

Needs Analysis of School Readiness for 3-Year-Old Children – Based on Triangulation of Observation, Interview and Cross-National Policy Analysis

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Abstract

To accurately identify the core needs of 3-year-old children during the transition to kindergarten and provide empirical evidence for the development of the *School Readiness Module to Support Parents of Children Aged 3* (School Readiness Module), this study adopted the logic of the needs analysis phase of the Design and Development Research (DDR) paradigm and employed a triangulation method integrating natural observation, semi-structured interviews and cross-national policy document analysis. Ten first-time kindergarteners aged 3 and three primary caregivers were selected from three kindergartens of different types in Zhejiang Province, and relevant school readiness policy documents of China, Malaysia, the United States and the United Kingdom were systematically collated. The results showed that 3-year-old children faced four core challenges in the transition to kindergarten, namely emotional adaptation, social interaction, behavioral adaptation and ability development, which were characterized by significant individual differences and gradual alleviation; parents generally lacked standardized guidance tools and their parenting practices were fragmented and experience-based; China's school readiness policies had obvious gaps in rural policy implementation, guidance tool supply and support for special groups. This study constructed a three-dimensional needs framework of *Children's Pain Points - Parents' Needs - Policy Orientation*, which filled the research gap in the accurate needs analysis of school readiness from the family perspective and provided operable empirical support for the subsequent design of the School Readiness Module to Support Parents of Children Aged 3.

Keywords: 3-Year-Old Children, School Readiness, Needs Analysis, Ddr Paradigm, Home-Kindergarten Collaboration

Introduction and Problem Statement

Research Background

The transition to kindergarten is a critical turning point for 3-year-old children moving from family to collective life, and the quality of their adaptation directly affects their subsequent

academic development, social adaptation and mental health (Rimm-Kaufman & Pianta, 2000). China's 14th Five-Year Plan for the Development and Improvement of Preschool Education clearly proposes to "strengthen the collaborative education of families, kindergartens and communities, and help young children smoothly realize the transition from family to kindergarten". However, three prominent problems remain in practice, as shown in **Figure 1**.

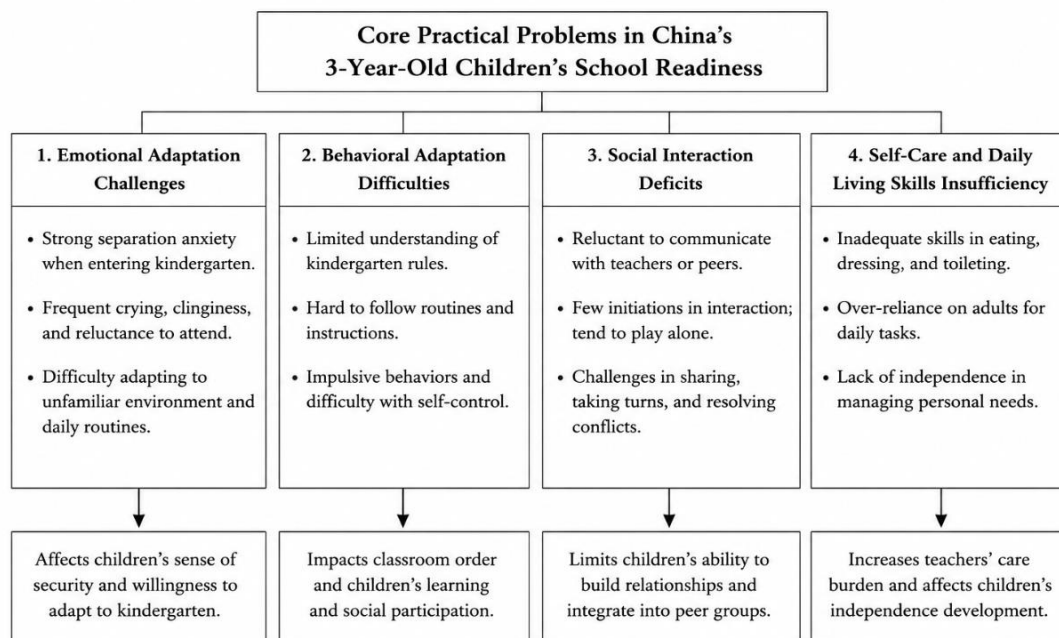


Figure 1 Core Practical Problems in China's 3-Year-Old Children's School Readiness

Existing studies have mostly focused on kindergarten-led transition interventions (e.g., progressive kindergarten admission, environmental creation) or quantitative analysis of children's adaptation outcomes (e.g., the degree of improvement in social skills), but have paid insufficient attention to the specific behavioral performance of children during the transition period from the family perspective, parents' real guidance dilemmas, and the in-depth gap between policies and practices (Guo, 2023; Schulting et al., 2025). The Design and Development Research (DDR) paradigm emphasizes "practice orientation and cyclic iteration", and its needs analysis phase is the core foundation for subsequent module development, which requires accurate capture of real problems through multi-source data (Richey & Klein, 2007).

Problem Statement

Based on the above background and combined with the logic of the needs analysis phase of the DDR paradigm, this study focuses on the core research directions and explores only the following two core research questions:

- (1) What are the core challenges of 3-year-old children during the transition to kindergarten and the specific guidance needs of parents in school readiness? What is the internal relationship between them?
- (2) How to construct a scientific needs framework based on children's core challenges and parents' guidance needs, combined with cross-national policy experience, to provide precise guidance for the development of the School Readiness Module to Support Parents of Children Aged 3?

Research Significance

Theoretical Significance

Enrich the application cases of the DDR paradigm in the field of preschool education, construct a three-dimensional needs analysis framework of *Children's Behavior - Parents' Practice - Policy Environment*, and refine the operational path of needs analysis.

Supplement the empirical data of school readiness needs research from the family perspective, provide support for the localized application of the ecological systems theory in kindergarten transition research, and reveal the influence mechanism of the interaction among family, kindergarten and policy systems on children's adaptation.

Expand the international perspective of school readiness research through cross-national policy comparison, and provide a theoretical reference for policy optimization.

Practical Significance

Accurately identify the core pain points of children in the transition to kindergarten and parents' guidance needs, and provide a clear content direction and empirical basis for the subsequent development of the School Readiness Module to Support Parents of Children Aged 3.

Reveal the practical gaps in the implementation of China's school readiness policies, and provide practical references for policy optimization (e.g., support for rural areas, protection of special groups).

Provide scientific needs diagnosis tools for kindergartens and parents, and help families and kindergartens collaborate to formulate personalized transition support plans.

Literature Review

School readiness is a multi-dimensional concept covering children's physical and mental development, family support and policy guarantee, and its relevant research has gradually formed a research system centered on "children's adaptation", "parental guidance" and "policy support" (Rimm-Kaufman et al., 2000). This section sorts out the relevant literature around the core research content, clarifies the research status and existing gaps, and lays a theoretical foundation for this study.

Research on Children's Adaptation During Kindergarten Transition

Children's adaptation during the transition to kindergarten is the core content of school readiness research, and scholars at home and abroad have conducted in-depth discussions on its dimensions and influencing factors. Internationally, Rimm-Kaufman & Pianta (2000) proposed from an ecological perspective that children's adaptation to kindergarten transition is affected by the interaction of microsystems such as family and kindergarten, with three core dimensions including emotional adaptation, social adaptation and behavioral adaptation. Schulting et al. (2025) further pointed out that children's social-emotional competence is a key factor affecting the quality of transition, and the lack of active social behavior and difficulty in understanding rules are the main obstacles to young children's adaptation.

In China, Lan (2022) found through a large-sample survey that 80% of 3-year-old children experience separation anxiety when entering kindergarten, and 47% show severe discomfort such as persistent crying and food refusal. Xie (2019) compiled the *Kindergarten Adaptation Observation Scale for Young Children* and pointed out that emotional adaptation, behavioral adaptation and ability development are the three core dimensions of young children's transition adaptation. **Table 1** compares the core dimensions of children's kindergarten transition adaptation proposed by domestic and foreign scholars.

Table 1

Comparison of Core Dimensions of Children's Kindergarten Transition Adaptation (Domestic vs. Foreign)

Research Perspective	Core Dimensions	Proposed by	Key Focus
Foreign (Ecological Perspective)	Emotional Adaptation, Social Adaptation, Behavioral Adaptation	Rimm-Kaufman & Pianta (2000)	Influence of microsystem interaction on children's adaptation
Chinese (Practical Observation Perspective)	Emotional Adaptation, Behavioral Adaptation, Ability Development	Xie (2019)	Actual adaptation performance and ability of young children in China

However, existing studies mostly focus on the overall statistical analysis of children's adaptation, and lack in-depth exploration of the micro-behavioral performance and individual differences of children during the transition period (e.g., adaptation differences among children with different care types), which constitutes the first research gap to be filled by this study.

Research on Parent Guidance for School Readiness

As the primary caregivers of children, parents play a crucial role in children's school readiness. Foreign studies pay more attention to the scientificity of parental guidance practices: the U.S. Head Start Program clearly requires parents to participate in systematic guidance courses, focusing on cultivating parents' ability to cope with children's separation anxiety and foster rule awareness (U.S. Department of Health and Human Services, 2016); the UK provides parents with "transition information packs" and "transition diaries" to help parents accurately grasp children's needs (Department for Education, 2024). Wong et al. (2016) pointed out that game-based parental guidance methods are more effective in improving children's adaptive ability than traditional preaching.

In China, Guo (2023) found that parents generally recognize the importance of school readiness, but their practices are fragmented and experience-based. Xie (2018) pointed out that 70% of parents fall into anxiety due to the lack of effective guidance tools, and some even adopt inappropriate methods such as threatening language, which exacerbates children's separation anxiety. **Figure 2** shows the main dilemmas of parental guidance in China's school readiness practice.

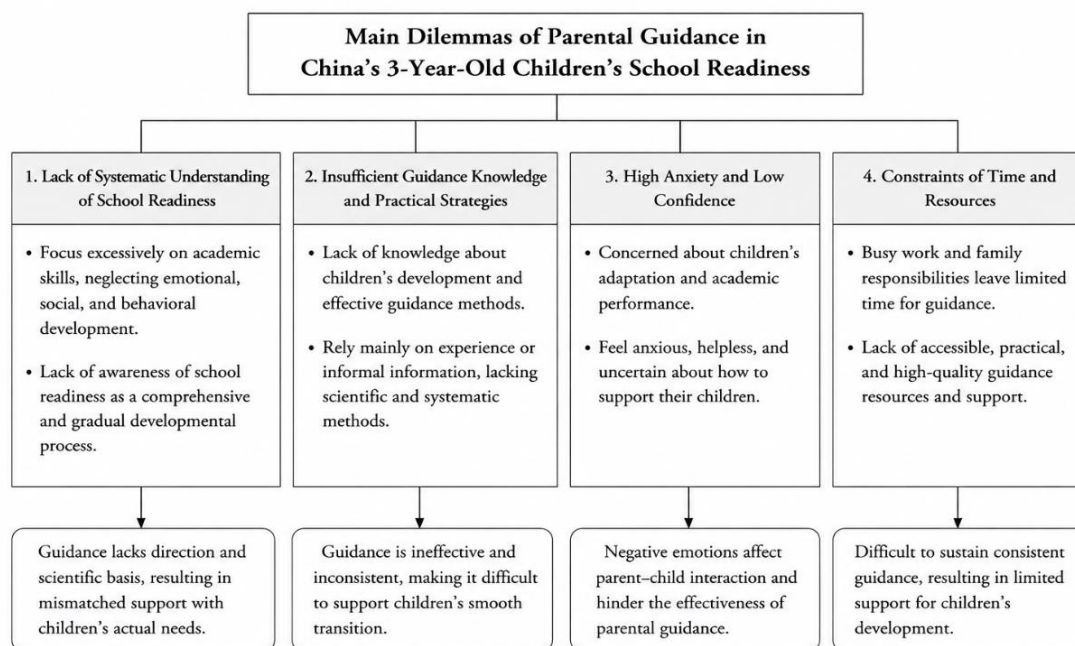


Figure 2 Main Dilemmas of Parental Guidance in China's 3-Year-Old Children's School Readiness

However, existing studies have not in-depth explored parents' core demand for "structured and operable guidance tools", and the matching degree between parental guidance practices and children's pain points is unclear (Guo, 2023), which is the second research gap to be filled by this study. In addition, Xu et al. (2013) pointed out that the coordination and unification of home and kindergarten rules is the key to improving the effect of parental guidance, but there are few studies focusing on this integration point.

Research on Cross-National Comparison of School Readiness Policies

The formulation and implementation of school readiness policies directly affect the overall level of school readiness. Foreign scholars have conducted some cross-national comparative studies: Malone et al. (2024) compared the school readiness policies of the United States, the United Kingdom and Australia, and found that all three countries emphasize home-kindergarten collaboration, but there are differences in policy focus — the United States focuses on supporting vulnerable groups, the United Kingdom on personalized transition plans, and Australia on community resource integration. The Malaysian government, combining religious and cultural characteristics, provides multilingual parental guidance manuals and community mobile toy library resources to narrow the urban-rural gap (Ministry of Education of Malaysia, 2019).

In China, existing policy research mostly focuses on the interpretation of domestic policies and lacks in-depth cross-national comparisons (Lan, 2022). Although some studies mention the experience of foreign policies, they have not systematically compared the core orientation, parental support strategies and implementation effects of policies in different countries, which cannot provide effective references for the optimization of China's policies (Guo, 2023). **Table 2** compares the core characteristics of school readiness policies in China, Malaysia, the US and the UK.

Table 2

Comparison of Core Characteristics of School Readiness Policies in China, Malaysia, the US and the UK

Country	Core Policy Orientation	Parental Support Strategies	Practical Characteristics	Policy Advantages	Key Deficiencies (China) / Highlights (Other Countries)
China	Collaborative education of home, kindergarten and community; promoting inclusive development of preschool education	Issuing basic parenting guidance manuals; kindergartens holding school readiness lectures	Kindergarten-led transition work; national policy coverage	Prominent inclusive orientation; in line with national development needs	Inadequate rural policy implementation; insufficient supply of parental guidance tools; weak support for special groups
the US	Guaranteeing education equity; focusing on the development of vulnerable groups	Systematic parental guidance courses; one-on-one home-kindergarten communication mechanism	Special support from Head Start Program; in-depth community participation	Improved support system for vulnerable groups; close home-kindergarten-community linkage	High integration of education and social security; diversified parental participation channels
the UK	Personalized development; focusing on children's transition experience	Providing transition information packs/diaries; parents participating in the design of kindergarten transition courses	Child-centered personalized transition plans	Refined transition services; high parental participation	Highly personalized and humanized transition support; perfect parent participation mechanism
Malaysia	Balancing cultural adaptation; narrowing the urban-rural education gap	Multilingual parenting guidance resources; community mobile toy libraries	Designing transition activities combined with religious culture; resource inclination to rural areas	Effective integration of urban-rural resources; strong cultural adaptability	Cultural integration of preschool education; targeted rural education support

This is the third research gap to be filled by this study.

Application of DDR Paradigm and Triangulation Method in Preschool Education Research

As a research paradigm focusing on "practice orientation and cyclic iteration", the DDR paradigm is widely used in the development of educational modules. Richey & Klein (2007) pointed out that the needs analysis phase of the DDR paradigm is the core foundation for module development, which requires accurate capture of real problems through multi-source data. In the field of preschool education, the application of the DDR paradigm is still in the initial stage, and few studies have used the DDR paradigm to conduct in-depth needs analysis for the development of the School Readiness Module to Support Parents of Children Aged 3. As an important means to improve the credibility of research data, the triangulation method has been gradually applied in preschool education research. Bronfenbrenner & Morris (2006) pointed out that multi-source data verification can more comprehensively reveal the real situation of research objects. **Figure 3** shows the application of triangulation method in this study.

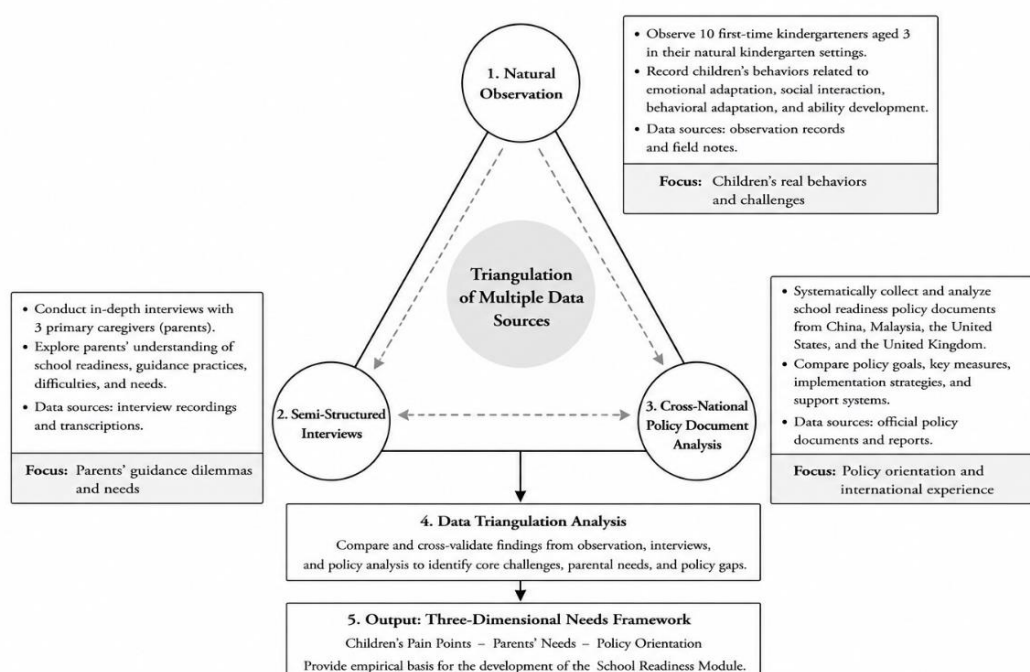


Figure 3 Triangulation Research Method Framework for This Study

However, most existing school readiness studies adopt a single research method (e.g., only interviews or only observations), and lack the integrated use of multiple methods such as natural observation, semi-structured interviews and policy document analysis (Schulting et al., 2025), which affects the depth and credibility of research results. This is the fourth research gap to be filled by this study.

Summary of Literature

In summary, existing studies have laid a certain theoretical foundation for the research on school readiness for 3-year-old children, but there are still four obvious research gaps, as shown in **Table 3**, and all these gaps need to be addressed through the exploration of the core research questions of this study.

Table 3

Four Research Gaps in the Current School Readiness Research for 3-Year-Old Children

No.	Research Gap	Specific Performance
1	Insufficient exploration of children's micro-behaviors and individual differences	Lack of in-depth analysis of children's specific behavioral performance and adaptation differences among different care types during the transition period
2	Inadequate excavation of parents' core guidance needs	Unclear parents' demand for structured and operable guidance tools; low matching degree between parental practices and children's pain points
3	Lack of in-depth cross-national policy comparison	Only superficial reference to foreign policies; no systematic comparison of policy orientation, support strategies and implementation effects
4	Single research method with low credibility	Rare use of DDR paradigm combined with triangulation method; difficult to connect research results with module development needs

Based on this, this study focuses on the above two core research questions, and through multi-method integrated needs analysis, addresses the existing research gaps and constructs a scientific needs framework to provide support for the development of the School Readiness Module to Support Parents of Children Aged 3.

Design Method and Module Specification*Research Design*

This study strictly follows the logic of the needs analysis phase of the DDR paradigm and adopts the triangulation method (natural observation + semi-structured interviews + cross-national policy document analysis) to ensure the comprehensiveness, credibility and depth of research data. The core design logic is centered on "identifying needs - verifying needs - constructing framework - supporting module", and the overall research design framework is shown in **Figure 4**.

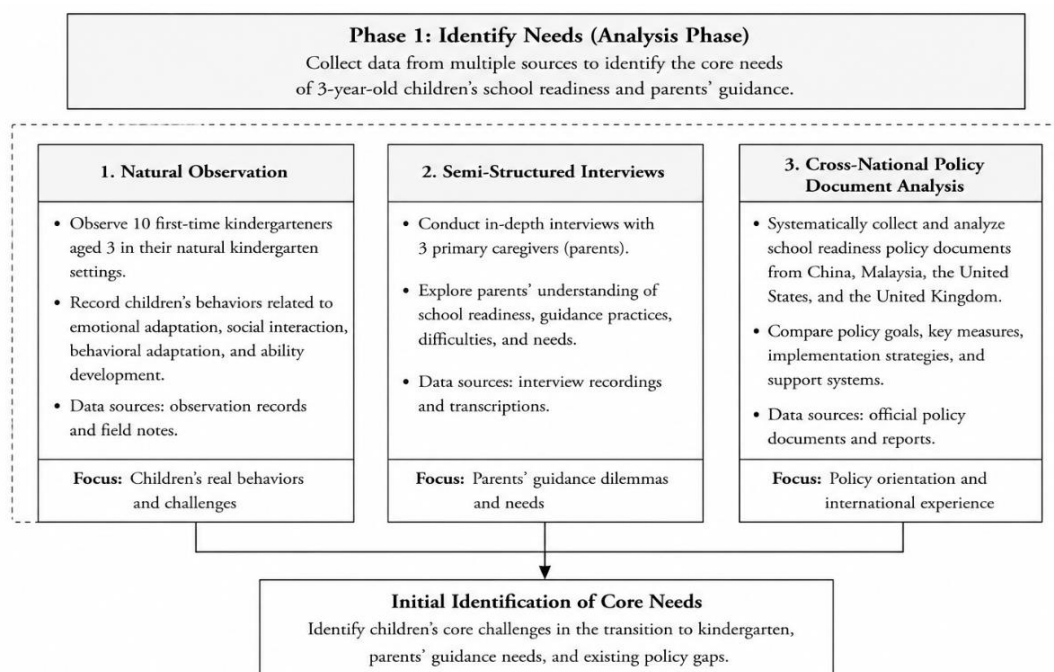


Figure 4 Research Design Framework of This Study Based on DDR Paradigm

The specific process is as follows:

(1) Selection of research objects: Using the purposive sampling method, 3 kindergartens of different types in Zhejiang Province (1 urban public kindergarten, 1 urban private kindergarten and 1 rural private kindergarten) were selected, and 10 first-time kindergarteners aged 3 (36-42 months, 5 boys and 5 girls) and 3 primary caregivers were screened as research objects, covering different care types such as parental care, grandparental care and nanny care to ensure the representativeness of the sample.

(2) Multi-source data collection: Simultaneously carry out data collection in three dimensions to form a complementary data chain — natural observation focuses on children's behavioral performance during the transition period, semi-structured interviews focus on parents' guidance practices and needs, and policy document analysis focuses on the differences in school readiness policies among China, Malaysia, the United States and the United Kingdom, so as to comprehensively capture the core research information.

(3) Data coding and analysis: Adopt the grounded theory coding method, and refine the core categories through three steps of open coding, axial coding and selective coding, and sort out the internal relationship between children's pain points, parents' needs and policy orientation.

(4) Construction of needs framework and module orientation: Based on the results of coding and analysis, construct a three-dimensional needs framework of *Children's Pain Points - Parents' Needs - Policy Orientation*, and clarify the core development direction of the subsequent School Readiness Module to Support Parents of Children Aged 3 to ensure that the module design is highly matched with real needs.

Research Objects*Children Samples*

All the 10 3-year-old children are first-time kindergarteners with no experience of collective life, covering different kindergarten types, care types and personality characteristics. The basic information is shown in **Table 4**.

Table 4

Basic Information of 3-Year-Old Children Samples

Name	Age	Kindergarten Type	Day Caregiver	Night Caregiver	Core Characteristics
Zhu	3 years 5 months	Urban Public	Parents	Parents	Has an elder sister in the same kindergarten, extroverted
Bao	3 years 2 months	Urban Private	Grandparents	Parents	Cared for by grandparents, poor self-care ability
Ding	3 years 1 month	Urban Private	Grandparents	Parents	Introverted and sensitive, unwilling to communicate actively
Shen	3 years 8 months	Urban Public	Parents	Parents	Parents are both teachers, strong rule awareness
Han	3 years 4 months	Rural Private	Nanny	Parents	Cared for by a nanny, unclear language expression
Jiang	3 years 2 months	Rural Private	Parents	Parents	Rural family, no experience of collective life
Chen	3 years old	Urban Public	Grandparents	Parents	Cared for by grandparents, unstable mood
Zhou	3 years 5 months	Urban Private	Paternal Grandmother	Paternal Grandmother	Cared for by single paternal grandmother, high dependence
Zhao	3 years old	Rural Private	Nanny	Parents	Cared for by a nanny, passive in social interaction
Wang	3 years 6 months	Urban Public	Maternal Grandmother	Parents	A history of mild separation anxiety

Parent Samples

Three primary caregivers of the above 10 children were selected as interviewees, all of whom are the main decision-makers of children's daily upbringing, covering different educational backgrounds and parenting experiences to ensure the diversity of interview data. The specific information is as follows:

Ms. Zhang: Master's degree, major in preschool education, her daughter (Zhu) is 3 years 5 months old and attends an urban public kindergarten. She has certain professional knowledge of preschool education and a preliminary scientific understanding of school readiness.

Ms. Huang: Bachelor's degree, has run a private kindergarten for 15 years, her daughter (Bao) is 3 years 2 months old and attends her own private kindergarten. She is familiar with the kindergarten transition process but has confusion in the coordination of family upbringing and kindergarten education.

Mr. Wang: Senior high school education, enterprise employee, his son (Wang) is 3 years 6 months old and attends an urban public kindergarten. He has an elder son (5 years old) who has already entered kindergarten and has certain experience in school readiness, but lacks systematic scientific guidance methods.

Table 5 summarizes the basic characteristics of the parent samples.

Table 5

Basic Characteristics of Parent Samples

Interviewee	Educational Background	Occupation	Parenting Experience	Core Advantages	Main Dilemmas
Ms. Zhang	Master's Degree (Preschool Education)	Preschool Education Worker	Systematic professional knowledge	Professional educational concepts; scientific parenting methods	Limited practical experience in solving actual transition problems
Ms. Huang	Bachelor's Degree	Private Kindergarten Operator	15 years of kindergarten management experience	Familiar with kindergarten transition process; close to kindergarten practice	Confused in home-kindergarten education coordination; lack of personalized guidance strategies
Mr. Wang	Senior High School Education	Enterprise Employee	Experience of raising an elder child	Rich daily parenting experience; understanding of children's basic needs	Lack of systematic scientific guidance; over-reliance on experience

Data Collection Methods

Natural Observation Method

The observation period was the first week of the children's kindergarten admission (September 1 to September 5, 2024), with fixed observation time from 8:00 to 11:30 a.m. and 14:30 to 16:30 p.m. every day, with a total observation duration of 50 hours. The observation content focused on four core dimensions of children's emotional adaptation, social interaction, behavioral adaptation and ability development. A combination of "on-site notes + video recording" was adopted to record children's specific behavioral performance in detail (e.g., crying duration, social initiative, rule implementation, completion of self-care behaviors). Finally, 20 observation logs were formed (about 1,500 words each). The observation tool was revised based on the *Kindergarten Adaptation Observation Scale for Young Children* compiled by Xie (2019) combined with the core research questions of this study to ensure the pertinence and scientificity of the observation content.

Semi-Structured Interview Method

The interviews were conducted in the second week after the children's kindergarten admission (September 9 to September 11, 2024). One-on-one in-depth interviews were conducted with 3 primary caregivers, each lasting 45-60 minutes. The interviews were recorded in full and later transcribed into text data, with a total of about 30,000 words of transcribed text. The interview outline was designed around four dimensions: "children's transition challenges, parents' guidance practices, use of existing resources, and policy support needs", including 15 core questions and follow-up questions (e.g., "What is the most troubling behavior of your child after entering kindergarten? What methods have you tried to deal with it and what is the effect?", "What specific guidance tools or support do you hope to obtain to help your child adapt to kindergarten better?"). Before the interview, the parents were informed of the research purpose and confidentiality principle in detail (all interview data are only used for academic research and processed anonymously). After the interview, member checking was conducted, and the transcribed interview text was fed back to the parents to confirm the authenticity of the content and ensure the validity of the interview data.

Policy Document Analysis Method

We systematically sorted out the relevant school readiness policy documents of China, Malaysia, the United States and the United Kingdom, and screened a total of 12 core policy texts, implementation rules and evaluation reports (3 from China, 2 from Malaysia, 3 from the United States and 4 from the United Kingdom), including China's *Guidelines for the Learning and Development of Children Aged 3 to 6*, *14th Five-Year Plan for the Development and Improvement of Preschool Education*, Malaysia's *National Preschool Standard Curriculum (NPSCE) 2019*, the U.S. *Head Start Program Performance Standards*, and the UK's *Early Years Foundation Stage Framework (EYFS) 2024*. The analysis dimensions included five aspects: policy objectives, core content, parental support strategies, practical characteristics and implementation effects. An analysis path of "coding - classification - comparison" was adopted to extract the commonalities and differences of policies in various countries, so as to provide an international reference for the optimization of China's school readiness practice and the development of the School Readiness Module to Support Parents of Children Aged 3.

Data Processing

The grounded theory coding method was adopted to process the qualitative data of this study, and the core categories were refined through three-level coding to clarify the internal relationship between children's pain points, parents' needs and policy orientation. The specific steps are as follows:

(1) Open coding: Conduct sentence-by-sentence analysis of observation logs, interview texts and policy documents, and extract initial concepts (e.g., "separation anxiety", "difficulty in understanding rules", "parental guidance anxiety", "unbalanced policy implementation"), with a total of 68 initial concepts extracted to ensure that no core information is omitted.

(2) Axial coding: Classify and integrate the 68 extracted initial concepts to form three core categories of *Children's Transition Challenges*, *Parents' Guidance Needs* and *Policy Support Orientation*, each containing 4-5 subcategories, and sort out the relationship between each subcategory

(3) Selective coding: Based on the three core categories formed by axial coding, construct the logical relationship between the categories, form the core logical chain of *Children's Pain Points* → *Parents' Needs* → *Policy Support*, and finally construct the three-dimensional needs framework of *Children's Pain Points - Parents' Needs - Policy Orientation*.

(4) Reliability and validity control: Multiple methods were adopted to ensure the reliability and validity of data processing — researcher triangulation (two researchers coded independently with a coding consistency of 86%), member checking (feeding back the coding results to parents and kindergarten teachers to confirm rationality), and policy document cross-validation (verifying the authenticity of observation and interview results with policy data), so as to ensure the credibility and validity of the research results.

Table 6 shows the core categories, subcategories and key initial concepts extracted by grounded theory coding.

Table 6

Core Categories and Subcategories Extracted by Grounded Theory Coding

Core Categories	Subcategories	Key Initial Concepts
Children's Transition Challenges	Emotional Adaptation Challenges	Separation anxiety, crying, emotional instability, fear of strangers, resistance to kindergarten
	Social Interaction Challenges	Passive communication, conflict with peers, unwillingness to cooperate, lack of social initiative, isolation from groups
	Behavioral Adaptation Challenges	Difficulty in understanding rules, non-compliance with kindergarten routines, bad living habits, low self-discipline
	Ability Development Challenges	Poor self-care ability, unclear language expression, low

		attention span, slow adaptive learning
Parents' Guidance Needs	Emotional Guidance Needs	Methods to soothe separation anxiety, emotional communication skills, coping with children's negative emotions, anxiety relief for parents
	Behavioral Guidance Needs	Rule cultivation methods, habit formation strategies, guidance for kindergarten routine adaptation, correction of bad habits
	Social Guidance Needs	Social skill training, peer interaction guidance, conflict resolution methods, group integration guidance
	Tool and Resource Needs	Standardized guidance manuals, practical training tools, home-kindergarten communication templates, multilingual resource support
Policy Support Orientation	Policy Implementation Support	Rural policy landing, resource inclination, special group guarantee, policy supervision mechanism
	Guidance Tool Supply	Development of personalized guidance resources, multilingual tool design, community resource integration, online resource platform construction
	Home-Kindergarten Collaboration	Establishment of collaboration mechanism, parent training courses, communication platform construction, joint activity design
	Evaluation and Supervision	Effect evaluation of transition work, policy implementation supervision, dynamic adjustment mechanism, feedback collection channel

Module Specification

Based on the results of this needs analysis, the subsequent development of the *School Readiness Module to Support Parents of Children Aged 3* will be strictly aligned with the three-dimensional needs framework of *Children's Pain Points - Parents' Needs - Policy Orientation*, focusing on parents' core needs and making up for the deficiencies of existing guidance tools. The core positioning of the module is "structured, operable and home-kindergarten collaborative", and the overall framework of the module is shown in **Figure 5**.

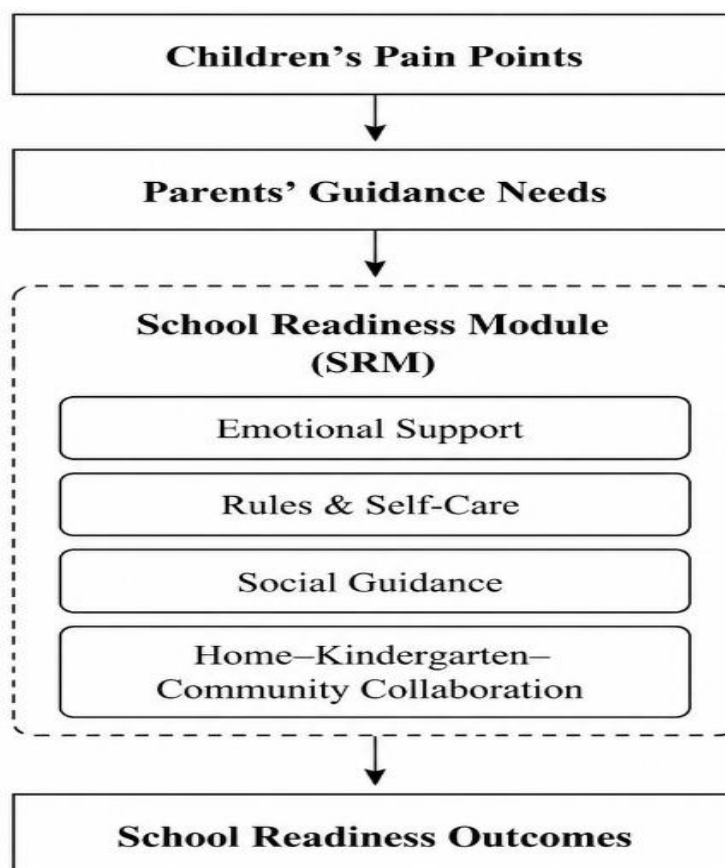


Figure 5 Four-in-One Framework of the School Readiness Module to Support Parents of Children Aged 3

The specific design of the four functional modules was guided by the identified needs of children, parents, and policy requirements.

1. Emotional Support Module

This module was designed to address children's emotional adaptation challenges, particularly separation anxiety during the transition to preschool. It provides parents with strategies to support children's emotional regulation, strengthen emotional security, and create a positive home environment. In addition, the module emphasizes parental emotional preparedness, recognizing the important role of parents' emotional well-being in supporting children's adjustment.

Rules and Self-Care Module

This module focuses on promoting children's understanding of daily routines, behavioral expectations, and self-care skills. It supports parents in providing consistent guidance and structured practice opportunities at home, while encouraging alignment between home and kindergarten expectations. The module aims to foster children's independence and readiness for preschool routines.

Social Guidance Module

This module addresses children's social adaptation needs by supporting the development of communication, interaction, and cooperation skills. Parents are provided with guidance on facilitating positive peer relationships and encouraging appropriate social participation. The

module also acknowledges individual differences among children and promotes flexible support according to children's developmental characteristics.

Home–Kindergarten–Community Collaboration Module

This module aims to strengthen collaboration among families, kindergartens, and community resources. It supports effective communication between parents and teachers, encourages the utilization of community-based resources, and promotes a collaborative approach to supporting children's transition to preschool. The module is aligned with current policy directions emphasizing shared responsibility in early childhood education.

Table 7 shows the matching relationship between each module of the school readiness module, children's pain points and parents' guidance needs.

Table 7

Matching Relationship Between Module Functions, Children's Pain Points and Parents' Guidance Needs

Module Name	Core Functions	Targeted Children's Pain Points	Meet Parents' Guidance Needs
Emotional Support Module	Soothe separation anxiety, emotional communication, negative emotion coping	Separation anxiety, emotional instability, resistance to kindergarten	Emotional guidance methods, parent anxiety relief
Rules and Self-Care Module	Unified rule guidance, self-care training, routine adaptation	Difficulty in understanding rules, poor self-care ability, non-compliance with routines	Behavioral guidance methods, habit formation strategies
Social Guidance Module	Social skill training, peer interaction guidance, conflict resolution	Passive communication, lack of social initiative, peer conflict	Social guidance methods, group integration guidance
Home-Kindergarten-Community Collaboration Module	Communication template supply, resource integration, policy guidance	All transition adaptation pain points (indirect support)	Tool and resource needs, home-kindergarten collaboration needs

Conclusion, Implications, Limitations, and Future Directions

Conclusion

Based on the logic of the needs analysis phase of the DDR paradigm, this study conducted a systematic exploration of the two core research questions through the triangulation method of natural observation, semi-structured interviews and cross-national policy document analysis. It not only accurately responded to the core of the research, but also targeted the existing research gaps proposed in the literature review, and drew the following core conclusions:

Aiming at the research gap of "lack of exploration of children's micro-behaviors and individual differences during the transition period" in the literature, this study clarified that 3-year-old children face four core challenges in the transition to kindergarten: emotional adaptation, social interaction, behavioral adaptation and ability development, which are characterized by "significant individual differences and gradual alleviation". Children with different care types and personality characteristics show obvious differences in transition adaptation performance, and their adaptation status improves gradually as they establish trust with teachers and peers. At the same time, it accurately identified that parents generally lack standardized guidance tools in children's school readiness, and face three core difficulties: coping with children's separation anxiety, cultivating rules and guiding social interaction, clarified parents' urgent demand for "structured and operable guidance tools", and sorted out the internal relationship between children's core challenges and parents' guidance needs, which effectively addressed the problem of "insufficient excavation of parents' needs and inaccurate grasp of children's challenges" in the literature.

Aiming at the research gaps of "inadequate cross-national policy comparison, unsystematic needs framework and difficult connection with module development" in the literature, this study sorted out the commonalities and differences of policies in various countries through the comparison of school readiness policies of China, Malaysia, the United States and the United Kingdom, and extracted learnable parental support experience. Based on children's core challenges and parents' guidance needs, it constructed a three-dimensional needs framework of *Children's Pain Points - Parents' Needs - Policy Orientation*, clarified the internal relationship between the two and policy orientation, which not only filled the research gap in the accurate needs analysis of school readiness from the family perspective, but also provided operable empirical support and clear guidance for the subsequent development of the *School Readiness Module to Support Parents of Children Aged 3*, effectively addressing the problem of "weak correlation between research results and module development and insufficient policy reference" in the literature.

This study adopted the DDR paradigm combined with the triangulation method to conduct research, which improved the credibility and practical relevance of the research results, and targeted the research gap of "single research method and insufficient credibility of results" in the literature. At the same time, combined with cross-national policy experience, it provided a diversified reference for the optimization of China's school readiness policies, made up for the shortcoming of "inadequate cross-national policy comparison" in the literature, and further improved the theoretical system of school readiness needs research from the family perspective.

The school readiness policies of China, Malaysia, the United States and the United Kingdom all emphasize home-kindergarten collaboration, but there are differences in the focus of policies in various countries — the United States focuses on supporting vulnerable groups, the United Kingdom on personalized transition and in-depth parental participation, and Malaysia on cultural adaptation and urban-rural resource integration. China's policies have obvious gaps in rural policy implementation, parental guidance tool supply and support for special groups, and need to learn from the advanced experience of other countries and combine national conditions to optimize the policy support system.

The three-dimensional needs framework of *Children's Pain Points - Parents' Needs - Policy Orientation* constructed in this study clarified the internal relationship among the three, and the four-in-one *School Readiness Module to Support Parents of Children Aged 3* designed based on this framework realizes the accurate matching of module functions, children's pain points and parents' guidance needs, which fills the research gap in the accurate needs analysis of school readiness from the family perspective and provides operable empirical support for the development of school readiness guidance modules for 3-year-old children in China.

Implications

Theoretical Implications

Enriched the application cases of the DDR paradigm in the field of preschool education, refined the operational path of the needs analysis phase of the DDR paradigm in the development of school readiness guidance modules, and provided a reference paradigm for the needs analysis of educational module development in the subsequent preschool education field.

Improved the theoretical system of school readiness needs research from the family perspective, deeply integrated the ecological systems theory with kindergarten transition research, revealed the influence mechanism of the interaction among family, kindergarten and policy systems on children's adaptation, and provided new support for the localized application of the ecological systems theory in China's preschool education research.

Expanded the international perspective of school readiness research through cross-national policy comparison, systematically sorted out the commonalities and differences of school readiness policies under different education systems, and provided an international reference for the research and theoretical innovation of China's school readiness policies.

Constructed a three-dimensional needs framework of *Children's Pain Points - Parents' Needs - Policy Orientation* for school readiness, which clarified the internal logical relationship between children's adaptation characteristics, parents' guidance needs and policy support direction, and provided a new theoretical framework for the subsequent school readiness research.

Practical Implications

For parents: This study clarified parents' core needs in children's school readiness, the subsequently developed *School Readiness Module to Support Parents of Children Aged 3* can directly provide parents with structured and operable guidance tools, help parents scientifically cope with children's separation anxiety, cultivate their rule awareness and social ability, and improve the effectiveness of school readiness guidance. The module's step-by-step practical methods are easy for parents to operate and apply in daily parenting.

For kindergartens: It provided a reference for kindergartens to carry out kindergarten transition work. Kindergartens can optimize transition support strategies (e.g., game-based rule guidance, personalized emotional comfort) combined with the core pain points of children identified in this study, strengthen collaboration with parents through the home-kindergarten collaboration module, and jointly help children make a smooth transition. The

module also provides a unified rule list and communication template for kindergartens, which is conducive to standardizing the home-kindergarten collaboration work.

For policy makers: This study revealed the practical gaps in the implementation of China's school readiness policies. It is suggested that policy makers further optimize policy content, increase the support for kindergarten transition in rural areas, improve the supply of parental guidance tools, strengthen the transition protection of special groups (children with developmental delays, migrant children), and promote the balanced implementation of policies. At the same time, it is suggested to learn from the experience of the US, the UK and Malaysia, build a diversified school readiness policy support system integrating home, kindergarten and community, and improve the policy implementation and supervision mechanism.

For preschool education practitioners: The research results and module framework provide a scientific reference for preschool education practitioners to carry out school readiness guidance work. Practitioners can use the three-dimensional needs framework to accurately identify children's pain points and parents' needs, and adopt targeted guidance strategies to improve the professionalism and effectiveness of school readiness guidance.

Limitations

Although this study ensured the credibility and pertinence of the research through the integration of multiple methods, there are still certain limitations that need to be improved in subsequent research:

Limited sample representativeness: The research objects were only 10 children and 3 parents from 3 kindergartens in Zhejiang Province, with the geographical scope concentrated in eastern China, and no samples from different regions such as western rural areas and ethnic minority areas were included. The age and care type of the sample are relatively single, which leads to the limited generalizability of the research results and cannot fully reflect the school readiness needs of 3-year-old children in different regions and different family backgrounds in China.

Short research cycle: This study focuses on the transition performance of children in the first week of kindergarten admission and parents' short-term needs, which is a short-term needs analysis. It did not track the long-term adaptation status of children in the kindergarten transition (e.g., 3-6 months after admission) and the dynamic changes of parents' guidance needs, and the long-term validity of the research results and module framework needs to be further verified.

Deficiencies in research methods: Although the triangulation method was adopted, the policy document analysis only focused on four countries (China, Malaysia, the United States and the United Kingdom), and did not include policies of more countries with different cultural backgrounds and economic development levels (e.g., European countries, developing countries in Africa), resulting in insufficient comprehensiveness of cross-national comparison. At the same time, quantitative research methods were not adopted to supplement and verify the results of qualitative research, and the research data lack quantitative support such as statistical analysis, which affects the persuasiveness of the research results to a certain extent.

Imperfect module design: The study only constructed the framework and core functions of the *School Readiness Module to Support Parents of Children Aged 3*, and did not carry out the specific development and pilot application of the module. The operability and practical effect of the module need to be further tested and optimized in the actual application process.

Future Directions

Based on the limitations of this study, combined with the research conclusions and practical needs, subsequent research can be carried out from the following aspects to further improve the research on school readiness needs and module development:

Expand the sample scope: Subsequent research can expand the geographical scope of the sample, include different regions such as western rural areas, ethnic minority areas and northern cities in China, increase the sample size, and cover more types of kindergartens (e.g., special education kindergartens, public welfare kindergartens) and children and parents with different care types, educational backgrounds and family incomes to improve the generalizability of the research results and make the research results more in line with the actual school readiness needs of 3-year-old children in different regions in China.

Conduct long-term follow-up research: Conduct long-term follow-up on the sample of this study, observe the adaptation status of children 3-6 months after entering kindergarten, explore the dynamic changes of children's transition adaptation characteristics and parents' guidance needs in different stages, and provide long-term empirical basis for the optimization and update of the *School Readiness Module to Support Parents of Children Aged 3*. At the same time, track the adaptation effect of children with different intervention strategies to compare the effectiveness of different school readiness guidance methods.

Enrich research methods and content: Add quantitative research methods (e.g., questionnaire survey, statistical analysis), expand the sample size to verify the validity of the qualitative research results of this study, and form a mixed research method combining qualitative and quantitative research to improve the persuasiveness of the research results; expand the scope of cross-national policy comparison, include policies of more countries with different cultural backgrounds and economic development levels to explore more valuable policy experience; at the same time, in-depth explore the impact of different family parenting styles, kindergarten education modes and community resource support on children's kindergarten adaptation to provide more detailed support for the optimization of the module design.

Promote module development and pilot application: Based on the framework constructed by this needs analysis, carry out the specific development of the *School Readiness Module to Support Parents of Children Aged 3*, including the compilation of guidance manuals, the design of training tools and the development of online resource platforms. Select kindergartens in different regions for pilot application, collect feedback from parents, kindergarten teachers and preschool education practitioners, test the operability and practical effect of the module, and continuously optimize the module content and function design according to the feedback results to ensure that the module can truly solve the actual needs of parents and children and provide an effective practical tool for China's 3-year-old children's school readiness guidance work.

Strengthen the research on policy support system: Based on the cross-national policy comparison results, combine China's national conditions and the actual needs of different regions, carry out in-depth research on the construction of China's school readiness policy support system, put forward targeted policy optimization suggestions, and focus on solving the problems of rural policy landing, parental guidance tool supply and special group support, so as to build a diversified, hierarchical and targeted school readiness policy support system integrating home, kindergarten and community.

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