Research on Children's Autonomous Learning Behavior in Performance Area---Taking H Kindergarten in Changsha as an Example

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Abstract. Respect and protect children's curiosity and interest in learning, help children gradually develop proactive learning quality, let children become the protagonists of their own learning, develop good thinking habits and study habits, and improve the ability of independent learning are the general trend\textsuperscript{[1]}. In the performance area, young children creatively express their understanding of life and art works by playing the role of literary and artistic works. They can develop the imagination and creativity of young children, and the satisfaction and pride they receive in stage performances are great temptation for young children. Through the coding and statistics of children's independent learning behaviors in the performance area activities, This paper that mainly adopts the observation method deeply analyzes and discusses the reality of children's independent learning behavior in kindergarten performance area activities, summarizes the characteristics of children's autonomous learning behavior, analyzes the influencing factors, and puts forward suggestions on improving children's autonomous learning behavior level: Pay attention to the age characteristics of young children in the behavior, treat children of different age, change teachers' concept of regional activities, and improve teachers' support for performance areas.

1. Introduction
The researcher divided the autonomous learning behaviors of children into three dimensions: observational comparative autonomous learning behavior, operational experiential autonomous learning behavior, and peer-cooperative autonomous learning behavior\textsuperscript{[2,3,4]}. The researcher divided the autonomous learning behavior of children's observation and comparison into 17 autonomy including four aspects: watching people, and asking people. In the operational experiential autonomous learning behavior, it is divided into the behavior of the operating material and the physical experience of the child according to the different materials of the child's operation. First of all, according to the level of the operating materials, it can be divided into five activities, mainly including exploration materials, modified materials and design materials. In addition, according to their own physical experience, it can be divided into five behaviors, including three aspects: making a sound, making an action, and adding a sound. In the peer-cooperative autonomous learning behavior, according to the level of peer cooperation, the children's peer-cooperative autonomous learning behavior is divided into invitation, negotiation, discussion, suggestion, conscious cooperation, reminder, judgment evaluation, explanation and guidance. There are 16 acts in all aspects. Based on this, the researcher compiled "Observation variables of children's independent learning behavior in performance area activities". Using this observation scale as a tool to collect research data through observation.
2. Participants and Data Collection

H kindergarten was selected as the research object. Six classes were randomly selected from the 12 classes of the kindergarten, and two classes were selected for each age group. In each of the six classes selected, one teacher is selected, and a total of six teachers are included. The subjects of this study were children from the six classes who participated in the performance area.

The researcher conducted six observations of the performance area activities under the guidance of each teacher, and collected 36 performance area activities. The self-made "Performance Table of Children's autonomous learning Behavior in Performance Area Activities" was used to record, encode and count 36 teaching videos. For behaviors that are difficult to identify or simulate with eyes, they are confirmed by an informal interview. Statistical analysis was performed on all data collected using spss20.0. In order to eliminate the interference of the subjective factors of the researchers on the data collation and analysis, and to ensure the scientificity and objectivity of the research data, the researcher invited two graduate students (after training by the researcher) to jointly observe the records and make the statistics consistent. The reliability test showed that the reliability of the observation table was 0.789.

3. Results

From the overall situation, children's autonomous learning behaviors are solidified and low. In the 36 performance area activities, 34 activities were mainly based on the theme of "song and dance performance", accounting for 94.44%, while the theme of “story performance” was only 5.56%. Children and teachers subconsciously use the performance area as a place for singing and dancing performances. Under the influence of the fixed performance area, the children's autonomous learning behavior gradually solidified, and the behavior types were concentrated and single. It can be seen that there are 13.28 children's autonomous learning behaviors in an average performance area. The average autonomous study behavior is 16.50 seconds, and the average participant participates is 2.15 children's autonomous learning behaviors. The time for autonomous learning is 219.12 seconds. The autonomous learning behavior of young children lasts for a very short time.

Observational comparative autonomous learning behavior is mainly to watch peers for singing and dancing performances. In the observational comparative autonomous learning behavior, the children “Watching companions to do a cabaret show” appeared 101 times, accounting for 78.3%. Analyzing this behavior in depth, the researcher found that the number of children who saw “singing with their peers” was the highest, 67 times, accounting for 66.34%. Among them, watching the companion singing was mainly to watch the companion solo, 50 times, accounting for 74.63%.

Operational experiential autonomous learning behavior is dominated by singing and jumping, and the influence of material is large. In the operational experiential autonomous behavior, the number of occurrences of children's singing and dancing are 67 and 18, accounting for 39.64%, 10.65%, and the total number is more than half. Due to the insufficient quantity and single type of materials in the performance area, the children's “exploration materials use method” accounted for 10.65%, ranking second in 11 behaviors. The frequency of “dressing” materials is 1716, accounting for 81.79%. This indicates that the materials placed in the performance area have a greater impact on children's autonomous learning behavior, and the role of materials should be emphasized.

In the peer-cooperative autonomous learning behavior, the guidance model is high and the life experience has a great influence. In the peer-cooperative autonomous learning behavior, the behavior of young children is relatively balanced. The behavior of “Provide support, guidance and demonstration” appears 37 times, accounting for 20.56%, and the number is relatively high. In addition, the frequency of “Discuss new storylines with peers” appeared relatively high, 32 times, accounting for 17.78%. Further analysis of this behavior, the behavior of creating life story has appeared 30 times, accounting for 93.75%. This shows that the experience of daily life is an important source of children’s story creation. This also reflects the important impact of life experience on peer-cooperative autonomous learning behavior.

Through comparative analysis, there are differences in children's autonomous learning behaviors in
terms of age, gender, teacher guidance, and time to entry. The level of autonomous learning behavior of children is increasing with age.

Table 1. Comparison of Autonomous Learning Behaviors of Different Age

|                      | X   | Z   | D   | X²  | P       |
|----------------------|-----|-----|-----|-----|---------|
| Observation comparison|     |     |     |     |         |
| N                    | 46  | 45  | 38  | .884| 0.643   |
| P                    | 47.92| 30.00|16.38|22.450|0.001   |
| Operational experience|     |     |     |     |         |
| N                    | 39.58| 30.67| 85  |22.450|0.001   |
| P                    | 36.45| 32.37| 36.64|87.433|0.001   |
| Peer-cooperative     |     |     |     |     |         |
| N                    | 12  | 59  | 109 |78.433|0.001   |
| P                    | 12.50| 39.33|46.98|48.98 |0.001   |

In this study, the researcher selected the large class (D), middle class (Z), and small class (X) of the H kindergarten as observation objects. There are 232 autonomous learning behaviors in D children, 150 autonomous learning behaviors in Z children, and 96 autonomous learning behaviors in X children. And Children of different ages have extremely significant differences in operational experiential autonomous behavior (P=0.001<0.01) and peer-cooperative autonomous behavior (P = 0.001 < 0.05).

Table 2. Comparison of Autonomous Learning Behaviors of Different Gender

|                      | B   | G   | X²  | P       |
|----------------------|-----|-----|-----|---------|
| Observation comparison|     |     |     |         |
| N                    | 13  | 116 |82.240|0.001   |
| P                    | 18.84|28.36|     |         |
| Operational experience|     |     |     |         |
| N                    | 35  | 134 |57.994|0.001   |
| P                    | 50.72|32.76|     |         |
| Peer-cooperative     |     |     |     |         |
| N                    | 21  | 159 |105.800|0.001  |
| P                    | 31.44|38.88|     |         |
| T                    | 69  | 409 |     |         |

There are obvious gender differences in children's autonomous learning behavior, and the level of female children is high. According to Table 2, it can be seen from SPSS that the P-values of the three behaviors are both 0.001 and less than 0.01. There are extremely significant differences. In terms of the overall number, there are 409 autonomous learning behaviors for female children, and 69 spontaneous autonomous behaviors for male children. Female children are higher than male children. In addition, in the three types of children's autonomous learning behavior, female children are higher than male children.

The level of autonomous learning behavior of young children increases with the improvement of the rank of teachers. Through the comparison of children's autonomous learning behavior under the guidance of teachers of different ranks (Novice-N, Development-D, Mature-M), there were significant differences in the three types of autonomous learning behaviors under the guidance of teachers of different ranks (P <0.05). The level of operational experiential autonomous behavior (39, 45, 85) and peer-cooperative autonomous behavior (34,37,109) increases with the improvement of the teacher's rank.

Table 3. Comparison of Children’s autonomous learning behavior under the guidance of teachers of different ranks

|                      | N     | D     | M     | X²   | P       |
|----------------------|-------|-------|-------|------|---------|
| Observation comparison|       |       |       |      |         |
| N                    | 34    | 57    | 38    | 7.023|0.030   |
| P                    | 31.78 | 41.01 |16.38  |      |         |
| Operational experience|       |       |       |      |         |
| N                    | 39    | 45    | 85    |22.201|0.001   |
| P                    | 36.45 |32.37  |36.64  |      |         |
| Peer-cooperative     |       |       |       |      |         |
| N                    | 34    | 37    | 109   |60.100|0.001   |
| P                    | 31.78 |26.62  |46.98  |      |         |
The autonomous learning behavior of children reaches a peak in the 5-15 minutes after entering the area, and then gradually decreases with time. It can be seen from Fig.1 that the children's interest in the performance area becomes thicker in 0-5 minutes of entering the area, and reaches a peak in the entrance area 5-15 minutes. Then, as time goes by, the interest of the young child gradually weakens and the behavior gradually decreases.

![Graph showing trends of children's autonomous learning behavior in different time zones](image)

Figure 1. Trends of children's autonomous learning behavior in different time zones

4. Conclusion
First, we need to Pay attention to the age characteristics of young children in autonomous learning, and treat them differently. Then, we need transform the concept of teachers. Moreover, improve teachers' support for performance area activities. Finally, seize the timing of education to support the improvement of children's experience.

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Authors' background

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