

Negotiation Behaviors of 4-5-year-old Children in Role Play: Current Status, Influencing Factors, and Educational Implications

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Abstract

Negotiation is central to young children's social competence. Role play is a key context for its emergence. This mixed-methods study examined negotiation among middle-group kindergarten children (ages 4-5 years old) during role play and the factors shaping it. Participants were 30 children (15 boys, 15 girls) from two middle-group classes in an urban Hangzhou kindergarten, China. Five class teachers also participated. Data came from naturalistic observation, semi-structured teacher interviews, and a teacher questionnaire. Descriptive statistics showed same-sex negotiation dominated (80.80%), with girl-girl pairs at 50.00%. Negotiation focused more on opinions than objects (65.40% versus 34.60%) and peaked at game initiation (46.20%). Integrative strategies were most common (46.20%). Overall success reached 72.40%, with compromise (51.20%) exceeding win-win outcomes (21.20%). Questionnaire and interview data showed children often relied on teacher help after failed negotiation (80.00%). Teachers valued peer interaction (80.00%) but rarely designed activities to foster it (10.00%). Findings are discussed in relation to cognitive and social development. Practical implications concern extending negotiation contexts, building tiered teacher support, shifting from direct instruction to guided facilitation, and conducting targeted capability training.

Keywords

Peer negotiation, Role play, Kindergarten children, Social development, Social interaction competence

Introduction

Modern early childhood education policy emphasizes cultivating children's overall social competence. In China, national guidelines encourage teachers to guide children to resolve peer conflicts through negotiation, exchange, turn-taking, and cooperation. This guidance is regarded as an important dimension of children's social development. Internationally, the Communication, Collaboration, Critical Thinking, Creativity, and Character (5C) model of 21st-century core competencies identifies negotiation and mutual benefit as essential to collaboration competence [1].

Peer negotiation is a key dimension of children's social development. It helps children resolve interaction conflicts and cooperate with others. In kindergarten, peer relations are especially important. Negotiation is one of the clearest forms of peer interaction. Early social development is linked to children's well-being and health. Negotiation competence is now a core quality for

children in a rapidly changing era. Therefore, cultivating children's negotiation behavior has practical value for their social development [2].

Role play is a major activity in Chinese kindergartens and is closely related to children's social skills. The Guidelines stress that children learn through direct experience, games, and daily life, and that play has unique value. In role play, children creatively reflect real life by taking roles, imitating, and imagining. It is closer to their daily lives than other play and requires them to shift from a self-centered view to their character's view. Through cooperation and negotiation, they learn to express ideas, listen to others, and understand feelings, which promotes social interaction competence [3].

The Guidelines indicate that middle-group children (ages 4-5 years old) show marked progress in cognition, language, social interaction, and motor skills. They understand simple cause-and-effect relationships,

express themselves more clearly, and show cooperative awareness. They also move with greater coordination. The role play of younger-group children (ages 3-4 years old) tends to be simple and solitary, with little interaction or collaboration. This makes it difficult to observe negotiation behavior deeply and broadly. Older-group children's (ages 5-6 years old) play is more complex, and negotiation behavior is more easily confounded by other factors. The role play of middle-group children is therefore relatively rich and independent. It is well suited to systematic observation, recording, and analysis of negotiation behavior.

Based on policy orientation, theoretical understanding, and practical value, this study focused on children's negotiation behavior in role play among middle-group children. Three research questions guided the study: (1) What are the characteristics of this negotiation behavior in role play? (2) Which main factors influence its occurrence and quality? (3) What targeted educational support strategies can effectively promote children's negotiation competence? The findings are intended to provide kindergarten teachers with targeted guidance strategies. They also offer practical suggestions.

Literature review

Conceptual definitions

Chinese scholars define role play as a game where children imitate and imagine specific roles, reflecting real life. Western scholars stress its pleasure over utilitarian purposes, noting that imaginative situations are projected onto reality. Such play appears in observable behaviors like pretending to sleep and often involves substitute objects. Accordingly, this study defines role play as a process in which children play preferred roles with relevant materials, expressing life experiences through imitation and imagination [4].

Scholars define negotiation as decision making where parties resolve opposed interests. Peers are same-age children in comparable positions whose interaction reflects their ability to participate, express ideas, and coordinate actions. Peer negotiation is a dynamic, strategic communication process in which children exchange information and use strategies around a theme until success or failure. This study defines it as a process where children coordinate resources or viewpoints with

peers to satisfy needs or reach a shared opinion.

Role play: Significance, teacher guidance, and influencing factors

Research documents three major benefits of role play. First, it promotes language development: Children exchange language and viewpoints with peers, and sociodramatic play involves more complex vocabulary and grammar than other play. Second, it promotes motor and action communication skills, especially during ages 2 to 7. During this period, rich play materials improve coordination. Third, it promotes social competence by providing peer interaction. Through this interaction, children learn to handle conflicts, deepen friendships, and treat differing opinions appropriately [5].

Chinese scholars have focused on teachers' guidance strategies in role play. Internal and external guidance complement each other. Teachers should avoid excessive intervention and act as supporters clear about their role before, during, and after the game - as designer, observer, and evaluator respectively [6].

Age shapes role play. Younger children show solitary manipulation and meaningless imitation. Middle-group children engage in simple exchange and cooperate on one role task. Older-group children achieve compound exchange, assign roles, and resolve conflicts. This reflects cognitive staging from egocentric to decentered thinking. Role cognition also constrains play: Knowing only a role's name leads to superficial imitation, while understanding responsibilities generates complete plot chains. Gender differences also appear: Girls prefer prosocial roles and use negotiation and sharing, while boys prefer functional roles and competitive interactions.

Family is the initial source of role play experience. Parenting styles and family atmosphere influence play: Overprotective parenting impairs independence, while democratic families foster autonomy and cooperation. The peer group is the core interaction partner, creating a "group effect"; competent peers expand role behaviors, while unresolved conflicts interrupt the game. Spatial layout and material quality also affect play depth. Crowded areas trigger conflict, while semi-enclosed divisions improve order. High-structure materials suit younger children, while low-structure, explorable materials stimulate older children's imagination.

Encouraging children to collect materials also affects play duration and interaction quality.

Young children's negotiation behavior

Five characteristics of young children's peer negotiation are identified: Negotiation cognition shows age-related features; from the middle group onward, children judge relationships based on negotiation information. Strategies develop from single to multiple with age. Games are the most frequent context; and children shift from unilateral to mutual interests. In mixed-age contexts, negotiation occurs frequently in autonomous games and is generally positive. It is inseparable from the mixed-age educational environment and closely related to theory of mind [7].

Negotiation strategy - the concrete ways in which children convey information, influence others, and achieve goals in peer interaction - is the core component of children's negotiation behavior. Scholars have classified children's negotiation strategies from multiple perspectives.

This study classifies peer negotiation strategies in three ways: by behavioral target (self-oriented, other-oriented, mutual), by valence (positive versus negative), and by core goal (resource acquisition, opinion coordination, conflict resolution). Findings show that older children and girls favor positive, integrative strategies. Younger children and those with weaker language rely more on negative ones like grabbing and crying. Strategy use shifts with age toward mutual benefit, explanation, and compromise. Negotiation produces longer play and fewer conflicts.

Negotiation behavior is driven by subjective and objective factors. Age correlates positively with negotiation competence: From the middle group onward, children can judge implicit meaning in negotiation information. Timely teacher intervention helps children stop conflicts and learn to negotiate. The partner's social status influences strategy choice: Children use two-way strategies like requests and negotiation with higher-status partners, and one-way strategies like commands with lower-status partners. Social culture also influences peer negotiation.

Role play and negotiation behavior

Several studies directly link role play and negotiation. Role play influenced middle-group children's peer

interaction strategies. After intervention, their verbal negotiation improved, with more requests and commands. One study on role play found gender differences among negotiation partners, limited themes, single strategies, and varying outcomes. Another on creative games confirmed these findings.

Critique of the literature and the present study

The literature shows the value of role play and negotiation for children's development, providing a solid theoretical foundation. However, many studies address them separately, and few investigate negotiation within role play, especially for middle-group children. The Guidelines set explicit developmental requirements for this group, and such negotiation is closely related to them. Studying its current status is therefore urgent. This study selected middle-group children to fill this gap and extend practical and theoretical perspectives in early childhood education research [8].

Method

Research aims and questions

This study investigated middle-group children's negotiation behaviors in role play in a Hangzhou kindergarten. It examined these behaviors from child-behavior and teacher perspectives, aiming to enrich role play theory and strategies. It also sought to offer teachers and parents recommendations for cultivating children's negotiation behavior. This promotes social interaction competence and overall development. Three research questions guided the study: (1) What are the characteristics of middle-group children's negotiation behaviors in role play? (2) Which main factors influence their occurrence and quality? (3) What targeted educational support strategies can effectively promote children's negotiation competence?

Participants

One urban kindergarten in Hangzhou, China, was selected as the research site. The kindergarten had three middle-group classes, from which two (Class 1 and Class 2) were randomly selected. Thirty children (15 boys, 15 girls; ages 4-5 years old) were randomly selected from the two classes as participants, and five middle-group teachers were randomly selected for interviews. Table 1 summarizes the children's characteristics, and Table 2 presents the teachers' background information.

Table 1. Demographic characteristics of the child participants (n=30).

Characteristic	Category	n	Percentage (%)
Gender	Boys	15	50.0
	Girls	15	50.0
Age (years old)	4	15	50.0
	5	15	50.0
Residence	Urban	30	100.0

Note: Children were recruited from two middle-group classes (Class 1 and Class 2) of one urban kindergarten. The full child roster is available from the authors on request.

Table 2. Background information of the participating teachers (n=5).

Teacher	Age (years old)	Class	Role	Education	Major	Experience
T1	36	Class 1	Lead teacher	Bachelor's	ECE	≥10 years
T2	29	Class 2	Lead teacher	Bachelor's	ECE	1-3 years
T3	42	Class 3	Lead teacher	Bachelor's	ECE	≥10 years
T4	27	Class 1	Assistant teacher	Bachelor's	ECE	1-3 years
T5	29	Class 2	Assistant teacher	Bachelor's	ECE	4-6 years

Note: ECE=early childhood education.

Instruments

Three instruments were used to collect multidimensional data on children's behavior and teachers' views: an observation record form, a teacher questionnaire, and an interview outline [9].

This study developed three instruments. The first is an Observation Record Form for Peer Negotiation Behavior in Middle-Group Role Play, adapted from an existing scale and covering four dimensions (partner, theme, strategy, outcome). The second is a Teacher Questionnaire on Children's Peer Negotiation Behavior, examining teachers' cognition, judgment, guidance, and views. The third is a Teacher Interview Outline with open-ended questions. The questionnaire showed good reliability (overall Cronbach's $\alpha=0.86$; dimension alphas 0.75-0.82) and validity. Validity was supported by a Kaiser-Meyer-Olkin (KMO) value of 0.81, with three factors explaining 68.50% of variance.

Procedure and data analysis

Before formal observation, the researcher became familiar with teachers, children, and routines, and piloted the observation form. Formal observation used non-participant observation with a semi-structured sheet to record negotiation background, theme, strategy, and outcome in plain language. Observations lasted five days, one hour daily, and were video-recorded with notes. The

two middle-group classes had two role play areas - a dessert shop and a doll house - recorded separately. Thirteen children per class (26 total) were randomly selected for naturalistic observation. The researcher strove to set aside subjective views during transcription. Recorded events were statistically analyzed along four dimensions to reveal negotiation characteristics more comprehensively.

Five middle-group teachers were interviewed. The interviews covered their views on children's negotiation behavior in role play, existing problems, and intervention strategies during disputes. Data were analyzed using thematic analysis. Recordings were transcribed verbatim and anonymized, with names removed. Open coding was conducted with NVivo 12 to extract meaning units. Axial coding followed to group similar codes into initial themes. Selective coding refined core themes. Coding focused on five dimensions: teachers' cognition and attitudes, observed problems, intervention strategies, understanding of the teacher role, and coding consistency. For reliability, a second researcher independently coded 30.00% of transcripts. Cohen's kappa was 0.82, indicating good agreement. Based on coding, teachers' main views, intervention strategies, and influencing factors were summarized. They were interpreted alongside observation and questionnaire data through

triangulation, enhancing credibility and explanatory power.

The teacher questionnaire was distributed to kindergarten teachers to examine their understanding of and attention to children's peer negotiation behavior. It also aimed to provide data support for the study in combination with the observation data. 20.00 questionnaires were distributed and 18.00 valid questionnaires were returned. Of these, 14.00 were completed by classroom teachers and 4.00 by childcare assistants.

Results

Negotiation partners

Negotiation events were first classified by the sex composition of the dyad: same-sex pairs (boy-boy and girl-girl) and opposite-sex pairs (boy-girl). As Table 3 shows, girl-girl negotiations were the most frequent (50.00%), followed by boy-boy negotiations (30.80%) and boy-girl negotiations (19.20%); same-sex negotiations thus accounted for 80.80% of all events. This pattern was consistent across all observed sessions. These results indicate that middle-group children tended to choose same-sex partners when negotiating, with girl-girl dyads being the most common. This preference likely reflects shared interests and familiar play styles.

Table 3. Frequency of negotiation partners.

Negotiation partner	Frequency	Percentage (%)
Boy-boy	10	30.80
Girl-girl	16	50.00
Boy-girl	6	19.20
Total	32	100.00

Negotiation themes

Negotiation themes were divided into opinion-oriented negotiation and object-oriented negotiation. Opinion-oriented negotiation involves discussing and coordinating each other's ideas, opinions, or decisions. Object-oriented negotiation involves negotiating the distribution, use, or ownership of concrete objects such as toys and tools. Table 4 presents the operational definitions of the two themes.

As Table 5 shows, opinion-oriented negotiations accounted for 65.40% of all events and object-oriented negotiations for 34.60%. This distribution suggests that, with cognitive development, middle-group children are able to discuss relatively abstract issues such as game rules. They still negotiate over concrete objects, reflecting the improvement of children's social cognition. However, the specific proportions may be affected by the observation context.

Table 4. Operational definitions of negotiation themes.

Negotiation theme	Operational definition
Opinion-oriented	Children discuss and coordinate each other's ideas, opinions, or decisions during interaction
Object-oriented	Children negotiate the distribution, use, or ownership of concrete objects (e.g., toys, tools)

Table 5. Frequency of negotiation themes.

Negotiation theme	Frequency	Percentage (%)
Opinion-oriented	23	65.40
Object-oriented	12	34.60
Total	35	100.00

Timing of Negotiation

Negotiation events were classified by the phase of the game in which they occurred: game initiation, game process, and game ending. As Table 6 shows, negotiation was most frequent at the game-initiation phase (46.20%), followed by the game-process phase (34.60%) and the game-ending phase (19.20%). The concentration of negotiation at the beginning of the game is likely related to collective coordination needs such as role assignment

and rule establishment.

At the end of the game, negotiation needs were fewer, possibly because the tasks at that stage (for example, tidying up toys) are relatively explicit.

This finding suggests that educators should attach importance to guidance at the beginning of games. They should help children master effective negotiation strategies so as to reduce conflict and promote cooperation.

Table 6. Frequency of the timing of negotiation.

Game phase	Frequency	Percentage (%)
Game initiation	12	46.20
Game process	9	34.60
Game ending	5	19.20
Total	26	100.00

Negotiation strategies

Following an existing classification, negotiation strategies were categorized as self-oriented, other-oriented, and integrative. As Table 7 shows, integrative strategies were most frequently used (46.20%). They were followed by self-oriented (34.60%) and other-oriented strategies (19.20%). This pattern indicates that nearly half of middle-group children can already take both parties' needs into account. It reflects relatively high level of negotiation competence. The substantial proportion of self-oriented strategies suggests that some children still need support in developing perspective-taking. The low proportion of other-oriented strategies calls attention to the development of autonomy in children who habitually compromise.

These findings suggest that teachers should differentiate their guidance: for self-oriented children, activities that require listening to others and jointly planning should be designed. For other-oriented children, opportunities to express their own preferences and practice refusing unreasonable demands should be provided. A balanced approach of this kind can help children move toward more integrative negotiation over time [10].

Table 7. Frequency of negotiation strategies.

Negotiation strategy	Frequency	Percentage (%)
Self-oriented	17	34.60
Other-oriented	9	19.20
Integrative	22	46.20
Total	48	100.00

Negotiation outcomes

Negotiation outcomes were classified into three types: win-win, compromise, and failure. As Table 8 shows, the overall success rate was 72.40%, of which win-win outcomes accounted for 21.20% and compromise outcomes for 51.20%, while the failure rate was 27.60%. This indicates that middle-group children can reach agreement through equal negotiation or moderate

compromise. It shows good communication willingness and cooperative ability. Win-win outcomes reflect the ability of some children to understand others' needs and jointly seek solutions. The high proportion of compromise outcomes indicates that children have initially mastered the social strategy of concession. At the same time, the failure rate of more than one quarter suggests that children still have room for development in emotional regulation, perspective taking, and conflict resolution.

These results suggest that teachers should not treat a successful outcome as sufficient evidence of negotiation competence. A compromise that avoids conflict may mask a lack of genuine mutual understanding. Teachers should therefore guide children to explain their reasons after reaching an agreement and to check whether both sides are truly satisfied. For failed negotiations, teachers can help children identify the point at which the exchange broke down and rehearse alternative strategies through role play. In this way, both successful and unsuccessful outcomes become opportunities for developing negotiation competence [11].

Table 8. Frequency of negotiation outcomes.

Negotiation outcome	Frequency	Percentage (%)
Success (win-win)	6	21.20
Success (compromise)	15	51.20
Failure	9	27.60
Total	30	100.00

Teacher questionnaire and interview findings

Teacher questionnaire and interview data are summarized in Table 9 and reveal three key characteristics of middle-group children's negotiation behavior. Negotiation occurred mainly in role play (50.00%). When it failed, 80.00% of children sought teacher help and 20.00% used physical conflict. Teacher support was imbalanced, and though 80.00% recognized peer interaction as key, only 10.00% regularly designed activities to promote it. Main obstacles were egocentrism (90.00%), limited language (70.00%), and poor rule understanding (70.00%). These findings suggest that teacher training should focus on translating awareness of peer interaction into concrete activity design and on helping children manage failure without relying on adult intervention.

Table 9. Summary of teacher questionnaire and interview findings.

Dimension	Indicator	Percentage (%) / Data
Negotiation context distribution	Role play as a high-frequency negotiation context	50.00
	Insufficient negotiation in other activities (blocks, outdoor)	Not quantified
Failed negotiation behavior	Children seek teacher help	80.00
	Children use physical conflict	20.00
Teacher support strategies	Provide alternative solutions	70.00
	Teach polite language	70.00
	Create cooperative situations	70.00
	Reinforce positive examples	60.00
Perception of influencing factors	Teachers regard peer interaction as a key factor	80.00
	Teachers actually design related activities	10.00
Obstacles to negotiation	Egocentrism	90.00
	Insufficient language expression	70.00
	Insufficient rule understanding	70.00

Summary of the findings

In sum, five conclusions can be drawn. First, negotiation partners showed marked sex differences, with same-sex negotiation dominant (80.80%) and girl-girl pairs most frequent (50.00%). Second, strategy use was diversified, with integrative strategies most frequent (46.20%) but self-oriented strategies still substantial (34.60%). Third, negotiation themes focused on opinions (65.40%) rather than objects (34.60%). Fourth, negotiation was concentrated at the game-initiation phase (46.20%). Fifth, the success rate reached 72.40%, with compromise (51.20%) far more common than win-win outcomes (21.20%) and a failure rate of 27.60%. These findings reflect the developmental characteristics of middle-group children's negotiation competence. They point to practical issues that deserve attention, such as expanding children's social range, cultivating empathy, creating rich negotiation contexts, attaching importance to guidance at the game-initiation phase, and providing targeted support to children with weaker negotiation competence.

Discussion

Sex differences in negotiation partners

The dominance of same-sex negotiation (80.80%) and the particularly high proportion of girl-girl dyads (50.00%) may stem from two sources. On the one hand,

children naturally tend to interact with familiar and intimate peers. On the other hand, teachers did not deliberately intervene in grouping during games. This allowed children's spontaneously formed fixed playmate relationships to persist.

This finding echoes earlier evidence of sex differences in children's partner selection and interaction style. It suggests that teachers may intentionally expand children's social range while respecting children's autonomous choices. In this way, both boys and girls gain experience in negotiating across sex groups.

Strategy use

The predominance of integrative strategies (46.20%) suggests that nearly half of middle-group children can already balance the needs of both parties. This is developmentally notable for the preoperational stage. However, the substantial proportion of self-oriented strategies (34.60%) indicates that a considerable number of children still need support in perspective taking. The relatively low proportion of other-oriented strategies (19.20%) calls attention to children who habitually compromise. Their autonomous development deserves attention. Strategy choice may be related to individual personality characteristics and social experience. Role play offers a natural venue for children to exercise a wider repertoire of strategies.

Themes and timing

The predominance of opinion-oriented negotiation (65.40%) reflects the cognitive characteristics of middle-group children. They are beginning to attend to and coordinate each other's ideas and show stronger abstract thinking. The concentration of negotiation at the game-initiation phase (46.20%) is closely related to situations requiring collective decisions, such as rule establishment and role assignment. Negotiations during the game (34.60%) mainly involve the adjustment of play methods. Negotiations at the end of the game (19.20%) mainly concern tidying up. Teachers should therefore pay particular attention to the game-initiation phase. They should help children establish a sound foundation for negotiation.

Outcome patterns

The overall success rate of 72.40% indicates that most middle-group children can use different strategies to resolve disagreements effectively. It also indicates that their social interaction competence has developed markedly. The fact that compromise (51.20%) far exceeds win-win outcomes (21.20%) shows that concession remains an important way for children of this age to resolve conflicts. Win-win outcomes indicate that some children can understand and coordinate the needs of both parties. The failure rate of 27.60% implies that teachers should continue to guide children in emotional management, perspective taking, and creative problem solving. This will further improve the quality of cooperation.

The teacher cognition-practice gap and children's dependence on adults

Teachers value peer interaction (80.00%) but rarely design activities to promote it (10.00%), relying on direct instruction over guided facilitation. Children depend heavily on adults after failed negotiations (80.00%). The gap between teachers' cognition and practice may reflect limited training or beliefs that obstacles like egocentrism are fixed. Such factors can improve through intervention.

Contributions of the study

This study makes theoretical, methodological, and practical contributions. Theoretically, it establishes a role play-specific framework with five dimensions: negotiation partner, theme, strategy, outcome, and game phase. It refines strategy classification into self-oriented,

other-oriented, and integrative types, reflecting children's transitional cognitive stage. Methodologically, it integrates quantitative and qualitative data, linking child, situational, and adult factors. It adopts a multi-actor perspective through child observation, teacher interviews and questionnaires, and parent-recorded home data, avoiding examining children in isolation. Using video recording and event sampling, it analyzes 32 typical negotiation events to reveal the logic from role need to strategy choice to outcome. Practically, it designed a tiered teacher support system, a capability training package, and a home-kindergarten collaborative mechanism. It reportedly increased children's negotiation success rate by 15.00% in pilot classes [12].

Educational implications

Extending negotiation contexts across activities

Negotiation tasks can be embedded in role play's initiation, process, and ending phases to cover opinion- and object-oriented themes. Beyond role play, negotiation-oriented activities can be created elsewhere, such as block area resource limits, outdoor cooperative tasks, and shared art tools, encouraging exchange, coordination, and turn-taking.

Establishing tiered teacher support

Given that teachers reported uncertainty about when to intervene, a three-step intervention method is recommended. It is based on the principle of giving priority to children's autonomous problem solving.

Step 1, observe and wait (1-2 minutes): Do not intervene immediately. Observe whether children can negotiate autonomously (e.g., whether two children fighting over a toy will spontaneously propose taking turns).

Step 2, question and guide: If negotiation is at an impasse, use open questions to prompt thinking (e.g., "Why do you think he does not want to give it to you?" "Apart from grabbing, is there another way?").

Step 3, suggest strategies: If guidance is ineffective, provide concrete alternatives (e.g., "You can decide who goes first by rock-paper-scissors, like last time").

A "Negotiation Star" record sheet can be used to document children's autonomously resolved conflict cases. It can also be used to share them regularly in class, thereby reinforcing positive behavior.

Shifting from teaching to facilitation

A teacher negotiation-support strategy checklist can

clarify the priority strategies for different negotiation states and avoid excessive direct intervention. For example, when a child only says “I want to play with it”, the teacher does not directly arrange turn-taking. Instead, the teacher teaches the child to say “Can we take turns?” When children negotiate successfully, the teacher does not merely praise them. Instead, the teacher guides reflection (“How did you talk to him just now - can you teach everyone?”).

Weekly peer-interaction negotiation activities such as a “win-win mini theater” and a “negotiation case seminar” can be designed. In the mini theater, a case such as “two children both want to be the doctor” is presented. Children are guided to think of ways for one to be the doctor and the other the head nurse and to work together. They then practice through role play. In the Friday case seminar, a case in which children used integrative strategies to resolve a conflict during the week is shared. Children discuss why that approach worked.

Conducting targeted capability training

To address the identified weaknesses in emotional expression, perspective taking, and rule understanding, several activities can be conducted in class. An “emotion mini theater” can be used to practice expressing needs (e.g., “Can I play with you?”) and refusal skills (e.g., “I do not want to play this right now”) through situational performance, thereby strengthening language expression, self-confidence, and social skills. Picture-book reading (e.g., *The Little Tortoise Finds Friends*) and empathy training (e.g., “If you were him, how would he feel?”) can help children understand others’ feelings and stand in others’ shoes. Finally, class conventions (e.g., “listen quietly when others are speaking,” “no fighting in the classroom”) can be co-constructed with children and presented visually with pictures and symbols. This helps children understand the meaning of rules and develop self-discipline and responsibility. Teachers can then use positive guidance and timely feedback to consolidate good behavior habits.

Limitations and future directions

Several limitations should be acknowledged. First, the sample was limited to 30 children from two middle-group classes of one urban kindergarten, and the same children participated repeatedly across observation days. This may affect the comprehensiveness of the data

and the generalizability of the results. Future research should expand the sample size and diversify the game themes.

Second, the observation records were subject to the researcher’s subjective interpretation. The classification of negotiation strategies and outcomes may contain bias, and some records were incomplete. Future studies could use multiple-observer cross-validation or more systematic recording tools.

Third, the study was confined to middle-group children in a particular kindergarten, and children’s negotiation behavior may differ across regions and cultural backgrounds.

Fourth, the study focused on role play within the classroom, and the influence of the family environment was not systematically examined.

Future research should expand the sample and settings, investigate the role of family factors, and adopt more rigorous and diversified research methods to provide a scientific basis for the cultivation of children’s social competence.

Conclusion

This study examines the current status of the negotiation behaviors of middle-group kindergarten children (ages 4 -5 years old) during role play using naturalistic observation, teacher interviews, and a teacher questionnaire. The results show that children’s negotiation behavior in role play is characterized by same-sex partner preference, opinion-focused themes, and concentration at the game-initiation phase. It also shows the predominance of integrative strategies and a high overall success rate that nonetheless relies heavily on compromise.

The findings also reveal a substantial gap between teachers’ recognition of the importance of peer interaction and their actual design of negotiation-promoting activities. They also reveal children’s strong dependence on adult help after failed negotiations. These results suggest that the negotiation competence of middle-group children is developing rapidly but is not yet autonomous. The quality of children’s negotiation depends substantially on adult scaffolding.

The educational implications - extending negotiation contexts, establishing tiered teacher support, shifting from teaching to facilitation, and conducting targeted

capability training - offer concrete directions for kindergarten practice. They also offer directions for future research on children's social development.

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Conflicts of Interest

The authors declare no conflict of interest.

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