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# Family Diagnosis and Educational Methods of Chinese Developmental Dyslexia Children

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**Abstract:** In China, there is no special organization to intervene in Chinese developmental dyslexia, and family education plays an important role in the correction of dyslexia. For preschool children, parents should be keenly aware of whether their oral development is consistent with their age. In the family, oral communication, picture book reading and cognitive games can be used to improve their oral expression ability. Primary school children mainly diagnose whether there is dyslexia based on the ranking of Chinese scores, reading and writing behaviors; family education is mainly carried out by increasing literacy and reading, mastering writing methods and cognitive games.

Keywords: Chinese developmental dyslexia; Family diagnosis; Family education

## 1. Introduction

Developmental dyslexia, also referred to as dyslexia, refers to children with normal intelligence, equal access to education, and no organic brain disease, but oral expression, reading and writing lag behind normal children [1]. In Chinese, the incidence of dyslexia is between 5% and 10% [2]. In dyslexia, children of different ages will have different manifestations and speak late in early childhood. Children with dyslexia in elementary school are mainly manifested by low literacy, poor reading comprehension, and writing difficulties [3].

Developmental dyslexia can be corrected through reading training, cognitive intervention and other methods, early diagnosis, early intervention, early benefit [4]. The assessment and intervention of Chinese dyslexic children in China is in the initial stage, and there is no special intervention institution for children with developmental dyslexia. Family education participation plays an important role in the correction of dyslexia [5]. Parents are the people who can be most aware of children's language development problems and can give children long-term help and support. This study divides dyslexic children into preschool children and school-age pupils to explore family diagnosis and education methods.

# 2. Family diagnosis of children with developmental dyslexia

## 2.1 Family Assessment and Diagnosis of Oral Expression Disorders in Preschool Children

For preschool children, parents or caregivers should be alert to the following verbal signals of young children.

- (1)0-1-year-old children lack response to voice, show too quiet, and have little eye contact with the maintenance person;
- (2) At the age of 2, there was no expression of any single word or spoken language;
- (3) still unable to use simple sentences at the age of 3;
- (4) At the age of 4, there are still many pronunciation errors, and the content of the speech is not easy to understand;
- (5) At the age of 5, he or she has no narrative ability and cannot tell simple stories;
- (6) During the age of 2-5, there was a significant decline in speech ability.

In early childhood, if the above characteristics appear in the language development of children aged 0-5, we should be alert to the existence of dyslexia.

## 2.2 Identification and Diagnosis of Primary School Students with Developmental Dyslexia

For primary school children, parents can learn simple ways to identify children's high risk of dyslexia. Preliminary identification

can be made on the basis of the Self-Examination Checklist for early identification of dyslexia. The Self-Examination List is as follows:

- (1) The language performance is significantly lower than the average level of the same class;
- (2)Read slowly and hard when reading, and do not understand the content after reading;
- (3)It is easy to skip words and lines when reading;
- (4) They don't like to read aloud, drop words or read wrong words when reading aloud;
- (5)Slow writing speed, easy to write wrong words;
- (6)Often can't remember the date or name;
- (7)Poor sense of balance, clumsy movements of small muscles;
- (8) Escape tasks that require a lot of reading;
- (9)Low level of self-esteem and no confidence in oneself;
- (10)Learning a foreign language is especially difficult.

If there are more than 6 items that meet the children's situation and last for more than half a year, there may be a potential risk of dyslexia. The Self-Examination List is only used for preliminary self-examination of the potential risk of dyslexia.

# 3. Family Education Methods for Children with Developmental Dyslexia

## 3.1 Family Education Methods for Preschool Children with Dyslexia

- 3.1.1 Parent-child Oral Communication For dyslexic children with oral expression disorders, parents should pay active attention to children when speaking, give sufficient time and do not urge them. If the time is sufficient and the child is still unable to express it orally, the parents can demonstrate first and the child can tell.
- 3.1.2 Reading a large number of words in picture books is helpful for oral expression. Regarding the accumulation of vocabulary, parents read picture books, children's songs or ancient poems to children. It not only increases vocabulary, but also improves rhyming awareness. The speed of reading is slow, and children can try to recite more times.
- 3.1.3 Cognitive games For children with dyslexia in preschool classes, cognitive games can be trained. Cognitive games suitable for children include day-night games. In day and night games, when children see the sun, they say it is night, and when they see the moon, they say it is day. The card classification task can be classified according to shape and color. Parents make rabbits, kitten, etc. of different colors, first classify according to animal species, and then classify according to color. This game can train children's cognitive flexibility. Search games can train children's working memory ability and hide an item in different positions for children to find.

## 3.2 Family Education Methods for Primary School Students with Dyslexia

- 3.2.1 Primary school students with less literacy use Chinese character card games to increase their literacy in family education. According to the situation of children with dyslexia, the number of Chinese characters is determined. Regular review and consolidation to prevent forgetting. Children's reading of books of interest not only increases their literacy and interest, but also improves their understanding. Parents communicate reading content with children can improve reading efficiency.
- 3.2.2 Primary school students with poor reading fluency should encourage their children to read aloud in family education. At first, the reading speed is slow, and the reading speed can be accelerated after proficiency. Use recording to let children listen and correct the bad habit of missing words or adding words when reading.
- 3.2.3 Writing exercises for primary school students with difficulty in writing are carried out in the order from easy to difficult, I e. according to strokes-components (side of shape or side of sound)-Chinese character components-single characters. Orthography or grouping rules help children quickly decode Chinese characters when reading and writing.
- 3.2.4 Cognitive games Pupils can also use games of inhibition control, working memory and cognitive flexibility to improve reading ability. The suppression control can use the color Stroop task. The Color Stroop task uses colored pens to write colored words. In order to train children's ability to suppress the meaning of words, let children say what color the words are written. Dyslexia children have a longer reaction time. Working memory can be memorized in reverse order. Parents say a few numbers and ask children to memorize them upside down. For cognitive flexibility games, numbers and Chinese characters appear in pairs. The first three groups let children read numbers first, and the last three groups let children read Chinese characters.

## **References:**

- [1] Miciak, J., & Fletcher, J. M. (2020). The critical role of instructional response for identifying dyslexia and other learning disabilities. Journal of Learning Disabilities, 53(5), 343-353
- [2]Wang, L.C., & Yang, H.M. (2018). Temporal processing development in Chinese primary school-aged children with dyslexia. Journal of Learning Disabilities, 51(3), 302-312.
- [3]Deng M.P., Cai D., Zhou, X. Leung, A. (2022). Executive Function and Planning Features of Students With Different Types of Learning Difficulties in Chinese Junior Middle School. Learning Disability Quarterly, Vol. 45 Issue 2, p134-143.
- [4]Luo, Wang et al., (2013). Working-memory training improves developmental dyslexia in Chinese children. Neural regeneration research,5(8): 452-460.
- [5] Chung, K. K. H., Lam, C. B., & Cheung, K. C. (2018). Visuomotor integration and executive functioning are uniquely linked to Chinese word reading and writing in kindergarten children. Reading and Writing, 31(1), 155-171.

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