March 30, 2021 Kids in Taiwan: National Longitudinal Study of Child Development & Care (KIT) Press Conference National Taiwan Normal University education think tank Newsletter

Theme: "Home-Stead" community- A bright future for our children.

The National Taiwan Normal University Education Think Tank Office and the Department of Human Development and Family Studies released the results of "Kids in Taiwan: National Longitudinal Study of Child Development & Care (KIT)" found that 5-year-olds who received preschool education had significantly better cognitive, language, and motor development than children who did not receive preschool education. There is a positive relationship between the quality of the "Home-Stead" relationship, the quality of kindergarten education and the overall development of children; children who learned in kindergartens with better quality education also had better overall development.

Children's Day is coming up in a few days, and a focus on quality and investment in pre-school education by both governments and parents will yield positive and effective results for young children in the future. According to the Programme for International Student Assessment (PISA) 2018 report, children with one-year of pre-school education scored 26 points higher in PISA reading skills at age 15 than children without pre-school education, and 14 points higher even after the exclusion of the factor of socioeconomic status. Children with two years of preschool education scored 45 points more, and 23 points more when corrected for socioeconomic status (see Table 1).

Table 1: Effect of preschool education on PISA reading ability (difference in scores between children who received and did not receive preschool education)

Number of years of preschool education	One year	Two year	More than Three year
Socioeconomic status corrected	14	23	19
Uncorrected for socioeconomic status	26	45	47

Source: OECD, PISA 2018 Database, Table V.B1.2.5.

With long-term funding support from the Ministry of Science and Technology (Taiwan), "Kids in Taiwan: National Longitudinal Study of Child Development & Care (KIT)" is the first longitudinal study in the Chinese region that focuses on early childhood development. The project is the first longitudinal study in the Chinese region that focuses on early childhood development. It has been five years since the nationwide survey began in March, 2005. This press conference will present the results from the analysis of the data from the third group of the 36-month age group (5 years old), including the parent questionnaire (1,985 children, 1,018 males and 967 females) and the childcare questionnaire (858 children, 430 males and 428 females; 8 male and 850 female childcare providers).

According to the Taiwan Ministry of Education, the percentage of 5-year-olds enrolled in kindergarten in the 2019 school year was 96.2%, indicating that the education

rate of Taiwan's 5-year-olds is very high, but the quality of kindergartens received by children deserves more attention and understanding. The following are the results of the survey on two important aspects of kindergarten quality, namely, the quality of "Home-Stead" relationship and the quality of education and training.

I. "Home Stead" relationship quality

In terms of the quality of the "Home·Stead" relationship, the survey found that most parents in Taiwan Were very concerned about their children's learning in kindergarten. On the other hand, about half of the teachers also considered it their own responsibility, but a higher percentage of teachers thought that their children were also held accountable. In addition, most of the parents and teachers considered it their responsibility to maintain good communication between the two parties; in terms of parent-teacher interaction, both parties mostly respected and trusted each other, and exchanged information about their children's learning status at home or at school. The results show that teachers and parents have the same direction of co-parenting and that the "Home·Stead" relationship was off to a good start.

The survey also found that a positive "Home·Stead" relationship was positively related to the quality of education in kindergartens; the better the "Home·Stead" relationship between parents and teachers, the better the quality of education children receive in kindergartens. In addition, a harmonious "Home·Stead" relationship was also conducive to the growth and development of children in all aspects, including cognitive, language, social and emotional development.

II. Preschool quality.

According to the results of the survey with parents and preschool staff (37.6% in public preschools, 60.8% in private preschools, and 1.5% in public private preschools), children in preschools with better quality had better overall developmental performance, with significantly better cognitive, language, social, emotional, and physical-motor development, and less aggressive behavior. This demonstrates the critical importance of preschool quality in the developmental process of young children. The assessment components of preschool quality were: preschool activities, learning environment, and teacher-student interactions, which are further described below.

1. Preschool Activity.

According to the survey results, the preschool activities that were frequently taken place (3-4 times per week) in kindergartens are, in order: letting children choose their own activities, doing physical activities, body rhythms, listening and singing finger rhymes, recognizing common words/patterns/symbols, doing activities with fine motor skills, and reading picture books together with teachers and students. The less frequent (1-2 times per preschool activities were: logical reasoning sequencing/categorizing/comparing activities, playing games or toys with rules, playing role-playing games, and simply telling stories to children. The results showed that the preschool activities such as logic and sorting were performed less frequently than language activities such as physical rhythm and children's songs and rhymes in kindergarten. Based on the benefits of the "Home Stead" collaboration, parents were advised to provide more opportunities for their children to engage in logic, sequencing, sorting, and role-playing activities at home. For example, doing household chores (arranging dishes, folding clothes, sorting clothes), parent-child cooking, playing jigsaw puzzles, jigsaw puzzles, board games, role-playing games, and so on, to supplement the learning opportunities of children who are less exposed to activities in kindergarten.

2. Learning Environment

Among the learning aids, materials, and environments provided in kindergartens, the top six most frequently used items were, in order: small construction toys or materials, group activity time, gross motor activity equipment, art materials, adequate play space, and display environment texts. The less frequently provided items included: natural objects, soft objects and relaxing comfort areas, sand and water play/apparatus, and free access to private spaces. The results show that nature and science exploration materials were less frequently provided and used in kindergartens, and there was a lack of emotionally relevant teaching aids and space arrangements that could relieve children's emotions. In addition, parents were advised to provide more toys, materials, and environmental arrangements at home that are not available in kindergartens to help children's development.

3. Teacher-Student Interaction

The results of the teacher-student interaction survey indicate that most kindergarten teachers believed that they could teach children well, and that even in busy situations, kindergarten teachers were rarely aggressive or impatient with children when they had problems or special situations. The interactions that kindergarten teachers often have with children (3-4 times a week) included listening carefully to what children said and responding cheerfully, talking to children about past events, and helping children understand others' thoughts. However, interactions with higher individual needs were less frequent (1-2 times a week), such as: guiding the child to talk more, knowing the child's interests and abilities and providing special consideration and support in designing activities, helping the child to communicate and interact with other children, and changing the scheduled program for the individual child. The results show that the preschool staff was patient with the children and can meet the needs of the children as a group, but it was difficult to cater the individual needs of the children. It is recommended that the parents should interact with their children more as a supplementary support for that lack of enough preschool teachers' support for individuals.

"Home Stead", Together we create a good quality kindergarten.

In view of the importance of kindergarten quality, the "Home-Stead" co-parenting should be emphasized to enhance the knowledge of parent-teacher cooperation. In addition to the above-mentioned activities that parents can do at home with their children, it is also recommended that the government establish and promote an online learning platform for the "Home-Stead" relationship, inviting experts in parenting and family education to explain how to improve parent-teacher trust and enhance the quality of parent-teacher communication. For kindergarten preschool staff, it is recommended that the government include more "Home-Stead" relationship issues in the 18-hour preschool professional knowledge seminars. We can also add parent-teacher cooperation and parent-teacher interaction issues to the Teacher E-school (formerly the Ministry of Education digital learning platform) and teacher professional community, and invite experts from parenting and family education-related backgrounds to serve as speakers to enhance the cooperation knowledge of the "Home-Stead".

In terms of preschool quality, it is recommended that the government focus on preschool activities that are less frequent, such as logic and sorting activities, and encourage preschool staff to conduct these activities on daily routines to provide children with diverse learning opportunities. In addition, it is also recommended to strengthen the less emphasized aspects of the preschool learning environment, such as the lack of nature materials and science exploration materials in kindergartens. It is recommended to strengthen teachers' awareness of the lack of nature and science materials in the preschool

environment and to develop teachers' ability to use nature and science media. This survey shows that the preschool staff is less able to respond to the individual needs of children. It is suggested that the government can make reference to other countries, such as the United Kingdom (1:13) and Australia (1:10), to reduce the student-teacher ratio.