

# A study of educational interventions for children with ADHD from a medical perspective

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**Abstract:** *This paper uses the combination of case studies and observation method to propose educational interventions to improve the symptoms of children with ADHD in school, enhance the family and educators' face to the children, and reduce the misjudgment, prejudgment, and single of their symptoms in education. Recording to the findings: we educators need to keep an open mind, we need to learn about the shortcut of knowledge in a timely manner; it is necessary to know about medical knowledge, and it is recommended that teachers develop a keep awareness of the symptoms through reading or observation as educators, we hope to get good educational intervention, which requires the honey and cooperation of parents, and the lake of cooperation will lead to the flag of educational intervention.*

**Keywords:** *Educational interventions; Educational diagnosis; Medical perspective*

## 1. Introduction

During the educational internship, the author was able to come into contact with students of a certain grade, with an average of 1-2 hyperactive students in each class, and some accompanied by impulsive and uncontrollable behavior. After observation, it was found that students with this characteristic have affected their academic level, emotional control ability, communication ability, etc. Not only are they unpopular or even bullied among children, but they also become problem students among teachers, causing both parents and teachers to worry and worry. At the same time, there is a lack of accurate conceptual guidance and scientific theory and method guidance. How to form a three-in-one cooperation and mutual assistance between family, school, and society has also become a challenge. Faced with this situation, teachers often adopt strict measures to stop or invite parents to school, but the problem is not solved, and student hyperactivity is even more serious. With the development of social competition, some parents have put more energy into their work, lacking the effort to pay attention to and track their children's academic performance both in and out of class. They also have higher requirements for their children's academic level, and lack methods to shift their weight around. The author begins to pay attention to children with suspected ADHD in reality. In classroom teaching, it is evident that these children have positive ideas for change and a positive attitude of cooperation, but it seems like they are being held back by a force. I have collected educational intervention methods suitable for this type of child online and read relevant books such as "Attention Deficit Hyperactivity Disorder" to learn more about these children. The name ADHD was first updated in 1987, and there is no clear data to indicate whether our empathy and action as educators are allocated to such children. Therefore, it requires us to invest our energy in research [1-2].

## 2. Related concepts and theoretical foundations

### 2.1 Concept definition

ADHD (Attention Deficit Hyperactivity Disorder), also known as Attention Deficit Hyperactivity Disorder, is a neurodevelopmental disorder that mainly affects children. The core pathological change of this disease is insufficient inhibitory function of the brain, and typical symptoms can be divided into three types. lack of concentration and distracted attention in class have deficiencies in this regard; Hyperactivity accompanied by impulsivity, easily losing control of emotions, and doing things without predetermined consequences; Mixed type, with attention deficit and impulsive hyperactivity, restlessness, and various uncontrollable movements.

## **2.2 Theoretical basis**

### **2.2.1 Bandura's Observational Imitation Theory**

Also known as observational learning theory. Although students are in a state of hyperactivity, based on this theory, we can utilize the positive changes in the environment for children aged 6-12. Bandura believes that children can imitate and learn to make complete behaviors by observing the actions and behaviors of others, which indirectly proves that children are easily influenced by others. Therefore, the author believes that this theory can be used to separate a child with ADHD from other children who are more mischievous or also suffer from ADHD, and adjust them to be next to students who follow the rules, perform more attentively, and are engaged, which has an effect.

### **2.2.2 Maslow's Hierarchy of Needs Theory**

Maslow's pyramid of demand hierarchy, from bottom to top and from low to high, is the physiological demand demand demand realization demand. The safety level needs of children with ADHD are in an empty state. When dealing with violations of classroom discipline, lower grade teachers in School A coincidentally choose to discipline and punish them, which increases the psychological pressure on these children. It may lead children to have the idea that 'if they don't behave quietly and obediently, it's just me.' Over time, it may lead to a child's inferiority complex, introversion, or even autism. Drawing on the medical symptoms of Switzerland, excessive gaze from classmates and excessive attention from peers can lead to emotional sadness, increased stress, and seizures.

### **2.2.3 Adler's Theory of the Role of Schools**

Adler wrote in "Inferiority and Transcendence" that if a child is not encouraged and supported by others at school, but is only scolded and criticized, then he will find a reasonable reason for not liking school. Because not being understood and accepted, the psychological distance between teachers and most students will be further, and he can only approach a small group of people with the same problems to gain a sense of acceptance, He also explained and reinforced his rebellious behavior[3-5].

## **3. The Application Value of Educational Intervention in the Treatment of ADHD in Children from the Perspective of Medical Diagnosis Suggestions**

Based on my experience in internship teaching, the school suggests that children with ADHD should interact more with children with stable and self-control behaviors, and be close to students with strong attention. I will take the following measures: divide these students into a group with another group of students who perform actively in class, raise their hands actively, and have more focused attention, and form a group of two people at the same table for cooperative activities. Due to the lack of dopamine producing components in children's brains, as educators, we should consider adopting educational intervention methods that can increase dopamine secretion in this regard. Educators should first abandon preconceived concepts such as "this student's bad behavior" and use praise, suggestion, and guidance education to replace teaching of behavioral violence. Even minor progress requires teachers to loudly praise them.

The educational intervention taken from a medical perspective is a comprehensive consideration, based on actual cases, aimed at alleviating ADHD in children, which can alleviate the situation where teachers cannot find direction like headless flies. The application value lies in being able to discuss within the teacher community, not based on the judgment of a single person, but rather gathering the words of a "hundred schools", fully listening to the feelings and ideas of parents, understanding each other from each other's perspectives, breaking down barriers to information exchange, and most importantly, being a humanized component of our teachers themselves, Adding "rational" basis to our "emotional" judgments - some explicit symptoms (which can be referenced from a medical perspective) such as students' sugar addiction to some extent, which can be used as a guess for dopamine deficiency, and so on; Scientific educational interventions have added some understanding and empathy to our rational educational practices. The primary school stage inevitably includes the function of education, and educating people requires nurturing the mind, which means increasing the necessary psychological knowledge targeted by teachers from a medical perspective.

#### **4. A survey on the current status of educational interventions for children with ADHD from a medical perspective**

##### ***4.1 A survey on the understanding of medical information about ADHD among parents of educators***

During my internship, I paid attention to medical advice in this area. Some teachers, including the author, have blind spots on medical information in this area, For example, "Why should children be advised to exercise more when they have already developed ADHD?" "Is the child not sensible now? As they grow up, their symptoms can be alleviated and subsided?" "It is currently unclear the difference between ADHD and general play. Can education workers take measures to improve their performance and attention in the classroom? What measures can be chosen?"

##### ***4.2 A survey on educational interventions for ADHD from a medical perspective***

The parent of a student mentioned in the case did not consult the teacher for observation or inform the teacher of the child's symptoms after taking the child to seek medical treatment. They lacked the teacher's opinion and needed the child to undergo EEG, DSM-5, ASRS and other projects for educational diagnosis and diagnosis, which cost a large amount of money and took a long time; The two typical characteristics of hyperactivity and impulsivity are often noticed by educators at my internship school, while some teachers believe that apart from being strict with these children, they have not noticed the typical feature of attention deficiency, which has led educators to characterize children as 'questioning behavior'. Educational interventions have not been combined with medical perspectives and suggestions. There is no special treatment for lunchtime meals, and such children should eat less sweets and fermented foods[6-9].

#### **5. Case analysis**

Select three students as case studies for observation and research. After two encounters with the first student in class, the author made a judgment based on classroom performance that uncontrollable physical factors affect the student's normal learning. Combined with a conversation with the class teacher, the author found that the student had attention deficit hyperactivity disorder (ADHD), specifically manifested as giggling during class, drawing on paper without shapes or designs, touching a water cup, and leaving a water stain on the table. However, there was no basic difference in intelligence compared to peers, He claimed that he had no brain problems and had a strong sense of self-esteem. When he was scolded by his classmates around him, he would feel embarrassed, nervous, and self-blame, with furrowed brows. However, the student could not control the occurrence of hyperactivity behavior again.

From February to May, the author found that A student had a higher level of coordination in the classroom. Therefore, based on the experience of other teachers on the internet, the student with ADHD was placed next to A student and their positions were adjusted to the middle and front of the classroom together. The hyperactivity behavior of the child was greatly alleviated by the teacher's eyes, and with the encouragement of the teacher, they could answer simple questions and answers, but there was still a situation where their attention could not be focused and their eyes drifted away from the classroom. But the overall stability and quiet time are relatively long. In early June, the children began to break this pattern by running out of the back door of the classroom to the playground before class. After more than half of the time, the homeroom teacher chased the students back, and this behavior was repeated.

The author first considers reducing academic requirements and allowing the student to draw and eat snacks within a safe area of the office. After discussing with colleagues, it is decided to allow the student to return to collective education. The front and back doors of the classroom will be locked tightly, and student leaders will be assigned to guard the front door. This time, student B, who has a high level of classroom participation, will be seated next to the student in the front row of the classroom. The teacher will use a painting book and colored pens painted with "Mysterious Garden" instead of animation as a tool for the student's attention training. The attention span of this ADHD child was significantly extended by 10-12 minutes compared to watching video animations in class. Therefore, the author boldly speculates that in future work, the combination of educational intervention and various forms of attention training will continue to verify the effectiveness of improving hyperactivity behavior in children with ADHD. Unfortunately, parents did not have sufficient psychological preparation after communication, and hesitated between believing that the child could not control themselves and believing that the child was not rational and wayward when facing the student's behavior. They did not have the psychological preparation to cooperate with treatment and

educational intervention[10-11].

In the second case, the mother of the student concealed the diagnosis results of the child's hospital from the school and teachers, without forming communication and collaboration between home and school. In this case, some teachers had formed a preconceived concept of the student, determined that the student had moral problems, and discipline was stricter. Criticism of improper punishment methods caused dissatisfaction among students. In addition, under the influence of the information age and adults, the student chose to resist and accompanied by vulgar language, and the teacher further judged that the student could not respect the teacher. However, what are the facts? After observation, the author learned that such hyperactive behaviors - getting off the seat, rolling on the ground, hoping to manage and lead other students, making strange noises, etc. - are all beyond the control of students on their own. During exploratory inquiries with parents over the phone, it was found that the student was diagnosed with ADHD attention deficit. Upon inquiry with the student, it was found that the parents of the child used to smoke near the child (indoors) in the past, which enables them to trace the cause of ADHD from a medical perspective. After communicating with parents, it is recommended that parents use verbal guidance and companionship to replace violent control. Teachers should provide more positive encouragement and praise in the classroom, and adjust seats to make Zheng and his child sit at the same table. The purpose is to expand the influence of children who are focused.

Communication with other teachers did not reach an agreement. Although the two ADHD children in the class were separated under the adjustment of the homeroom teacher, they still returned to their original state two days later. These children are located in a corner and are more concentrated. Fortunately, the homeroom teacher's deputy class still insists that the children have not given up. The child's final grade has made significant progress in terms of scores in the author's teaching of a single subject. Overall, their academic performance has remained relatively good under the education of medical teachers, and attention needs to be paid to making friends and mental health. There is an urgent need for educators to explore.

## 6. Summary and Outlook

There are still some issues that need to be addressed, such as how to balance the educational equity among ordinary students, ensure equal attention is paid to the remaining students, and discover and tap into their strengths as much as possible. Schools should increase their support and encouragement for such education. In addition to purchasing books on ADHD, playing videos on ADHD, and increasing or decreasing teachers' understanding and awareness, an educational intervention training for children with ADHD should be added to the training.

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