



# An observational study of children's approaches to learning in role-playing games in the middle class

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**Abstract.** In recent years, approaches to learning have garnered increasing attention from the educational community. Concurrently, The preschool years are a critical period for the development of learning aptitudes in young children. Role-playing games, popular among this demographic, serve as a method to foster these learning approaches due to their voluntary nature, diversity, and enjoyment factor. Therefore, this study explored the connotations and connections between role-playing games and approaches to learning, and uses observation, measurement and interview methods to investigate the quantitative analysis of the eight dimensions of approaches to learning, which included observational records of children's behavior and teacher interviews. The findings reveal significant variances in persistence and concentration among middle-class children of different genders, and there are significant differences in independence between only children and non-only children. Moreover, the study found that approaches to learning in role-playing games of the children in the middle-class is mainly influenced by the children themselves, teachers' guidance, materials and the environment. It was found that the quality of learning in the role-play of the children in the middle class is mainly influenced by the children themselves, teachers' guidance, materials and the creation of the environment. Consequently, recommendations for educational improvements are proposed from the teachers' perspective to enhance the situation.

**Keywords:** Middle-class in Kindergarten, Approaches to Learning, Role-playing.

## 1 Introduction

### 1.1 Research Background

In recent years, Approaches to Learning (ATL) has gradually become an emerging topic that has attracted attention in China. Following the early 1990s, when the U.S. National Education Goals Panel (NEGP) initially emphasized the significance of approaches to learning, China issued the “Guidelines for the Learning and Development of Children Aged 3-6” in 2012, which states that the importance of learning quality should be emphasized, and points out that " It is short-sighted and harmful to neglect

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the cultivation of learning quality in young children and purely pursue the learning of knowledge and skills."

From the perspective of sustainable development, approaches to learning hold considerable significance for children's development. Sound approaches to learning not only plays a pivotal role in school readiness but also in fostering children's progress in sharing, cooperation, and coordination. Concurrently, it contributes to positive peer relationships, thereby facilitating children's interpersonal growth. In Addition, children with superior approaches to learning generally achieve higher academic success.

Role-playing games have significant value for children's development. Games serve as one of the most crucial methods of learning for young children, and China's "Kindergarten Work Regulations" adhere to the principle of "using games as the basic activity." Several researchers have demonstrated a significant correlation between games and improved scores on standardized intelligence tests<sup>1</sup>. Games is an extension of life, providing children with an abundance of materials and scenarios to enhance their experiences and understand the world.

However, there is a research gap on the relationship between role-playing games and approaches to learning among preschool children from middle-class backgrounds. Most of the existing studies on games and approaches to learning primarily concentrates on constructive games or general play contexts. Furthermore, the middle-grade stage is a period of rapid physical and cognitive development, during this time, the children become more active in role-playing and their approaches to learning undergoes rapid advancement. Therefore, this research aims to explore the manifestation and influence of approaches to learning in role-playing games among middle-class preschool children.

## 1.2 Research on Role-Playing Games

### The Concept of Role-Playing.

The perspectives of role-playing games held by Chinese and Western scholars demonstrate notable differences. Chinese scholars propose that role-playing that role-playing games are a format wherein children employ various materials to emulate and conceptualize diverse character roles through playing actions, expressions and events, serving as a creative reflection of their immediate environment. This type of play satisfies children's desires for imitation, imagination, and psychological satisfaction related to adult roles. In contrast, Western preschool education sector, based on Piaget's cognitive development theory, classifies children's play into functional play, symbolic play, and rule-based play. Role-playing games fall within the purview of symbolic play, where children use "pretend" to "Symbolize" things not present before them based on their real experiences and emotions. This definition foregrounds "symbolism" as a prominent characteristic of role-playing.

In conclusion, Chinese scholars attach importance to 'role-playing' and experiential aspects associated with it, whereas Western scholars place greater emphasis on the representational nature of thinking in role-playing.

### **Relationship between Role-Playing Games and Child Development.**

Matsuk (2017) proposed that role-playing games foster children's social development, facilitating the experiential understanding of social roles and emotions, fostering an appreciation for rules, and subsequently cultivating social interaction skills<sup>2</sup>. A study conducted by Harvard researchers in 2014 revealed that children between the ages of 3 to 5 could expedite the enhancement of executive and self-control skills through extensive engagement in role-imaginative play<sup>3</sup>. Gabriel and Elaine(2009) discovered that children involved in pretend play exhibited superior narrative skills compared to their non-participating counterparts, thereby underscoring the importance of 'participation' in the development of children's narrative abilities<sup>4</sup>. Engel et al.(1995) underscored that children in the phase of rapid language development can utilize role-playing to unconsciously refine their language skills<sup>5</sup>.

In conclusion, role-playing games are intricately linked to the development of young children's sociability, cognitive level, and language abilities.

### **1.3 Research on approaches to learning(ATL)**

#### **Content of ATL.**

Up to this point, a consensus has yet to be reached by scholars regarding the categorization of ATL content. Kagan et al. (1995) suggested that ATL is a general term encompassing learning attitudes, tendencies, styles, and habits<sup>6</sup>. Fantuzzo et al. (2000) regarded ATL as primarily consisting of attention, persistence, flexibility, and compliance<sup>7</sup>. In 2015, The U.S. "Ready to Learn" initiative defined ATL with four dimensions included in preschoolers' learning standards: emotional and behavioral regulation, self-awareness and self-regulation, initiative and curiosity, and creativity. Feng Xiaoxia et al. (2010) proposed that ATL encompasses eight elements: initiative demonstrated during activities, persistence in the goals of activity goals, resistance to frustration, imagination and creativity, concentration during activities, curiosity, and independence<sup>8</sup>.

To sum up, although there is no consensus among scholars on a unified conclusion on the content of ATL, the core elements of ATL, such as focus, reflection, imagination, and creativity, are consistently emphasized.

#### **Factors Influencing and Cultivating ATL.**

In terms of individual factors, Sander et al. (2013) discovered significant gender differences in various dimensions of ATL<sup>9</sup>. In addition, Bell et al. (2013) demonstrated that younger children developed ATL and socio-emotional skills a more accelerated pace than the older children<sup>10</sup>.

Regarding family factors, Mistry et al. (2008) concluded that elevated parental literacy levels were associated with higher ATL scores in children<sup>11</sup>. Yeung et al. (2014) determined that family exerted influenced children's ATL through educational investments<sup>12</sup>. Feng Lina (2021) concluded that higher family socio-economic status corresponded to better performance in children's ATL<sup>13</sup>.

On the social side, Swanson (2011) pointed out that teachers' effortful control favored children's ATL. McClelland et al. (2014) discovered that children from high-risk

and deprived backgrounds were more likely to exhibit poor ATL compared to their non-impooverished peers<sup>14</sup>.

In conclusion, ATL is influenced by factors such as individual characteristics, family environment, and society factors.

#### 1.4 Research on the Relationship Between Games and Children's ATL

Researchers have increasingly focused on the impact of constructive play or overall play on ATL. However, there is a gap of discussion on role-playing games specifically concerning their relationship with children's ATL.

In summary, while there is an abundance of mature concepts and contents in the research on role-playing and learning quality, there are fewer discussions on the relationship between role-playing and young children's ATL, especially the lack of observation of middle-class children. This study aims to empirically and theoretically analyze the overall and dimensional levels of ATL in role-playing games for children in the middle class, exploring influencing factors, and put forward targeted educational reference for parents and teachers.

## 2 Methodology

### 2.1 Population and Sample

This study used convenience sampling to select 193 middle-class (4-5 years old) preschoolers who were actively involved in role-playing in two provincial kindergartens in Hangzhou and Ningbo, China. The final number of participants who provided valid data was 63. This group included 33 boys (52%) and 30 girls (48%), with 31 being only children and 32 non-only children.

### 2.2 Research Design

This study used a mixed research method. Firstly, a comprehensive review of pertinent domestic and international literature was undertaken to establish a foundation for investigating the relationship between role-playing and Approaches to Learning (ATL). Secondly, on-site observations and questionnaire assessments distribution were conducted at the research site to encode and analyze the collected data from observations and questionnaire responses. Based on the results, an assessment was performed to examine the performance of preschool children in role-playing games in relation to ATL (Approaches to Learning). In addition, the researcher conducted Informal interviews with teachers, which were combined with observations and questionnaire results for a deeper understanding. Lastly, a thorough analysis of factors was analyzed, leading to the targeted educational strategies.

**Observation Method.** This study utilized an educational observation methodology at selected kindergartens in Hangzhou and Ningbo, China through audio-visual means. The

selected video recordings of role-playing were at least fifteen minutes, enabling clear observation of the children's language use and actions. The observational data were collected twice for each child to ensure a relatively accurate descriptions of ATL.

**Instruments of the Study.** The quantitative research method used in this study was "Observation and Evaluation Scale for Young Children's ATL " developed by Professor Feng Xiaoxia of Beijing Normal University, which encompasses eight dimensions: initiative, goal consciousness, persistence, resilience, imagination and creativity, concentration, curiosity, and independence. Each dimension has its independent criterion, and a 1-3-5 scale was utilized for assessment. The tool demonstrated excellent expert validity and reliability of over 0.92.

*Analysis Software.* Data was analyzed by SPSS26, employing descriptive statistics and independent sample T-tests to analyze the developmental progress of middle-class preschool children's ATL within the context of role-playing games.

**Interview Method.** Informal interviews were applied as a supplementary approach to the observation method. The researcher interviewed six teachers of middle-class preschoolers observed in the sample. The interviews aimed to gain insights into teachers' understanding of ATL and role-playing games, as well as their viewpoints on ATL development during role-playing games. These interviews aimed to gather information about teachers' guidance, creation of material and the environmental setup, game reflections, and ATL development during children's role-playing.

### 3 Conclusions

#### 3.1 Comprehensive Analysis of Preschool Children's ATL in Middle Class Role-Playing

Table 1 presents the average total score for learning quality among this middle class sample is 3.43, indicative of an intermediate level of ATL . The dimensions, ranked in ascending order based on their scores, are as follows: resilience, imagination and creativity, persistence, independence, concentration, goal consciousness, curiosity and initiative.

Notably, the scores for persistence and independence are equal. Additionally, the standard deviations for all eight dimensions are below 1, signifying a relatively stable and consistent performance in ATL across the participants without significant fluctuations.

**Table 1.** Comprehensive Analysis of Preschool Children's ATL in Middle-Class Role-Playing

	N	Minimum value	Maximum value	Mean	Standard deviation
1.initiative	63	3	5	3.67	.696
2.goal consciousness	63	2	5	3.56	.799
3.persistence	63	2	5	3.43	.979
4.resilience	63	2	5	3.11	.900
5.imagination and creativity	63	2	5	3.27	.677
6.concentration	63	2	4	3.44	.642
7.curiosity	63	2	5	3.57	.893
8.independence	63	2	5	3.43	.797
$\mu$				3.4345	.55579

### 3.2 Gender Differences in ATL Among Middle-Class Preschoolers during Role-Playing Games

This study used independent t-test to analyze the gender differences among middle-class preschoolers on various dimensions. The results, displayed in Table 2, demonstrating that the variable of gender exhibited significant differences in persistence and concentration with T-test achieving the level of significance ( $P < 0.05$ ). This suggests that girls markedly outperformed boys in persistence and concentration, while the remaining dimensions did not attain the level of significance ( $P \geq 0.05$ ).

**Table 2.** Gender Differences in ATL Among Middle-Class Preschoolers during Role-Playing

Dimensions of ATL	gender	N	mean	Standard deviation	T	p
1.initiative	male	33	3.73	.719	.722	.473
	female	30	3.60	.675		
2.goal consciousness	male	33	3.55	.794	-.104	.917
	female	30	3.57	.817		
3.persistence	male	33	3.09	.947	-3.058	.003*
	female	30	3.80	.887		
4.resilience	male	33	3.18	.950	.651	.518
	female	30	3.03	.850		
5.imagination and creativity	male	33	3.42	.663	1.941	.057
	female	30	3.10	.662		
6.concentration	male	33	3.27	.626	-2.302	.025*
	female	30	3.63	.615		
7.curiosity	male	33	3.64	.859	.602	.549
	female	30	3.50	.938		
8.independence	male	33	3.36	.783	-.675	.502
	female	30	3.50	.820		

\* $P < 0.05$

### 3.3 Differences in ATL Among Middle-Class Preschoolers During Role-Playing Based on Sibling Status

Table 3 reveals that there is a significant difference in the dimension of independence ( $P < 0.05$ ), which is manifested that non-only children exhibit superior independence compared to only children. Nevertheless, there is no statistically significant difference in all other dimensions. ( $P \geq 0.05$ ).

**Table 3.** Differences in ATL Among Middle-Class Preschooler Children During Role-Playing Based on Sibling Status

Dimensions of ATL	Sibling Status	N	Mean	Standard deviation	T	p
1. initiative	Only child	31	3.68	.653	.120	.905
	Non-only	32	3.66	.745		
2. goal consciousness	Only child	31	3.39	.844	-1.671	.100
	Non-only	32	3.72	.729		
3. persistence	Only child	31	3.35	1.018	-.585	.561
	Non-only	32	3.50	.950		
4. resilience	Only child	31	3.10	.870	-.123	.902
	Non-only	32	3.13	.942		
5. imagination and creativity	Only child	31	3.39	.715	1.362	.178
	Non-only	32	3.16	.628		
6. concentration	Only child	31	3.45	.568	-.087	.931
	Non-only	32	3.44	.716		
7. curiosity	Only child	31	3.52	.926	.481	.632
	Non-only	32	3.63	.871		
8. independence	Only child	31	3.19	.833	-2.338	.020*
	Non-only	32	3.66	.701		

\* $P < 0.05$

### 3.4 Sub-dimensional Performance of ATL Among Middle-Class Preschooler Children During Role-Playing

**Initiative.** In this study, the initiative was assessed by evaluating the willingness to participate in role-playing. Table 4 presents the frequency distribution of the children's initiative. It can be observed that the mean score for initiative in role-playing games among middle-class preschoolers is 3.67, indicating a marginally above-average level. The majority of children earned a score of 3 points, encompassing 29 individuals, accounting for 46% of the total sample. It is judged that the children have a certain level of willingness to participate in role-playing games.

**Table 4.** Initiative

	Score	Frequency	Percentage	Mean
Effective	3	29	46.0	
	4	26	41.3	
	5	8	12.7	
	Total	63	100.0	3.67

**Consciousness of Goal.** This study assessed goal awareness based on how well the children understand and consistently remember the goals of the activity. Table 5 presents the frequency distribution of children's goal awareness. The average score is 3.56, indicating a moderate level. The majority of children scored 4 points, totaling 29 individuals, accounting for 46% of the total. This suggests that while children may occasionally deviate from the objectives, they consistently remember the goal and exert effort.

**Table 5.** Goal Orientation

	Score	Frequency	Percentage	Mean
Effective	2	6	9.5	
	3	22	34.9	
	4	29	46.0	
	5	6	9.5	
	Total	63	100.0	56

**perseverance.** This study assessed persistence based on whether the children maintained focus and completed the necessary tasks during role-playing. Table 6 presents the frequency distribution of children's perseverance. It can be observed that the average score for perseverance is 3.43, indicating a moderate level. The majority of children scored 4 points, totaling 25 individuals, accounting for 39.7% of the total sample. It is judged that the children are generally capable of persisting in the role-playing process, even while intermittently engaging in activities unrelated to the game.

**Table 6.** Persistence

	Score	Frequency	Percentage	Mean
Effective	2	14	22.2	
	3	16	25.4	
	4	25	39.7	
	5	8	12.7	
	Total	63	100.0	3.43

**Concentration.** In this study, the level of concentration served as an indicator of the children's focus during role-playing, as well as their propensity for distraction.. Table



7 presents the frequency distribution of children's Concentration. The average score for Concentration is 3.44, indicating a moderate level. The majority of children scored 4 points, totaling 33 individuals, accounting for 52.4% of the total. It is inferred that while children may encounter difficulties in maintaining concentration during role-play, they typically return to the task without needing reminders.

**Table 7.** concentration

	Score	Frequency	Percentage	Mean
Effective	2	5	7.9	
	3	25	39.7	
	4	33	52.4	
	Total	63	100.0	3.44

**Resilience.** In this study, resilience was reflected in the kids' ability to persevere with the task in role-playing without fear of difficulties related to the game itself. Table 8 presents the frequency distribution of children's resilience. The distribution of children scoring 2, 3, and 4 points is roughly equivalent. It is judged that the children will give up or not be able to carry on with the game when encountering difficulties in the process of role-playing, but they can resume their roles and complete them with the help and prompts of others.

**Table 8.** Resistance to frustration

	Score	Frequency	Percentage	Mean
Effective	2	19	30.2	
	3	21	33.3	
	4	20	31.7	
	5	3	4.8	
	Toal	63	100.0	3.11

**Imagination and Creativity.** In this study, the manifestation of imagination and creativity was gauged by the children's ability to generate multiple solutions to a problem during role-playing. Table 9 presents the frequency distribution of children's imagination and creativity. The mean score for imagination and creativity is 3.27, indicating an intermediate level. The majority of children scored 3 points, accounting for 52.4% of the total. This suggests that children demonstrate a certain level of creativity and imagination in performing role-playing.

**Table 9.** Imagination and Creativity

	Score	Frequency	Percentage	Mean
Effective	2	7	11.1	
	3	33	52.4	
	4	22	34.9	
	5	1	1.6	
	Total	63	100.0	3.27

**Curiosity.** In this study, curiosity is demonstrated by the enthusiasm and interest exhibited by children in exploring various people, events, and natural elements in the role-playing. Table 10 presents the frequency distribution of children's curiosity. The largest number of children scored 3 and 4 points were 23 respectively, which accounted for a total of 73%. This suggests that children display a general level of curiosity and desire for exploration during role-playing.

**Table 10.** Curiosity

	Score	Frequency	Percentage	Mean
Effective	2	7	11.1	
	3	23	36.5	
	4	23	36.5	
	5	10	15.9	
	Total	63	100.0	3.57

**Independence.** In this study, independence was reflected in the degree of dependence on researchers and peers during role-playing among the children. Table 11 presents the frequency distribution of children's independence. The mean score for independence among the children during role-playing is 3.43, indicating a mean level. The majority of children scored 3 points, accounting for 42.9% of the total. This suggests that while children display a degree of independence during role-playing, they still require some level of engagement from their peers and teachers to sustain the activity

**Table 11.** Independence

	Score	Frequency	Percentage	Mean
Effective	2	7	11.1	
	3	27	42.9	
	4	24	38.1	
	5	5	7.9	
	Total	63	100.0	3.43

### 3.5 Factors Influencing Children's ATL in Middle-Class Role-Playing

#### Teacher level.

*Teachers' incomplete knowledge of ATL.* Teachers' emphasis on ATL and the method of cultivating it can be influenced by their personal subjective experiences. This study has determined that teachers' comprehension of ATL is relatively superficial. As Teacher 4 articulated, "Approaches to learning is a kind of behavioral habit, such as having good listening skills and thinking habits." Teacher 5 said, "Perhaps it involves children's attitudes towards tasks and their abilities. There exist learning habits, such as rule adherence." Teacher 2 believed, "Are not the curiosity and interest exhibited by the children during role-playing representative of ATL?"

From the foregoing, it is apparent that the teachers possess misconceptions about ATL. They tend to perceive ATL as solely involving attitudes and habits, thereby neglecting the comprehensive nature of the construct, including learning attitudes, tendencies, styles, and habits. In addition, teachers did not have a comprehensive understanding of the specific dimensions, thus neglecting the cultivation of imagination, creativity, independence, reflectivity and other dimensions. Some even erroneously included skills such as listening ability and adhering to rules, which is a misunderstanding of the fact that ATL is about "what they acquire" rather than "how children learn".

*Inadequate or Misguided Guidance from Teachers.* Teacher guidance was identified as an important factor in helping students to learn<sup>15</sup>. However, through observation, it was discerned that numerous teachers failed to offer efficacious guidance to students during game play, as illustrated below:

**Insufficient guidance:** In response to the query on the provision of guidance during role-playing, Teacher 2 said "We seldom interfere with children's play nowadays, Our obligation is to restore autonomy in play to the children , all I have to do is to provide the children with suitable materials. The children will come to us for help when they encounter problems." Teacher 1 said, "Our primary aim is to avoid children making a fuss or chasing after them like that so that they don't get hurt." we found that teachers are influenced by the idea of "free play" and are hesitant to intervene in children's play for fear of affecting the children's freedom of play. This has led to a low level of guidance. Their attention remains on the routine of children's role-playing, such as ensuring children's safety and good classroom discipline.

**Inappropriate intervention:** The temporal context and the modality of the teacher's intervention bear significant impacts on the outcome of the children's play. Premature intervention may inhibit children independent thinking, culminating in their mechanical adherence to the teacher's ideation, thereby curtailing the children's initiative,creativity, independent thinking. Conversely, delayed intervention could render the children unable to participate in the play, possibly resulting in abandonment of the game midway or passive waiting, which in turn impedes the development of perseverance, concentration and awareness of the goal.

Inappropriate intervention also means that the teacher intervenes in a rigid manner, acting as an 'outsider'. The children and the teacher are simply in a submissive relationship, limiting children's critical thinking and transforming their games into mere extensions of the teacher's predetermined activities. Therefore The children cannot experience the pleasure of playing and their exploratory behaviors are restrained.

*Absence of teacher's evaluation.* Young children cannot reach the educational goal only by spontaneous practice in play, and teacher evaluation is one of the means to realize the educational meaning. However, it was observed that most of the time after role-playing, teachers did not evaluate the process and behavior of the children's play, nor did they allow the children to engage in reflection sessions, such as sharing and discussion, but focused on hurriedly tidying up classroom and washing up. Even if there was a summary, it was dominated by teachers general and full of authority. There were two types in most time, one was the teacher's evaluation of the play routine, which was

expressed by the teacher saying "The children in the barracks were very noisy and behaved badly today." "After today's activity, the children in the kitchen did not put back the vegetables and fruits they took out, so they should be criticized."

Another kind of expression is the teacher's general evaluation of children's performance, for example, the teacher directly evaluates that "XXX behaved very well today" and "All the children in group XX performed exceptionally well today". However, a more comprehensive assessment of children's role-playing games should prioritize the evaluation of the process, rather than being solely outcome-focused.

### **Children's factor.**

*Age.* Children in the middle class scored the lowest in resilience but the highest in curiosity and initiative. This trend might be attributed to their well-developed large muscle groups and fine movements, which facilitates active engagement in games. Additionally, children are willing to participate in role-playing games as it provides an excellent platform for them to demonstrate initiative and self-worth.

However, when confronted with conflicts, their limited cognitive processing and experiential knowledge inhibit their ability to effectively solve issues, leading to exacerbation of conflict or giving up the game, thereby reducing their resilience capacity.

*Gender and whether they were born alone.* In this study, girls outperform boys significantly in persistence and concentration dimensions. This discrepancy may be attributed to gender differences in rule education during the preschool stage, where girls tend to be more obedient, which is consistent with the explanation that girls are subject to more constraints under the socialization perspective<sup>16</sup>.

Moreover, non-only children demonstrate a higher level of independence compared to only children. This is because non-only children receive less attention from their elders and have more opportunities to help others and independently solve problems. Additionally, the attachment formed with siblings in families with multiple children contribute to a secure internal psychological mechanism, enabling them to approach circumstances with enhanced confidence in their ability to navigate the external world. As a result, non-only children tend to display more independence.

*Individual differences of toddlers.* Early Experiences: Lack of experience related to specific themes and roles may lead to children's role performances being simplistic, remaining at the operational and repetitive level rather than exploring complex games. As Teacher 6 mentioned, when constructing a restaurant scenario, some children might prefer adopting the role of chefs, to cut the food and to make things, rather than taking orders or being servants. This preference could be due to a lack of relevant experiences in ordering or serving guests.

Lack of familiarity with the play materials and manipulatives could pose a challenge for children. Even though the children might explore to a certain extent, they might encounter difficulties in play, potentially leading to a loss of concentration and patience, and prompting a transition to more familiar forms of play. This shows that experience is the basis of play and can also improve the quality of the process.

**Personality:** The individual personalities of children can influence their preferences in games and subsequently, their performance within those games. Compelling children who are introverted to take on roles that require public speaking may make them feel uncomfortable or even resistant. Similarly, asking outgoing children to play silent and reserved roles can also result in feelings of unnatural.

### **Environment and materials.**

*Environment Creation.* The process of environment creation encompasses both the physical and psychological aspects. Currently, teachers are the primary creators of the environment. While environment solely created by teachers may be more efficient, this approach can result in children becoming unfamiliar with the game scenario, diminishing the valuable impact of the environment. Nonetheless, some teachers are aware of the importance of a connection between environment creation and children. As expressed by Teacher 5, "Our environment should mirror reality, resembling places such as a supermarket or a store that children have visited in their everyday life, and they are encouraged to use their imagination and come up with names themselves." This indicates that teachers recognize the need for children to engage in the environment preparation, but practical implementation remains limited.

Through observation, it was also obvious that teachers were prone to overemphasize discipline and interrupting forcefully during the game. Furthermore, teachers would emphasize specific disciplinary rules before the game, such as refraining from shouting or running to other areas to get materials. These actions restrict children from communicating and expressing themselves freely, impeding the progress of their game.

*Material Placement.* The type, quantity, structure, and arrangement of materials in the game all have an impact on children's autonomous behavior. Within the observed sample group, issues primarily arose from insufficient number of materials and over-structuring of materials. Children in the middle class often display strong pro-activity and prefer roles that provide more performance opportunities. For instance, multiple children may express a desire to play roles like bubble tea makers, chefs, or doctors, but teachers usually prepare only one or two sets of materials for these roles. This can lead to conflicts over the limited resources or passive assignments of roles that they are not interested in, thus impeding the natural progression of the game.

Moreover, excessively structured materials can limit children's active thinking during the game, while those under-structured may place high demands on children's abilities. Consequently, teachers need to carefully take into account the realistic materials and low structuring requirements to enhance the quality of children's play.

### 3.6 Strategies for Promoting the Development of ATL in Kindergarten Role-Playing games

Teachers play a supportive role in role-playing games: preparing materials, environment and experience before the game; careful observation and scientific guidance during the game; timely reflection and evaluation following the game.

**In-depth Understanding of ATL.** As educators, it is essential to acquire theoretical knowledge about ATL through various methodologies. For instance, this can be accomplished through engagement in self-directed learning and participating in academic research activities.

**Respecting Autonomous Ideas of Children.** Each child has unique game motivation and will engage in activities in diverse ways. Teachers should respect, and understand children's feelings and preferences, thereby stimulating their strong initiative and enthusiasm, with the aim of ensuring that children experience both joy and growth within a conducive environment.

**Enriching Children's Early Experiences.** Teachers should seize educational opportunities to guide children, fostering their observational skills and enhancing their comprehension. Game activities can be extended into teaching exercises, or alternatively, children's acquired experiences can be flexibly applied to role-playing scenarios. Additionally, children can augment the richness of the game's content by integrating experiences drawn from diverse domains.

Furthermore, comprehensive experiences can be gleaned from daily life encounters. In the kindergarten setting, teachers can organize activities such as reading sessions and observations. In the realm of home-based education, parents should engage their children in direct perception, practical, and hands-on experiences to accumulate real-life knowledge.

**Emphasizing Environment and Materials.** The environment, often regarded as a "third pedagogue," facilitates children's self-development. Teachers can guide children to participate in environment creation, enhancing their sense of communication with the surroundings<sup>17</sup>. By constructing authentic game scenarios, and stimulating imagination and creativity, teachers grant children the right to choose their game activities, thus fostering a relaxed psychological environment. Self-exploration is the characteristic of role-playing. Teachers should use less discipline and routine to suppress children's role performance and make them feel free. Additionally, Teachers should carefully match game materials. For roles that children demonstrate a preference for, materials can be appropriately increased to avoid conflicts. Conversely, materials that are irrelevant or marginal can be reduced to prevent children from being distracted. Moreover, an equilibrium should be preserved between highly structured materials (with fixed rules and realistic game materials) and low-structured materials (support materials that

children explore on their own). Highly-structured materials incite children's initiatives, whereas low-structured materials challenge their imagination and creativity. Additionally, as children grow, the arrangement of materials should be adapted in accordance with their evolving needs to foster.

**Effective Implementation of Scientific Guidance.** Teachers need to meticulously observe children's interests and needs during the game to accurately choose the appropriate timing and measures for intervention, thus aiding children in their play. To evaluate children's gaming state, teachers should comprehend the essence of the game and have insights into individual children's behaviors. When constrained by time, teachers can employ resources such as observation records, photos, videos, and other means to analyze children's performances and provide more targeted guidance.

One of the characteristics of role-playing games is autonomy and voluntary, and children can imagine themselves as various roles, fulfilling their imaginative aspirations. The multiplicity of roles not only fuels children's interest in play, but also offers valuable reference points for teachers. Consequently, teachers can participate in games as "insiders," using internal language to facilitate games. This necessitates teachers to trust in children's inherent potential, respect their diversities, and communicate with them on an equal footing, thereby enabling children to think and act in a more dynamic and audacious manner.

**Emphasizing Game Evaluation.** The purpose of evaluation is to promote children's development and lay the groundwork for their future growth. During game evaluations, teachers should not exclusively focus on the end result; instead, they should consider various aspects in detail, such as game materials, children's behavior, and developmental progress. *Beside*, children were the primary subjects of evaluation, traditionally. Educators played the role of critics, conducting efficient and objective evaluations while neglecting children's main position and initiative. In the context of the new educational philosophy, children's game evaluations should emphasize their awakening of self-awareness and behavioral optimization. Following role-playing games, children can employ self-evaluation and mutual evaluation in the form of self and collective sharing and discussion. Simultaneously, the teacher can provide supplementary evaluations to augment children's comprehension

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