

# Intervention of Positive Reinforcement Method on Classroom Problem Behavior of Primary School Students

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**Abstract:** *As a method to correct bad behavior through incentive and reward, positive reinforcement has been widely used in psychology and medicine. In order to test whether the positive reinforcement method has obvious effect on the correction of classroom problem behaviors of primary school students, this paper selected 10 students in grade two of a primary school in Tianshui City as experimental objects, and took one of them as an example to record the implementation process and results in detail. After three months of intervention, the classroom problem behaviors of the 10 subjects were improved. This experiment proves that the positive reinforcement method provides a more effective intervention method for classroom problem behavior, and provides more inexperienced novice teachers with ideas to solve classroom problem behavior.*

**Keywords:** *Classroom problem behavior; Positive reinforcement method; Case of intervention; Suggestions*

## 1. Introduction

Classroom problem behavior mainly refers to all the behaviors that make the classroom unable to proceed normally. It is common. For example, "poor students" can't pay attention in class, whisper, or even speak loudly to disturb the order of the class. Students with excellent grades will also have problem behaviors. Novice teachers may take a negative approach to solve problems in the classroom. They may choose to verbally criticize or ignore them. It is not a big problem that novice teachers cannot concentrate on the class and dare not raise their hands to answer questions, as long as it does not affect the normal learning of other students. However, if these problems are neglected for a long time, it will not only affect the study of these students, but also affect the overall development of students, and cause harm to the development of students' mental health.

## 2. The harm and causes of classroom problem behavior

### 2.1. The harm of classroom problem behavior

The summary of international mental health surveys shows that the mental health of children and adolescents aged 2-19 years includes mood disorders (anxiety disorders, depression, mania), conduct disorders (repetitive and persistent destructive behaviors and antisocial behaviors), and hyperactivity disorders (inattention, hyperactivity, impulsivity) [1]. In the classroom, most of the primary school students have inattention, hyperactivity and other problem behaviors, and will accompany each other and appear at the same time.

Classroom problem behavior seriously affects the smooth development of teachers' teaching work, the original teaching task can not be completed on time, and will delay other students to learn knowledge, will disturb the classroom atmosphere, make more students appear inattention and other problems. Classroom problem behaviors will also affect the development of students' physical and mental health. They will be unable to focus on completing learning tasks carefully and be careless, which will eventually lead to poor academic performance and loss of passion and confidence in learning.

## **2.2. The causes of classroom problem behavior**

### **2.2.1. Personal factors**

Classroom problem behavior is common to primary school students. 5-10 years old child development is not mature, full of curiosity for all kinds of things, also is unable to concentrate, not strong self-control, especially primary school lower grade students, they are in the early stages of from kindergarten to primary school, can't consciously listening to lectures in class, like to touch is their nature, are essential to their development process. Moreover, children at this stage are psychologically self-centered and want to get attention from others, so a series of problem behaviors will occur.

### **2.2.2. Family factors**

Parents are the first teachers of children, and the formation of children's personality is deeply influenced by parents. Some parents spend time reading with their children, which not only cultivates their children's patience and resilience, but also cultivates their children's interest in reading and learning. In addition, children have a strong imitation, parents are quiet to read, they will learn from their parents, so that children can focus their attention from an early age, peace of mind to do one thing. Some parents are busy with their work and neglect to care for their children, leading to their children's inner desire for attention, which exacerbates their desire to attract others' attention in class.

### **2.2.3. Teacher factors**

The advantage of the class system is that it can educate the majority of school-age children with the least amount of teachers. However, the class teaching system also has disadvantages. When a teacher is faced with dozens of students, the teacher does not have the energy and means to take into account the reaction and learning status of all students in the class. Each student has different personality and uneven knowledge level, so it is impossible for teachers to teach students in accordance with their aptitude. Over time, those who follow the teacher's rhythm will get better grades, while those who are weak in receiving ability will get worse grades, and because they can't get the teacher's attention, they will use extreme methods of not listening to the teacher to attract the teacher's attention.

## **3. Overview of positive reinforcement method**

### **3.1. Related concepts of positive reinforcement method**

Positive reinforcement method is a psychological concept, which is widely used in children's problem behavior intervention method. The aim is to increase the frequency of the desired behavior and reduce the occurrence of the problem behavior by rewarding the children. This method has been widely used in the intervention and correction of learning problems in different grades. According to Watson of behaviorism, personality is the sum of all actions, is malleable and can be changed [2]. No matter how a person's previous behavior is, the frequency of a certain behavior can be increased through reinforcers. In particular, the personality of primary school students is in the developing stage, and the problem behavior is easier to correct.

"Target target" refers to the target that needs to be completed in the process of problem behavior intervention. In the process of intervention, the target should not be too large, otherwise it will be difficult to complete, thus losing students' confidence in the intervention, and the target should not be too small, because too easy to complete is not conducive to the normal progress of intervention. In the process of positive reinforcement, it is necessary to monitor the target target's behavior, timely supervise whether the target's behavior appears, and adjust the target in time according to different progress, so as to finally form positive behavior.

### **3.2. Application and research results of positive reinforcement method**

Positive reinforcement method is first used for intervention in patients with schizophrenia and other bad behavior, prevention and control of Jining city spirit of the three doctors found that patients who have poor eating behaviors, 78% of patients with poor eating behaviors and psychological factors, and use positive reinforcement to 40 schizophrenic behavior intervention, rectify period of 4 weeks, After correction, the patient's poor diet has been significantly improved. After the intervention, the compliance behavior of children with leukemia was increased by 21.87%, and the infection rate was reduced by 28.12%. Positive reinforcement method in medical, in view of some behavior correction, the effect is

very remarkable.

Positive reinforcement method has also been used in education to intervene all kinds of bad behaviors of primary and secondary school students. Teachers of Senior three in Shihezi No. 1 Middle School used positive reinforcement method to intervene the students' learning behavior of "headless", to help students implement learning plans and improve learning efficiency and performance. A teacher of Guangdong Ocean University used positive reinforcement method to intervene the college students with Internet addiction for 3 months. Finally, the students successfully quit the Internet addiction, and their academic performance and mental outlook were greatly improved. In human resource management, positive reinforcement can also promote individual growth and development.

#### **4. Positive reinforcement intervention case**

##### ***4.1. Case introduction***

This case selected 10 students as the experimental objects, they are from a primary school in Tianshui City second grade students. After observation in class, it was found that the 10 students could not focus their attention for a long time. They would get up from the bench every few minutes, and some would even leave their seats, not listening to the teacher carefully and disturbing the classmates around them. Their grades were in the lower and middle grades, and analysis of their tests and assignments revealed that they were extremely careless, making mistakes in many of the simplest questions and writing poorly. After the teacher and their parents consultation, decided to use positive reinforcement method to intervene their behavior. The most typical case is selected as follows to introduce the process and results of the intervention.

##### ***4.2. Preparation before intervention***

###### ***4.2.1. Talk with the students***

The author called CAI to office to talk with him on the pretext of dictation. At first, the student was very nervous, thinking that the teacher would criticize him. Instead, the author put forward his advantages by encouraging him, and then pointed out the harm caused by his active activity in class. After hearing this, the students expressed their willingness to accept the teacher's help. After talking with CAI, we reached an agreement on the intervention process: the intervention was divided into three months, with teachers and parents as supervisors, and the principle of joint scoring after class was implemented. The rewards students hope to receive are Harry Potter books and summer camps. Teachers and parents hope that after three months, the student can listen carefully in class, write neatly, answer questions actively in class, and get top 15 scores in the class.

###### ***4.2.2. Communication with parents***

Only relying on teachers' supervision in school can not complete the intervention task well, and need the cooperation and support of parents. The author communicated with CAI's parents through home visits. The parents said that they knew that CAI was careless, had poor grades, and did not get along well with his classmates at school, but they had no choice. After negotiation, the parents agreed to make a record of the intervention plan according to the child's home situation every day and give the author a summary every week. For the children put forward to get the reward, parents also expressed strong support, with the teacher to complete the task.

###### ***4.2.3. Consultation with other teachers***

In order to successfully and efficiently complete the intervention on CAI's problematic behavior in class, it is not enough to implement it only in English class, and other teachers need to supervise CAI to some extent. After consultation with the math and Chinese teachers, they expressed their willingness to cooperate with CAI to correct her hyperactivity disorder. They would pay more attention to CAI's reactions in class, including whether she would pay attention to the class, whether she would reduce her hyperactivity behavior, whether she would actively raise her hand to answer questions, etc., and report the situation to the author after class.

### 4.3. Intervention process

#### 4.3.1. Determination of "target target"

After communication and negotiation with parents of students, the target was set as reducing hyperactivity behavior in class, raising hands to answer questions, completing homework voluntarily after class and reducing careless problems, and the implementation was completed according to three small goals from easy to difficult, and the time limit of each small goal was 1 month.

Table 1: Targets before intervention

| Time                   | Target target                                                                                                                                                     | Scores                                                                                                                                                                                | Others                                                                               |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| From April to May 2019 | Ask to sit on a stool in class, do not move;<br>Ask not to talk to other students in class;                                                                       | If gets 1 point for every day, he gets 22 points for a month.<br>If gets 2 points a day, he gets 44 points a month.<br>If gets 2 points for every day, he gets 44 points for a month. | Excluding weekends off                                                               |
| From May to June 2019  | Take the initiative to raise hands to answer questions once a day in class; Listen attentively in class, do not move, do not talk; The handwriting should be neat | If gets 2 points a day, he gets 44 points a month                                                                                                                                     | The teacher needs to be asked individually about the student's performance in class. |
| From June to July 2019 | Ask to finish the homework and write neatly at home;<br>Ask to check more before handing in homework, reduce the problem of careless mistakes;                    | If gets 2 points for every day, he gets 44 points for a month.                                                                                                                        | Parents are required to monitor the completion of homework at home                   |

#### 4.3.2. Determination of the reward system

Considering the students' demand for rewards and the actual situation of parents, the author divided the rewards into three levels, and gave certain rewards to students according to their scores.

Table 2: Specific reward rules for intervention

| Scores                                                 | Reward situation                         |
|--------------------------------------------------------|------------------------------------------|
| The total score of three months is less than 50 points | Get 20 days of English and math tutoring |
| The three-month total score ranged from 51 to 75       | Get a Harry Potter book                  |
| The three-month total score ranged from 76 to 110      | Get a Harry Potter book and summer camp  |

#### 4.3.3. Specific implementation situation

The intervention was conducted in three phases, each lasting one month. The first and second stages were mainly completed in class. The author and other teachers recorded CAI's classroom behavior and scored her after class according to the table of targets and objectives. In the third stage, in addition to the teachers' classroom records, parents also need to score points, and feedback the score to the author every week, and finally the author unified summary.

#### 4.3.4. Intervention outcome and analysis

After three months of intervention, the score of the student was:  $12+30.8+35.2=78$ , which allowed him to obtain the Harry Potter books and summer camp. The intervention process was basically completed, which also met the expectations of teachers and parents. During the intervention, it is obvious that the initial stage is the most difficult, which is a great test of the students' patience. In the second and third stages, the student has formed the habit of sitting on a stool to listen to the lecture. The correct rate of answers when the teacher asks questions is higher and higher, and the student realizes the feeling of learning success and the teacher's importance. In the following learning, parents and teachers need to continue to supervise him, encourage and remind him from time to time, until his behavior forms a habit,

because primary school students have no autonomy, and need to consolidate the effect of external intervention.

*Table 3: Implementation process and record of intervention*

| Time                   | Implementation                                                                                                                                                                                                                                                  | Scores            | Others                                                                                                                                             |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| From April to May 2019 | For about 12 days, he could sit on a stool and not talk to his classmates. The rest of the time, teachers need to give eye warning.                                                                                                                             | $12 * 1 = 12$     | After the end of the first stage, the author talked with the student and gave words of encouragement.                                              |
| From May to June 2019  | For three weeks, he could sit on the stool and listen attentively, but he would not raise his hand to answer questions. He would only answer when asked by the teacher. The answers were basically correct, and his handwriting was much more neat than before. | $44 * 0.7 = 30.8$ | He basically completed 70%, although did not take the initiative to raise his hand to answer the question, but the answer rate is relatively high. |
| From June to July 2019 | He can sit on the stool every day. He does not talk to other students in class. His handwriting is much more neat.                                                                                                                                              | $44 * 0.8 = 35.2$ | According to parents, students are now highly motivated to finish their homework, and more lively and polite than before.                          |

Six of the 10 students had the best intervention effect, and the total score of the three months was higher than 76. They also showed obvious positive behaviors in class, such as the frequency of talking in class decreased significantly, the frequency of raising hands to answer questions increased, and according to the reaction of parents, the children had formed the habit of doing homework actively after going home. The scores of the other four students in the three months were between 50 and 70 points, and the problem behaviors decreased significantly. According to the reactions of the classmates, these students became more cheerful.

## 5. Suggestions

### 5.1. Recommendations for implementation of positive reinforcement

If the student is not willing to cooperate, the intervention is useless. Before the intervention, the most important thing is that the students with problem behavior should be aware of their own problems and be willing to cooperate with the teacher to complete the task and solve their problems. For students to stick with the intervention program, there must be appropriate incentives. Primary and secondary school students lack self-control, so the use of incentives can improve the effect of intervention. Teachers can consult with parents to determine the most desired thing of students as the reward after the completion of intervention, so as to urge students to adhere to the teacher's intervention on their behavior and motivate them to complete the goal.

The positive reinforcement process is not all smooth, during which many problems will be encountered, teachers need to find out in time and solve them with a positive attitude. When students are found to be depressed and sometimes unable to complete the contents stipulated in the plan, they should be encouraged in time and should not be criticized in a blaming tone. This will not only fail to complete the goal, but also cause psychological damage to students. When the student COMPLETES THE goal SMOOTHLY, MUST according TO THE REWARD table EXCHANGE reward, must not prevaricate with various reasons, otherwise will lose the trust between the student and the parent and the teacher, finally after the intervention completes, still need to continue to SUPERVISE the student, until the student forms the good behavior habit.

### **5.2. Suggestions on classroom management for teachers**

As a means of classroom management, punishment goes hand in hand with education. It is usually manifested as verbal attack, corporal punishment, punishment for copying homework, etc. Punishment can immediately complete the correction of problem behaviors at that time, but the correction effect is short, and it will also bring worse damage to people's spirit. The famous educational thinker John Locke believed that rewards must be more effective than beating and scolding.<sup>[3]</sup> When teachers face students' problematic behaviors, punishment should not be the preferred way to correct them. Presenting facts and reasoning, story therapy and positive reinforcement intervention are more conducive to the correction of problematic behaviors, the shaping of students' good behaviors and the formation of a harmonious relationship between teachers and students. Teachers must not use criticism and punishment in front of the whole class. Teachers can give eye warning in class, timely communication after class and intervention to problem behaviors.

Besides being the disseminators of knowledge, teachers should also be the guardians of students' healthy minds. When students have classroom problem behaviors, they may be unconscious and uncontrollable. Teachers need to find out the causes of the problems and help them. They should face the students with trust, encouragement, love and affirmation. Classroom problem behavior can reflect psychological problems, the teacher found the problem after the timely use of class meeting or extracurricular activities, proper psychological counseling on the class, channel mode should be adopted to tell stories and pictures, multimedia animation and other public way, avoid using psychological sensitive individual students and specific way of case analysis.

## **6. Conclusions**

As a way to deal with problem behavior opposite to criticism and punishment, positive reinforcement method solves problems in a friendly and respectful way, which not only arouses students' learning enthusiasm, protects students' psychological sunshine and healthy development, but also enhances the relationship between teachers and students. At the same time, it has obvious effect on correcting problem behavior. However, it also has some disadvantages: the implementation of positive reinforcement may require the help of other teachers to monitor students' performance in class, which will increase the burden of other teachers. Parents may not be able to deliver the reinforcement students want, which may affect the effectiveness of the intervention. There are still many unsolved problems in positive intervention, which need to be explored and solved by colleagues together.

## **References**

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