of migrant children have a low sense of efficacy in parenting. It might be due to their lower education and literacy levels, which make them feel inadequate to educate their children. Moreover, fathers are busy with work and less involved in parenting and interaction with their children, resulting in increased pressure on mothers to raise their children. Additionally, parents' different parenting ideas, unrealistic expectations on children, and their emotional problems result in a conflicting parenting atmosphere, which in turn affects children's physical and mental health. Furthermore, economic constraints negatively impact living environments, which is not conducive to children's better development. Last but not least, due to the inequality in education, migrant children cannot enjoy the same educational opportunities and resources as local children.

Seeking further support, parents aspire for further support and assistance in father engagement, communication with teachers, and access to parenting courses. Firstly, mothers wish to gain more support from fathers, whose parenting is crucial to their children's development and whose role in parenting is irreplaceable. Most respondents in this study expect fathers to raise awareness of educational involvement and actively participate in parenting activities. Secondly, parents of migrant children view teachers as professionals, and they expect professional guidance and assistance from teachers in parenting; furthermore, parents expressed the desire to receive professional family parenting courses as a way to enrich parenting knowledge and improve parenting skills. Additionally, many parents of migrant children said they would try their best to get their children a consistent education in Shanghai. Finally, some parents expressed their hope that their community could offer suitable activities to promote their children's development, and increase the frequency of these activities.

5. Early childhood teachers encounter challenges in their professional skills and in fostering cooperation between families and kindergartens. They seek support and assistance to address these issues.

The obstacles faced by early childhood teacher in the education process encompass three key aspects. Firstly, there is a need for higher professional competence among teachers, yet limited training opportunities hinder the execution of high-quality teaching and learning activities. Secondly, kindergarten education resources are relatively scarce, posing difficulties in providing ample teaching resources for the development of early childhood teachers. Lastly, in terms of family-kindergarten cooperation, parents often view teachers as authoritative figures but lack active participation awareness, resulting in a dearth of constructive advice for teachers.

To combat these educational dilemmas, teachers require additional support and assistance for professional development and improved infrastructure and hardware conditions. They aim to enhance their skills through increased training opportunities, thus elevating their professionalism. Additionally, they aspire to share successful parenting examples with parents, aiming to boost parental involvement and emphasize the significance of family education in their children's development.

Teachers also anticipate support for kindergartens in terms of infrastructure. By augmenting kindergarten resources such as play materials and facilities, educational establishments can offer a richer learning environment, facilitating teaching and learning activities and fostering the holistic development of young children.

6. Subsequent measures and actions will be implemented for community initiatives aimed at fostering the early development of migrant children aged 3-6. (These initiatives will address issues related to family-community cooperation and the expected support from the community.)

Two primary problems exist within family-community cooperation. Firstly, there is a low level of parental engagement due to specific parenting beliefs that hinder active participation and support for community activities. Secondly, fathers exhibit limited involvement in community activities due to work and other obligations, posing a challenge in their participation in their children's community engagements.

The community has outlined three expectations for support in addressing these issues. Firstly, there's a need to implement relevant training programs to enhance the professional abilities of community workers. This aims to empower them to better fulfill their responsibilities and execute related tasks effectively. Secondly, organizing visits and learning from successful experiences of other organizations is crucial to broaden perspectives and bolster professional knowledge and skills. Lastly, seeking assistance from Save the Children, drawing from their rich experience, can compensate for manpower limitations within the community. This collaboration can facilitate community activities and promote the sustainable development of children from migrant families.

The community has outlined three expectations for support in addressing these issues. Firstly, there's a need to implement relevant training programs to enhance the professional abilities of community workers. This aims to empower them to better fulfill their responsibilities and execute related tasks effectively. Secondly, organizing visits and learning from successful experiences of other organizations is crucial to broaden perspectives and bolster professional knowledge and skills. Lastly, seeking assistance from Save the Children, drawing from their rich experience, can compensate for manpower limitations within the community. This collaboration can facilitate community activities and promote the sustainable development of children from migrant families.

Recommendations for data use

Save the Children can tailor subsequent project interventions for preschool migrant children by leveraging the insights derived from this report. The study initially assessed the development status of migrant children in both experimental and control groups and examined their family and kindergarten environments. This groundwork establishes a crucial basis for future intervention studies. Additionally, the investigation highlighted the educational challenges and needs faced by parents during the upbringing process, as well as the perceived dilemmas and conditions encountered by teachers in the educational sphere. Utilizing these findings, Save the Children can design targeted intervention activities to augment their effectiveness. Furthermore, identified issues in this study, such as potential ceiling or floor effects in IDELA items, can be mitigated and rectified in subsequent studies. Save the Children could undertake validity studies and revisions of the IDELA tool tailored to Chinese samples.

Government bodies such as the Education Bureau, Civil Affairs Bureau, and Women's Federation can utilize this report to comprehend the learning and living challenges encountered by migrant children in Shanghai. Responding to the concerns raised by parents and teachers, these agencies are encouraged to provide appropriate policy and infrastructural support. This proactive approach aims to foster an improved and enabling environment for migrant children.

Methodology and Limitations

Methodology

This evaluation employed a blend of qualitative and quantitative methodologies.

Quantitative data stemmed from the IDELA test and distributed questionnaires to parents and teachers. The IDELA test was administered to 733 preschool migrant children aged 3-6, including 380 children in the experimental groups and 353 children in the control groups. Questionnaires were gathered from 670 mothers, 649 fathers, and 706 teachers associated with these 733 children.

For qualitative analysis, one-on-one interviews were conducted with parents, respecting their voluntary participation and withdrawal rights. Due to fathers' busing working schedule and primary caregiving roles held by mothers, ten volunteering mothers from six kindergartens (only one mother was recruited from the two two smaller-scale kindergartens) were interviewed for approximately 45 minutes each. Their ages ranged from 26 to 37, with varying educational backgrounds - three mothers graduated with junior high school diploma, one with high school diploma, one with vocational secondary school diploma, and five with college diploma. Additionally, one female early childhood teacher from each experimental kindergarten, aged 34 to 51, with teaching experience spanning 10 to 21 years, participated in the interviews.

Limitations

- (1) Due to COVID-19 lockdowns, the completion of teacher observations and community worker interviews was delayed. This aspect of the study was concluded in early 2023, with the subsequent results incorporated into the comprehensive baseline study report.
- (2) While the IDELA demonstrates good reliability and validity overall for holistic child learning and development, two specific items in this study were identified for revision:
 - a. In the size and length differentiation task, a high percentage of children in both K1 (72.7%) and K2 (91.4%) Classes achieved perfect scores, potentially indicating a ceiling effect and not accurately reflecting the children's abilities.
 - b. Concerning the phonological awareness task, a significant portion of children in K1 (86.6%) and K2 (77%) Classes scored zero, suggesting a potential floor effect that might not appropriately measure their abilities.
- (3) The IDELA instrument lacks a standardized reference, impacting its ability to comprehensively represent children's development across domains. While this baseline study established differences in developmental levels and family situations between experimental and control groups, it lacks a normative reference standard. To truly comprehend the developmental progress of migrant children, a standard norm for reference is essential.
- (4) All interviewed parents were mothers, potentially limiting the breadth of understanding regarding family parenting challenges and needs. While utmost respect was given to participants' rights to voluntary participation and withdrawal, the interviewees comprised solely mothers. Consequently, the absence of fathers' participation in the interviews may overlook unique issues pertinent to family education dilemmas. The inclusion of fathers' perspectives could shed light on different facets of these challenges. Subsequent studies should aim to actively engage fathers in the interview process to capture a more comprehensive view of family dynamics and educational predicament.

Project Introduction and Background

Study Purpose

In the past three decades, due to China's unbalanced economic development, a large number of people from rural areas in the central and western regions have migrated to urban areas in the east and south for better working and living conditions. Some parents bring their children from the countryside to the cities, creating a group of "migrant children". The report *Current Situation of Migrant Children in China in 2022: Facts and Data* shows that in 2020, China's migrant children (0-17 years old) reached 71.09 million, of which about 11.47 million are 3-5 years old migrant children, accounting for about 20% of children aged 3-5 years old. This study focuses on migrant children aged 3-6, referred to as preschool migrant children. In this study, with reference to the views of Shan et al. (2021), they are defined as preschool children aged 3-6 who leave their household registration place with either parent or another guardian, cross a certain administrative area, live in the migrant area for more than half a year and receive kindergarten education in the migrant area (excluding preschool migrant children separated from families in the municipal area).

Due to the restrictions of household registration, household income, and other factors, migrant children face many difficulties in urban life, which may restrict the development of migrant children. In terms of family environment, parents have lower educational background and higher unemployment rate (Liu et al., 2020; Liu & Jacob, 2013); At the same time, parents are faced with greater living pressure and economic pressure, and their time and economic investment in children's education is limited (Jin et al., 2017). In terms of public services, migrant children are unable to enjoy the same welfare policies and educational resources as registered children in their cities and often have to attend private schools with relatively poor quality in the face of the shortage of public education degrees. According to the survey results of the report *Current Situation of Migrant Children in China in 2022: Facts and Data*, 70% of the children of migrant workers are enrolled in private schools (Liu & Zeng, 2022). These factors lead migrant children to lag behind the urban local children of the same age in terms of quality and ability.

As the economic center of China, Shanghai can provide a large number of job opportunities and attract a large number of migrants, which makes it one of the largest cities in China with migrant children. In 2008 and 2010, in order to solve the problem of preschool education for children of migrant workers, the Shanghai Municipal Education Commission successively issued *Several Opinions on Doing a Good Job in Preschool Education for Migrant Children Living Together With Migrant Workers in Shanghai*, *Interim Measures for the Management of District Private Third-Level Kindergartens and Nursing Centers*, and *Several Opinions on Strengthening the Management of Preschool Children's Nursing Centers in the Suburbs of Shanghai*. Since then, the enrollment rate of migrant preschool children in Shanghai has increased significantly. In 2010, preschool migrant children in Shanghai accounted for only 30%, and this figure rose to 42% in 2014 (Lu et al., 2016).

Although Shanghai provides relatively adequate educational support for migrant children, Lu et al. (2016) showed that there are still two prominent problems in the parenting and education environment of migrant children in Shanghai. First, in the family, although parents have high expectations for their children's academic development, due to the lack of scientific family education methods, while working long hours with high intensity, and neglecting to accompany and educate their children, they can't meet children's upbringing and educational needs, resulting in children showing many developmental problems and psychological problems. Second, in terms of kindergarten education, the conditions of kindergartens for migrant children are in urgent need of improvement. Teachers and students move frequently. Teachers are weak and have low academic qualifications, and they lack post-service training to improve their teaching ability.

In view of the disadvantaged situation of migrant children in Shanghai, Save the Children plans to conduct a Shanghai 3-6 Years Old Children Comprehensive Development Project. The project is developed according to the World Health Organization's (WHO) Framework for Nurturing Care and Save the Children's (SC) Building Brains, Ready to Learn, and Enabling Teachers Common Approaches concept. The basic principle of the project is that to develop children to their full potential, they need a nurturing environment that is respectful and protective. This environment depends on the caregiver having the necessary knowledge and skills to create it. Caregivers can gain these necessary knowledge and

skills through effective community networks and consulting services of high quality, as well as through an enabling environment. Therefore, for children aged 3-6 years, the project will focus on building the capacity of caregivers and service providers and creating an enabling environment to support early childhood development. The project aims to improve the quality of teacher-child interaction in kindergartens of preschool migrant children through teacher training, so that migrant children can truly receive compensatory education outside the family. Through research to understand the family environment of preschool migrant children, we can drive the improvement of family parenting environment (mainly parenting style and interparental relationships) to promote the early physical and mental development of this group of children and narrow the development gap between them and urban children of the same age.

Literature Review

Early Development Status of Preschool Migrant Children

The development status of children refers to a state in which they are currently in various aspects of development, including the development level of various core abilities such as early learning (such as reading and writing, mathematics), cognition, social-emotion, and motor development. As mentioned earlier, migrant children face more challenges and difficulties compared to non-migrant children (Wen & Lin, 2012; Fang et al., 2017). Compared with their urban counterparts of the same age, migrant children showed early developmental delay and backward academic ability in the preschool period. The gap in academic achievement widens further when they reach primary and secondary school (Wen & Lin, 2012; Fang et al., 2017).

Academic ability is a developing field that parents of migrant children attach great importance to and have high expectations for. However, the performance of preschool migrant children in early academic development is not promising. Compared with urban local preschool children of the same age, preschool migrant children are lagging behind in emergent numeracy ability (Zhang, 2017), writing and painting (Shi et al., 2013), and other aspects.

In terms of cognitive ability, early childhood often reflects cognitive level through executive function. Executive function is a series of high-level cognitive processes related to goal-oriented behaviors (Diamond, 2013), including three core components: inhibitory control, working memory, and cognitive flexibility (Miyake et al., 2000). International studies showed that the executive function of Sri Lankan immigrant children in the United States is poor in inhibitory control (Hewage et al., 2006). Domestic research also found that the cognitive flexibility and inhibitory control ability of disadvantaged children aged 3-6 were weaker than those of urban local children (Luan, 2015).

In terms of social-emotional abilities, migrant children are weaker than urban local children in communication ability, emotional maturity, and emotional regulation (Hu et al., 2020; Zhao et al., 2020). In terms of emotional regulation strategies, the frequency of cognitive reconstruction strategies¹ used by migrant children is significantly lower than that of non-migrant children. These will undoubtedly affect the mental health of migrant children. Some meta-analyses on the mental health of migrant children (Yan et al., 2022; Zhang et al., 2019) have shown that compared to urban children, migrant children show more psychological problems such as learning anxiety, social anxiety, loneliness, fear, and depression.

In terms of motor ability, the exercise time and frequency of migrant children are significantly lower than that of urban local children, with migrant girls having the shortest exercise duration (Zhang, 2016). However, some studies have shown that preschool migrant children have better motor abilities than urban children, which are reflected in the three dimensions of fine motor, sensory-motor, and gross motor (He, 2013).

In addition to some of the core competencies mentioned above, approaches to learning is also an important element emphasized in domestic and international preschool education programs. Approaches to learning is a measure of

¹ Cognitive reconstruction strategy refers to the rethinking of negative situations, such as replacing negative, self-attacking thoughts with positive, explicit ones. The cognitive reconstruction strategy is a positive emotion regulation strategy: when the attitude toward the negative situation changes, the negative situation's adverse effects do not exist.

attention and learning motivation, including children's task persistence and attention, learning desire, learning independence, flexibility, and organization (Duncan et al., 2007; Galindo & Fuller, 2010). In terms of persistence and attentiveness, half of preschool migrant children frequently experienced inattention and distraction in kindergarten's daily activities (Ouyang, 2007).

In summary, preschool migrant children lag behind in various aspects of development compared to urban children of the same age. Therefore, in order to narrow this discrepancy, researchers need to investigate and reveal its causes and provide targeted intervention measures.

Family Environment for Preschool Migrant Children

According to Bronfenbrenner's (1979) Ecological Systems Theory, individual development is nested in an interactive environmental system. The development of preschool migrant children is affected by aspects ranging from distal aspects of social structure (e.g., economic level) to proximal aspects of social interaction (e.g., parenting style, parent-child interaction, etc.). Parents are the first teachers of children, and as migrant children follow their parents to live in the city, parenting styles and the family atmosphere that parents create for their children are important family factors that affect migrant children's adaptation, development and learning engagement.

Parenting style refers to strategies followed by parents in raising their children. Researchers classified parenting style into four types: authoritative parenting, authoritarian parenting, permissive parenting, and neglectful parenting (Maccoby & Martin, 1983). In this study, only authoritative and authoritarian parenting are examined because previous studies have shown that authoritative and authoritarian parenting are predominant among Chinese parents, and permissive and neglectful parenting are not applicable to the Chinese educational context (Sorkhabi, 2005; Steinberg, 2001). Authoritative parents usually adopt supportive parenting such as warmth and support, understanding and guidance, and behavioral supervision; Authoritarian parents often use controlled parenting such as scolding, corporal punishment, and psychological control (Baumrind, 1971).

Most existing studies show that authoritative parenting helps children develop various good academic and social-emotional outcomes, while authoritarian parenting hinders children's development (Pinquart & Kauser, 2018; Spera, 2005). However, due to factors such as the nature of their parents' work, economic status, and educational level, migrant children's families may have their own unique parenting pressures and behaviors. Compared with urban local families, migrant parents have a less emotional expression to their children, less able to respond to their children's needs and rely more on punitive or powerful authoritarian parenting (Conger et al., 1984; McLoyd, 1990; Peterson & Peters, 1985). Domestic studies have also found that parents of migrant children lack warmth and support, tend to be strict and overly interventionist, and imperative control is the most used approach (Zhang et al., 2017). Parenting style is also an important factor affecting the social integration of migrant children. For example, the level of intimacy in the family environment can not only directly affect the social integration of migrant children, but also play a role through the maternal rejection, emotional warmth, and overprotection (Zhuo et al., 2015).

Interparental conflict mainly refers to verbal or physical attacks and disputes caused by disagreements between spouses (Chi & Wang, 2002). There is a close relationship between family mobility and interparental conflict. Some researchers believe that the challenges and pressures brought by family mobility, such as unstable housing, work, and social discrimination, can make the relationship between family members tense. Therefore, migrant families have more interparental conflicts than non-migrant families (Lee, 2015). According to family system theory, when parents are in a bad relationship, children will be involved in conflicts between their parents and be negatively affected. Many studies have shown that interparental conflicts have a significant impact on children's internal and external problems. Frequent interparental conflicts may cause children to develop negative emotions, psychological adaptation difficulties, and difficulties in dealing appropriately with peers (Scott et al., 2015; Koss, George, & Davies, 2013; Stocker & Youngblade, 1999). Previous domestic studies have found a negative correlation between interparental conflict and child development, which is related to children's lower levels of learning engagement and attentiveness; Interparental conflicts can also lead to parental neglect of children's education, which in turn affects children's learning engagement (Liu et al., 2022).

In conclusion, the age of 3-6 is a critical period for children's development, and the family is the initial venue for the development of various abilities of preschool migrant children, playing a very important role in their growth process. This study will focus on the characteristics of parenting styles and interparental conflict in migrant children's families and their impact on children's development, with a view to exploring the core family environment variables that influence the adaptation and development of migrant children.

Kindergarten Education Environment for Preschool Migrant Children

Although it is no longer difficult for preschool migrant children to enter kindergartens, the kindergarten education environments in which migrant children live tend to be poorer and of lower environmental quality, not only below the national average but even below the overall rural level (Shi, 2015). These low qualities are reflected in poorer physical environment creation, more chaotic life activities, more rigid curriculum, and more monotonous daily activities. Due to the poor teaching facilities and conditions, it is difficult for kindergartens to attract excellent early childhood teachers, so teachers are weak. Most in-service teachers come from other places and may return to their home cities for various reasons, resulting in high teacher mobility and difficulty in forming a stable teacher-child relationship (Lu & Liu, 2016). There are also serious professional development issues among teachers in kindergartens where migrant children are located. Research has found that these kindergartens and regulatory authorities provide little external support for teachers' professional development (Lu, 2016). Teachers lack platforms for professional development at all levels, both in and out of school, such as rotations, training, and seminars, and these problems were more prominent in private kindergartens, where most teachers showed a strong need for professional development opportunities.

The differences in development and learning between migrant children and local urban children have led teachers to hold negative attitudes toward the inclusion of migrant children in such operations as daily urban education, with some teachers even holding negative views of migrant children and suggesting that migrant children be placed in different classrooms from urban children (Liu et al., 2015). Teachers also hold negative views on the parents of migrant children, believing that parents often neglect education, such as not participating in their children's homework, school affairs, and cooperation with teachers (Liu et al., 2015). Migrant children may perceive such differentiated attitudes from teachers, which in turn can lead to a greater sense of loneliness (Liu et al., 2014), which can hinder the formation of intimate, good teacher-child relationships and be detrimental to children's lives and learning in kindergarten. Although some teachers have remained stubborn, many teachers have recently changed their attitudes toward migrant children (Liu et al., 2020). On the one hand, one reason is that the experience of teaching migrant children has led teachers to change their previous stereotypes. On the other hand, another reason is that teachers have participated in some post-service training for migrant children's education, which has improved their teaching and management methods (Liu et al., 2020).

The teacher-child relationship faced by migrant children is also not optimistic. A good teacher-child relationship can lead to a better adjustment to kindergarten and can also affect the child's later academic and social adjustment (Davis, 2003). Research has found that teacher-child intimacy can reduce children's problem behaviors, while teacher-child conflict may increase children's problem behaviors (Zhang et al., 2008). For migrant children, a good teacher-child relationship is also of great significance. Studies have found that teacher-child intimacy positively predicts migrant children's social skills and negatively predicts migrant children's implicit problem behaviors (Li et al., 2014). Teacher-child relationships can also mitigate the negative effects of mother-child conflict on children. As the teacher-child conflict decreases, the negative impact of mother-child conflict on the social skills of migrant children becomes smaller and smaller. As the intimacy between teachers and children increases, the positive impact of mother-child conflict on the implicit problem behavior of migrant children will also decrease (Li et al., 2014). However, the teacher-child relationship faced by migrant children in China is not optimistic. Hu (2020) found that the teacher-child relationship among migrant children is only at a moderate level, and teacher-child conflict is significantly correlated with emotional disorders and personality defects in migrant children's mental health.

The disadvantages of kindergartens for migrant children are likely to further widen the gap in early development and learning between migrant children and urban children. It is particularly important to improve the kindergarten environment, especially to provide a platform for teachers' professional development and to enhance their teaching and management of migrant children. Therefore, this study will focus on the characteristics of kindergartens for preschool

migrant children and their impact on children's development, with a view to adopting effective interventions to improve the kindergarten education environment for preschool migrant children.

Objective and Content of Baseline Study

There are two main objectives of this baseline study: First, to understand the basic situation of early learning and development of migrant children in Shanghai, and to provide a scientific basis for more targeted early development promotion projects for migrant children. The second is to evaluate the current situation of the family upbringing environment of migrant children and the kindergarten education environment participating in the project, find the weak links, explore the concerns of parents and teachers, and determine the focus of short-term intervention.

The objects of this baseline study include children, child caregivers, early childhood teachers, and communities. Specifically, there are six research questions as follows:

- **Question #1. What are the early developmental characteristics of preschool migrant children aged 3-6 in both the experimental and control groups?**
- **Question #2. What are the characteristics of the family and kindergarten environments among preschool migrant children aged 3-6 in the experimental and control groups?**
- **Question #3. What are the family and kindergarten environmental factors that affect the development of preschool migrant children aged 3-6?**
- **Question #4. What are the challenges and needs regarding nurturing faced by these families?**
- **Question #5. What are the educational challenges and needs of teachers working with preschool migrant children?**
- **Question #6. What measures and actions within the community can be implemented to promote the early development of migrant children aged 3-6?**

In order to answer the above six questions, we plan to use a combination of quantitative and qualitative research methods, which can comprehensively investigate the development status and influencing factors of preschool migrant children.

IDELA test was conducted for young children to understand their development in emergent numeracy, emergent literacy, social emotion, motor development, executive function, approaches to learning, and other aspects, to understand the baseline development level of migrant children in the experimental group and control group, in order to answer question 1.

A questionnaire survey was conducted for all child caregivers and teachers to investigate the family and kindergarten environment such as parenting style, couple conflict, teacher-child relationship, etc., to understand the current situation of the family and kindergarten environment of migrant children, in order to answer question 2.

Questionnaire survey data of child caregivers and early childhood teachers were matched with IDELA test data of children. Through the statistical analysis, factors in children's family and kindergarten environment were understood to have an impact on children's development in which aspects, so as to answer question 3.

Some parents are recruited to conduct semi-structured interviews to understand the advantages and challenges faced by parents in the process of parenting, deeply understand the current situation of the family environment and how family environment affects children's development, and explore where parents expect help and support in parenting, in order to answer question 4.

Some teachers were recruited to conduct semi-structured interviews to deeply explore the current situation of the kindergarten environment and how it has an impact on children's development, understand teachers' educational difficulties in teaching activities and what they expect to get help from in the future, in order to answer question 5.

Community workers were recruited to conduct semi-structured interviews to understand what actions the community has taken to help the healthy development of preschool children and what further improvements can be made in the future, in order to answer question 6.

Procedures and Methods

Basic Description of the Sample

Nine kindergartens were selected in Jinshan District, Jiading District, Qingpu District, and Minhang District of Shanghai for the baseline test from September 2022. Linchao Kindergarten and Jinwei Kindergarten served as control kindergartens², and Labor Kindergarten, Little Oxford Kindergarten, Taoyuan Kindergarten, Caizhiyuan Kindergarten, Xianghuaqiao Kindergarten, Hangnan Kindergarten, and Huchuan Kindergarten served as experimental kindergartens². The two control kindergartens were public second-level kindergartens. Among the seven experimental kindergartens, Xianghuaqiao was a public second-level kindergarten, while the rest were private third-level kindergartens. Both the experimental and control group kindergartens were kindergartens with preschool migrant children. The research subjects involved in this study include preschool migrant children, child caregivers, teachers, and community workers.

IDELA test sample Preschool migrant children were selected using cluster sampling. For the experimental kindergartens, the kindergartens were divided into 7 groups according to 7 kindergartens. Then one class of children (about 30) in each K2 and K1 Class was selected from each group, trying to ensure that the proportion of boys and girls was about 50% each. If α was set at 0.05, the confidence interval was 95%, and the statistical efficacy was 85%. A sample size of 320 would meet the requirement. The control group was located in the same region and level as the control group (1 kindergarten in Minhang District and 1 kindergarten in Jiading District), and the required sample size for the control group was the same as that of the experimental group. The minimum number of participants in the experimental and control groups was 640 children in total, 320 in each group. To ensure that there was ultimately an adequate sample size for analysis resulting from the possible risk of subject attrition, 760 participants were drawn for the actual study, 380 each for the experimental and control groups. In the actual administration, 27 children did not complete the test because they were absent from kindergarten that day or were not in good condition to take the test that day, thus 733 children eventually completed the IDELA test. There were 353 children in the control kindergartens and 380 children in the experimental kindergartens. There were 166 boys and 187 girls in the control kindergartens and 198 boys and 182 girls in the experimental kindergartens. There were 172 children in the K1 and 208 children in the K2 Class of the experimental kindergartens, and 165 children in the K1 and 188 children in the K2 Class of the control kindergartens. The total number of children, the ratio of boys to girls, and the ratio of grades in the experimental and control kindergartens were approximately equal. The distribution of numbers, grade ratios, and gender ratios for each kindergarten can be seen in Table 1.

Table 1: Gender distribution of the sample of children in the experimental and control kindergartens

Group	Kindergarten	Gender		Grade		Total
		Male	Female	Age 3-4	Age 4-5	
Control kindergarten	Linchao Kindergarten	89(45.9%)	105(54.1%)	91(46.9%)	103(53.1%)	194(100.0%)
	Jinwei Kindergarten	77	82	74	85	159
		48.4%	51.6%	46.5%	53.5%	100.0%
	Total for the control kindergarten	166	187	165	188	353
Experimental kindergarten	Labor kindergarten	47.0%	53.0%	46.7%	53.3%	100.0%
		23	22	20	25	45
	Little Oxford Kindergarten	51.1%	48.9%	44.4%	55.6%	100.0%
		20	30	21	29	50

² Project control kindergartens

² Project intervention kindergartens

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		40.0%	60.0%	42.0%	58.0%	100.0%
Taoyuan Kindergarten	20	17	14	23	37	
		54.0%	46.0%	37.8%	62.2%	100.0%
Caizhiyuan Kindergarten	20	18	17	21	38	
		52.6%	47.4%	44.7%	55.3%	100.0%
Xianghuaqiao Kindergarten	64	42	51	55	106	
		60.4%	39.6%	48.1%	51.9%	100.0%
Hangnan Kindergarten	25	28	23	30	53	
		47.2%	52.8%	43.4%	56.6%	100.0%
Huchuan Kindergarten	26	25	26	25	51	
		51.0%	49.0%	51.0%	49.0%	100.0%
Total experimental kindergarten	198	182	172	208	380	
		52.1%	47.9%	45.3%	54.7%	100.0%
Total	364	369	337	396	733	
		49.7%	50.3%	46.0%	54.0%	100.0%

Questionnaire sample Questionnaire was administered to children's parents and teachers who completed the IDELA test. The survey was conducted online by Wenjuanxing (www.wjx.cn). For the 733 children who completed the IDELA test, a total of 670 mother questionnaire data were obtained, with 63 missing, 649 father questionnaire data, with 84 missing, and 706 teacher questionnaire data, with 26 missing.

Parent interview sample Based on voluntary principles, 10 parents were recruited to conduct one-on-one online interviews. All 10 parents involved were mothers. The youngest was 26 years old, and the oldest was 37 years old. Three mothers had a junior high school diploma, one had a high school diploma, one had a junior college diploma, and five had a college diploma.

Teacher interview sample 6 preschool teachers were recruited to conduct one-on-one online interviews. All six teachers were female. The youngest was 34 years old, and the oldest was 51 years old. The minimum teaching experience is 10 years, and the maximum is 21 years.

Community interview sample 2 community workers and 1 community parent were recruited to conduct a semi-structured online interview. All 3 community members were female. Two of the community workers have bachelor's diploma and the community parent has a college diploma.

Teachers' teaching quality observation sample The Teach observation coding tool was used to rate the quality of teaching of 33 teachers in 9 kindergartens, among which 17 teachers in the experimental kindergarten and 16 teachers in the control kindergarten.

Introduction to Assessment Tools

Child Development Assessment

The assessment tool for child development is the Chinese version of the International Development and Early Learning Assessment (IDELA) developed by Save the Children, which is divided into the following four subscales.

Emergent Numeracy consisted of 38 items, including 7 subtasks: number knowledge (20 items), basic addition and subtraction (3 items), one-to-one correspondence (3 items), shape identification (5 items), sorting abilities based on color and shape (2 items), size and length differentiation (4 items), and completion of a simple puzzle (1 item). The Cronbach's α for the emergent numeracy test in this study was 0.937, and its reliability in this domain was good. The Cronbach's α for the number knowledge, shape identification, basic addition and subtraction, and one-to-one correspondence subtasks were 0.967, 0.713, 0.610, and 0.679, respectively, and the Cronbach's α for the sorting abilities based on color and shape and size and length differentiation were 0.337 and 0.388, respectively.

Emergent Literacy consisted of 34 items, including 6 subtasks: print awareness (3 items), letter knowledge (20 items), phonological awareness (3 items), oral comprehension (5 items), emergent writing (1 item), and expressive vocabulary

(2 items). The Cronbach's α for emergent literacy test in this study was 0.846, and its reliability in this domain was good. The Cronbach's α for letter knowledge and expressive vocabulary were 0.970 and 0.635, respectively, and the Cronbach's α for the print awareness, phonological awareness, and oral comprehension were 0.336, 0.455, and 0.545, respectively.

Social-emotional development consisted of 16 items, including 5 subtasks: self-awareness (6 items), emotional awareness (4 items), empathy (3 items), peer relations (1 item), and conflict resolution (2 items). The Cronbach's α for the social-emotional development test in this study was 0.672, and its reliability in this domain was acceptable. The Cronbach's α for emotional awareness, empathy, and conflict resolution were 0.748, 0.890, and 0.624, respectively, and the Cronbach's α for the self-awareness subtask was 0.382.

Motor development consisted of 12 items, including 4 subtasks: hopping on one foot (1 item), copying a shape (2 items), folding paper (1 item), and drawing a human figure (8 items). These subtasks were designed to assess children's development of fine and gross motor movements. The Cronbach's α for the motor development test in this study was 0.661, and its reliability in this domain was acceptable. The Cronbach's α for copying a shape and drawing a human figure were 0.598 and 0.845 respectively.

In addition, child development measures include assessments of Executive Function and Approaches to Learning. Executive function is a set of high-level cognitive processes related to goal-directed behaviors. Inhibitory control is one of the core components of executive function, which is the ability of young children to delay or inhibit impulsive responses. Working memory is a memory system with a limited capacity for the temporary processing and storage of information that plays an important role in many complex cognitive activities. Testers assess children's attentiveness and persistence as they complete test tasks to understand the development of approaches to learning.

Parent and Teacher Questionnaire

Parenting Styles Parenting Styles and Dimensions Questionnaire (PSDQ) was developed by Robinson et al. (2001) and revised by Wu et al. (2002). The 32-item questionnaire was divided into three dimensions of authoritative parenting: warmth (7 items), reasoning (4 items), and autonomy (4 items), and three dimensions of authoritarian parenting: physical coercion (5 items), verbal hostility (3 items) and nonreasoning (3 items), rated on a 5-point Likert scale ranging from 1 (never) to 5 (always), with higher scores indicating greater conformity to the parenting style characteristics. The Cronbach's alpha coefficient for the authoritative parenting style in this study was 0.902, and the Cronbach's α for the authoritarian parenting was 0.882, indicating that the reliability of PSDQ was good.

Parental Conflicts Spanier et al. (1976) developed an 8-items scale covering the main conflicts in the marital life of couple, rated on a 4-point Likert scale ranging from 1 (often) to 4 (never). The higher the score, the more conflict the couple has. This scale has been widely used in Chinese subjects. The Cronbach's α for this questionnaire in this study was 0.827, which indicates that the reliability was good.

Student-Teacher Relationship Student-Teacher Relationship Scale (STRS) was developed by Pianta and Steinberg (1992), and the Chinese version was revised by Zhang (2010). The scale consists of 28 items, including conflict (12 items), closeness (11 items), and dependency (5 items), which is rated on a 5-point scale from 1 (not at all applicable) to 5 (fully applicable), with questions 4 and 19 being reverse scored, and the mean score calculated for each dimension. The Cronbach's α for teacher-child intimacy in this study was 0.768, and the Cronbach's α for teacher-child conflict was 0.903, indicating that the reliability was good.

Parent Interviews

According to the purpose of the study, a semi-structured parent interview outline was compiled for this study on the basis of relevant studies and extensive listening to the opinions of preschool professional teachers. The actual interviews were conducted one-on-one online with ten parents using Tencent Meeting. The interviews focused on the following contents: what aspects of the development of children are parents' main concerns in the process of education, the cooperation between the kindergarten and family, and the support and help parents have received and hope to receive. Details can be referred to in Appendix 1.

Teacher Interviews

According to the purpose of the study, a semi-structured teacher interview outline was compiled for this study on the basis of relevant studies and extensive listening to preschool teachers. For the actual interviews, one-on-one online interviews were conducted with six teachers using Tencent Meeting. The interviews focused on the following contents: what aspects of children's development kindergarten teachers were mainly concerned about in the process of education and teaching, the cooperation between the kindergarten and family, and the support and assistance teachers had received and hoped to receive, as detailed in Appendix I.

Community Interviews

According to the purpose of the study, a semi-structured community interview outline was compiled for this study on the basis of relevant studies and extensive listening to preschool teachers. For the actual interviews, one-on-one online interviews were conducted with three community members using Tencent Meeting. The interviews focused on the following contents: assistance provided by the community for the development of migrant children, the difficulties encountered in carrying out the work, and the support received and expected in the future. The interview outline is detailed in Appendix I.

Measuring the quality of teaching practices

Teach ECE is designed to assess the teaching quality of preschool teachers in early childhood education (ECE) classrooms for children aged 3–6 years. The Teach framework has two main components ("Time on Task" and "Quality of Teaching Practices"). "Time on Task" aims to record the learning time provided by preschool teachers in the classroom and the completion of tasks by the children. "Quality of Teaching Practices" includes three areas: Classroom Culture, Guided Learning, and Socioemotional Skills. The three "Quality of Teaching Practices" areas have nine corresponding elements that point to 28 behaviors (see the appendix for specific behaviors). These behavioral indicators contribute to the development of children's socioemotional and cognitive skills. The behaviors are characterized as low, medium, or high, based on the quality of teaching practices observed. These behavior scores are translated into a five-point scale (1 = lowest score, 5 = highest score) that quantifies teaching practices as captured in observations.

Classroom Culture refers to the efforts made by teachers to create a supportive learning environment, and it encompasses two elements: (1) Supportive Learning Environment, where teachers respect each child, use positive language, attend to and meet the needs of the children, challenge gender stereotypes, and do not show gender bias in the classroom, to ensure that children feel emotionally safe and supported. This helps create a supportive learning environment where children feel supported in their learning and encouraged to meet high academic and behavioural standards, leading to long-lasting positive effects on student's learning success (Pianta et al., 2003; Spilt et al., 2012). At the same time, studies show that teacher support toward children can reduce their internalizing (e.g., anxiety, depression) and externalizing (e.g., aggression), and enhance self-control (Grigg et al., 2016; Merritt et al., 2012). (2) Positive Behavioral Expectations: effective teachers create clear expectations for children's behavior and notice when children behave in ways that match those expectations. Teachers who are consistent and positive in establishing expectations not only help children reach their learning potential, but also support children's development of positive behavior, social skills, and self-control within a safe environment (Jones et al., 2013; OECD, 2009).

Guided Learning refers to the way teachers guide children to deepen their understanding and encourage critical thinking and analysis. It includes four elements: (1) Facilitation of Learning, where teachers clarify learning objectives, explain concepts clearly, and connect new knowledge with children's experiences to promote understanding and learning. Teacher instruction is crucial for children's learning (Carver & Klahr, 2001). When teachers have clear teaching goals, they help children learn and present content in a way that is easy for children to understand, while also connecting it to their existing experiences. This helps children understand, digest, and absorb new materials, improving learning performance (Dunlosky et al., 2013; Hattie, 2009). (2) Checks for Understanding, where teachers use questions, prompts, or other strategies to monitor children's level of understanding and supervise children's understanding in group or independent work. In addition, teachers also adjust the pace of activities to provide more learning opportunities for children. Teachers' raising questions to children and regular monitoring for children's understanding have been linked to



positive and large effects on children's learning (Aslam & Kingdon, 2011), and as such it has been identified as a critical component of good instruction (Good & Grouws, 1977). At the same time, checking for children's understanding enables teachers to adapt their teaching strategies to meet the needs of children, a concept known as differentiated instruction, which is grounded in Vygotsky's zone of proximal development (Vygotsky, 1978). (3) Feedback, where teachers provide specific comments or hints to help clarify children's misunderstandings or identify their successes. Studies show that feedback helps children better understand their learning and performance (Hattie & Timperley, 2007). Teachers who give consistent, periodical, and process-oriented feedback have been associated with self-regulated, high-achieving children (Nicol & Macfarlane-Dick, 2006). (4) Critical Thinking, where teachers encourage children to think critically by asking open-ended questions and providing thinking tasks to develop their critical thinking skills. This involves the teacher asking open-ended questions that require reasoning, explanation, or generalization or have more than one correct answer (Lee et al., 2012; Roth, 1996). Encouraging children to actively analyze and present critical viewpoints (rather than passively receiving information) helps improve children's learning efficiency (National Academies of Sciences, Engineering, and Medicine, 2018). Beyond asking the right questions, teachers should provide thinking tasks, such as making predictions, identifying patterns, explaining thinking from different views, making connections, and interpreting information (Moon, 2007; Willingham, 2008).

Socioemotional Skills, where teachers develop children's social-emotional skills and encourage them to succeed in and outside the classroom. It includes three elements: (1) Autonomy, where teachers provide children with opportunities to make choices and let them play a meaningful role in the classroom. Children use these opportunities to volunteer for roles and express their ideas and opinions. According to the self-determination theory (Ryan & Deci, 2000), when children have a sense of control over learning goals and opportunities, they are more likely to be interested, engaged, and active in learning. Sociocultural Theory points to the importance of engaging children in meaningful tasks that prepare them for roles and responsibilities in adulthood (Rogoff, 1990; Vygotsky, 1978). More recent empirical evidence supports these theories in showing that allowing children to choose (Reeve, 2006, 2009; Reeve & Jang, 2006) their roles in the classroom (Hay & Dempster, 2004; Schwab & Elias, 2014) increase children's engagement with and ownership of the learning process. (2) Perseverance, where teachers recognize failure and frustration as part of the learning process and encourage children to set short-and long-term goals, instead of focusing on their intellectual or natural abilities; learning is not always interesting, and failure and frustration are inevitable. Teachers need to encourage young children to make efforts to face challenges and help them understand that abilities are malleable, which in turn is linked to better learning performance (Park et al., 2016). Teachers should also encourage children to set learning goals for themselves and to persevere in their efforts to reach these goals (Duckworth et al., 2007). Evidence has shown that when teachers promote self-regulated learning, including goal-setting, alongside domain-specific skills, children produce higher-quality work (Glaser & Brunstein, 2007). (3) Social and Collaborative Skills, where teachers encourage children to interact with each other, fostering cooperation and developing interpersonal skills such as perspective-taking, empathy, emotional regulation, and problem-solving, thus cultivating social and collaborative abilities. Teachers play an important role in children's social and emotional development by encouraging peer-to-peer interactions, and within those, modeling positive behaviors (Gest & Rodkin, 2011), providing support to students to manage strong emotions (e.g., Denham et al., 2012), and managing naturally occurring power imbalances that can lead to aggression and bullying (Farmer et al., 2011). Further, collaboration, or cooperative learning, can help children better understand tasks and produce better learning outcomes.

Data Collection Training and Collection Process

Data collection comprised child developmental outcome measures, family and kindergarten environment measures, and parent and teacher interviews. Child developmental outcomes were measured using the IDELA instrument in a one-on-one field test. In contrast, the family and kindergarten environment were measured by questionnaires for fathers, mothers, and teachers, and then some parents and teachers were recruited for in-depth interviews.

IDELA Test Data Collection Data collection for the child development results went through two phases: the IDELA test training and the formal collection. The first stage was the IDELA test training, which was conducted online from September 19 to September 21, 2022, by the professional teacher in charge of Save the Children for the participating

postgraduate students of preschool education at Shanghai Normal University (later referred to as the interviewers), the training content was centered on the IDELA test content and notes, and the training process had three steps. (1) Before the start of the training, the IDELA test materials were mailed to all the interviewers so that they could understand the training content in advance and better digest and absorb the training knowledge during the actual training. (2) During the training, Save the Children instructors explained in detail how each question on the IDELA test is administered, how it is scored, and precautions. In order to facilitate the understanding of the interviewers and improve the training effect, two teachers from Save the Children played the roles of a child and an interviewer to show the process of administering each question. The Save the Children instructors focused on the scoring criteria for some controversial questions. The interviewers could ask questions anytime to ensure no blind spots were left in their knowledge. (3) At the end of the training, the interviewers went to a non-participating kindergarten to take a pre-test. They practiced the entire IDELA administration process, accompanied by a Save the Children teacher who answered questions promptly. Each pre-test was allowed to take the formal test once he or she had completed the test with one child. The second phase of the formal testing will take place in October–November 2022. The project leader from Shanghai Normal University will contact the kindergarten in advance to determine the number of children to be tested daily and the time for each master test. The test will be conducted with strict reference to the IDELA content of the training and will not interfere with the ordinary teaching activities of the kindergarten.

Questionnaire Data Collection The assessment of the family and kindergarten environment was collected online through Wenjuanxing (www.wjx.cn) by contacting the kindergarten director and sending a link to the questionnaire to each child's father, mother, and teacher, asking the child's parents and teachers to fill out and submit the questionnaire at a convenient time as soon as possible after receiving it.

Interview Data Collection Data collection for the parent, teacher and community workers interviews was conducted online through Tencent Meeting. Parents and early childhood teachers were recruited to participate in the interviews simultaneously, as the questionnaires were administered in the first phase. Parents and teachers willing to participate in the interviews were contacted in advance to set up an interview time. The interviews were conducted by trained preschool teachers and graduate students, and the entire interview was recorded.

Teacher's Teaching Quality Data Collection The data collection is divided into three stages: training on the use of the *Teach ECE*, filming in kindergartens, and formal coding. First, teachers from *Save the Children* provided training to students majoring in early childhood education at Shanghai Normal University on the use of *Teach ECE*. The training included an introduction to the content of the *Teach ECE* and coding of a video to give everyone practical experience and allowing everyone to encode a video and experience the encoding process in practice. Teachers from the *Save the Children* provided detailed answers to any questions or issues that arose during the training, ensuring a unified understanding of the *Teach ECE*. Second, students from Shanghai Normal University filmed a classroom activity of a teacher in a pre-arranged kindergarten, following training on filming requirements to ensure quality. Third, the teaching behaviors were coded based on *Teach ECE*. The coding process involved three steps: (1) 10 coders coded 6 videos to assess the reliability of the coding. After coding each video, a meeting was held to discuss any inconsistencies or doubts and reach a consensus. (2) For the remaining 27 videos, each video was coded by two coders independently. (3) Finally, the specialized researchers checked and verified the coding results. In cases of inconsistency between the two coders, a third researcher made a judgment and discussed with the coders to determine the final results.

Data Analysis

Four databases were generated for this study: the early childhood IDELA test database, the parent and teacher questionnaire database, the parent interview database, and the teacher interview database. Different databases were analyzed and used to answer different research questions. Data analyses were performed using Excel, SPSS, and Nvivo12Plus.

The IDELA test was administered using a paper version of the questionnaire, and the test data for each child were subsequently entered into a pre-designed Excel file by a graduate student from the School of Preschool Education, Shanghai Normal University. After data entry, SPSS was used for statistical analysis. The chi-square test was used to

examine the differences between children in the experimental and control kindergartens under each indicator in emergent numeracy, emergent literacy, social-emotional, and motor development.

The questionnaire data completed by parents and teachers can be exported directly to an Excel file through Wenjuanxing (www.wjx.cn). The questionnaire data from fathers, mothers, and teachers, as well as the data from the children's IDELA tests, were paired and combined according to the number and name of each child. Independent sample t-tests were used when examining whether there were differences in parenting styles, family environment, and teacher-child relationships between the experimental and control kindergartens. Finally, multiple linear regression was used when analyzing whether the family and kindergarten environments had an effect on children's development.

Parental interview data analysis. First, the interview text exported from the Tencent Meeting was verbatim proofread against the audio recording. Secondly, the collated text was imported into Nvivo12Plus for analysis. Specifically, the analysis was conducted in five steps: First, two researchers read all the interview texts repeatedly and discussed them briefly. Second, the ten texts were coded in groups of 5 with two interviewers to facilitate the determination of data saturation. Nvivo12Plus, a qualitative analysis software, was introduced to assist in the coding process of this study to standardize the data analysis process. During the coding process, no new codes emerged, indicating that data saturation was reached in this study. Third, the core themes were assessed, named and defined. Usually, one theme can be classified as a core theme when about 50% of the sample talk about it in the interview. However, this division ratio can be adjusted according to the situation to prevent some meaningful themes from being omitted. This study combined the actual situation during the interview and the coding process to delineate the themes that more than 3 interviewees talked about as core themes. Fourth, a discussion was held to examine whether the initially generated themes could be further merged to become core themes, whether the identified themes had identifiable particularities, and whether they were universally representative. Fifth, the themes were reviewed by four individuals to determine the final names. The identified coding labels distilled themes reflecting the reciprocal relationship between migrant parents' education and parenting and migrant children's development.

Teacher interview data analysis. The teacher interview text was analyzed by first verbatim proofreading the exported interview text against the audio recordings. Next, the collated text was imported into Nvivo12Plus for analysis. The specific analysis was still conducted in five steps: First, the two researchers read all the interview texts repeatedly and discussed them briefly. Second, the six texts were coded to determine data saturation. Nvivo12Plus, a qualitative analysis software, was introduced to assist in the coding process of this study to standardize the data analysis process, and no new codes emerged during the coding process, indicating that the data of this study had reached saturation. Third, the core themes were assessed and named separately. Usually, one theme can be classified as a core theme when about 50% of the sample talk about it in the interview. However, this division can be adjusted according to the actual situation to prevent some meaningful themes from being missed. This study combined the actual situation during the interview and the coding process to delineate the themes talked about by more than 2 interviewees as core themes. Fourth, a discussion was held to examine whether the initially generated themes could be further merged to become core themes, whether the identified themes were identifiable and unique, and whether they were universally representative. Fifth, the themes were reviewed by four individuals to determine the final names. The themes reflecting the reciprocal relationship between teacher education and migrant children's development were extracted from the identified coding labels.

Community interview data analysis. The community member interview text was analyzed by first verbatim proofreading the exported interview text against the audio recordings. Next, the collated text was imported into Nvivo12Plus for analysis. The specific analysis was still conducted in five steps: First, the two researchers read all the interview texts repeatedly and discussed them briefly. Second, the three texts were coded to determine data saturation. Nvivo12Plus, a qualitative analysis software, was introduced to assist in the coding process of this study to standardize the data analysis process, and no new codes emerged during the coding process, indicating that the data of this study had reached saturation. Third, the core themes were assessed and named separately. Usually, one theme can be classified as a core theme when about 50% of the sample talk about it in the interview. However, this division can be adjusted according to the actual situation to prevent some meaningful themes from being missed. This study combined the actual

situation during the interview and the coding process to delineate the themes talked about by more than 2 interviewees as core themes. Fourth, a discussion was held to examine whether the initially generated themes could be further merged to become core themes, whether the identified themes were identifiable and unique, and whether they were universally representative. Fifth, the themes were reviewed by four individuals to determine the final names. The themes reflecting the reciprocal relationship between community members and migrant children's development were extracted from the identified coding labels.

Ethics and Responsibility

Approval was obtained from the ethics committee of Shanghai Normal University (Approval Number: 2022-056; see Appendix III).

This assessment will fully account for gender sensitivity, minority sensitivity, and the rights of children, parents, and teachers. This project aims to help preschool migrant children aged 3-6 achieve good early development and realize their full potential. The project sites are kindergartens for children of migrant workers and migrant communities in Shanghai, and the children served are mainly children of migrant workers. Children of different grades, genders, and backgrounds have the same rights and opportunities to participate in the study.

Informed parental consent was obtained before IDELA testing was performed on children participating in the study. During the IDELA test, the informed consent form is read aloud to the child to ensure that the child understands the intent of the experiment and their rights. The IDELA test can only be performed with the child's confirmed consent. During the test, children have the right and freedom to withdraw from the study if they feel uncomfortable or have other problems. A paper copy of the child's informed consent form will be kept for review by Save the Children.

When parents and teachers are surveyed, the first part of the questionnaire is informed consent. If the respondents disagree with the survey, they can end the questionnaire immediately. The follow-up questionnaire survey can only be carried out after the respondents positively reply to the contents of the informed consent. Informed consent will remain in electronic form for review by Save the Children.

Interviews with parents, teachers and community workers are conducted with the informed consent of parents, teachers and community workers prior to the commencement of each interview. Due to the need for later text preparation, the entire interview will be recorded. At the beginning of the interview, the assessment team will clearly state the purpose, content, and form of the investigation, as well as the needs of the recording, and the interview will be officially started after obtaining the consent of the survey subjects. Informed consent forms will remain electronically available for review by Save the Children.

The survey data will be treated confidentially. First, the original data is encrypted and stored on a separate computer, where subsequent analysis is performed exclusively. Secondly, the basic information, such as the name and age of the survey object or other privacy-revealing information, is processed by coding, and the subject is not directly associated with the relevant information. Finally, sensitive data were eliminated at a specified time at the end of the study.

Limitations

This research still has the following limitations:

- (1) While the IDELA demonstrates good reliability and validity overall for holistic child learning and development, two specific items in this study were identified for revision:
 - a. In the size and length differentiation task, a high percentage of children in both K1 (72.7%) and K2 (91.4%) Classes achieved perfect scores, potentially indicating a ceiling effect and not accurately reflecting the children's abilities.
 - b. Concerning the phonological awareness task, a significant portion of children in K1 (86.6%) and K2 (77%) Classes scored zero, suggesting a potential floor effect that might not appropriately measure their abilities.

- (2) The IDELA instrument lacks a standardized reference, impacting its ability to comprehensively represent children's development across domains. While this baseline study established differences in developmental levels and family situations between experimental and control groups, it lacks a normative reference standard. To truly comprehend the developmental progress of migrant children, a standard norm for reference is essential.
- (3) All interviewed parents were mothers, potentially limiting the breadth of understanding regarding family parenting challenges and needs. While utmost respect was given to participants' rights to voluntary participation and withdrawal, the interviewees comprised solely mothers. Consequently, the absence of fathers' participation in the interviews may overlook unique issues pertinent to family education dilemmas. The inclusion of fathers' perspectives could shed light on different facets of these challenges. Subsequent studies should aim to actively engage fathers in the interview process to capture a more comprehensive view of family dynamics and educational predicament.

Findings

Basic Information on Early Learning and Development of Preschool Migrant Children

The Current Situation and Comparison of Emergent Numeracy Development

As shown in Figure 1, children in the experimental group had a total mean score of 51% in the area of emergent numeracy development (expressed as a percentage calculated by: actual score / total score in one area * 100%), and children in the control group had an overall mean score of 52% in the area of emergent numeracy development. Specifically, the mean scores were 36% and 38% for children in the experimental and control groups in the K1 Class of kindergarten (children aged 3-4), 63% and 65% for children in the experimental and control groups in the K2 Class of kindergarten (children aged 4-5), 53% and 51% for boys in the experimental and control groups, and 49% and 53% for girls in the experimental and control groups.

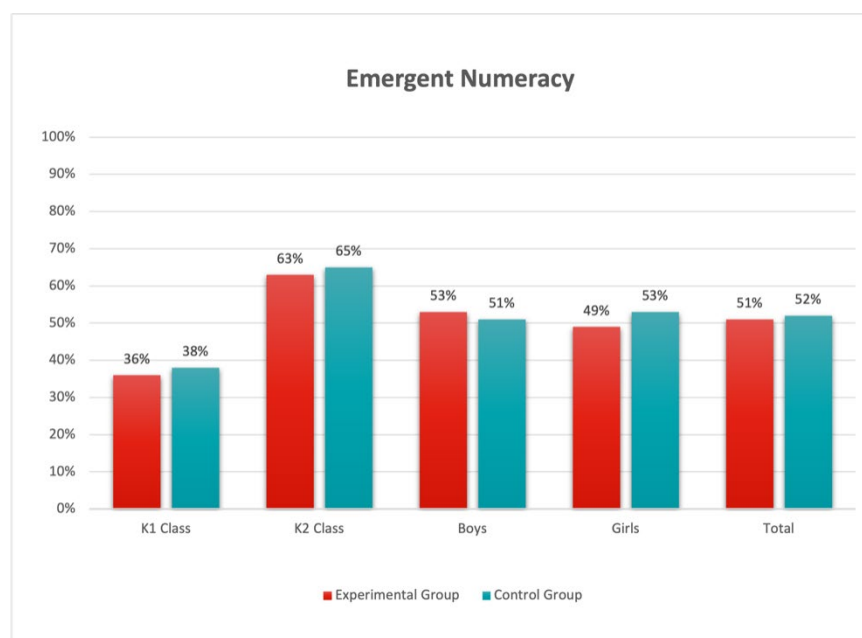


Figure 1: The mean score of emergent numeracy of children by grade and gender for the experimental and control groups

The results of the independent samples t-test showed that there were no significant differences in the scores of children in the experimental and control groups across grade ($t = -0.65, p = 0.51$; $t = -0.81, p = 0.42$) and gender ($t = 0.54, p = 0.59$; $t = -1.56, p = 0.12$) in the area of emergent numeracy development (see Table 2). There was also no significant difference between the scores of boys and girls within the experimental group ($t = 1.25, p = 0.21$).

Table 2: Comparison of the mean score of emergent numeracy of children by grade and gender for the experimental and control groups

	Experimental Group			Control Group			t	p
	n	M	SD	n	M	SD		
K1 Class	166	0.36	0.21	161	0.38	0.21	-0.65	0.51
K2 class	208	0.63	0.24	188	0.65	0.23	-0.81	0.42
Boys	194	0.53	0.27	165	0.51	0.27	0.54	0.59
Girls	180	0.49	0.25	184	0.53	0.24	-1.56	0.12

Total	374	0.51	0.27	349	0.52	0.26	-	0.65	0.52
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As shown in Figure 2, children in the K1 Class experimental group scored lower than the control group in number knowledge, basic addition and subtraction and completion of a simple puzzle, and higher than the control group in one to one correspondence, sorting abilities based on color and shape and size and length differentiation. The scores of shape identification were the same for both groups. In the K2 Class, children in the experimental group scored lower than the control group in number knowledge, basic addition and subtraction, one to one correspondence, shape identification and size and length differentiation, and higher than the control group in sorting abilities based on color and shape and completion of a simple puzzle.

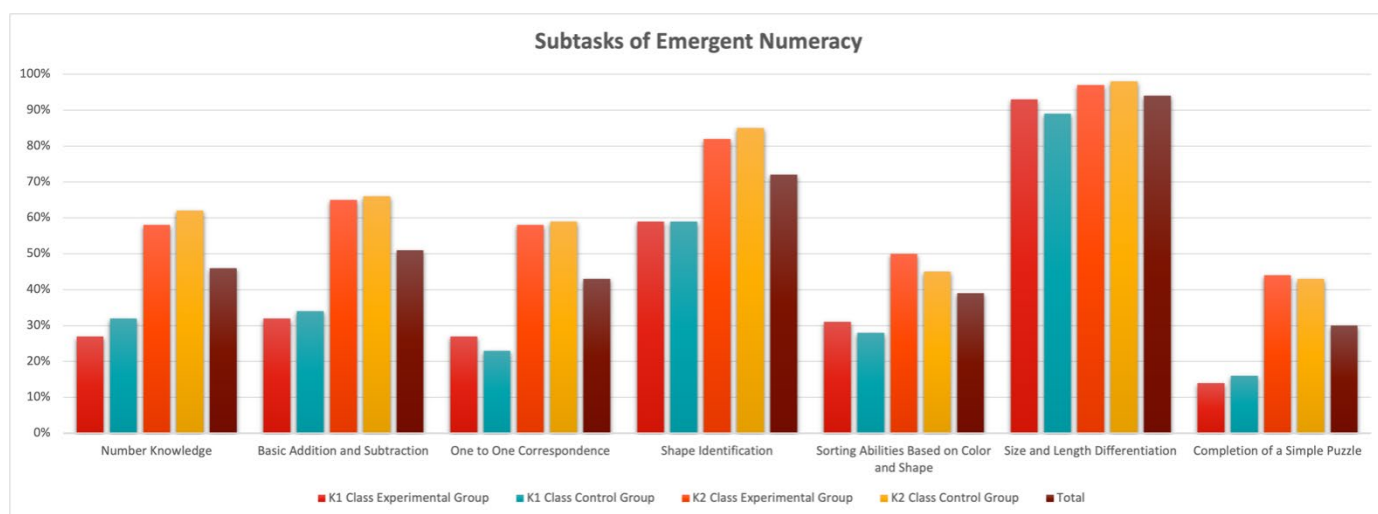


Figure 2: The mean score of subtasks of emergent numeracy of children by grade and gender for the experimental and control groups

The results of the chi-square test showed that there was no significant difference between the K1 Class experimental and control groups in the scores of number knowledge, basic addition and subtraction, one to one correspondence, shape identification, sorting abilities based on color and shape, size and length differentiation and completion of a simple puzzle and there was a significant difference between the K2 Class experimental group and the control group only in the score of size and length differentiation ($\chi^2 = 6.85, p < 0.05$). Furthermore, there was no significant difference between the experimental and control groups in the scores of girls on the seven subtasks of emergent numeracy, while there was a significant difference between the experimental and control groups in the scores of boys only on sorting abilities based on color and shape ($\chi^2 = 6.23, p < 0.05$) (see Table 3). There was a significant difference between boys and girls in the experimental group only in the score of number knowledge ($\chi^2 = 34.01, p < 0.05$).

Table 3: Comparison of the mean score of subtasks of emergent numeracy for children by grade and gender for the experimental and control groups

		Experimental Group			Control Group			χ^2	<i>p</i>
		n	M	SD	n	M	SD		
Number Knowledge	K1 Class	172	0.27	0.30	165	0.32	0.32	12.72	0.89
	K2 Class	208	0.58	0.36	188	0.62	0.35	22.50	0.31
	Boys	198	0.46	0.38	166	0.48	0.38	19.68	0.48
	Girls	182	0.42	0.35	187	0.48	0.36	29.82	0.07

Baseline Study of Children Aged 3-6 in Shanghai Jan, 2023 - China



Basic Addition and Subtraction	K1 Class	172	0.32	0.30	165	0.34	0.31	0.45	0.93
	K2 Class	208	0.65	0.33	188	0.66	0.32	0.47	0.93
	Boys	198	0.51	0.35	166	0.49	0.35	0.29	0.96
	Girls	182	0.49	0.35	187	0.53	0.35	1.69	0.64
One to One Correspondence	K1 Class	172	0.27	0.26	165	0.23	0.25	2.90	0.41
	K2 Class	208	0.58	0.34	188	0.59	0.33	0.57	0.90
	Boys	198	0.43	0.34	166	0.40	0.35	1.63	0.65
	Girls	182	0.45	0.35	187	0.44	0.35	3.53	0.32
Shape Identification	K1 Class	172	0.59	0.30	165	0.59	0.30	1.06	0.96
	K2 Class	208	0.82	0.24	188	0.85	0.21	4.51	0.48
	Boys	198	0.74	0.30	166	0.71	0.30	2.05	0.84
	Girls	182	0.70	0.29	187	0.74	0.27	2.78	0.73
Sorting Abilities Based on Color and Shape	K1 Class	168	0.31	0.31	164	0.28	0.31	1.47	0.48
	K2 Class	208	0.50	0.34	188	0.45	0.36	2.67	0.26
	Boys	195	0.41	0.33	166	0.35	0.35	6.23*	0.04
	Girls	181	0.41	0.35	186	0.38	0.34	0.80	0.67
Size and Length differentiation	K1 Class	172	0.93	0.14	165	0.89	0.20	4.70	0.32
	K2 Class	208	0.97	0.09	188	0.98	0.09	6.85*	0.03
	Boys	198	0.94	0.12	166	0.92	0.17	3.55	0.47
	Girls	182	0.96	0.11	187	0.95	0.14	4.40	0.35
Completion of a Simple Puzzle	K1 Class	170	0.14	0.26	162	0.16	0.28	1.14	0.89
	K2 Class	208	0.44	0.39	188	0.43	0.38	0.54	0.97
	Boys	197	0.33	0.38	165	0.26	0.34	4.83	0.31
	Girls	181	0.28	0.35	185	0.34	0.38	2.86	0.58

The Current Situation and Comparison of Emergent Literacy Development

As shown in Figure 3, children in the experimental group had a total mean score of 36% in the area of emergent literacy development, and children in the control group had an overall mean score of 37% in the area of emergent literacy development. Specifically, the mean scores were 26% and 26% for children in the experimental and control groups in the K1 Class, 45% and 46% for children in the experimental and control groups in the K2 Class, 37% and 36% for boys in the experimental and control groups, and 36% and 37% for girls in the experimental and control groups.

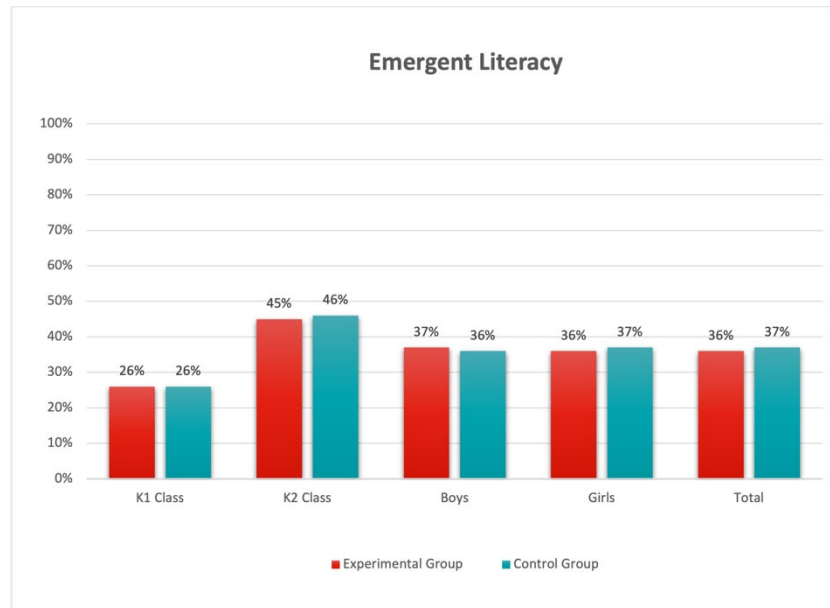


Figure 3: The mean score of emergent literacy of children by grade and gender for the experimental and control groups

The results of the independent samples t-test showed that there were no significant differences in the scores of children in the experimental and control groups across grade ($t = 0.16, p = 0.87$; $t = -0.63, p = 0.53$) and gender ($t = 0.42, p = 0.67$; $t = -0.68, p = 0.50$) in the area of emergent literacy development (see Table 4). There was also no significant difference between the scores of boys and girls within the experimental group ($t = 0.55, p = 0.58$).

Table 4: Comparison of the mean score of emergent literacy of children by grade and gender for the experimental and control groups

	Experimental Group			Control Group			t	p
	n	M	SD	n	M	SD		
K1 Class	172	0.26	0.15	164	0.26	0.15	0.16	0.87
K2 Class	208	0.45	0.18	188	0.46	0.20	-0.63	0.53
Boys	198	0.37	0.19	166	0.36	0.21	0.42	0.67
Girls	182	0.36	0.19	186	0.37	0.20	-0.68	0.50
Total	380	0.36	0.19	352	0.37	0.20	-0.18	0.86

As shown in Figure 4, children in the K1 Class experimental group scored lower than the control group in letter knowledge and higher than the control group in print awareness, phonological awareness, oral comprehension and expressive vocabulary. The scores in emergent writing were the same for both groups. The children in the K2 Class experimental group scored lower in letter knowledge and oral comprehension than the control group, and higher in print awareness, phonological awareness, emergent writing, and expressive vocabulary than the control group.

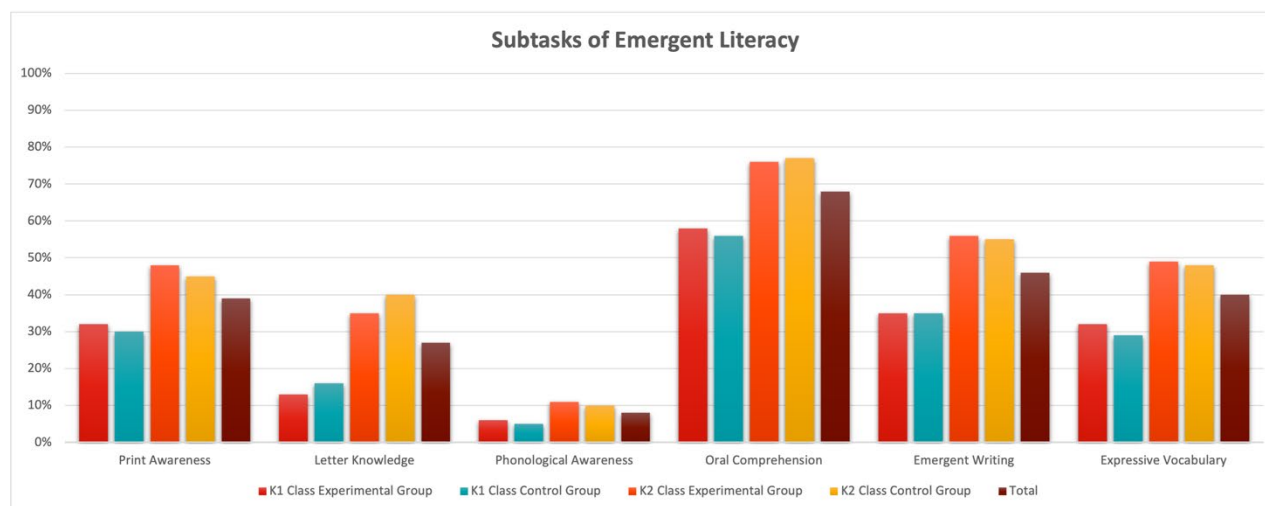


Figure 4: The mean score of subtasks of emergent literacy for children in the experimental group and the control group in the K1 and K2 classes

The results of the Chi-squared test showed that there was no significant difference between the K1 Class experimental group and the control group in the scores of print awareness, letter knowledge, phonological awareness, oral comprehension, emergent writing and expressive vocabulary. There was a significant difference between the K2 Class experimental group and the control group only in the scores of emergent writing ($\chi^2 = 11.81$, $p < 0.05$). In addition, there was no significant difference between the experimental and control groups on the six subtasks of emergent literacy for boys, while there was only a significant difference between the experimental and control groups on the score of letter knowledge for girls ($\chi^2 = 35.55$, $p < 0.05$) (see Table 5). There were no significant differences between boys and girls within the experimental group on any of the subtask scores for emergent literacy.

Table 5: Comparison of the mean score of subtasks of emergent literacy for children by grade and gender for the experimental and control groups

		Experimental Group			Control Group			χ^2	p
		n	M	SD	n	M	SD		
Print Awareness	K1 Class	172	0.32	0.29	165	0.30	0.26	2.53	0.47
	K2 Class	208	0.48	0.31	188	0.45	0.28	4.84	0.18
	Boys	198	0.40	0.31	166	0.38	0.29	2.50	0.48
	Girls	182	0.41	0.31	187	0.38	0.28	4.16	0.25
Letter Knowledge	K1 Class	172	0.13	0.25	165	0.16	0.28	13.39	0.86
	K2 Class	208	0.35	0.36	188	0.40	0.38	29.44	0.08
	Boys	198	0.24	0.33	166	0.30	0.37	29.98	0.07
	Girls	182	0.26	0.33	187	0.28	0.35	35.55*	0.02
Phonological Awareness	K1 Class	172	0.06	0.16	165	0.05	0.15	1.69	0.64
	K2 Class	208	0.11	0.20	188	0.10	0.21	2.42	0.49
	Boys	198	0.08	0.18	166	0.07	0.18	3.82	0.28
	Girls	182	0.09	0.19	187	0.07	0.18	0.92	0.82
Oral Comprehension	K1 Class	172	0.58	0.27	165	0.56	0.27	1.28	0.94
	K2 Class	208	0.76	0.21	188	0.77	0.21	3.89	0.57
	Boys	198	0.69	0.26	166	0.64	0.27	8.03	0.16
	Girls	182	0.67	0.25	187	0.70	0.25	4.13	0.53
Emergent Writing	K1 Class	172	0.35	0.22	165	0.35	0.19	2.83	0.59
	K2 Class	208	0.56	0.26	188	0.55	0.29	11.81*	0.02
	Boys	198	0.44	0.25	166	0.43	0.26	5.80	0.21
	Girls	182	0.49	0.27	187	0.48	0.27	7.11	0.13

Expressive Vocabulary	K1 Class	172	0.32	0.21	164	0.29	0.19	15.67	0.68
	K2 Class	208	0.49	0.20	188	0.48	0.23	28.53	0.10
	Boys	198	0.44	0.23	166	0.38	0.22	29.10	0.09
	Girls	182	0.39	0.22	186	0.40	0.24	14.42	0.81

The Current Situation and Comparison of Social-Emotional Development

As shown in Figure 5, children in the experimental group had a total mean score of 45% in the area of social-emotional development, and children in the control group had an overall mean score of 44% in the area of social-emotional development. Specifically, the mean scores were 36% and 35% for children in the experimental and control groups in the K1 Class, 52% and 51% for children in the experimental and control groups in the K2 Class, 45% and 42% for boys in the experimental and control groups, and 44% and 45% for girls in the experimental and control groups.

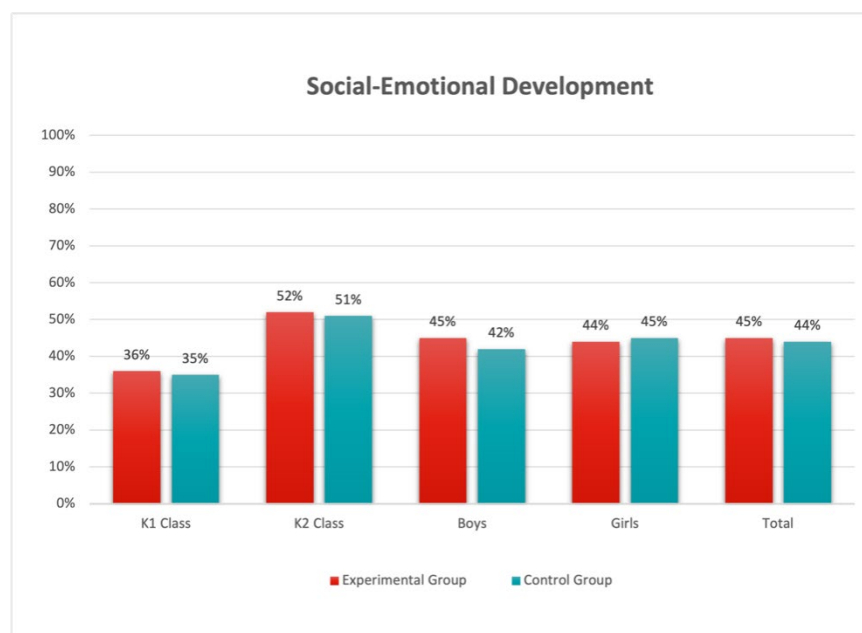


Figure 5: Mean social-emotional development scores of children by grade and gender for the experimental and control groups

The results of the independent samples t-test showed that there were no significant differences in the scores of children in the experimental and control groups across grade ($t = 0.84$, $p = 0.40$; $t = 0.43$, $p = 0.67$) and gender ($t = 1.71$, $p = 0.09$; $t = -0.33$, $p = 0.74$) in the area of social-emotional (see Table 6). There was also no significant difference between the scores of boys and girls within the experimental group ($t = 0.44$, $p = 0.66$).

Table 6: Comparison of the mean score of social-emotional development of children by grade and gender for the experimental and control groups

	Experimental Group			Control Group			t	p
	n	M	SD	n	M	SD		
K1 Class	171	0.36	0.15	163	0.35	0.15	0.84	0.40
K2 Class	207	0.52	0.15	188	0.51	0.17	0.43	0.67
Boys	198	0.45	0.17	165	0.42	0.18	1.71	0.09
Girls	180	0.44	0.17	186	0.45	0.18	-0.33	0.74
Total	378	0.45	0.17	351	0.44	0.18	0.92	0.36

As shown in Figure 6, the scores of emotion awareness and conflict resolution of the K1 Class experimental group were lower than those of the control group, while the scores of empathy and peer relations were higher than those of the

control group. The scores of self-awareness were similar between the two groups. The scores of self-awareness and empathy in the K2 Class experimental group were lower than those in the control group, and the scores of emotional awareness and peer relations were higher than those in the control group. The scores of conflict resolution were the same for both groups.

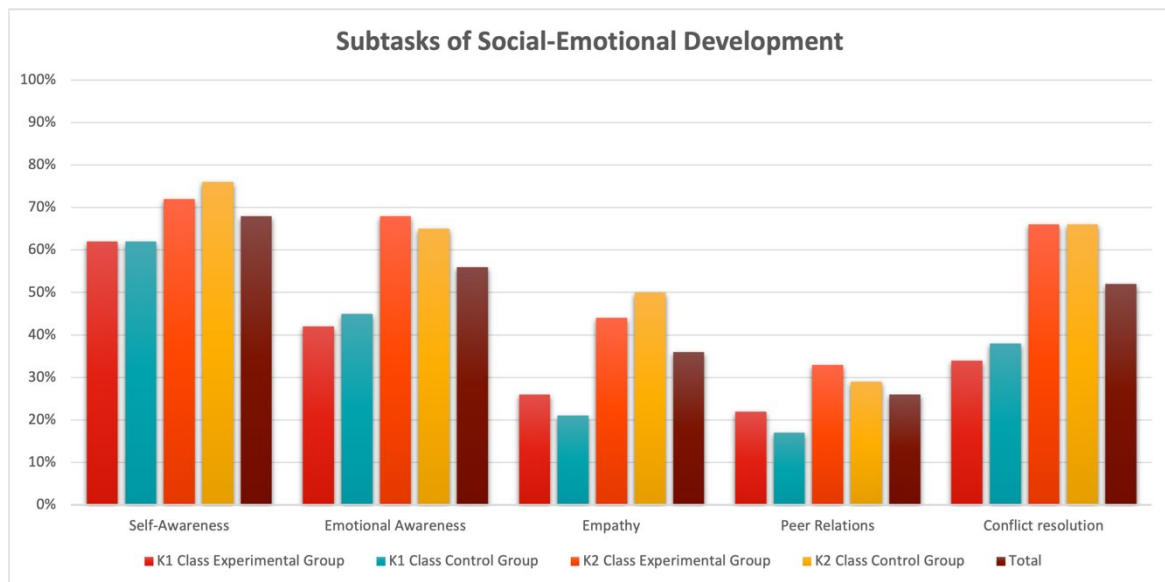


Figure 6: The mean score of subtasks of social-emotional development for children in the experimental group and the control group in the K1 and K2 Classes

The results of the chi-square test showed that there were no significant differences between the experimental and control groups in the scores of self-awareness, emotional awareness, empathy, peer relations and conflict resolution in the K1 Class, and there was only a significant difference in the scores of self-awareness between the experimental and control groups of children in the K2 class ($\chi^2 = 18.12$, $p < 0.01$). In addition, there was no significant difference between the experimental and control group of girls on the subtask of social-emotional development, while there was a significant difference between the experimental and control group of boys only on the score of self-awareness ($\chi^2 = 22.61$, $p < 0.001$) (see Table 7). No significant differences were found between the boys and girls in the experimental group on the subtasks of social-emotional development.

Table 7: Comparison of the mean score of social-emotional development for children by grade and gender for the experimental and control groups

		Experimental Group			Control Group			χ^2	p
		n	M	SD	n	M	SD		
Self-Awareness	K1 Class	172	0.62	0.14	165	0.62	0.18	11.26	0.08
	K2 Class	208	0.72	0.14	188	0.76	0.17	18.12**	0.00
	Boys	198	0.68	0.14	166	0.70	0.19	22.61***	0.00
	Girls	182	0.67	0.15	187	0.69	0.18	11.09	0.09
Emotional awareness	K1 Class	172	0.42	0.38	165	0.45	0.37	1.56	0.82
	K2 Class	208	0.68	0.32	188	0.65	0.34	3.59	0.47
	Boys	198	0.55	0.37	166	0.54	0.37	0.51	0.97

Empathy	Girls	182	0.57	0.37	187	0.57	0.37	1.23	0.87
	K1 Class	172	0.26	0.37	165	0.21	0.36	4.06	0.26
	K2 Class	208	0.44	0.45	188	0.50	0.44	6.04	0.11
Peer relations	Boys	198	0.37	0.41	166	0.30	0.41	5.97	0.11
	Girls	182	0.35	0.44	187	0.41	0.44	3.50	0.32
	K1 Class	171	0.22	0.19	163	0.17	0.15	13.26	0.21
Conflict resolution	K2 Class	207	0.33	0.23	188	0.29	0.21	15.77	0.11
	Boys	198	0.28	0.23	165	0.22	0.18	15.27	0.12
	Girls	180	0.28	0.21	186	0.25	0.20	13.14	0.22
	K1 Class	172	0.34	0.38	165	0.38	0.38	1.52	0.47
	K2 Class	208	0.66	0.34	188	0.66	0.36	2.11	0.35
	Boys	198	0.54	0.39	166	0.50	0.40	1.47	0.48
	Girls	182	0.49	0.40	187	0.56	0.39	2.69	0.26

The Current Situation and Comparison of Motor Development

As shown in Figure 7, children in the experimental group had a total mean score of 48% in the area of motor development, and children in the control group had an overall mean score of 46% in the area of motor development. Specifically, the mean scores were 28% and 28% for children in the experimental and control groups in the K1 Class, 65% and 62% for children in the experimental and control groups in the K2 Class, 45% and 41% for boys in the experimental and control groups, and 52% and 51% for girls in the experimental and control groups.

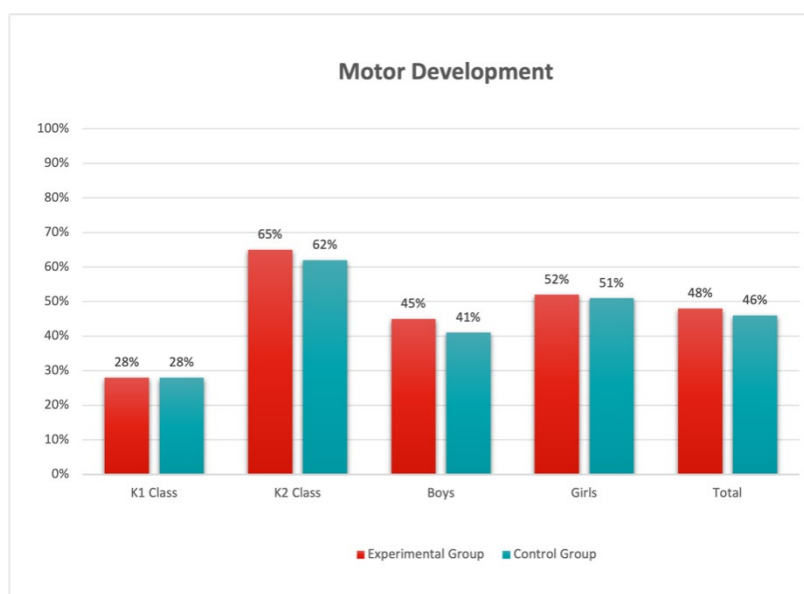


Figure 7: The mean score of motor development of children by grade and gender for the experimental and control groups

The results of the independent samples t-test showed that there were no significant differences in the scores of children in the experimental and control groups across grade ($t = -0.11$, $p = 0.91$; $t = 1.47$, $p = 0.14$) and gender ($t = 1.34$, $p = 0.18$; $t = 0.56$, $p = 0.58$) in the area of motor development (see Table 8). There was a significant difference in the scores of boys and girls within the experimental group ($t = -2.62$, $p < 0.05$).

Table 8: Comparison of the mean score of motor development of children by grade and gender for the experimental and control groups

	Experimental Group			Control Group			t	p
	n	M	SD	n	M	SD		
K1 Class	172	0.28	0.20	165	0.28	0.19	-0.11	0.91
K2 Class	208	0.65	0.19	187	0.62	0.24	1.47	0.14
Boys	198	0.45	0.26	165	0.41	0.27	1.34	0.18
Girls	182	0.52	0.28	187	0.51	0.28	0.56	0.58
Total	380	0.48	0.27	352	0.46	0.28	1.10	0.27

As shown in Figure 8, children in the K1 Class experimental group scored lower than the control group in folding paper and higher than the control group in copying a shape, while the two groups scored similarly in hopping on one foot and drawing a human figure. The children in the K2 Class experimental group scored lower than the control group in the folding paper, and higher than the control group in hopping on one foot, copying a shape, and drawing a human figure.

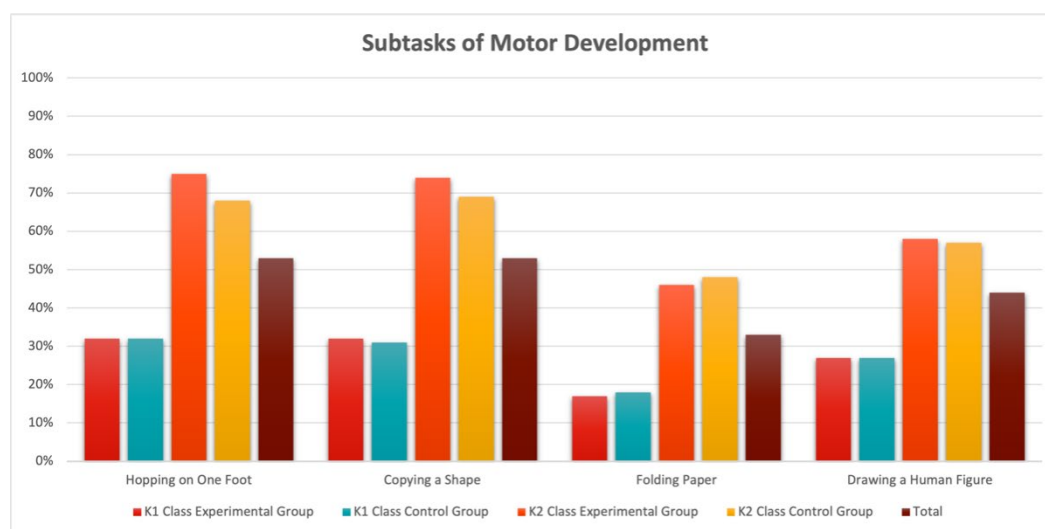


Figure 8: The mean score of subtasks of motor development for children in the experimental group and the control group in the K1 and K2 classes

The chi-square test showed that there were no significant differences between the experimental and control groups in the scores of hopping on one foot, copying a shape, folding paper and drawing a human figure by grade and gender, as shown in Table 9. There was a significant difference between boys and girls in the experimental group only in the score of drawing a human figure ($\chi^2 = 21.35$, $p < 0.01$).

Table 9: Comparison of the mean score of subtasks of motor development for children by grade and gender for the experimental and control groups

		Experimental Group			Control Group			χ^2	p
		n	M	SD	n	M	SD		
Hopping on One Foot	K1 Class	172	0.32	0.31	165	0.32	0.32	7.26	0.70
	K2 Class	208	0.75	0.31	187	0.68	0.36	17.46	0.07
	Boys	198	0.54	0.37	165	0.50	0.39	7.29	0.70
	Girls	182	0.56	0.38	187	0.53	0.37	3.80	0.96
Copying a Shape	K1 Class	172	0.32	0.36	165	0.31	0.33	7.34	0.12
	K2 Class	208	0.74	0.33	188	0.69	0.38	7.02	0.14
	Boys	198	0.52	0.40	166	0.45	0.40	6.06	0.20
	Girls	182	0.59	0.41	187	0.56	0.40	3.90	0.42

Folding Paper	K1 Class	172	0.17	0.26	165	0.18	0.25	1.39	0.85
	K2 Class	208	0.46	0.37	188	0.48	0.38	4.11	0.39
	Boys	198	0.30	0.34	166	0.26	0.33	1.88	0.76
	Girls	182	0.37	0.36	187	0.40	0.37	2.53	0.64
Drawing a Human Figure	K1 Class	172	0.27	0.29	165	0.27	0.28	5.64	0.69
	K2 Class	208	0.58	0.27	188	0.57	0.30	10.99	0.20
	Boys	198	0.38	0.32	166	0.36	0.30	8.50	0.39
	Girls	182	0.51	0.30	187	0.50	0.33	7.27	0.51

The Current Situation and Comparison of Executive Function

As shown in Figure 9, children in the experimental group had a total mean score of 56% in the area of executive function, and children in the control group had an overall mean score of 52% in the area of executive function. Specifically, the mean scores were 41% and 37% for children in the experimental and control groups in the K1 Class, 68% and 65% for children in the experimental and control groups in the K2 Class, 56% and 48% for boys in the experimental and control groups, and 56% and 56% for girls in the experimental and control groups.

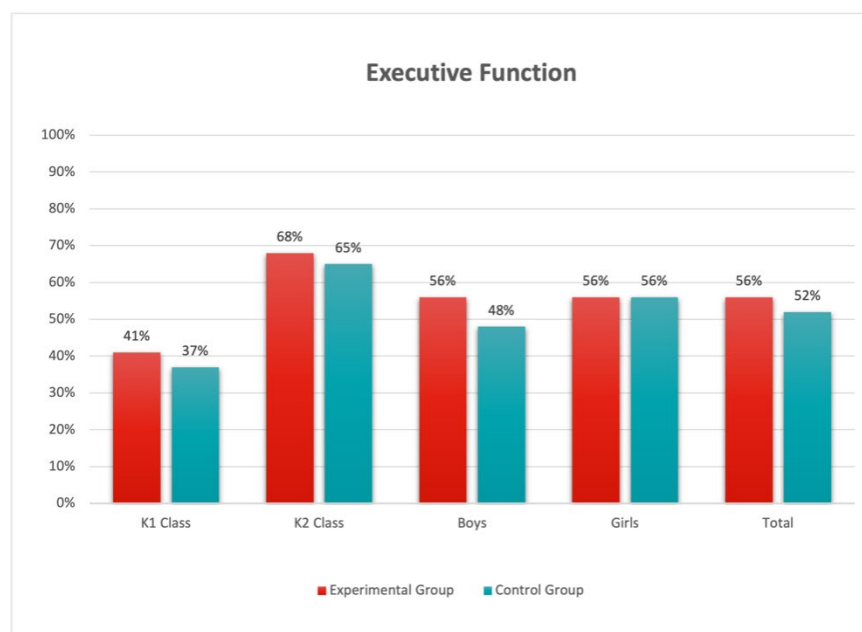


Figure 9: The mean score of executive function of children by grade and gender for the experimental and control groups

The results of the independent samples t-test showed that there was no significant difference between the scores of children in different grades in both the experimental and control groups on executive functions ($t = 1.29, p = 0.20$; $t = 0.92, p = 0.36$), and there was no significant difference between the scores of girls in the experimental and control groups ($t = 0.18, p = 0.85$), but there was a significant difference between the scores of boys in the experimental and control groups ($t = 2.16, p < 0.05$) (see Table 10). There was no significant difference in the scores of boys and girls within the experimental group ($t = -0.19, p = 0.85$).

Table 10: Comparison of the mean score executive function of children by grade and gender for the experimental and control groups

	Experimental Group			Control Group			t	p
	n	M	SD	n	M	SD		
K1 Class	172	0.41	0.32	165	0.37	0.30	1.29	0.20

K2 Class	208	0.68	0.29	188	0.65	0.30	0.92	0.36
Boys	198	0.56	0.33	166	0.48	0.34	2.16*	0.03
Girls	182	0.56	0.33	187	0.56	0.32	0.18	0.85
Total	380	0.56	0.33	353	0.52	0.33	1.59	0.11

As shown in Figure 10, children in the K1 Class experimental group scored higher on working memory and impulse control than the control group. The children in the K2 Class experimental group also scored higher than the control group on working memory and impulse control.

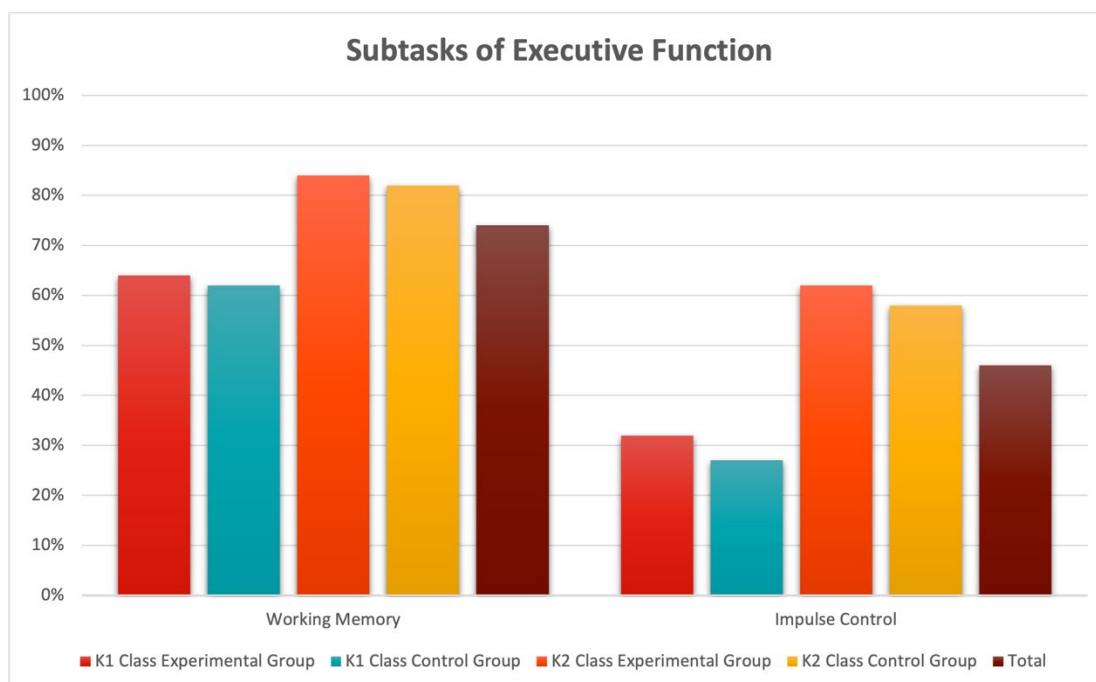


Figure 10: The mean score of subtasks of executive function for children in the experimental group and the control group in the K1 and K2 Classes

The chi-square test showed that there were no significant differences between the experimental and control groups in the scores of the two subtasks of executive function (working memory and impulse control) in different grades, and no significant differences between the experimental and control groups in the scores of girls, while there is only a significant difference in the scores of working memory between boys in the experimental group and the control group ($\chi^2 = 12.96$, $p < 0.05$), as shown in Table 11. There was no significant difference in the scores of executive functional subtasks between boys and girls in the experimental group.

Table 11: Comparison of the mean score of subtasks of executive function of children by grade and gender for the experimental and control groups

		Experimental Group			Control Group			χ^2	p
		n	M	SD	n	M	SD		
Working Memory	K1 Class	172	0.64	0.32	165	0.62	0.32	1.61	0.81
	K2 Class	208	0.84	0.21	188	0.82	0.21	0.93	0.92
	Boys	198	0.77	0.26	166	0.69	0.29	12.96*	0.01
	Girls	182	0.72	0.30	187	0.76	0.28	4.51	0.34
Inhibitory Control	K1 Class	172	0.32	0.39	165	0.27	0.38	15.38	0.12
	K2 Class	208	0.62	0.38	188	0.58	0.39	8.56	0.58
	Boys	198	0.47	0.42	166	0.40	0.42	13.88	0.18
	Girls	182	0.50	0.41	187	0.48	0.41	8.58	0.57

The Current Situation and Comparison of Approaches to Learning

As shown in Figure 11, children in the experimental group had a total mean score of 89% in the area of approaches to learning, and children in the control group had an overall mean score of 85% in the area of approaches to learning. Specifically, the mean scores were 82% and 80% for children in the experimental and control groups in the K1 Class, 94% and 90% for children in the experimental and control groups in the K2 Class, 86% and 84% for boys in the experimental and control groups, and 91% and 86% for girls in the experimental and control groups.

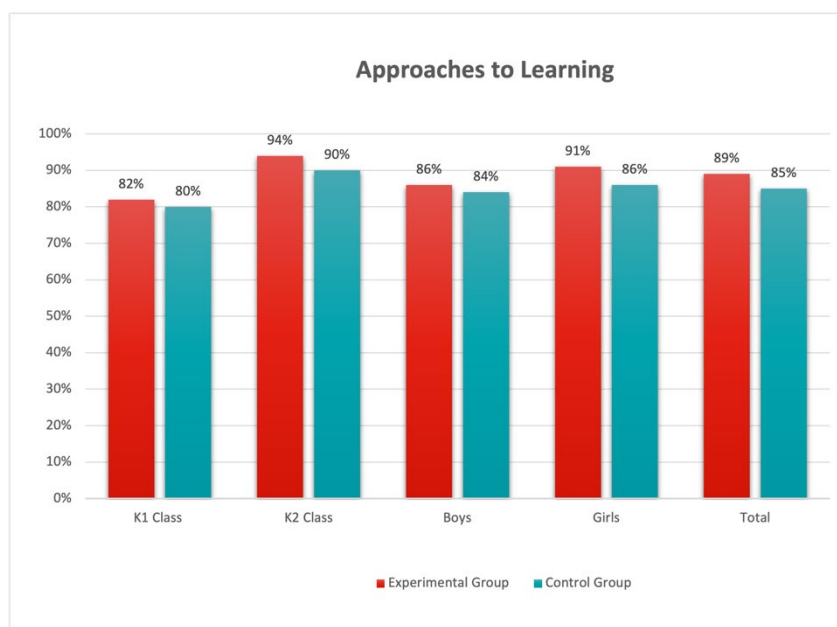


Figure 11: The mean score of approaches to learning of children by grade and gender for the experimental and control groups

The results of the independent samples t-test showed that there was no significant difference between the scores of the experimental and control groups on approaches to learning in the K1 Class ($t = 0.86$, $p = 0.39$), and there was a significant difference between the scores of the experimental and control groups on approaches to learning in the K2 Class ($t = 2.23$, $p < 0.05$), with the experimental group scoring significantly higher than the control group. In addition, there was no significant difference between the scores of boys in the experimental and control groups ($t = 0.82$, $p = 0.41$), while there was a significant difference between the scores of girls in the experimental and control groups ($t = 2.38$, $p < 0.05$) (see Table 12). Furthermore, there was a significant difference between the scores of boys and girls within the experimental group ($t = -2.68$, $p < 0.05$).

Table 12: Comparison of the mean score of approaches to learning of children by grade and gender for the experimental and control groups

	Experimental Group			Control Group			t	p
	n	M	SD	n	M	SD		
K1 Class	169	0.82	0.23	163	0.80	0.25	0.86	0.39
K2 Class	208	0.94	0.13	187	0.90	0.19	2.23*	0.03
Boys	197	0.86	0.21	165	0.84	0.22	0.82	0.41
Girls	180	0.91	0.16	185	0.86	0.23	2.38*	0.02
Total	377	0.89	0.19	350	0.85	0.22	2.10*	0.04

As shown in Figure 12, the scores of attentiveness and persistence of the experimental group were higher than those of the control group in both K1 and K2 Classes.

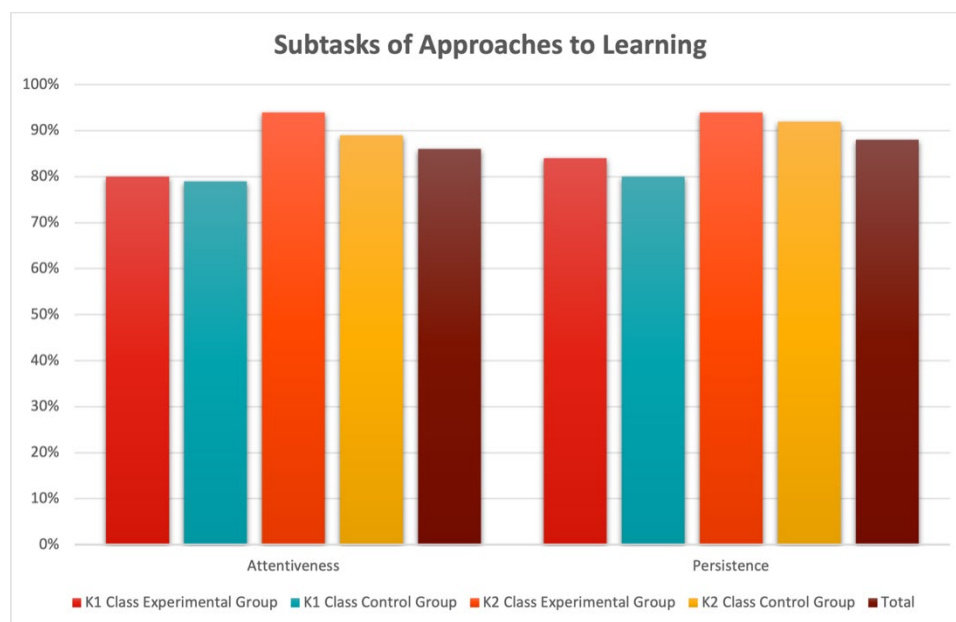


Figure 12: The mean score of subtasks of approaches to learning for children in the experimental group and the control group in the K1 and K2 Classes

The chi-square test showed that there was no significant difference between the experimental and control groups in the scores of attentiveness and persistence in different grades; there was also no significant difference between the experimental and control groups in the scores of boys on the two subtasks of approaches to learning, and there was only a significant difference between the experimental and control groups in the scores of girls on attentiveness ($\chi^2 = 13.09$, $p < 0.05$), as shown Table 13. There was a significant difference between boys and girls in the experimental group only in the score of attentiveness ($\chi^2 = 17.87$, $p < 0.01$).

Table 13: Comparison of the mean score of subtasks of approaches to learning of children by grade and gender for the experimental and control groups

		Experimental Group			Control Group			χ^2	p
		n	M	SD	n	M	SD		
Attentiveness	K1 Class	169	0.80	0.25	163	0.79	0.26	5.12	0.53
	K2 Class	208	0.94	0.14	187	0.89	0.22	10.54	0.10
	Boys	197	0.85	0.23	165	0.83	0.25	4.01	0.68
	Girls	180	0.91	0.18	185	0.86	0.24	13.09*	0.04
Persistence	K1 Class	169	0.84	0.23	163	0.80	0.25	7.74	0.26
	K2 Class	208	0.94	0.13	187	0.92	0.18	7.15	0.21
	Boys	197	0.87	0.21	165	0.85	0.22	2.11	0.91
	Girls	180	0.92	0.17	185	0.87	0.23	11.77	0.07

The Current Situation and Comparison of IDELA Total Score

As shown in Figure 13, the mean score of the total IDELA score for children in the experimental group was 44%, and the mean score of the total IDELA score for children in the control group was 44%. Specifically, the mean scores were 31% and 31% for children in the experimental and control groups in the K1 Class, 55% and 55% for children in the experimental and control groups in the K2 Class, 45% and 42% for boys in the experimental and control groups, and 44% and 46% for girls in the experimental and control groups.

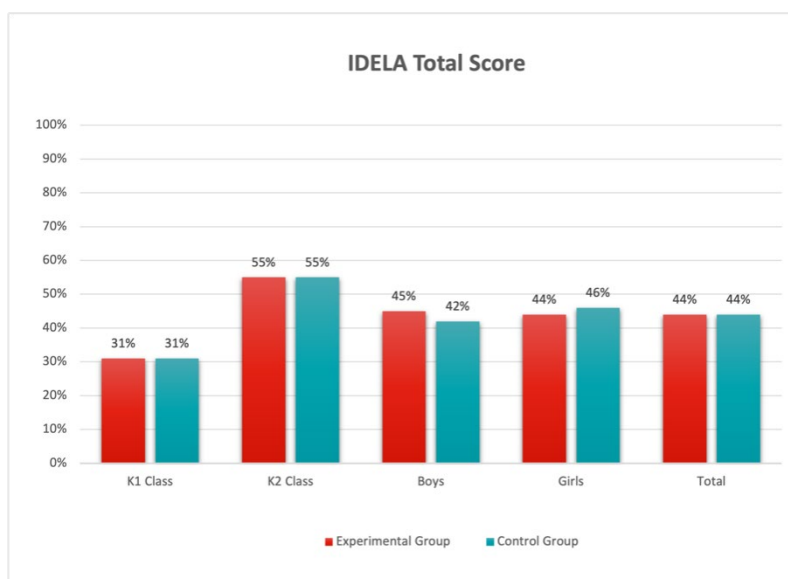


Figure 13: The mean score of IDELA total score of children by grade and gender for the experimental and control groups

The results of the independent samples t-test showed that there was no significant difference between the experimental and control children overall on the IDELA total score ($t = 0.17$, $p = 0.87$). There was no significant difference in the IDELA total score between the experimental and control groups of children in different grades ($t = 0.06$, $p = 0.95$; $t = -0.21$, $p = 0.84$). Furthermore, there was no significant difference in the IDELA total score between the experimental and control children by gender ($t = 1.08$, $p = 0.28$; $t = -0.80$, $p = 0.43$), as shown in Table 14. And there was no significant difference in the scores of boys and girls within the experimental group ($t = 0.23$, $p = 0.82$).

Table 14: Comparison of the mean score of IDELA total score of children by grade and gender for the experimental and control groups

	Experimental Group			Control Group			t	p
	n	M	SD	n	M	SD		
K1 Class	166	0.31	0.14	160	0.31	0.13	0.06	0.95
K2 Class	207	0.55	0.16	187	0.55	0.17	-0.21	0.84
Boys	194	0.45	0.19	163	0.42	0.20	1.08	0.28
Girls	179	0.44	0.19	184	0.46	0.18	-0.80	0.43
Total	373	0.44	0.19	347	0.44	0.19	0.17	0.87

Summary

In order to understand the developmental characteristics of the migrant children in the experimental and control groups and whether there were differences in development between the two groups, one-to-one IDELA tests were administered to the children. The results showed that, overall, there were no significant differences between the experimental and control groups in emergent numeracy, emergent literacy, social-emotional development, motor development, and executive function. There was a significant difference in approaches to learning between the two groups, as the children in the experimental group scored higher in approaches to learning compared to the control group. However, when comparing the total IDELA scores of the two groups, no significant differences were found. This indicates that overall, the development of the migrant children in the experimental and control groups was similar and did not differ significantly. The scores of children in the experimental and control groups in emergent numeracy, emergent literacy, social-emotional development, and motor development, across grade and gender, are shown below:

Group	Grade	Gender	Sample Size	Emergent Numeracy	Emergent Literacy	Social-Emotional Development	Motor Development
Experimental Group	K1 Class	Boy	87	38%	26%	37%	25%
		Girl	85	35%	26%	36%	32%
	K2 Class	Boy	111	64%	45%	52%	61%
		Girl	97	62%	44%	52%	70%
Subtotal			380	51%	36%	45%	48%
Control Group	K1 Class	Boy	85	36%	26%	33%	25%
		Girl	80	39%	26%	36%	31%
	K2 Class	Boy	81	67%	47%	51%	58%
		Girl	107	64%	45%	52%	65%
Subtotal			353	52%	37%	44%	46%
Total			733	52%	36%	44%	47%

Characteristics of Preschool Migrant Children's Home and Kindergarten Environments

Current Status and Comparison of Parenting Styles

Parenting style refers to the emotional climate that is constructed by the relatively stable behavioral tendencies of parents in the process of raising children, including authoritative and authoritarian parenting styles (Darling & Steinberg, 1993; Xu et al., 2022). Authoritative parenting is child-centered parenting that has high expectations for the child's psychological maturity (Baumrind, 1967). Authoritarian parenting is characterized by parents who interfere excessively with their children's behaviors, demanding that children follow rules unconditionally, and reprimanding and punishing them for minor infractions (Baumrind, 1967).

Parenting Styles and Dimensions Questionnaire (PSDQ) was used to measure parenting styles. The scale is scored on a 5-point scale, with a minimum score of 1 and a maximum score of 5. Two dimensions, authoritative parenting and authoritarian parenting, were selected, with higher scores indicating higher levels of parenting, respectively. The mean scores of authoritative parenting and authoritarian parenting in the experimental and control groups of children in the K1 and K2 Classes are shown in Figures 14 and 15. In the experimental group of the K1 Class, the mean score for authoritative parenting is 3.81, while in the control group, it is 3.91. In the experimental group of the K2 Class, the mean score for authoritative parenting is 3.80, while in the control group, it is 3.89. For the authoritarian parenting style, in the experimental group of the K1 Class, the mean score is 1.90, while in the control group, it is 1.89. In the experimental group of the K2 Class, the mean score for authoritarian parenting is 1.98, while in the control group, it is 1.89.

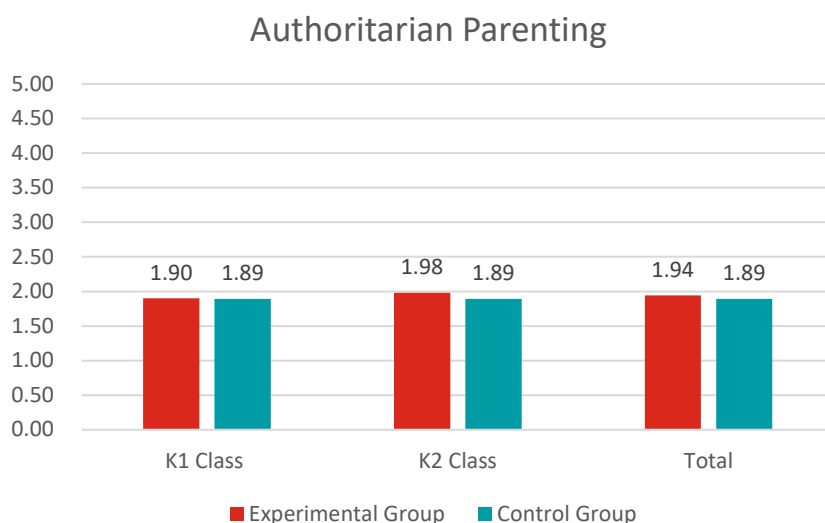


Figure 14: Mean scores of authoritative parenting in the experimental and control groups

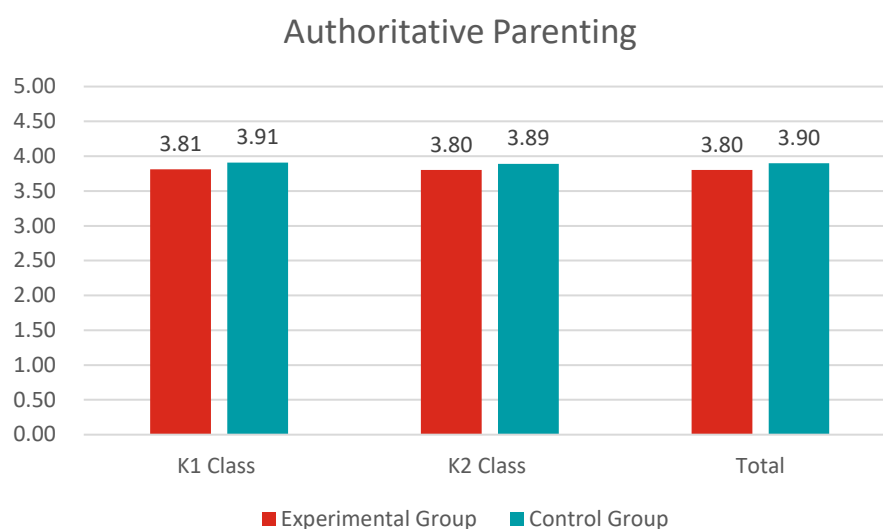


Figure 15: Mean scores of authoritarian parenting in the experimental and control groups

Next, the independent samples t-test was used to examine whether there was a significant difference between the parenting scores of the experimental and control groups. The results are shown in Table 15. For the K1 and K2 Classes, there was no significant difference between the experimental and control groups in the authoritative parenting scores and the authoritarian parenting scores ($t = -1.32, p = 0.19$; $t = 0.05, p = 0.96$; $t = -1.32, p = 0.19$; $t = 1.43, p = 0.15$). Overall, there was no significant difference between the experimental and control groups in terms of authoritative parenting ($t = -1.86, p = 0.06$) and authoritarian parenting ($t = 1.07, p = 0.29$), without differentiating between K1 and K2 Classes. This indicates that there is no significant difference in parenting styles between the experimental and control groups.

Table 15: Comparison of parenting scores between the experimental and control groups

Parenting	Grade	Experimental Group			Control Group			t	p
		n	M	SD	n	M	SD		
Authoritative Parenting	K1 Class	160	3.81	0.68	144	3.91	0.65	-1.32	0.19
	K2 Class	184	3.80	0.63	182	3.89	0.73	-1.32	0.19
	Total	344	3.80	0.65	326	3.90	0.69*	-1.86	0.06
Authoritarian Parenting	K1 Class	160	1.90	0.57	144	1.89	0.64	0.05	0.96
	K2 Class	184	1.98	0.58	182	1.89	0.62	1.43	0.15
	Total	344	1.94	0.57	326	1.89	0.63	1.07	0.29

Current Status and Comparison of Interparental Conflict

Interparental conflict mainly refers to verbal or physical aggression and arguments between parents due to disagreement, and it can be described by characteristics such as the frequency, intensity, content, style (overt/covert) of conflict occurrence and whether the conflict is resolved.

The **Children's Perception of Interparental Conflict Scale (CPIC)** was used to measure the level of interparental conflict. The scale is scored on a 4-point scale, with a minimum score of 1 and a maximum score of 4. Higher scores indicate more serious interparental conflict. The mean of interparental conflict scores of children in the K1 and K2 Classes in the experimental and control groups are shown in Figure 16. In the experimental group of the K1 Class, the mean score for interparental conflict is 1.76, while in the control group, it is 1.80. In the experimental group of the K2 Class, the mean score for interparental conflict is 1.83, while in the control group, it is 1.81. Overall, the mean score for interparental conflict is 1.80 in the experimental group and 1.81 in the control group.

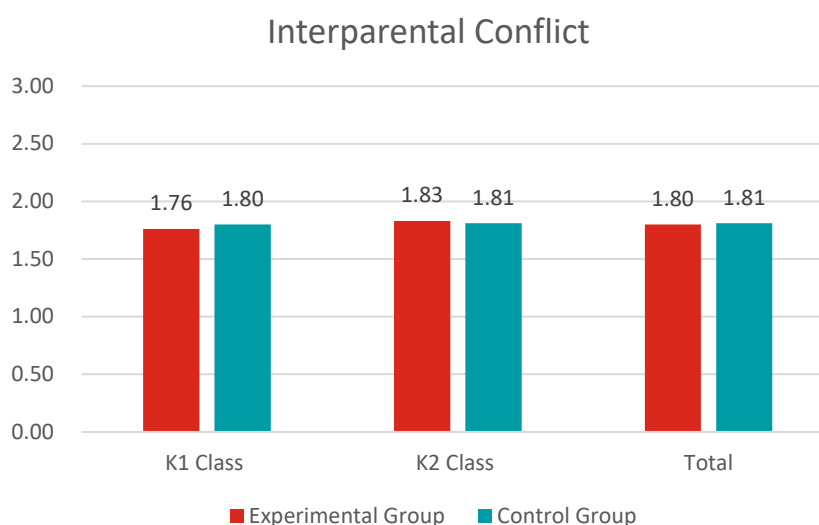


Figure 16: Mean of interparental conflict scores in the experimental and control groups

Next, the independent samples t-test was used to examine whether there was a significant difference in the interparental conflict scores between the experimental and control groups. The results are shown in Table 16. For both the K1 and K2 Classes, there was no significant difference in the interparental conflict scores between the experimental and control groups ($t = -0.88$, $p = 0.38$; $t = 0.27$, $p = 0.79$). Without distinguishing between K1 and K2 Classes, there was no significant difference in interparental conflict between the experimental and control groups ($t = -0.40$, $p = 0.68$). This indicates that for the experimental and control groups, there was no significant difference in interparental conflict.

Table 16: Comparison of interparental conflict scores between the experimental and control groups

	Grade	Experimental Group			Control Group			t	p
		n	M	SD	n	M	SD		
Interparental Conflict	K1 Class	166	1.76	0.40	150	1.80	0.42	-0.88	0.38
	K2 Class	192	1.83	0.44	188	1.81	0.42	0.27	0.79
	Total	358	1.80	0.42	358	1.81	0.42	-0.40	0.68

Current Status and Comparison of Teacher-child Relationship

The teacher-child relationship is a psychological relationship between teachers and children that expresses interdependence in emotional, cognitive, and behavioral terms, and usually includes teacher-child intimacy and teacher-child conflict. teacher-child intimacy usually refers to positive interactions, open communication, and warm feelings between children and teachers, while teacher-child conflict manifests as negative interactions and negative feelings between children and teachers.

The Student Teacher Relationship Scale (STRS) was used to measure teacher-child relationships. The scale is a 5-point scale with a minimum score of 1 and a maximum score of 5, with higher scores indicating better teacher-child relationships. The mean teacher-child intimacy and teacher-child conflict scores of the children in the K1 and K2 Classes are shown in Figures 17 and 18 for the experimental and control groups. The mean scores of teacher-child intimacy were 3.53 and 3.61 for the experimental group in the K1 Class and the control group, respectively, the mean scores of teacher-child intimacy were 3.67 and 3.58 for the experimental group in the K2 Class and the control group, respectively. The mean scores of teacher-child conflict were 2.03 and 1.82 for the experimental group in the K1 Class and the control group, respectively, the mean scores of teacher-child conflict were 1.99 and 1.90 for the experimental group in the K2 Class and the control group, respectively.

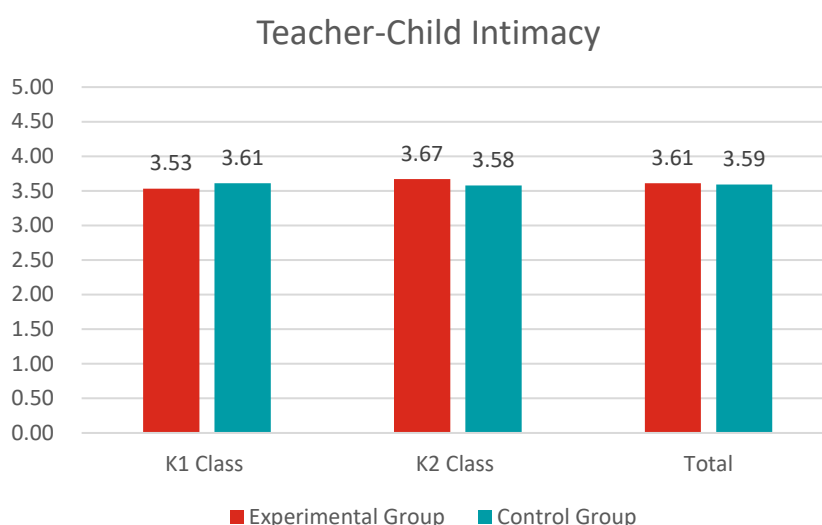


Figure 17: Mean of teacher-child intimacy scores in the experimental and control groups

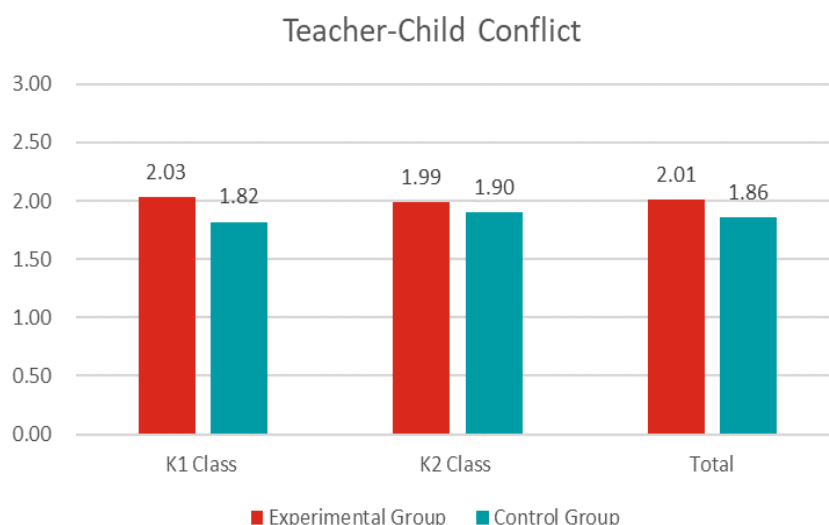


Figure 18: Mean of teacher-child conflict scores in the experimental and control groups

Next, the independent samples t-test was used to examine whether there was a significant difference between the teacher-child relationship scores of the experimental and control groups. The results are shown in Table 17, where the experimental group in the K1 Class of kindergarten had significantly higher teacher-child conflict scores than the control group ($t=2.51$, $p < 0.05$). However, there was no significant difference between the experimental and control groups in the teacher-child intimacy scores ($t=-1.14$, $p = 0.26$). For the K2 Class, there were no significant differences between the experimental and control groups on teacher-child intimacy ($t=1.61$, $p = 0.11$) and teacher-child conflict scores ($t=1.09$, $p = 0.28$). Overall, there was no significant difference between the experimental and control groups on teacher-child intimacy ($t=0.38$, $p = 0.70$) and a significant difference on teacher-child conflict ($t=2.50$, $p = 0.013$), with the experimental group having higher scores on teacher-child conflict than the control group. This indicates that there is a significant difference between the experimental and control groups on teacher-child conflict in K1 Class of kindergarten.

Table 17: Comparison of teacher-child relationship scores between the experimental and control groups

Teacher-Child Relationship	Grade	Experimental Group			Control Group			t	p
		n	M	SD	n	M	SD		
Teacher-Child Intimacy	K1 Class	159	3.53	0.56	163	3.61	0.64	-1.14	0.26
	K2 Class	204	3.67	0.60	180	3.58	0.52	1.61	0.11
	Total	363	3.61	0.58	343	3.59	0.58	0.38	0.70
Teacher-Child Conflict	K1 Class	159	2.03	0.80	163	1.82	0.74	2.51*	0.01
	K2 Class	204	1.99	0.83	180	1.90	0.72	1.09	0.28
	Total	363	2.01	0.82	343	1.86	0.73	2.50*	0.013

Current Status and Comparison of Teaching Quality

The quality of teaching practices was evaluated using the *Teach ECE*, including three areas: Classroom Culture, Guided Learning, and Socioemotional Skills. The *Teach ECE* uses a 5-point scoring system, with higher scores indicating better teaching quality in certain aspects. The scores of teaching quality for the experimental group and the control group teachers are shown in Figure 19. In terms of the total score, the teaching quality scores for the experimental group and the control group were 3.44 and 3.46, respectively, almost the same. From the three areas of teaching quality, the scores

for classroom culture in the experimental group and the control group were 4.35 and 4.13, for guided learning they were 3.76 and 3.92, and for socioemotional skills they were 2.41 and 2.40. It is worth noting that, compared with classroom culture and guided learning, the teachers in the experimental group and the control group generally scored lower in socioemotional skills. Thus, there is potential for improvement in teachers' teaching to enhance children's socioemotional skills. Therefore, the teaching quality of teachers needs to be improved in promoting the development of children's socioemotional skills.



Figure 19: Mean of teaching quality scores in the experimental and control groups

Next, the non-parametric test method was used to examine whether there was a significant difference in the teaching quality scores between the experimental group and the control group. The results, as shown in Table 18, indicate that there was no significant difference between the scores of the experimental and control groups in the total score of teaching quality, classroom culture, guiding learning, and socioemotional skills.

Table18: The mean score of teaching quality for the experimental and control groups

Teaching Quality	Experimental Group (n=17)	Control Group (n=16)	Mann-Whitney U	p
	Mean	Mean		
Classroom Culture	19.24	14.63	174.00	0.179
Guided Learning	15.65	18.44	113.00	0.423
Socioemotional Skills	17.53	16.44	145.00	0.763
Total	16.85	17.16	133.50	0.929

Summary

To gain insights into the family and kindergarten environment of migrant children, a questionnaire survey was conducted with their parents. The survey examined environmental variables such as parenting styles, interparental conflict, teacher-child relationships and teaching quality. The results indicate that there were no significant differences in authoritative parenting style, authoritarian parenting style, interparental conflict, and teacher-child intimacy between the experimental group and the control group. However, a significant difference was observed in teacher-child conflict between the two groups. The experimental group exhibited higher levels of teacher-child conflict compared to the

control group. It is important to note that this difference in teacher-child conflict was significant for children in the K1 Class but not for those in the K2 Class.

Influence of Family and Kindergarten Environments on the Development of Preschool Migrant Children

Family environment indicators include parenting (with two dimensions of authoritative parenting and authoritarian parenting and two aspects of interparental conflict; kindergarten environment indicators focus on teacher-child relationship (with two dimensions of teacher-child intimacy and teacher-child conflict).

There are six domains of **IDELA** testing indicators: emergent numeracy, emergent literacy, social-emotional development, motor development, executive function, and approaches to learning.

Linear regression was used to examine the relationship between family and kindergarten environments and child development.

Parenting Styles and Child Development

The effects of authoritative and authoritarian parenting styles on children's emergent numeracy, emergent literacy, social-emotional development, motor development, executive functions, approaches to learning, and total **IDELA** scores were examined separately using simple linear regression analysis. The results revealed that authoritative parenting showed a significant positive correlation with emergent numeracy, emergent literacy, and total **IDELA** scores. However, there was no significant correlation between authoritative parenting and other domains of child development. There was no significant correlation found between authoritarian parenting and all of the domains of child development. The detailed results are shown in Table 19.

Table 19: Effects of family and kindergarten environments on various aspects of child development

Independent Variable	Dependent Variable	B	SE	β	t	p
Authoritative Parenting	Emergent Numeracy	0.044	0.015	0.112**	2.923	0.004
	Emergent Literacy	0.039	0.011	0.135***	3.522	0.000
	Social-Emotional Development	0.019	0.010	0.072	1.860	0.063
	Motor Development	0.028	0.016	0.068	1.757	0.079
	Executive Functions	0.042	0.019	0.085	2.199	0.028
	Approaches to Learning	0.012	0.012	0.038	0.977	0.329
	Total IDELA Score	0.035	0.011	0.121***	3.154	0.002
Authoritarian Parenting	Emergent Numeracy	-0.013	0.017	-0.031	-0.793	0.428
	Emergent Literacy	-0.010	0.013	-0.030	-0.772	0.440
	Social-Emotional Development	-0.003	0.011	-0.012	-0.305	0.760
	Motor Development	0.014	0.018	0.032	0.818	0.414
	Executive Functions	-0.020	0.021	-0.037	-0.956	0.339
	Approaches to Learning	-0.006	0.014	-0.018	-0.469	0.640
	Total IDELA Score	-0.005	0.013	-0.014	-0.374	0.708

Interparental Conflict and Child Development

The effects of interparental conflict on children's emergent numeracy, emergent literacy, social-emotional development, motor development, executive functions, approaches to learning, and total **IDELA** scores were examined separately using simple linear regression analysis. The results found that interparental conflict was not a significant predictor of children's development in any of the domains (shown in Table 20).

Table 20: Effects of interparental conflict on various aspects of child development

Independent Variable	Dependent Variable	B	SE	β	t	p
Interparental Conflict	Emergent Numeracy	0.003	0.024	0.005	0.139	0.889
	Emergent Literacy	- 0.0007	0.018	- 0.002	-0.041	0.967
	Social-Emotional Development	0.011	0.016	0.025	0.671	0.503
	Motor Development	0.020	0.025	0.031	0.817	0.414
	Executive Functions	-0.017	0.030	-0.021	- 0.558	0.577
	Approaches to Learning	-0.017	0.020	-0.032	- 0.840	0.401
	Total IDELA Score	0.008	0.018	0.017	0.459	0.646

Interparental conflict is one of the factors of the couple subsystem within the family that, although it does not have a direct impact on children's development, may have an indirect impact on children's development through the mediating effect of a number of factors. Interparental conflict may affect the way parents treat their children, that is, their parenting style. The correlation analysis revealed that interparental conflict had a significant negative correlation with authoritative parenting ($r = -0.124$, $p < 0.01$) and a significant positive correlation with authoritarian parenting ($r = 0.258$, $p < 0.001$). Since parenting styles significantly influence child development, it is possible that interparental conflict may affect child development through the mediating role of parenting styles.

Mediation analysis was conducted using Mplus 7.4. Authoritative parenting mediated the relationship between interparental conflict and child development. Specifically, interparental conflict negatively predicted authoritative parenting, which in turn affected children's total **IDELA** scores and emergent numeracy, emergent literacy, motor development, and executive functions. The specific results can be seen in Figure 20. Authoritarian parenting did not mediate the relationship between interparental conflict and child development, and the specific results can be seen in Figure 21.

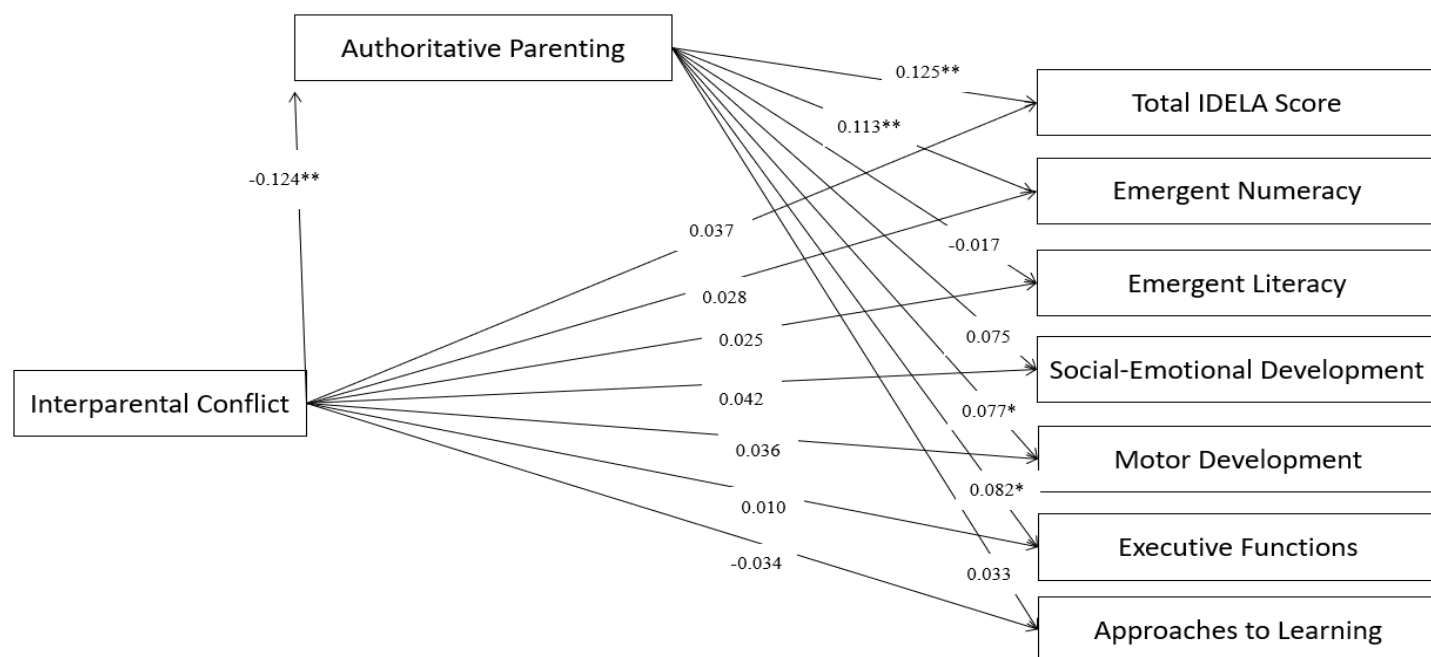


Figure 20: Effects of interparental conflict on child development through the mediating role of authoritative parenting

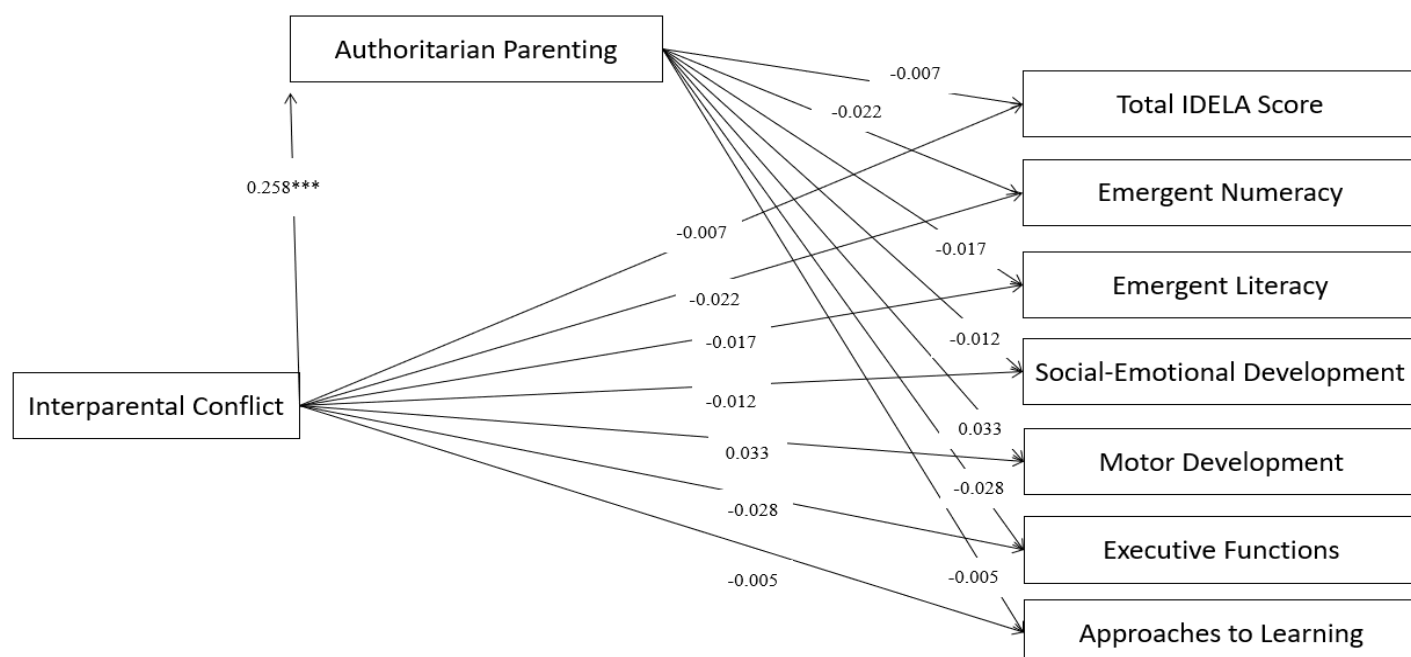


Figure 21: Effects of interparental conflict on child development through authoritarian parenting

Teacher-Child Relationship and Child Development

The effects of teacher-child intimacy and teacher-child conflict on each of the domains of emergent numeracy, emergent literacy, social-emotional development, motor development, executive functions, approaches to learning, and total IDELA score were examined separately using simple linear regression analysis. The results found that teacher-child intimacy significantly predicted children's motor development and executive functions, but not other domains of children's development. Teacher-child conflict was not a significant predictor of children's development in all domains (see Table 21).

Table 21: Effects of teacher-child relationship on various aspects of child development

Independent variable	Dependent variable	B	SE	β	t	p
Teacher-child intimacy	Emergent Numeracy	-0.012	0.017	-0.026	-0.694	0.488
	Emergent Literacy	-0.005	0.013	-0.015	-0.410	0.682
	Social-Emotional Development	0.009	0.012	0.029	0.771	0.441
	Motor Development	0.039	0.018	0.082*	2.180	0.030
	Executive Functions	0.043	0.021	0.076*	2.020	0.044
	Approaches to Learning	0.015	0.014	0.039	1.047	0.295
	Total IDELA Score	0.002	0.013	0.005	0.135	0.893
Teacher-child conflict	Emergent Numeracy	0.003	0.013	0.008	0.209	0.835
	Emergent Literacy	0.009	0.010	0.035	0.939	0.348
	Social-Emotional Development	0.002	0.009	0.011	0.284	0.777
	Motor Development	0.001	0.013	0.002	0.054	0.957
	Executive Functions	-0.017	0.016	-0.041	-1.076	0.282
	Approaches to Learning	0.012	0.011	0.042	1.117	0.264
	Total IDELA Score	0.006	0.010	0.023	0.617	0.537

Summary

Overall, the family environment can have a significant impact on children's development. Authoritative parenting positively predicted children's emergent numeracy, emergent literacy, and total IDELA scores, whereas authoritarian parenting did not benefit child development. Although interparental conflict does not directly affect child developmental outcomes, it can indirectly affect child development through the mediating role of parenting style. Interparental conflict can affect emergent numeracy, emergent literacy, motor development, and executive functions through the mediation of authoritative parenting, but not through the mediation of authoritarian parenting.

The teacher-child relationship can also have an impact on children's development. Primarily, teacher-child intimacy contributes to children's motor development and executive functions, whereas teacher-child conflict is not beneficial to children's development.



Nuturing Dilemmas and Needs of Families

Family Parenting Dilemmas

Parents do not have a smooth parenting process, and they may be influenced by themselves and other family members in many ways, and they may encounter many difficulties in the process of parenting (Cai & Liu, 2021). If parents are less educated and have less scientific parenting knowledge, they may have a lower sense of parenting efficacy in the process of child-rearing; if the family-rearing atmosphere is conflicting and parents often show negative emotions in the family, with the tension between family members, constant conflicts and frequent quarrels between husband and wife, neglect of children, or even relationship breakup, the impact on young children is very bad; In addition, if one parent is busy, less involved or absent from the child's upbringing for a long time, the child will become more and more dependent on the other parent, and will also lack responsibility and accountability, and some children may even show very low self-esteem, and will lose self-confidence in the long run. Migrant families have the characteristic of mobility, and most parents of migrant children are busy at work, have low education levels, and have a poor family parenting atmosphere, etc. The parenting dilemmas they encounter are more specific according to the results of the interviews. Specifically speaking, it can be demonstrated in the following five aspects:

"Dragging the Legs": Low Parenting Efficacy

Overall, parenting dilemmas are more often manifested in low parenting efficacy. Parenting efficacy refers to parents' judgments or beliefs about their ability to successfully organize and complete various parenting-related tasks (Chen, 2020). The main reasons for the low parenting efficacy of parents of migrant children are their own limited knowledge, low education, and insufficient parenting experience. First, preschoolers are full of curiosity and like to ask their parents many questions. However, many migrant parents are often frustrated by their inability to answer their children's questions because they do not have sufficient knowledge. One mother said:

"I feel that nowadays children have a lot of questions and always ask me questions, and sometimes there is something I don't know, that is, I can't answer." (Interview LX-F-221102)

Another mother also struggled with this, and said:

"My child likes to talk and keep asking why, and sometimes my head explodes. A lot of times I can't answer. He's there asking questions without a clue, and I just muddle through." (Interview ZX-F-221022)

Secondly, some parents of migrant children feel they are at a disadvantage in raising their children because of their low education level compared to other parents of children. As one parent said:

"Our education level is relatively homogeneous for children's education, other parents have higher education level and have more complete education planning for their children from childhood, we just take one step at a time... .. It's getting harder and harder to educate children, and I feel like I'm dragging my feet." (Interview YY-F-221014)

Finally, parents often feel helpless when it comes to dealing with their children's emotional problems in daily life, such as tantrums. One parent said:

"There are times when she loses control of her emotions and we feel particularly helpless, but on second thought, it is really some of our inappropriate parenting behaviors that cause her to lose control like this." (Interview TE-F-221014)

Another full-time mother said:

"Our child is particularly stubborn, very stubborn kind, the more you do not let him touch things, the more he goes to touch. Like our home socket, you do not let him touch he did not listen, he had to go to touch. We took a board to beat his hand into red, but he still did not listen to you, still wanted to move. He is so stubborn, and I often do not know what to do." (Interview BC-F-221029)

"Stranger in the Family": Less Involvement of Fathers in Education

Fei Xiaotong used the term "the differential mode of association" to describe the social relationship built on the basis of blood. In modern society, with the deepening of social openness and the improvement of transportation conditions, the scope of people's interconnections has been expanded, the dimension of relationship composition has been enriched,

and the traditional relationship based on blood has been expanded into relationship based on blood, industry, and geographical locations. Mr. Fei used the analogy of "ripples of water" to describe Chinese social relationships - each person forms a network of relationships centered on himself, and those closer to his center are strong relationships, while those "further" from the center are "thinner". The closer to the center, the stronger the relationship; and the further away from the center, the "thinner" the relationship. Father is close to children and has a strong relationship in children's networks, which has a significant impact on their growth. Active involvement of fathers in early childhood parenting can have a facilitating impact on children's self-esteem (Li et al., 2021), emotional development (Yang et al., 2021) behavioral problems (Rodríguez et al., 2019), personality, and sociality (Zou et al., 2020).

Many migrant children are migrant with their parents and their primary caregivers are both parents. In this study, most of the migrant children's mothers were full-time mothers, while the fathers were busy and were the main breadwinners of the family. In this "Men are breadwinners and women are homemakers" pattern of life, mothers are mainly responsible for child care. In terms of spending time with their children, the analysis found that although most fathers spent as much of their free time as possible with their children, they spent most of their time at work and did not invest enough in their children's education. Many of the mothers shared the same feeling:

"Dad is busy in sales, so basically he doesn't have time to spend with his children from Monday to Friday." (Interview LX-F-221102)

"We have a store at home, so dad has to take care of the family business. So dad has very little time to spend with his children, just a little time at night." (Interview ZQ-F-221031)

"Dad is very busy and often has to go on business trips, this time for half a month and has not come back yet. So he usually spends very little time with his children." (Interview ZX-F-221022)

"Sword and Sorcery": A Conflicting Family Parenting Atmosphere

The main caregivers of migrant children are both parents, although some parents of migrant children are able to work together for the growth and development of their children. However, due to being in a different place and pressures from work and life, more family conflicts can occur in migrant families compared to local families. Based on the interviews, we analyzed and found that the family parenting atmosphere of migrant families' conflicts mainly manifested in two aspects. On the one hand, parents of migrant children have differences in their educational concepts. First, parents' conceptions of the way of children's education differed greatly. One mother felt that her husband was not demanding enough of her child:

"Sometimes he feels that I am too demanding of the little child. He feels that the child is still young and always compares the child to him when he was a child." (Interview YY-F-221014)

On the other hand, another mother thought her husband was too strict with her children:

"He thinks I spoil them more, and sometimes he thinks it's not necessary to spoil them that way." (Interview ZQ-F-221031)

Secondly, parents also had different opinions on their expectations for their children's education. A full-time mother said:

"I hope my child will stay in Shanghai to study, but my husband still wants her to go back home to study. Although the father is trying to save up points for the child, he still wants the child to study in their hometown." (Interview LX-F-221102)

On the other hand, parents of migrant children usually have high stress levels and mood swings, and the emotional instability of parents may lead to an unwelcoming home environment. As one mother said:

"We also know we should not fight in front of our children, but sometimes we can't control it and fight. We mentioned divorce previously and it scared our children." (Interview ZX-F-221022)

These conflicting family parenting atmospheres have had a negative impact on the educational upbringing of migrant families and the development of their children. One interviewee talked about:

"I think the biggest family problem is that when mom and dad are not in a good mood, they can't help but lose their temper, which is probably really bad for the kids." (Interview YE-F-221014)

Another parent said:

"The problem we have is that sometimes (I) fight with his father and sometimes it scares him, and he says I want my father and I want my mother too. " (Interview ZX-F-221022)

"What's Next to Ink Turns Black": Poor Living Environment Atmosphere

Swedish educator Ellen Kay pointed out that the environment plays a very important role in a person's growth, and a good environment is a basis for a child to form correct thoughts and an excellent personality. In addition, the story of Mencius's mother moving three times tells us that a person's growth has a very important relationship with his life trajectory and growth environment. Modern early childhood education is actually environmental education, and the environment has a great influence on people's life and development. A warm and harmonious environment can make children have a lively personality, rational behavior, and good communication.

Families of migrant children usually live in different places, most of them rent houses or live in staff group dormitories, and the surrounding living environment may not be conducive to the healthy development of young children. At the same time, it is difficult for families with migrant children to move together as one big family. Most of them are parents with their children, and there is less social interaction with other relatives, which is not conducive to the social development of children.

First, in terms of the physical environment around the family, some parents in the interviews expressed concerns about the living environment around the family:

"The factors that are not very conducive to the development of children at the moment are probably the environment in which our family lives, because our family is now renting a house here, also taking into account the cost of a rent, and we share a house with other people. Then the next-door neighbors sometimes quarrel, and the child will say that he is afraid." (Interview YK-F-221030)

Second, most migrant children follow their parents' mobility and have less social interaction with other relatives and peers, which is not conducive to the development of their social aspects. For example, one parent talked about:

"There are fewer people in the family environment, only mom and dad are around. I often wonder if her social skills are lacking because there are not so many people with her, and there are no grandparents to take her downstairs to participate in some activities, play with the children in the neighborhood and so on. " (Interview YE-F-221014)

"Hard to Find": Unequal Access to Education

Although China has been promoting education equity, migrant children's access to education faces serious challenges with limited educational resources. Migrant children who want to go to school outside of their original household registration place are still subject to some conditions. At the kindergarten level, most families with migrant children choose to attend kindergartens nearby in order to balance work and children's education and give preference to public kindergartens that are more cost-effective. However, many public kindergartens require a certain number of points, and many families with migrant children are unable to meet the "threshold" of these kindergartens and are forced to choose private kindergartens.

First, on the issue of points, one full-time mother said she could not attend her preferred kindergarten because she did not have enough points:

"At the beginning, we wanted to go to a public kindergarten in Shanghai, but the requirements for public kindergartens are quite high and require points, we did not have enough points and there were other conditions that we did not meet, so we did not succeed in getting into a public kindergarten." (Interview BC-F-221029)

Secondly, the schooling process of migrant children is also restricted by school districts and household registration. As a mother of two said:

"We searched for eight kindergartens, and only two of them replied, and to be honest, we were rejected because the school district was one of the reasons, and the number of places was full, and most of them were remote, and there were also those who were not

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registered in the household. We thought about finding a private kindergarten, but considering that we were a two-child family, it might be relatively stressful." (Interview LM-F-221023)

In addition, the educational conditions in big cities are better, many migrant families want their children to receive a consistent education in big cities, but because of points, household registration, home purchase, and other reasons, children have to return home or go to other places to receive an education. A mother who is considering the issue of schooling for her eldest child said:

"We are now getting the points, that is to say, we want them both to finish here and then if the requirements are not met, then we can only send their brother to study elsewhere first." (Interview ZQ-F-221031)

Another mother worried:

"I hope my children can go to elementary school in Shanghai, but at the moment there are still not enough points, and we are trying." (Interview LX-F-221102)

Parental Nurturing Needs

In recent years, the community has gradually recognized the critical role of family education in improving the quality of early childhood education. Compared to other parents, parents of migrant children face great challenges in raising their children. Therefore, providing parents of migrant children with the support and assistance they need will help them solve their parenting challenges and improve the quality of parenting. When parents of migrant children were asked in the interviews what they needed to help their children develop, most parents expected to be supported in the following areas: more involvement of fathers in their children's parenting, more communication with teachers, access to hands-on parenting classes, and the opportunity to study at a consistent school in Shanghai.

More Companionship and Participation from Father

Many of the respondents in this survey were full-time mothers who reported that they and their loved ones had separate roles in their lives, with the father working outside and the mother primarily responsible for the children's education. In this "men are breadwinners and women are homemakers" life pattern, the father becomes the "breadwinner" of the family, providing financial support for the mother's involvement in the child's education so that the mother can devote herself to the child's education in a "well-fed" environment. However, some mothers mentioned that they spent less time with their children because their fathers were busy at work and left work late. Also, some respondents mentioned that there were differences in the educational influence of fathers and mothers and that the father's educational involvement is crucial for the child. One mother mentioned:

"Because our child is a little bit insecure, the company of her father makes her feel more secure." (Interview LX-F-221102)

Therefore, she expressed a desire for fathers to be more involved in their children's education. Several other mothers also said in the interview,

"Actually, I still want fathers to be with them more, because if only mothers are with them, they are definitely lacking a little bit." (Interview YK-F-221030)

"I hope her father will cooperate with her, he's been a little busy with work lately, but every day before she goes to bed, I ask him to tell her a story." (Interview YY-F-221014)

It is evident that mothers not only realize the importance of fathers in raising their children but also hope that fathers will make time to be more involved in their children's upbringing.

More Communications and Suggestions from Teachers

During the interview, the parents mentioned that because they were in another county, they had fewer people to turn to, and the people they communicated with most on a daily basis were their relatives and teachers, and teachers spent more time with their children, so they wanted to get help from teachers. One parent mentioned in the interview,



"We are a family of three here, so if we have any problems, we want to communicate with the teacher in time, and we hope to get help from the teacher. Sometimes when the teacher is off work and we go all the way, I try to talk to him, the teacher is also quite good. I hope I can meet such a good teacher again in the future." (Interview QL-F-221021)

The parents trust the teachers, they feel that the teachers are very professional and know their children very well, so they hope that they can communicate more with the teachers and get timely support from them when they encounter parenting problems.

Implementable Parent Courses

During the interviews, we learned that some parents of migrant children felt that their education was low and they were worried about not being able to give their children a better education. For example, one parent expressed this concern,

"Our education may be more homogeneous for children, some parents with higher education may have a more complete plan for their children from a young age. We just take one step at a time." (Interview YY-F-221014)

Therefore, several parents mentioned that they would like to have access to some more practical courses that would help them better solve the difficulties they encounter in the parenting process. As one parent said:

"I just hope there will be special courses for parents to see how to educate their children and how to raise them, so that they can see how to guide them properly and how to help them develop habits. Because teachers alone can't do it, parents at home also influence their children implicitly. So it would be better if there are some courses for parents to learn." (Interview BT-F-221029)

Opportunities for Consistent Study in Shanghai

In the interview, parents mentioned that education conditions in big cities are better, and many families with migrant children want their children to receive consistent education in big cities, but they also have to let their children go back home or go elsewhere to receive education because of points, household registration, and house purchase, etc. They hope they can save enough points and buy a house in Shanghai to get the opportunity for their children to study in Shanghai consistently. As two parents said:

"I am hoping we can choose a good school district, in fact, elementary school is very fast, children immediately go into elementary school, and junior high school really fast, and they will be learning on the right track. Every parent is hoping that their children can develop better." (Interview YE-F-221014)

"Her father and I have been two people because we have registered in another place. We need points to live in Shanghai and we have been getting this thing. We try to let her stay in Shanghai later, rather than back home." (Interview LX-F-221102)

Stronger Support from Community

The survey found that parents of migrant children gave high recognition to community activities and expressed their desire for further support from community. On the one hand, parents of migrant children want the community to organize more activities that are suitable for their children and promote their children's development. As one parent said:

"The first is some activities about the healthy development of the child. The second is that activities can be carried out according to the child's interests. My children love to draw and I would love to have that as well. (Interview X-C-231002)"

On the other hand, due to the limited capacity of community activities, some parents of migrant children expressed that they were limited by the quota and hoped that the community could increase the frequency of activities. A parent mentioned:

"It's good that the community can carry out activities at least once or twice a month, but I hope that the frequency can be more." (Interview with X-C-231002)"

Summary

In summary, the difficulties encountered by families with migrant children in the process of child-rearing are: first, parenting efficacy in child-rearing is low, and parents often feel that they want but lack the capacity to educate their



children due to their low levels of education and knowledge; second, fathers are busy and less involved in child-rearing, resulting in the mothers' parenting pressure. Third, the conflicting family parenting atmosphere caused by parents' different parenting concepts, future expectations of children and parents' own emotional problems will affect children's physical and mental health; fourth, the poor living environment due to the family's economic situation is not conducive to children's good development; fifth, due to the unequal educational opportunities, migrant children cannot enjoy the same educational opportunities and educational resources as local children.

In terms of desired support and assistance, the study showed that: first, parents wanted further support in terms of father involvement, teacher communication, and parenting courses. Fathers' parenting is crucial to children's development and their role in the parenting process is irreplaceable, so most respondents expect fathers to be more aware of educational involvement and actively participate in parenting activities; secondly, parents of migrant children see teachers as professionals and expect professional guidance and help from teachers in the parenting process; furthermore, parents said they expected to receive professional family parenting courses as a way to enrich parenting and knowledge and enhance parenting skills. Finally, many parents of migrant children also expressed that they would strive for their children to receive consistent education in Shanghai through their own efforts, and that they hoped to receive further support for child development from their communities..

Teachers' Educational Dilemmas and Needs

Teachers' Educational Dilemmas

Lack of Training Opportunities

In recent years, due to the epidemic, many trainings could not be carried out normally. Although there are many online lectures and trainings, teachers still want to go offline to attend trainings and study. So they can get relevant training and learning materials. One teacher mentioned:

"We as teachers hope to get some learning materials or learning resources, because now during the epidemic, it is all online. In fact, when watching the video online, it will not be watched very carefully and seriously, and I hope some good learning resources can be shared in offline communication." (Interview C-T-221201)

Teachers also want to improve their own professionalism and skills more, for example, one teacher mentioned:

"Only when teachers improve their own professionalism and skills can they better promote the development of children." (Interview Z-T-221221)

Another teacher also said:

"I would like to hear more from the experts about the shortcomings in teaching." (Interview ZJ-T-221110)

Kindergarten Educational Resources Are Scarce

Educational resources are the sum of physical resources, human resources, and financial resources. In the field of preschool education, educational resources are mainly manifested in three aspects: building construction, teachers' team, and financial system. Adequate educational resources are conducive to the work of teachers and the long-term development of kindergartens. However, during the interview process, several teachers mentioned the lack of educational resources in kindergartens.

First of all, in terms of building construction, there is a big gap between the facilities of private kindergartens and public kindergartens. One private kindergarten teacher mentioned:

"The facilities in private kindergartens are not comparable to those in public kindergartens." (Interview Z-T-221110)

Another private kindergarten teacher mentioned:

"The kindergarten is not very well equipped with materials, and there is a lack of daily playthings and teaching aids, but there is no time to do it." (Interview J-T-221122)

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In terms of the teaching staff, kindergarten teachers are relatively lacking and teachers have heavy workloads, making it difficult for teachers to carry out their teaching work effectively. As one private kindergarten director mentioned:

"Staffing may be lacking a bit, the teachers' workload is heavy and difficult, and it is difficult to pay attention to each child in each session, and communication with parents is lacking." (Interview T-T-221111)

In terms of funding, the financial situation of the kindergarten was relatively poor due to the epidemic. Materials were not purchased enough, and teachers encountered difficulties in carrying out their teaching. One teacher mentioned:

"First of all, due to the epidemic, there is a need for help in terms of funding." "Secondly, in terms of resources, we need to have some external resources to help us to carry out activities and help parents with their children's development, which is one of our biggest needs. Another is that we need to add some materials to solve some of the problems that the children have in the program." (Interview Z-T-221121)

In addition, parents are also a resource that teachers can use, but due to the epidemic, cooperation with parents only exists online, and it is difficult to integrate and utilize parental resources because they cannot communicate with parents offline. One teacher said:

"Because most of the children in the kindergarten are migrant, educational resources are limited and efforts can only be made to tap into resources on the part of parents. But because of the epidemic, parental resources could not be fully utilized, for example, there were home delivery activities before the epidemic, and teachers would go and conduct various group activities for children in the institutions." (Interview C-T-221201)

Low Parents' Awareness of School Participation

The better development of young children depends to a large extent on the two subjects: early childhood teachers and their own parents, so it is crucial that parents and teachers work closely together and cooperate well between the kindergarten and the family. Active cooperation between families and kindergartens can, to a certain extent, promote children's growth and play an important role in improving the relationship between families and kindergartens and promoting kindergarten education and teaching. However, parents' awareness of participation in kindergarten affairs is not high, for example, one director mentioned that parents' awareness of school participation is weak:

"Because more parents have been introduced in recent years due to talent attraction, the overall quality of parents is relatively okay. But parents are busy at work, and some parents are taking care of their second or third child, so their time and energy are limited, and they don't spend their time and energy in understanding the school's work. I think we can continue to work on this point, so that parents can learn more about the work of the school." (Interview Z-T-221121)

One of the teachers also mentioned that parents were mostly passive in cooperating with the teachers in the activities set up by the school, and their awareness of participation was not high. This may be due to the prominent high and low mix of integration in home-based cooperation, where teachers are located at the high end of the theoretical aspects of home-based cooperation as leaders, and parents are located at the grassroots level of practice as practitioners, so parents trust the teachers' authority in professionalism.

"I think parents of migrant children are actually very plain and honest, and they are very willing to cooperate with the teachers when teachers communicate with them about certain things. They can give parents a lot of help because they always feel the teachers are very professional. Parents may not have a convenient schedule, for example, if there is a parent event, they can take time off work to attend, but during the process, there are not many suggestions that parents can give us, and they are more cooperative. Also, I think there is not enough awareness to actively participate in all kinds of activities in our kindergarten." (Interview L-T-221117)

Support Expected from Teachers

Early childhood teachers play a critical role in the development of preschool children, and giving them the support and assistance they need will help them improve their teaching. When teachers were asked what kind of support and assistance they would like to receive, their responses focused on professional support and material support. They wanted to increase teacher training, give parents parenting cases and strengthen cooperation between kindergartens, and they wanted to increase kindergarten play equipment and outdoor sports facilities.

Professional Support

(1) Increase teacher training

During the interviews, teachers expressed that their professionalism affected their teaching level and thus their children's development and that they would like to attend more professional training to improve their professionalism. For example, one teacher mentioned:

"We can give teachers some training opportunities. Last time we participated in that social-emotional training activity, I think it's quite good." (Interview L-T-221117)

Some teachers also mentioned that they would like to receive more hands-on training:

"I think we should give teachers training, preferably of a more practical kind, easy to understand for us teachers, and we can immediately learn to apply it to our classroom activities. It is necessary to train teachers." (Interview T-T-221111)

"And then there are some of the substantive aspects of the operation, targeted, there may be more expert teachers to give us more training and guidance, that is also really quite looking forward to." (Interview J-T-221111)

(2) Give parents parenting cases

Family education is an inseparable and important part of the whole education system, which is related to the healthy growth of children. Family education refers to the social activities in which parents consciously implement certain educational influences on their children in family life through their own words and practice of family life in accordance with the requirements of cultivating talents in society. Most teachers are also aware of the importance of family education, for example, one teacher mentioned:

"I think children are actually not just kindergarten and family, I think kindergarten is actually working very hard to create such an environment for children, but I just think that the family is also to pay the same efforts. Because parents are the first teacher of children, parents themselves also need to invest some efforts. We need to work together with the kindergarten to solve the problems." (Interview C-T-221201)

When referring to the support and assistance they expect to receive, they also mentioned that they hoped to give parents some professional educational cases so that they can raise their children more scientifically. The teacher said:

"I'm going to talk about families again, maybe we can share some good cases for parents, for example, parents can deeply feel that their children's growth is inseparable from the hope of the family, and parents can also work hard for it." (Interview C-T-221201)

Material Support

(1) Increase the number of kindergarten playthings

For the development of early childhood teaching, due to the age and thought characteristics of young children, they need to use a more visual way to teach, and through the use of teaching aids in teaching, better teaching effects can be achieved. In the actual teaching process, early childhood teachers can use play aids to develop children's imagination, improve their language skills, cultivate their moral sentiments, improve their hands-on skills, and enhance their awareness of frugality and environmental protection, thus promoting the overall improvement of kindergarten education quality. When asked about the support and assistance teachers need, the teachers said that there is a lack of teaching aids in the kindergarten and they hope to get more materials. As two teachers mentioned:

"There is a shortage of books for the age group, and teaching aids that we use every day, and toys. We may need all of these." (Interview J-T-221111)

"Books, our kindergarten books are currently rotating, these books, teaching aids are relatively short." (Interview Z-T-221110)

(2) Increase outdoor sports facilities for kindergarten children

Kindergarten outdoor activities are an important part of the overall educational activities of children. The Outline clearly stipulates that kindergartens should "carry out various outdoor games and physical activities, cultivate children's

interest and habit of participating in physical activities, enhance physical fitness, and improve their adaptability to the environment". This shows the importance of outdoor activities for children. Sports facilities are indispensable physical conditions for outdoor sports, which not only influence children's emotions and behaviors in participating in sports, but also trigger children's interest and conception in participating in exercise and generate corresponding behaviors and activities. One teacher mentioned:

"If we really need help, I think we may need some hardware, sports equipment, and need to target this age group and take them to play." (Interview T-T-221111)

Summary

In summary, the dilemmas encountered by early childhood teachers in the education process include three aspects: first, teachers' own professional quality is low and the lack of training opportunities makes it difficult to carry out high-quality teaching activities. Second, kindergarten education resources are relatively scarce, making it difficult to provide rich teaching resources for the development of early childhood teachers' teaching. Finally, in the cooperation between home and family, parents take teachers as the authority and have little awareness of active participation, and are unable to provide constructive advice to teachers.

The study found that teachers themselves expected support and assistance in the face of their educational dilemmas. First, teachers expect to increase teacher training to improve their own professionalism. Secondly, they hope to share some good parenting cases with parents, so that they can improve their parenting skills and actively participate in parenting and acknowledge the importance of family education to their children's growth. Finally, teachers expect to give kindergartens some help in material aspects. For example, we can provide kindergartens with more teaching aids and hardware facilities to provide rich educational resources and a good educational environment for the development of teaching and learning activities, so as to promote the healthy development of children.

Community Initiatives in Promoting the Development of Preschool Migrant Children

Because of the COVID-19 lockdowns, teacher observations, and community worker interviews have not yet been completed; this part of the study will be completed in early 2023, at which time the corresponding results will be added to the full baseline study report.

Family-Community Cooperation issues

The cooperation of migrant children's families and communities is essential for the development of migrant children. Family and community are the primary environment for young children's development and have an important impact on them. Family systems theory supports families in providing love, safety, and support for children (Minuchin, 1985), while communities provide abundant resources and opportunities (Chen, 2007). Together, family-community cooperation can promote children's holistic development, provide appropriate learning environments and opportunities, and develop their social skills and values. Therefore, the cooperation of children's families and communities is an important factor in ensuring that young children have the best possible development and learning opportunities. However, according to the interview results, there are still problems in family-community cooperation, such as low parental cooperation and low participation of fathers in community activities:

(1) Parents are not very cooperative with the community

The community carries out various activities, and in most cases the parents are cooperative, but there are some cases where the parents of migrant children are not very cooperative. For example, a community doctor found that some parents of migrant children were not very cooperative with the examination during the nursery examination, and described:

"When we do the nursery examination, there will be a scale, the words of the scale must be asked one by one to ask the parents and child, then the parents may feel that it is not necessary, he said 'why you asked, I have to answer'. They may feel that it is not necessary, my child is mine, I also understand them (Interview with X-C-230805)"

The main reason is that some parents think that community services are formal, the doctor added:

"The degree of cooperation is not very high, he feels that the child is not normal or not, he knows it, this kind of enrollment examination is just a formality anyway." First of all, parents must have this concept. If he doesn't care, it's useless for you to tell him more. Education should not start from the child, I think it should start with the parents. (Interview with X-C-230805)"

(2) Less Involvement of Fathers in Community

The father of migrant children participates less in community activities due to work and other reasons. As one community worker said:

"During the summer, it's mostly grandparents who participate because parents are at work. Fathers' involvement is relatively low, maybe one or two fathers out of ten families will participate." (Interview W-C-230803)

Another community doctor also expressed:

"I believe that father's presence is very important for children, and it can even be said to be no less important than the mother's. However, when it comes to accompanying children for enrollment examinations, it is mostly mothers who accompany them. Fathers do accompany, but the proportion is not very high, it's relatively low." (Interview X-C-230805)

In an interview with parents of migrant children, one father who was listening nearby mentioned his participation in community activities:

"I have also taken our child to participate in community activities. Usually, it's his mother who takes him there because I don't have time due to work." (Interview X-T-231002)

Support Expected from Community

The role of communities is important, and communities need to fully mobilize existing resources and personnel to provide sufficient opportunities and space for the development of migrant children. Due to the migratory, precarious, and economic status of migrant children, communities need to do more to promote the development of migrant children and may face many problems. Even though the community has received some support and help in various aspects, the results of the study show that in practice, the community also expects more support, mainly in the following aspects:

(1) Increase relevant training

There are many job positions in the community, and different positions require different responsibilities. In order to better promote the development of migrant children, community personnel believe that continuous learning is necessary and they also look forward to relevant training opportunities.

On the one hand, in terms of professional skills, some community workers hope to receive more specialized training to increase their professional knowledge and enhance their skills. One community worker said:

"I hope there can be some training to learn from their experience in organizing activities and to exchange ideas with each other." (Interview W-C-230803)

Community doctors also expressed:

"In terms of professional skills, I hope to receive support from higher-level hospitals. For example, they can regularly give us lectures, which I think is necessary, especially for the support work. I also want to learn more about language rehabilitation and how they intervene. And when it comes to dealing with special children, especially those with autism, I want to know how to intervene. But as grassroots workers, we are not very specialized in this area. Especially for children who require our intervention, I think the community should be more involved in the future." (Interview W-C-230805)

On the other hand, in terms of skills for communicating with migrant children, community workers feel that they lack the knowledge and experience to effectively communicate with them during activities. In order to better understand the children and carry out activities more effectively, they hope to receive relevant training and support. A community doctor said:

"We come into contact with many children from migrant families, but we don't know how to communicate and interact with them. We could definitely learn some skills in this area. Compared to us, early childhood education students have much stronger abilities, including expression. I hope we can have opportunities for learning in this regard in the future." (Interview X-C-230805)

(2) The opportunity of visiting and learning

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Save the Children®

Some community workers hope to go out more and visit other social organizations to learn from their excellent experiences. As the community workers said:

"We hope to go out and see how other social organizations or institutions organize activities for migrant children's families." (Interview X-C-230803)

Visiting and learning can help community workers broaden their horizons and understand the working methods and experiences of other communities. This not only helps improve their professional knowledge and skills, but also promotes communication and cooperation with other community workers. Through visiting and learning, community workers can gain new inspiration and innovative ideas, making a greater contribution to the development and improvement of the community. Therefore, we should encourage and support community workers to actively participate in various visiting and learning activities.

(3) Save the Children to carry out more activities

Community workers said that the Save the Children had carried out a series of activities and achieved good results. The community hopes to receive attention from the Save the Children, and they also hope that Save the Children can help the community organize activities that are beneficial to the development of migrant children. A community doctor said:

"I think the work of the Save the Children is really good. They have started cooperation with us, and we are looking forward to them coming to our community to carry out activities for migrant children and families, such as parent-child activities. They have done a really good job in this area." (Interview X-C-230805)

Due to limited community resources, the community also hopes to have more volunteers to help them carry out related activities. A community leader mentioned that volunteers from early childhood education programs provide them with manpower and professional support:

"Volunteers in early childhood education are indeed very professional. They interact well with children during activities for migrant children and families. Watching their ways, methods, and techniques of interacting with children, we really need to learn from them. We also look forward to continuing to cooperate with them in the future." (Interview X-C-230805)

Summary

From the current support for the work of migrant children in the community, it can be seen that the community has received support from higher-level departments and the society, and has obtained certain resources such as venues, personnel, and training. However, due to parenting beliefs and work reasons of migrant families, the main participants in community activities are still children from the local community. Overall, the breadth and depth of community support for migrant children is still insufficient.

In the future, communities should provide appropriate support for migrant children. This includes offering stable educational resources. Migrant children may face difficulties in receiving education due to frequent relocations. Communities can collaborate with local schools to ensure that migrant children can smoothly enroll and receive a good education. Communities can also help migrant children adapt to new environments by teaching them basic life skills and fostering their self-confidence. Additionally, communities can provide stable environments and support for migrant children and their families, including offering family counseling, parenting education training, and financial assistance. Strengthening family support can help migrant children establish a sense of security and improve their happiness and quality of life. Through these efforts, communities can create an environment conducive to the comprehensive development of migrant children.

In summary, to support the development of migrant children aged 3-6, communities can take various measures. These measures include providing stable educational opportunities, offering adaptive training, and strengthening family support. Through these efforts, communities can create an environment conducive to their overall development.

Recommendations

Parents Should Adopt Authoritative Parenting

As a key family environment factor, parenting style has an important impact on children's development. The authoritative parenting is usually considered as positive and democratic parenting. Parents not only make demands on children but also respond positively to children, which is conducive to enhancing parent-child intimacy and improving parent-child relationship. However, authoritarian parenting tends to increase parent-child conflict and reduce parent-child intimacy. Therefore, parents should adopt more authoritative parenting in their choice of parenting style, so that they can give positive, timely, appropriate feedback and warm responses to their children while making demands on them in learning and life, so as to enhance their interest and motivation. Parents can implement authoritative parenting practices from the following aspects.

Firstly, parents should accept their children's negative emotions and create a safe and positive emotional atmosphere for their children's development. Children are very sensitive to their parents' attitudes, and parents must sincerely treat their negative emotions and encourage them to express their negative experiences. This not only allows children to experience their understanding and support but also provides them with the opportunity to sort out their negative emotions. While helping children overcome negative emotions, it can also increase the intimacy between parents and children. Parents should encourage their children to express their negative feelings and let them know that no matter what kind of feelings they feel, they are acceptable. Even if they express strong emotions, they will not be despised or abandoned.

Secondly, parents should encourage their children to "persist" and cultivate their ability to achieve "success" through hard work. Parents should encourage children to put in the effort and make them think about what is controllable (such as "effort") and how to better control it. Parents should cultivate children's "growth mindset", let children understand that their abilities will grow, and failure and mistakes are not terrible. This can make children more proactive, hardworking, engaged, and resilient. When encountering uncontrollable things, parents can help children analyze the reasons, respond, and handle them in a timely manner. Parents should learn to praise and encourage their children by adopting a process of praise, which involves providing feedback on the child's level of effort or strategies used in completing tasks or behaviors. For example, they can tell their child, 'You still haven't completed this task, you should use other methods to do it again', etc.

Once again, parents should understand that their children are independent individuals and encourage them to "be independent" and take responsibility for themselves. In the process of children's growth, parents should actively encourage children to bravely express their views and wishes on things, and listen carefully to the self-will expressed by children. Parents should let the children decide for themselves. Parents should let their children take control of their own affairs and also guide them to learn autonomy and take responsibility for themselves. Parents should respect children's right to say 'no'. Parents can't ask the child to blindly obey, but should give them the right to express their own ideas and teach them to say 'no' and learn to refuse.

In addition, parents should maintain good relationships. The conflict between parents affects parenting styles. The more conflict between husband and wife, the easier it is to adopt authoritarian parenting, and the less it is to adopt authoritative parenting. When parents encounter problems, they should communicate and solve them as soon as possible. Parents should not engage in arguments in front of their children and should create a warm and harmonious family environment for them. Parents should have a cooperative partnership in raising their children, and both sides should reach an agreement on parenting concepts to avoid exposing children to a contradictory environment.

Finally, parents should keep up with the trend of the times and update their knowledge structure in time. For example, parents should learn new educational resources through family lectures, reading the preschool education official account, and other ways to make family education more suitable for the needs of the times, families, and children.



Teachers Should Pay Attention to Establishing Close Teacher-Child Relationship

On the one hand, the intimate teacher-child relationship allows children to feel secure and cared for. On the other hand, allowing teachers to play role models can help teachers give more attention and understanding to children. Teachers must love, respect, and understand children, listen to their voices, and make them feel equal, accepted, and respected. Teachers should create a safe and relaxing classroom environment for children. If children are always in a forced and tense atmosphere, they are unable to express their opinions and ideas freely and dare not, which can lead to negative emotions. Children have the characteristics of being active and inquisitive. They are curious about everything, but they are also prone to behavioral problems and negative emotions. If teachers criticize or even physically punish them too harshly, children will become increasingly afraid of teachers, become distant from teacher, or develop a rebellious mentality, and then oppose teacher. Therefore, teachers should treat children's behavioral problems and negative emotions with understanding and tolerance, teach them how to solve problems, and enhance their sense of self-worth. Teachers can establish good relationships with children from the following aspects.

Firstly, teachers should respect children and interact with them in a friendly and equal manner. In the process of interacting with children, teachers should try their best to pay attention to every child and try to understand their feelings towards people, things, and objects from the perspective of children. When talking with children, try to use the tone of consultation and suggestion, even if the child does something wrong, he or she should not be criticized and reprimanded, but should be as treated in a kind and tolerant manner.

Then, maintain interest in children's activities and actively participate in their activities. In kindergartens, many activities are carried out by children themselves. If teachers can participate in children's activities, they can maintain effective interaction, and communication with children, and can truly feel children's activity experience. At the same time, children can also reduce the distance and increase the understanding of the teacher in the interaction with the teacher.

Finally, respond positively to children's behaviors. If children engage in good prosocial behaviors (such as maintaining cooperation, helping peers, and being friendly), teachers should encourage and acknowledge such behaviors in a timely manner. If children have negative social behaviors (such as lying, destroying objects), teachers should also treat children's mistakes with understanding and tolerance, patiently help children analyze the reasons for their mistakes and how to correct them. If young children can feel the unconditional attention and acceptance of teachers, they can naturally eliminate the barrier with teachers, which is conducive to establishing high-quality teacher-child relationships.

Recommendations for Save the Children to Optimize Project Interventions

Firstly, parents should be provided with highly practical family parenting courses. Some of the parents mentioned that they were worried about giving their children a good education due to their low level of education and that they would like to take some courses on family parenting. In its intervention programs, Save the Children should intentionally listen to parents' requests and conduct talks and activities to help parents improve their parenting skills in response to the difficulties and challenges they face in the parenting process.

Secondly, teacher training should be conducted to enhance the professional skills of teachers. (1) The content of teacher training should be tailored to the needs and interests of teachers, and some hands-on training can be given to meet the development needs of teachers in terms of professional skills and technology application. (2) Training should focus on improving teachers' professional recognition of their own, understanding of their own shortcomings, and eliminating shortcomings by improving their own professional development, so as to improve their sense of self-efficacy. (3) Teacher-child relationship are crucial to children's development, and in addition to enhancing teachers' professional skills, intervention programs focus on teaching them the concepts and methods of building good teacher-child relationship with children. (4) Teacher professional training is a long-term process, which needs to guide the kindergarten to create a good and relaxed atmosphere, give teachers the opportunity to internalize the training content and continuous learning, exchange their understanding of the training and specific practical methods, and form a positive atmosphere of communication and continuous improvement within the kindergarten.

Furthermore, create opportunities for cooperation between family and kindergartens. Parents hope to get teachers' guidance in the process of parenting, and teachers also hope to get parents' cooperation in the teaching process. Save the Children should try to make connections between teachers and parents, and let parents participate in the kindergarten curriculum activities so that teachers guide the practice of family parenting, teachers and parents to form a joint force for children to create a good, consistent family and kindergarten environment.

In addition, kindergarten toys, books, and other teaching aids should be increased. For the development of early childhood teaching, due to the age characteristics and thought characteristics of children, the use of toys and teaching aids in teaching is conducive to the development of children's imagination, improves children's language ability, cultivates children's moral sentiments, improve children's practical ability, and enhance children's awareness of thrift and environmental protection, so as to promote the overall improvement of teaching quality. In the interview, more than one teacher mentioned the lack of books and teaching aids in kindergartens. Save the Children will be able to provide corresponding teaching aids to kindergartens in the later period according to their actual needs.

Finally, increase the number of outdoor sports facilities in the kindergarten. Kindergarten outdoor activities are an important component of overall educational activities for young children, which can cultivate their interest and habits in participating in sports activities, increase their physical fitness, and improve their adaptability to the environment. However, some kindergartens lack outdoor sports facilities. Save the Children can increase outdoor sports facilities suitable for children's activities according to the actual situation of kindergartens, and can also coordinate the communities where kindergartens are located to provide places for kindergartens to carry out outdoor activities.

Recommendation to Co-Ordinate among the Education Bureau, Save the Children, Kindergartens and Parents.

In working with the project kindergartens, Save the Children has done a lot of interventions to help kindergartens and teachers to focus on and understand the developmental level of children and to link educational practices to child development through the publication of information materials on child development, volunteer-led thematic activities, the organization of teacher training activities, the provision of activity resources and reference games, etc.

In the four-way relationship between the Education Bureau, Save the Children, kindergartens, and parents, Save the Children is an important "coordinator" with the goal of promoting children's development and can coordinate work in a variety of ways. Although the contents and methods of the activities organized by Save the Children are not completely consistent with the implementation and content of the curriculum required for the second phase of Shanghai curriculum reform, they are all aimed at promoting children's development. A systematic comparison and integration work can be done based on this common denominator to increase the convenience of learning and practice in project kindergartens. In addition, in order to promote communication and cooperation among kindergartens, Save the Children can organize kindergartens to visit each other's advantageous projects, share their experiences, and learn from each other's strengths.

In order to let the Education Bureau and parents understand the efforts made by kindergartens in early childhood development, relevant staff and parents of the Education Bureau can be invited to visit the projects of cooperation between Save the Children and kindergartens. They can see the positive impact of cooperation between kindergartens and Save the Children from the performance and response of the children in the projects, and enhance the participation and trust of the Education Bureau and parents, in order to encourage other project managers, Education Bureau, and parents to increase their investment in children's development. At the same time, positive feedback from the Education Bureau and parents will strengthen the vision of kindergarten staff to improve the quality of kindergartens.

Conclusions

Comparatively, **preschool migrant children in the experimental group didn't exhibit significant disparities in emergent numeracy, emergent literacy, social-emotional development, motor development, executive function, or the total IDELA**

score when contrasted with the control group. However, the experimental group demonstrated enhanced performance in approaches to learning compared to the control group.

Notably, the family and kindergarten environments of migrant children highlight areas requiring further enhancement. A substantial variance in authoritative parenting emerged between the experimental and control groups, indicating a tendency for parents in the control group to employ more authoritative parenting methods than those in the experimental group. Additionally, a significant disparity in teacher-child conflict was observed between these groups, with the experimental group experiencing greater conflict. This disparity was particularly evident in the K1 Class but not in the K2 Class. Hence, bolstering parenting styles and nurturing teacher-child relationships stands crucial for migrant children.

The pivotal influence of family and kindergarten environments on children's development is evident. Authoritative parenting exhibits a significant positive correlation with emergent numeracy, emergent literacy, and IDELA scores. In contrast, authoritarian parenting does not contribute positively to children's development. Although interparental conflict might not directly impact children's outcomes, its indirect effect through mediating parenting styles is notable. Interparental conflict influences emergent numeracy, emergent literacy, motor development, and executive function through the mediation of authoritative parenting. Moreover, the teacher-child relationship holds significance in children's development. Specifically, positive teacher-child intimacy aids motor development and executive function, while teacher-child conflict does not foster children's development.

Families with migrant children encounter various difficulties in the upbringing process. Firstly, parents often grapple with a diminished sense of parenting efficacy, stemming from lower levels of education and knowledge. Despite their willingness, they feel unequipped to adequately educate their children. Secondly, fathers' demanding work schedules, limited involvement in child-rearing, and minimal interaction with their children contribute to heightened pressures on mothers in child upbringing. Thirdly, conflicting parental ideologies lead to unrealistic expectations for children and create emotional turmoil within the family environment, affecting the physical and mental well-being of the children. Additionally, economic constraints lead to subpar living conditions, which impede the optimal development of children. Furthermore, unequal educational opportunities deprive migrant children of the same educational resources available to local children.

In response to these difficulties, parents seek additional support in areas such as father involvement, communication with teacher, and parenting education. Firstly, parents stress the critical role of fathers in child development, urging increased awareness and active participation in parenting activities. Secondly, parents regard teachers as professionals and seek their guidance and support in the parenting journey. Thirdly, parents express a strong desire for professional family parenting courses to enhance their knowledge and refine their parenting skills. Lastly, many parents endeavor to secure consistent educational opportunities in Shanghai for their children, striving for equal educational footing.

Early childhood teachers face several challenges in the education process, encompassing three primary areas. Firstly, teachers encounter limitations in their professional quality and lack sufficient training opportunities, hindering the facilitation of high-quality teaching activities. Secondly, the scarcity of kindergarten education resources poses a challenge in providing robust teaching materials for early childhood educators. Lastly, concerning collaboration between families and kindergartens, parents tend to view teachers as sole authorities and exhibit limited active participation awareness, thereby restricting their ability to offer suggestions to teachers.

To mitigate these educational challenges, teachers seek further support and assistance in enhancing their professional capacity and improving hardware conditions and infrastructures in kindergartens. Firstly, teachers emphasize the necessity for increased teacher training to elevate their professional proficiency. Secondly, teachers aspire to share exemplary parenting cases with parents, aiming to enhance parental skill levels and encourage active parental involvement, emphasizing the vital role of family education in children's growth. Finally, teachers anticipate support for kindergartens in enhancing hardware conditions. This includes augmenting toys, teaching aids, and infrastructure within kindergartens to furnish abundant educational resources and a conducive learning environment, thereby fostering the holistic development of children.



References

2022 The status of China's migrant children: Facts and figures. Retrieved from:

https://mp.weixin.qq.com/s?__biz=MzAwODQyOTUyOA==&mid=2247493183&idx=1&sn=3c62bc59472c8a0f8e0b12d40dc896c4&chksm=9b6dac88ac1a259e7f0a28da8b52d3598e6799f71a7a8afe04f9d23e5d8a26cff01abd2669de&cur_album_id=2215423626894426113&scene=189#wechat_redirect.

Aslam, M., & Kingdon, G. (2011). What can teachers do to raise pupil achievement? *Economics of Education Review*, 30(3), 559-57449-54.

Cai, Y., & Liu, Q. (2021). The current situation, dilemma, and countermeasures of parental responsibilities in family education. *Children's Study*, 5, 40-48.

Carver, S. M., and Klahr, D. (Eds.). (2001). *Cognition and instruction: Twenty-five years of progress*. Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Chen, L. (2020). Research on the influence of female reproductive reasons on parenting efficacy—The intermediary effect of internalization degree [Master's Thesis, Sichuan Normal University].
<https://kns.cnki.net/KCMS/detail/detail.aspx?dbcode=CMFD&dbname=CMFD202002&filename=1020747765.nh&v=>

Chen, Y. Y. (2007). On Making Use of Community Resources and Enlarging Sports Space for Children. *Journal of Ningbo Institute of Education* (02), 79-80.

Chi, L., & Wang, Y. (2002). Theoretical advance on the relations between marital conflict and problem behaviors in children. *Advances in Psychological Science*, 4, 411-417.

Duan, C., Lv, L., Wang, Z., & Guo, J. (2013). The Survival and Development Status of Floating Children in China: An Analysis of the Sixth Population Census Data. *South China Population*, 28(4), 44-55+80.

Denham, S. A., Bassett, H. H., & Zinsser, K. (2012). Early childhood teachers as socializers of young children's emotional competence. *Early Childhood Education Journal*, 40(3), 137-143

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087.

Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science In the Public Interest*, 14(1), 4-58.

Farmer, T. W., Lines, M. M., & Hamm, J. V. (2011). Revealing the invisible hand: The role of teachers in children's peer experiences. *Journal of Applied Developmental Psychology*, 32(5), 247-256.

Gest, S. D., & Rodkin, P. C. (2011). Teaching practices and elementary classroom peer ecologies. *Journal Of Applied Developmental Psychology*, 32(5), 288-296.

Glaser, C., & Brunstein, J. C. (2007). Improving fourth-grade students' composition skills: Effects of strategy instruction and self-regulation procedures. *Journal of Educational Psychology*, 99(2), 297-310.

Good, T. L., & Grouws, D. A. (1977). Teaching effects: A process-product study in fourth-grade mathematics classrooms. *Journal Of Teacher Education*, 28(3),
Rosenshine, B. (2012). Principles of instruction: Research-based strategies that all teachers should know. *American Educator*, 36(1), 12.

Griggs, M. S., Mikami, A. Y., and Rimm - Kaufman, S. E. (2016). Classroom quality and student behavior trajectories in elementary school. *Psychology in the Schools*, 53(7), 690-704.

Hattie (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York: Routledge.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review Of Educational Research*, 77(1), 81-112.

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- Hay, I., & Dempster, N. (2004). Student leadership development through general classroom activities. *Educational Research into Practice*, 2, 141-150.
- He, H. (2013). An Analysis of Ningbo Migrant Children School Readiness Level. *Journal of Ningbo Institute of Education*, 15(2), 100-103+106.
- Hu, Q., & Zhang, P. (2020). Assessment on early development differences between migrant children and household registered children in Shanghai. *Chinese Journal of PHM*, 36(5), 611-615. <https://doi.org/10.19568/j.cnki.23-1318.2020.05.005>
- Hu, X. (2020). A study on the relationship between teacher-child relationship and the mental health of preschool migrant children [Master's Thesis, Guangzhou University].
<https://kns.cnki.net/KCMS/detail/detail.aspx?dbcode=CMFD&dbname=CMFD202201&filename=1020309025.nh&v=>
- Jones, S. M., Bouffard, S. M., and Weissbourd, R. (2013). Educators' social and emotional skills vital to learning. *Phi Delta Kappan*, 94(8), 62-65.
- Lee, Y., Kinzie, M. B., & Whittaker, J. V. (2012). Impact of online support for teachers' open-ended questioning in pre-k science activities. *Teaching and Teacher Education*, 28, 568-577.
- Liu, D., Yu, X., Wang, Y., Zhang, H., & Ren, G. (2014). The impact of perception of discrimination and sense of belonging on the loneliness of the children of Chinese migrant workers: A structural equation modeling analysis. *International Journal of Mental Health Systems*, 8(1), 1-6.
- Li, J., Ding, W., Sun, Z., Xie, R., & Zhang, J. (2021). Parental Involvement and Loneliness in Children: Mediating Role of Self-Esteem and Peer Attachment. *Chinese Journal of Clinical Psychology*, 29(4), 842-845+849.
<https://doi.org/10.16128/j.cnki.1005-3611.2021.04.036>
- Li, Y., Xu, L., Lv, Y., Liu, L., & Wang, Y. (2014). The Associations between Mother-child Relationship, Teacher-child Relationship and Social Adaptive Behaviors for Preschool Migrant Children. *Psychological Development and Education*, 30(6), 624-634. <https://doi.org/10.16187/j.cnki.issn1001-4918.2014.06.009>
- Liu, C., & Tang, M. (2022). The Influence of Migrant Children's Perceived Parental Conflict on Learning Engagement: a Moderated Mediation Model. *Educational measurement and evaluation*, 4, 102-112.
<https://doi.org/10.16518/j.cnki.mae.2022.04.010>
- Liu, J., & Zeng, W. (2022). Practice and reflection of social work involvement in community education for migrant children. *China Journal of Social Work*, 24, 28-29.
- Luan, W. (2015). Research on the development of executive function of 3-6-year-old children and its differences between urban and rural areas [Master's Thesis, Zhejiang Normal University].
<https://kns.cnki.net/KCMS/detail/detail.aspx?dbcode=CMFD&dbname=CMFD201601&filename=1015647338.nh&v=>
- Lu, J., Liu, L., Wu, N., Wang, J., Li, Y., & Yan, Y. (2016). Research on the Current Situation and Resolution of Preschool Education for the Children of Migrant Workers in China's Cities. *Education Approach*, 5, 5-18+54.
- Merritt, E. G., Wanless, S. B., Rimm-Kaufman, S. E., Cameron, C., and Peugh, J. L. (2012). The Contribution of Teachers' Emotional Support to Children's Social Behaviors and Self-Regulatory Skills in First Grade. *School Psychology Review*, 41(2).
- Moon, J. (2007). *Critical Thinking: An exploration of theory and practice*. London, U.K.: Routledge Falmer.
- National Academies of Sciences, Engineering, & Medicine. (2018). *How people learn II: Learners, contexts, and cultures*. Washington, DC: The National Academies Press.
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.
- Ou, Y. (2007). A Survey of Mental Health of Preschool Children from Floating Families. *Early Childhood Education (Educational Sciences)*, 12, 39-41.

Baseline Study Of Children Aged 3-6 In Shanghai

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- OECD (2009). *Creating Effective Teaching and Learning Environments: First Results from TALIS*. Paris, France.
- Park, D., Gunderson, E. A., Tsukayama, E., Levine, S. C., & Beilock, S. L. (2016). Young children's motivational frameworks and math achievement: Relation to teacher-reported instructional practices, but not teacher theory of intelligence. *Journal of Educational Psychology*, 108(3), 300.
- Pianta, R. C., Hamre, B., and Stuhlman, M. (2003). Relationships between teachers and children. *Handbook of Psychology*, 199-234.
- Reeve, J. (2006). Teachers as facilitators: What autonomy-supportive teachers do and why their students benefit. *The Elementary School Journal*, 106(3), 225-236.
- Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational Psychologist*, 44(3), 159-175.
- Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal Of Educational Psychology*, 98(1), 209.
- Rodríguez Ruíz, M. M., Carrasco, M. Á., & Holgado-Tello, F. P. (2019). Father involvement and children's psychological adjustment: maternal and paternal acceptance as mediators. *Journal of Family Studies*, 25(2), 151-169. <https://doi.org/10.1080/13229400.2016.1211549>
- Rogoff, B. (1990). *Apprenticeship in thinking*. New York, NY: Oxford University Press.
- Roth, M. W. (1996). Teacher questioning in an open-inquiry learning environment: Interactions of context, content, and student responses. *Journal of Research in Science Teaching*, 33(7), 710-735.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Schwab, Y., & Elias, M. J. (2014). From compliance to responsibility. In E. Emmer, & E. Sabornie (Eds.), *Handbook of classroom management* (pp. 94e115). London, U.K.: Routledge.
- Shan, C., & Wang, X. (2021). A comparative study on the social support of preschool migrant children 's education in different cities. *Journal of Inner Mongolia Normal University (Educational Science)*, 34(5), 23-31.
- Shi, J., & Liu, Y. (2013). Comparative Study on the Drawing Ability in the Previous Year of School Education between Migrant and Urban Children. *Studies in Preschool Education*, 11, 32-38. <https://doi.org/10.13861/j.cnki.sece.2013.11.005>
- Shi, J. (2016). A survey on the school readiness of migrant children in Beijing. *Shanghai Research on Education*, 3, 22-25. <https://doi.org/10.16194/j.cnki.31-1059/g4.2016.03.006>
- Sorkhabi, N. (2005). Applicability of Baumrind's parent typology to collective cultures: Analysis of cultural explanations of parent socialization effects. *International Journal of Behavioral Development*, 29(6), 552-563.
- Spilt, J. L., Hughes, J. N., Wu, J. Y., & Kwok, O. M. (2012). Dynamics of teacher – student relationships: Stability and change across elementary school and the influence on children ' s academic success. *Child Development*, 83, 1180 – 1195.
- Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Willingham, D. T. (2008). Critical Thinking: Why is it so hard to teach? *Arts Education Policy Review*, 109(4), 21-32.
- Xu, P., Zhu, L., Li, Y. & Xiong, J. (2022). Parenting Styles and Parent-Child Relationships: The Actor-Partner Interdependence Model. *Chinese Journal of Clinical Psychology*, 2022,30(06):1423-1427+1432.DOI:10.16128/j.cnki.1005-3611.2022.06.032.
- Yang, X., Guo, F., & Chen, Z. (2021). Marital Satisfaction and Father Involvement: The Mediating Role of Positive Expressiveness and the Moderating Role of Parenting Stress. *Chinese Journal of Clinical Psychology*, 29(2), 272-276. <https://doi.org/10.16128/j.cnki.1005-3611.2021.02.011>

Baseline Study Of Children Aged 3-6 In Shanghai Jan, 2023 - China



Save the Children

Zhang, J. (2017). Relationships between approximate number system accuracy and mathematical competence in young children aged 5-6 [Master's Thesis, East China Normal University].

<https://kns.cnki.net/KCMS/detail/detail.aspx?dbcode=CMFD&dbname=CMFD201801&filename=1017075953.nh&v=>

Zhang, X., Leng, L., Chen, H., Fang, X., Shu, Z., & Lin, X. (2017). Parental Rearing Pattern Mediates the Association between Social Economic Status and Cognitive Ability of Migrant Children. *Psychological Development and Education*, 33(2), 153-162. <https://doi.org/10.16187/j.cnki.issn1001-4918.2017.02.04>

Zhang, X. (2010). Reliability and Validity of Teacher-Child Relationship Scale. *Chinese Journal of Clinical Psychology*, 18(5), 582-583. <https://doi.org/10.16128/j.cnki.1005-3611.2010.05.021>

Zhang, X., Chen, H., & Zhang, G. (2008). Children's Relationships with Mothers and Teachers: Linkages to Problem Behavior in Their First Preschool Years. *Acta Psychologica Sinica*, 4, 418-426.

Zhang, X. (2016). Comparison of exercise habits between migrant children and resident children in some cities of Guangdong Province. *Journal of Physical Education*, 23(2), 64-67. <https://doi.org/10.16237/j.cnki.cn44-1404/g8.20160125.015>

Zhao, Z., & Liu, W. (2020). Study on the Effect of Home Chaos on Emotional Regulation Strategies of Left-behind and Migrant Children Aged 4~6 Years. *Studies In Early Childhood Education*, 10, 30-42. <https://doi.org/10.13861/j.cnki.sece.2020.10.003>

Zhuo, R., & Ge, L. (2015). The influence of family environment on migrant children's social integration: The mediating role of parenting style. *Social Science Front*, 10, 271-274.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic psychology monographs*.

Baumrind, D. (1971). Current patterns of parental authority. *Development Psychology*, 4(1), 1-103.

Davis, H. A. (2003). Conceptualizing the role and influence of student-teacher relationships for children's social and cognitive development. *Educational Psychologist*, 38(4), 207 - 234.

Darling, N., & Steinberg, L. (2017). Parenting style as context: An integrative model. In *Interpersonal development* (pp. 161-170). Routledge.

Diamond, A. (2013). Executive functions. *Annual review of psychology*, 64, 135.

Duncan, G. J. et al. (2007). School readiness and later achievement. *Developmental psychology*, 43(6), 1428.

Fang, L., Sun, R. C., & Yuen, M. (2017). "Be useful to society": parental academic involvement in rural to urban migrant children's education in China. *Asia Pacific Education Review*, 18(3), 361-371.

Galindo, C., & Fuller, B. (2010). The social competence of Latino kindergartners and growth in mathematical understanding. *Developmental psychology*, 46(3), 579.

Hu, B. Y., & Szente, J. (2010). Education of young Chinese migrant children: Challenges and prospects. *Early childhood education journal*, 37(6), 477-482.

Koss, K. J., George, M. R., Davies, P. T., Cicchetti, D., Cummings, E. M., & Sturge-Apple, M. L. (2013). Patterns of children's adrenocortical reactivity to interparental conflict and associations with child adjustment: a growth mixture modeling approach. *Developmental psychology*, 49(2), 317.

Lee, N. (2015). Migrant and ethnic diversity, cities and innovation: Firm effects or city effects?. *Journal of Economic Geography*, 15(4), 769-796.

Liu, D., Yu, X., Wang, Y., Zhang, H., & Ren, G. (2014). The impact of perception of discrimination and sense of belonging on the loneliness of the children of Chinese migrant workers: A structural equation modeling analysis. *International Journal of Mental Health Systems*, 8(1), 1-6.

Baseline Study Of Children Aged 3-6 In Shanghai

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- Liu, T., Holmes, K., & Albright, J. (2015). Urban teachers' perceptions of inclusion of migrant children in the Chinese educational institution: a comparative study. *International Journal of Inclusive Education*, 19(9), 994-1008.
- Liu, T., Holmes, K., & Albright, J. (2020). Teachers' perceptions of educational inclusion for migrant children in Chinese urban schools: A cohort study. *Education and Urban Society*, 52(4), 649-672.
- Minuchin, P. (1985). Families and Individual Development: Provocations from the Field of Family Therapy. *Child Development*, 56(2), 289.
- Miyake, A., Friedman, N. P., Emerson, M. J., Witzki, A. H., Howerter, A., & Wager, T. D. (2000). The unity and diversity of executive functions and their contributions to complex "frontal lobe" tasks: A latent variable analysis. *Cognitive psychology*, 41(1), 49-100.
- Pianta, R. C., & Steinberg, M. (1992). Teacher-child relationships and the process of adjusting to school. *New Directions for Child and Adolescent Development*, 192(57), 61-80.
- Pinquart, M., & Kauser, R. (2018). Do the associations of parenting styles with behavior problems and academic achievement vary by culture? Results from a meta-analysis. *Cultural Diversity and Ethnic Minority Psychology*, 24(1), 75.
- Rodríguez Ruíz, M. M., Carrasco, M. Á., & Holgado-Tello, F. P. (2019). Father involvement and children's psychological adjustment: maternal and paternal acceptance as mediators. *Journal of Family Studies*, 25(2), 151-169. <https://doi.org/10.1080/13229400.2016.1211549>
- Robinson, C. C., Mandlco, B., Olsen, S. F., & Hart, C. H. (2001). The parenting styles and dimensions questionnaire (PSDQ). *Handbook of Family Measurement Techniques*, 3, 319-321.
- Scott, K. L., Ingram, A., Zagenczyk, T. J., & Shoss, M. K. (2015). Work-family conflict and social undermining behaviour: An examination of PO fit and gender differences. *Journal of Occupational and Organizational Psychology*, 88(1), 203-218.
- Sorkhabi, N. (2005). Applicability of Baumrind's parent typology to collective cultures: Analysis of cultural explanations of parent socialization effects. *International Journal of Behavioral Development*, 29(6), 552-563.
- Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational psychology review*, 125-146.
- Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of research on adolescence*, 11(1), 1-19.
- Stocker, C. M., & Youngblade, L. (1999). Marital conflict and parental hostility: Links with children's sibling and peer relationships. *Journal of Family Psychology*, 13(4), 598.
- Wen, M., & Lin, D. (2012). Child development in rural China: Children left behind by their migrant parents and children of nonmigrant families. *Child development*, 83(1), 120-136.
- Wu, P., Robinson, C. C., Yang, C., Hart, C. H., Olsen, S. F., Porter, C. L., ... & Wu, X. (2002). Similarities and differences in mothers' parenting of preschoolers in China and the United States. *International Journal of Behavioral Development*, 26(6), 481-491.
- Zou, S., Wu, X., & Li, X. (2020). Coparenting Behavior, Parent-Adolescent Attachment, and Peer Attachment: An Examination of Gender Differences. *Journal of Youth & Adolescence*, 49(1), 178-191. <https://doi.org/10.1007/s10964-019-01068-1>

Appendix I: Indicator Table

Indicator	Baseline value
Communication, cognitive, motor, and social-emotional development improved in boys and girls aged 3-6.	IDELA mean total score in the experimental group: Aged 3-4 : 31% Aged 4-5 : 55% Mean total score : 44%

Appendix II: Data Collection Instruments



访谈提纲（园长、教研组）.docx



流动儿童家长访谈提纲.docx



父母教师问卷.doc
x



社区家长访谈提纲.docx



社区工作人员-访谈提纲.docx



Teach-ECE观察员手册.pdf

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Appendix III: Ethics Approval



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Who can I contact if I have a question or comment about this document?

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