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Robert Thornberg

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The Situated Nature of Preschool Children's Conflict Strategies

Robert Thornberg
Linköping University

Abstract

The purpose of this study was to examine whether the peer conflict strategies of preschool children are situated and therefore vary across different conflict situations. Hypothetical conflict interviews were administered through a series of puppet shows. Participants were 178 preschool children. Results indicate that preschool children's conflict management skills are situated in peer conflict, because their strategies are to a greater or lesser degree influenced by the opponent's strategies. When the opponent's conflict strategy is non-aggressive, aggressive conflict strategies are atypical and low in frequency. When the opponent behaves with physical aggression in the conflict situation, most of the subjects respond to this aggressive conflict strategy with physical aggression. The findings confirm neither a static individual view nor a situated determinism, but a situated action view in which both individuals' cognitions and distributed cognitions interact.

Conflict can be defined as a state of resistance or opposition between two or more individuals (Shantz & Hartup, 1992). It is, according to Isheden, Abdollahzadeh, and Faresveit (1995), a state of incompatible behaviours or goals. Conflict can also be defined as a relationship where two people have incompatible goals, and use a variety of prosocial and antisocial strategies to influence each other's behaviour (Malloy & McMurray, 1996). Some of the researchers describe the conflict as at least a three-unit exchange (e.g., Laursen & Hartup, 1989; Shantz, 1987).

1. A influences B with an act or a verbal utterance.
2. B resists this influence.
3. A attempts once again to influence B. Not until this third turn does the opposition become mutual.

Peer conflicts between preschool children are a familiar form of social interaction, and young children often resolve peer conflicts on their own, without any adult intervention (Shantz, 1987). According to Rizzo (1992), peer conflicts give children an opportunity to develop their relations to each other. These conflicts represent a type of everyday social situation with a considerable effect on the development of social competence (Dunn & Slomkowski, 1992). Conflict management skills are associated with the formation and maintenance of friendships (Gottman, 1983; Rose & Asher, 1999), successful peer group entry (Putallaz & Sheppard, 1992), and increased perspective taking and social understanding (Dunn & Slomkowski, 1992); Katz, Kramer, & Gottman, 1992). It is also associated with the development of moral skills, including the ability to coordinate the needs of the self with the needs of others (Killen & Nucci, 1999). The importance of developing and using appropriate and prosocial conflict strategies should not be underestimated. A permanent use of inappropriate strategies can result in difficulties in peer relations, such as aggression, victimisation, and peer rejection (Perry, Perry, & Kennedy, 1992).

However, both social competence in general and conflict management skills in particular could in sociocultural terms be considered as situated skills. Thoughts, communication, and physical acts, according to the sociocultural view, are situated in contexts (Säljö, 2000). Children's social competence and conflict strategies in these terms are not something invariant and unaffected by the context. Their conflict strategies should instead vary across different situations. The theoretical explanation of situated actions is, according to Lave (1988; Lave & Wenger, 1991) and Säljö (2000), that different social situations contain different structuring resources. The structuring resources in the actual situation guide the child to orientate him/herself in the situation, and scaffold the child's actions. The individual child's conflict management skills are therefore not confined to the child's character or internal cognition, but exist in the structuring resources of the situation as well, and are distributed by other people, tools, activity, and the physical milieu involved in the situation.

The sociocultural term “distributed cognition” means that knowledge, thinking, and skills are distributed or mediated in the interactions of people, tools, and milieu. This concept emphasises the impact of the activity on the situation rather than just the internal activity in the head of the subject (Cole & Engeström, 1997; Pea, 1997; Salomon, 1997; Wertsch, Tulviste, & Hagstrom, 1996). A child's learning and development processes are interdependent, and consequences of the child in social activities with others (Moll & Whitmore, 1996). Taking a sociocultural view, therefore, peer conflict situations should not only mean that the children involved think and act

in a situated way, guided and scaffolded by structuring resources in the situations and by socially distributed cognitions. According to a sociocultural view, peer conflict situations include situated learning processes in which children master and appropriate conflict management skills, also guided and scaffolded by structuring resources and socially distributed cognitions.

Also, taking a social cognition or social informational processing view, the information in the situation and in the social interaction is of course a main influence upon the child's thinking and actions (Crick & Dodge, 1994; Lemerise & Arsenio, 2000). In their social information-processing model of children's social adjustment, Crick and Dodge (1994) write about what they call situational cues. Children selectively attend to particular situational cues, encode those cues, and then interpret them. After interpreting the situation, the children select a goal or desired outcome for the situation (e.g., staying out of trouble, getting even with a provocateur, making a friend, or getting a desired toy) or continue with a pre-existing goal. It is proposed that the children bring goal tendencies to the social situation but also revise those goals and construct new goals in response to immediate social information or cues. They access possible responses from memory to the situation, or may (especially if the situation is novel) construct new behaviours in response to immediate social cues. In the model, the relation between social information processing and social adjustment is a reciprocal one. Both external or situational cues and the children's own mental database of social knowledge matter. Children rely on cognitive heuristics or schemata to help them interpret the situational cues experienced in social situations. Most processing is of course not conscious or reflective, but highly automated.

Although Crick and Dodge (1994) assert that emotion is an important component of social information processing, they also acknowledge that the role of emotion is not well articulated in their model. Lemerise and Arsenio (2000) proposed a revised model in which emotion processes are explicitly integrated into Crick and Dodge's model. Additionally, in this revised model, situational or external cues are a main influence on the child's processing of social information. Lemerise and Arsenio add that affective cues from others in the situation (which of course can be seen as a form of situational cue) are an important source of information that will influence the social information processing. For example, provocateurs' anger cues in the context of ambiguous provocation facilitate hostile attributions (Lemerise & Arsenio, 2000). According to social cognition research, aggression cues (e.g., the presence of a weapon or salient hostile verbalisations) in a situation seem to activate cognitive schemata related to aggression and thus increase the salience of aggressive response options (Carlson, Marcus-Newhall, & Miller, 1990; Johnson & Downing, 1979; Krahé, 2001). It is possible to hypothesise that anger cues or aggressive behaviour from an opponent in a conflict situation can function as aggression cues and therefore increase the likelihood of aggressive responses.

Research into preschool children's conflict management skills has shown that the children do not use strategies randomly, but in response to the strategies of their opponent (Eisenberg & Garvey, 1981; Ross & Conant, 1992). Eisenberg and Garvey's (1981) study shows that insistence is highly likely to lead the partner to respond with insistence, and reasons are more likely to be met with a concession to the speaker's point of view and less likely to be met with rigid demands. Physical strategies such as reaching for, grasping, and pulling the object that both want are often followed by similar physical strategies, and verbal strategies are often followed by verbal strategies (Ross & Conant, 1992).

Conflicts in which children simply insist, or use other strategies that lead to a relative lack of information from which compromise and conciliation could be derived, have been called “simple”, and these conflict sequences generally escalate in nature. Conflicts that include reasoning and attempts to compromise can be called “elaborate”, because they contain strategies that give the partner information about the speaker's perspective and which resolutions the speaker may find reasonable. This elaborate reasoning more often tends to lead to resolution compared to simple verbal messages. Simple strategies lead to simple strategies, and elaborate strategies lead to elaborate strategies (Ross & Conant, 1992). In general, peer conflicts are usually resolved by insistence resulting in a win-lose outcome (Laursen & Hartup, 1989).

In this paper the term “discursive information” will be used to refer to complex and elaborate conflict strategies. The concept includes arguing, reasoning, information in order to negotiate, and information/reasoning that gives more detail about the perspective of the speaker (e.g., to give justifications or reasons, suggest alternative proposals, verbalise feelings, refer to rules, or suggest compromise in the form of turn-taking or sharing).

Research has also shown that physical aggression is an atypical, low frequency behaviour in peer conflicts among preschool children (Eisenberg & Garvey, 1981; Hartup & Laursen, 1993; Isheden et al., 1995; Killen & Nucci, 1999; Laursen & Hartup, 1989; Perry et al., 1992; Ross & Conant, 1992; Vespo, Pedersen, & Hay, 1995). But are aggressive conflict strategies really atypical if the opponent acts or reacts in the conflict with physical aggression? If conflict management skills are situated, it is possible to hypothesise that aggressive strategies usually lead to aggressive strategies. This hypothetical situated action, according to the sociocultural view, may be explained in terms of structuring resources and distributed cognition. According to a social cognition view, the children's processing of social information could be seen as influenced by the aggression cues in the situation. These kinds of situational cues may activate hostile or aggressive schemata, facilitate hostile attributions, and/or may be used as a direct model for constructing behaviour.

The purpose of the present study was to examine if the peer conflict strategies of preschool children are situated and therefore varying across different conflict situations. Hypothetical conflict interviews were administered through a series of puppet shows.

Method

Subjects

The original sample consisted of 201 children attending 33 preschool classes in different preschools. These classes were selected randomly from 148 preschools in a Swedish city. The sample included all 5-year-old children in these 33 classes (range = 60-72 months). Of these, 23 were excluded from the study.¹ Consequently, 178 children participated in the present study (92

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¹ A group of 16 children dropped out because their parents had not given their consent to their participation. One child was excluded on account of language difficulties. Four children were excluded because of difficulties in interaction during the interview. Two children dropped out because they did not want to participate.

boys and 86 girls), from lower and middle-class families (94 children from non-academic families and 67 children from academic families - information about parental education level was not available for 17 children). The majority of the participants were of Swedish extraction (132 children) and only a small minority were immigrant children (30 children). Information about ethnicity was not available for 16 children.

Procedures

The researcher in this study visited the children in their kindergarten and was able to chat with them for an hour some days before the interviews in order to let the children become familiarised with him. Furthermore, at the beginning of each interview the child was given time to become familiarised with both the researcher and the puppets used during the interviews in order to reduce novelty effects.

Individually administered puppet interviews with the children were conducted in a secluded location in each preschool. Puppet interviews are an established interview method that has been used in some studies involving preschool children. This interview technique means that the examiner first gives a concrete form to a social dilemma or situation - enacting the problem - with the help of puppets and perhaps props. Then the examiner asks the child to give the dilemma or situation an ending, either verbally or by acting through one of the puppets (Eisenberg et al., 1994; Iskander, Laursen, Finkelstein, & Fredrickson, 1995; Mize & Ladd, 1988; Zahn-Waxler, Friedman, Cole, Mizuta, & Hiruma, 1996). In the present study four hypothetical peer conflict situations in the form of puppet shows were presented to the subject. All the hypothetical conflict situations contained an imaginary play situation involving the subject and a same-sex peer in which a conflict about play role arose. Two practice vignettes were included to familiarise children with the format of the stories and follow-up acting. These preceded the four vignettes. Two puppets were used in each situation. One puppet represented the subject and the other represented a same-sex peer. The interviewer (the author of this paper) started each story by enacting the situation and dialogue with two puppets and some small toys, and then dropped the puppets so the subject could proceed with the puppet that represented her or himself.

The four hypothetical peer conflict situations had a common introduction theme: the subject and the peer were going to play doctors. Each new situation included a new peer. The first two exchanges or turns in the three-unit exchanges were the same for all four conflict situations, and were enacted by the interviewer: (1) peer puppet, "I'll be the doctor"; (2) subject puppet, "But I want to be the doctor." The difference between the four conflict dilemmas was how the peer puppet acted in the third exchange. In the hypothetical Conflict Situation A, the peer puppet said, "No, I'll be the doctor!" (insisting). In the hypothetical Conflict Situation B, the peer puppet said, "I'll be the doctor, because I said it first!" (justifying). In the hypothetical Conflict Situation C, the peer puppet said, "If I'm the doctor, you could be the one who is helping and giving injections and so on" (alternative proposal). And in the hypothetical Conflict Situation D, the peer puppet reacted with physical aggression.

The researcher used a consistent tone across all conditions. The researcher did not use an aggressive tone in the fourth condition because the third exchange was non-verbal. The researcher just told the children that the peer puppet hit the subject puppet in the stomach with his/her fist, then moved the peer puppet in that way. The interview procedure for each child took about 10 minutes, and the children's responses were audiotaped, and then coded according to a coding scheme. The coding procedure was conducted by a simple dotting in the coding schema. If the subject enacted or suggested more than one conflict strategy, the first one enacted or suggested was coded. The author of this paper undertook all the coding work.

Coding Responses

The subjects' responses were coded in seven main categories: aggressive assertion, simple assertion, discursive assertion, discursive cooperation, compliance, withdrawal, and turn to teacher (see Table 1).²

For the statistical significance testing part of the analysis, the coded interview data (coded in the seven main categories) was recoded into a set of dichotomous variables (assertion, aggression, complexity, and reciprocity). For each of the four dichotomous variables, all data was recoded. First, the data was recoded and analysed in terms of assertive or non-assertive strategies. Then, the data was recoded and analysed in terms of aggressive or non-aggressive strategies. After that, the data was recoded and analysed in terms of complex or simple strategies. And last, the data was recoded and analysed in terms of reciprocal or non-reciprocal strategies (see Table 2).

Coder reliability was checked on a random subsample (18 subjects) of the total sample (178 subjects). The interview material in these cases was coded by a second coder. He was chosen on the basis on his master's degree in behavioural sciences and he decided upon his ratings using a short manual that consisted of the original coding scheme, with category labels and descriptions. The inter-rater reliability according to this procedure was 97% agreement.

Statistical Analysis

The first step in the statistical processing of the data was to conduct descriptive comparisons between the interview data from the four different hypothetical peer conflict situations. The second step was to conduct Cochran's Q tests for each of the four dichotomous variables (assertion, aggression, complexity, and reciprocity) to find out if a significant change existed in

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² The coding schema actually consisted of six main categories and in total 23 subcategories: (a) aggressive assertion: verbal aggression, physical aggression, destruction (acting violently against play object), and checking out (physically moving the opponent away from the play situation); (b) simple assertion: insist, refuse, ignore, and simple protest against violence (protest against physical aggression by saying "stop"); (c) discursive assertion: give justification, give alternative proposal, verbalise negative conditional directives, verbalise positive conditional directives, friendly oriented inquiry, question, and verbalise emotions; (d) discursive cooperation: suggest turn-taking, suggest doing same (suggest that both can enjoy the same play role), suggest a children's rhyme like "eeny meeny miney mo" to decide who should be the doctor, and suggest a new game; (e) retreating strategy: compliance and withdrawal; and (f) turn to teacher. However, one of the main categories (retreating), on the basis of its subcategories, was divided afterwards into two new main categories, compliance and "withdrawal."

each of these variables as an effect of the conflict situation variation. The level of significance (α) used in the statistical significance testing part of the analysis was .05. If a significant change was found in a variable, a post hoc test designed by the author was used. The first step in this post hoc test was to rank all the sum differences from the largest to the smallest between the conflict situations. Then the largest difference was tested by McNemar's test. If this difference was significant, the next step was to test the second largest difference with McNemar's test. If this difference was significant, the third largest difference was tested by McNemar's test, and this procedure continued until non-significance was detected. In order to maintain $\alpha = .05$ across all the comparisons, the significance was tested according to $\alpha' = \alpha/c$ in which c refers to the number of operated comparisons. In the first step $c = 1$ and therefore $\alpha_1' = .05$. In the next step (when the second largest difference was tested) $c = 2$ and therefore $\alpha_2' = .025$. In the third step $c = 3$ and therefore $\alpha_3' = .01667$, and so on.³

Table 1: Conflict strategy categories for descriptive statistics

No	Label	Description
1	Aggressive assertion	Strategies that contain physical aggression (e.g., to push, hit, or kick) directed against the opponent or the play objects, or verbal aggression (e.g., to insult) directed against the opponent, or physically moving the opponent away from the play situation.
2	Simple assertion	Strategies that maintain the subject's own position, without using physical or verbal aggression, and without providing discursive information to the situation (e.g., to insist or ignore).
3	Discursive assertion	Strategies that maintain the subject's own position but at the same time provide discursive information to the situation (e.g., to give a justification, reason, alternative proposal, or to refer to rules).
4	Discursive cooperation	Strategies that do not unilaterally aim to serve the subject's own position or the peer's position, but instead consider both positions in the conflict. These strategies provide the situation with discursive information, without being assertive (e.g., to suggest compromises such as turn-taking, or that both can have the same play role at the same time).
5	Compliance	Obedience or submission in response to the opponent's request.
6	Withdrawal	The subject ends the social interaction with the opponent and leaves the situation.
7	Turn to teacher	The subject turns to a teacher.

³ The power of the test decreases as the number of comparisons increases, and consequently the probability of making a Type II error is higher. However, two steps have been taken to reduce the risk of making a Type II error: (a) by using 5% instead of 1% as the level of significance; and (b) by using a large sample size (178 children).

Table 2: Recoded dichotomous variables for significance testing statistics

Label	Description
Assertion	Fighting for one's own sake, preserving one's one position. Assertive strategies include conflict strategy categories 1-3. Non-assertive strategies include conflict strategy categories 4-7 (see Table 1).
Aggression	A special form of assertion, meaning that the maintenance of one's own position is aggressive. Aggressive strategies include conflict strategy category 1. Non-aggressive strategies include conflict strategy categories 2-7.
Complexity	Discursive information in the strategy. Complex strategies include conflict strategy categories 3-4. Simple strategies include conflict strategy categories 1-2 and 5-7.
Reciprocity	A special form of complexity in which the discursive information is oriented to compromise solutions. Reciprocal strategies include conflict strategy category 4. Non-reciprocal strategies include conflict strategy categories 1-3 and 5-7.

Results

Before presenting the results, the following comments have to be made. When it is said that the opponent used justification, this refers to the specific example illustrated in Conflict Situation B (“I’ll be the doctor, because I said it first!”). If the opponent had used another justification, the outcome might have been different. When the opponent is said to have given an alternative proposal, this refers to the specific proposal illustrated in Conflict Situation C (“If I’m the doctor, you could be the one who is helping and giving injections and so on”).

Main Strategies Used in Each Conflict Situation

Descriptive analysis indicates that the children's conflict strategies have a situated nature. The response strategies vary across the four conflict situations. Figure 1 shows the frequency of the types of response used in each of the four conflict situations side by side.

Simple assertion was the most frequent conflict strategy when the opponent insisted (Conflict Situation A) - 99 children (55.6%) responded with simple assertion. Of these 99, 89 just insisted, simply repeating their line without bringing new information to the conflict discourse (e.g., “No, I’ll be the doctor” or “I want to be the doctor”), thus using the same strategy as the opponent. Compliance was the second most frequent conflict strategy in this conflict situation - 47 children (26.4%) responded with this strategy.

Compliance was the most frequent conflict strategy when the opponent used a justification (Conflict Situation B) - 57 children (32.0%) responded in this way. Simple assertion was the second most frequent conflict strategy in this conflict situation - 54 children (30.3%) responded

with this strategy. The third most frequent conflict strategy in Conflict Situation B was discursive assertion, which was used by 34 children (19.1%).

Figure 1. Responded conflict strategy

Compliance was also the most frequent conflict strategy when the opponent gave an alternative proposal (Conflict Situation C) - 123 children (69.1%) responded with compliance. Simple assertion was the second most frequent conflict strategy in this conflict situation - 31 children (17.4%) responded with this strategy. The third most frequent conflict strategy in Conflict Situation C was discursive assertion, which was used by 15 children (8.4%).

Finally, aggressive assertion was the most frequent conflict strategy when the opponent used physical aggression (Conflict Situation D) - 96 children (53.9%) responded in this way. Of these 96 children, 93 used physical aggression (the other three children used verbal aggression). Turn to the teacher was the second most frequent conflict strategy in this conflict situation - 21 children (11.8%) responded with this strategy.

Descriptive Comparisons between the Children's Responses

Figure 1 shows that aggressive assertion was more frequent in Conflict Situation D (96 children; 53.9%) than in Conflict Situation A (10 children; 5.6%), B (10 children; 5.6%), and C (5 children; 2.8%). This means that aggressive assertion increased when the opponent used physical aggression, as compared to when the opponent insisted, used justification, or gave an alternative proposal. In these other three conditions, aggressive assertion was atypical (2.8-5.6%). Simple assertion was more frequent in Conflict Situation A (99 children; 55.6%) than in Conflict

Situation B (54 children; 30.3%), C (31 children; 17.4%), and D (15 children; 8.4%). In other words, simple assertion increased when the opponent insisted, as compared to when the opponent used justification, gave an alternative proposal, or acted with physical aggression. Furthermore, discursive assertion was more unusual in Conflict Situation A (5 children; 2.8%) than in Conflict Situation B (34 children; 19.1%), C (15 children; 8.4%), and D (18 children; 10.1%). This means that the frequency of discursive assertion decreased when the opponent insisted compared to when the opponent used justification, gave an alternative proposal, or acted with physical aggression. Discursive assertion increased most when the opponent used justification.

Figure 1 shows that compliance was more frequent in Conflict Situation C (123 children; 69.1%) than in Conflict Situation A (47 children; 26.4%), B (57 children; 32.0%), and D (17 children; 9.6%). This means that compliance increased when the opponent gave an alternative proposal, as compared to when the opponent insisted, used justification, or acted with physical aggression. Furthermore, the comparison also shows that compliance was most unusual in Conflict Situation D. In other words, the frequency of compliance decreased most when the opponent used physical aggression. Withdrawal decreased when the opponent gave an alternative proposal (no children withdrew), compared to when the opponent insisted (6 children withdrew; 3.4%), used justification (7 children withdrew; 3.9%), or acted with physical aggression (9 children withdrew; 5.1%). The comparison further shows that discursive cooperation was more unusual in Conflict Situations C (4 children; 2.2%) and D (2 children; 1.1%) than in Conflict Situations A (10 children; 5.6%) and B (15 children; 8.4%). Finally, turn to teacher increased when the opponent used physical aggression (21 children; 11.8%), compared to when the opponent insisted (1 child; 0.6%), used justification (1 child; 0.6%), or gave an alternative proposal (no children).

Distribution of Discursive Information

Of the 34 children who responded with discursive assertion when the opponent used a justification (Conflict Situation B), 27 used a justification, in conformity with the opponent. Of these 27 children, 14 replied with the argument that it was they, not the opponent, who verbalised the position first (e.g., “No, I said it first” or “I’ll to be the doctor, because I said it first”). Thus, these children used the same justification as the opponent. Another four of the 27 children replied with the argument that they thought or wanted it first (e.g. “But I thought of it first”). One of the 27 children placed his doll near some “doctor” stuff and said, “The one here first will be the doctor.” So in total 19 of the 27 children used a justification in which the underlying principle seemed to be the same as the one the opponent referred to: first come, first served. Of the 15 children who responded with an alternative proposal when the opponent used an alternative proposal (Conflict Situation C), 13 used what I prefer to call a “looking glass proposal”. This means that the children suggested the same alternative proposal as the opponent but instead the tables were turned (“If I’m the doctor, you could be the one who is helping and giving injections and so on”). All these incidents indicate occurrences of situated distribution of discursive information as a foundation of conflict management.

Significant Changes as an Effect of the Conflict Situation Variation

The results from a Cochran's Q test indicate a significant change in assertion across conflict situations ($\chi^2 = 114.838, p = .000$). A follow-up post hoc test shows significant differences between Conflict Situations A and C ($\chi^2 = 55.710, p = .000$), between B and C ($\chi^2 = 38.473, p = .000$), between B and D ($\chi^2 = 16.364, p = .000$), and between C and D ($\chi^2 = 61.760, p = .000$). This indicates that assertive strategies were significantly less frequent when the opponent gave an alternative proposal, as compared to when the opponent insisted, used justification, or used physical aggression. The post hoc test also indicates that assertive strategies were significantly more frequent when the opponent used physical aggression, as compared to when the opponent used justification, or gave an alternative proposal.

Aggressive strategy is a subgroup of assertive strategy and has also been tested separately. A Cochran's Q test reveals a significant change in aggression across conflict situations ($\chi^2 = 240.031, p = .000$). The follow-up post hoc test shows significant differences between Conflict Situations A and D ($\chi^2 = 82.102, p = .000$), between B and D ($\chi^2 = 84.012, p = .000$), and between C and D ($\chi^2 = 89.011, p = .000$), which indicates that aggressive strategies were significantly more frequent when the opponent used physical aggression, as compared to when the opponent insisted, used justification, or gave an alternative proposal.

A Cochran's Q test shows a significant change in complexity across conflict situations ($\chi^2 = 38.841, p = .000$). A follow-up post hoc test reveals significant differences between Conflict Situations A and B ($\chi^2 = 25.929, p = .000$), between B and C ($\chi^2 = 16.173, p = .000$), and between B and D ($\chi^2 = 16.000, p = .000$), indicating that complex strategies were significantly more frequent when the opponent used justification, as compared to when the opponent insisted, gave an alternative proposal, or used physical aggression.

Reciprocal strategy is a subgroup of complex strategy and has also been tested separately. Cochran's Q test shows a significant change in reciprocity across conflict situations ($\chi^2 = 16.760, p = .000$), and a follow-up post hoc test reveals significant differences between Conflict Situations B and C ($p = .013$), and between B and D ($p = .001$), which indicates that reciprocal strategies were significantly more frequent when the opponent used justification, as compared to when the opponent gave an alternative proposal, or used physical aggression.⁴

Discussion

The claims that preschool children do not use conflict strategies randomly, but use them as an answer or a response to the conflict strategies of their opponent (Eisenberg & Garvey, 1981; Ross & Conant, 1992), have been confirmed in the present study. The findings demonstrate differences in strategies related to differences between the peer conflict situations. Simple

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⁴ In the processing of the reciprocity variable, the SPSS program executes a binomial test instead of a χ^2 -based McNemar test. When testing the level of significance, SPSS uses the binomial distribution instead of the χ^2 distribution if fewer than 25 cases have different values for the two variables

assertion was the most frequent strategy when the opponent merely insisted, which corresponds to the results of Eisenberg and Garvey's (1981) study.

Furthermore, the results of this study show that complex strategies were more frequent when the opponent gave a justification ("I'll be the doctor, because I said it first!") as compared to when the opponent just insisted (simple assertion) or acted with physical aggression. These findings support Ross and Conant's (1992) discussion of simple and elaborate conflict sequences. The results in the present study also show that aggressive strategies were atypical and low in frequency when the opponent's strategies were non-aggressive. This finding agrees with earlier research claims that physical aggression is atypical and unusual in peer conflicts between preschool children (Eisenberg & Garvey, 1981; Hartup & Laursen, 1993; Isheden et al., 1995; Killen & Nucci, 1999; Laursen & Hartup, 1989; Perry et al., 1992; Ross & Conant, 1992; Vespo et al., 1995). However, according to this study, aggressive strategies appear to be a likely response if the opponent acts with physical aggression. This finding supports Lemerise and Arsenio's (2000) idea that affective cues - anger cues in this case - are an important source of information that will influence the social information processing and the outcome of this processing. It seems that an opponent's aggressive behaviour within a conflict situation can function as an aggression cue and therefore increase the likelihood of aggressive responses (cf. Carlson et al., 1990; Johnson & Downing, 1979; Krahé, 2001).

This study, Eisenberg and Garvey's (1981) study, and Ross and Conant (1992) indicate that preschool children's conflict management skills are situated - that their way of managing the peer conflict situation is guided and scaffolded by the structuring resources in the situation. In the present study, variation in the opponent's conflict behaviour across the situations created a variation in the structuring resources from situation to situation. The results in this study indicate that the conflict situation in which the opponent used physical aggression seemed to contain structuring resources that guided the majority of the subjects to propose aggressive strategies. This could be compared to the conflict situation in which the opponent suggested an alternative proposal, "If I'm the doctor, you could be the one who is helping and giving injections and so on." This appeared to help the majority of the participants with structuring resources that scaffolded a compliance - the alternative proposal distributed or mediated a play role that a lot of the participants seemed to appropriate.

The conflict strategies of the preschool children in this study show that their conflict management skills were situated. The findings show children who simply insisted when the opponent simply insisted, and children who used the same kind of justification ("I'll be the doctor, because I said it first") or the same underlying principle (first come, first served) as the opponent in the conflict situation. Moreover, the findings show children who gave a looking glass proposal (the same alternative proposal as the opponent but with exchanged roles), and children who used physical aggression when the opponent used physical aggression. In line with a sociocultural view, a possible explanation for these responses is that the conflict strategies or management skills were distributed or mediated in the conflict situations. These findings therefore support the idea of distributed cognition (Cole & Engeström, 1997; Pea, 1997; Salomon, 1997; Wertsch et al., 1996), and structuring resources (Lave, 1988; Lave & Wenger, 1991; Säljö, 2000).

However, it is important to draw attention to the fact that the participants did not all react in the same way: far from it. For example, 56% responded with simple assertion when the opponent simply insisted, 69% responded with compliance when the opponent suggested the alternative proposal, and 54% responded with aggressive assertion when the opponent reacted with physical aggression. Thus, the findings do not confirm a situated determinism (Pea, 1997). Instead, they indicate the influence of individuals' own cognition, and the interaction or transaction between individual and distributed cognitions (Salomon, 1997). The results in this study hence support Salomon's statement:

The claim that individuals' representations totally account for their intellectual activity is an overstatement as much as is the claim that partnerships with tools or peers totally account for the quality of the process or that activity itself fully accounts for it. Different factors participate in the process interactively, although their specific influence may vary under different circumstances. (Salomon, 1997, p 125)

The results in this study also agree well with Crick and Dodge's (1994) model of social information-processing mechanisms in children's social adjustment. Their model suggests that children focus on situational cues, encode them, and interpret them. Relevant knowledge (in the form of schemata or scripts), gained through earlier experiences, is recalled from memory and used as a guide for interpreting and understanding the present social situation. The main conclusion from the findings in this study is that the preschool children's conflict management skills appear not to be static and independent of the situation, but situated and dependent on the conflict strategies of the opponent. The children in this study used the situational cues in the hypothetical peer conflict situations. However, individual variation in the findings indicates that intrapsychological processes matter too. Individual differences in past social experiences, and therefore differences in cognitive schemata and scripts, could be a reasonable explanation for the children's individual variation. The ways in which children interpret, understand, and use situational cues are, according to Crick and Dodge's model, highly influenced by their own social knowledge recalled from their memory, i.e., activated schemata or scripts.

Study Limitations

Several notes of caution, however, need to be sounded regarding the transferability of these findings. It is important to recognise that the particular examples of conflict used, which the four hypothetical conflict situations during the puppet interviews illustrated in this study, limit the field. If other types of conflict had been used during the interviews they would perhaps, to a certain degree, have resulted in a different outcome. Furthermore, the interviews and the hypothetical conflict situations were confined to the beginning of a conflict procedure (turns 1-4), in which the subjects responded with the fourth turn. Therefore, the findings in this study cannot be generalised to all kinds of conflicts or to whole conflict procedures.

Moreover, the administration of the conflict situations was not counter-balanced, and therefore the study could be criticised for being biased with order effects. However, the reasons behind the administration of the stories in the same way for all the children were as follows. The first story contained the least information (a simple strategy). The second and third stories contained more

information (complex strategies), and therefore had more information to offer to the possibility of carrying over to the next story. The fourth story contained an obvious aggression cue, which this study actually proves, and was likely to arouse strong emotions that could risk resulting in order effects if there were stories afterwards (i.e., resulting in more aggressive responses to these stories). Therefore, this was the last story. These reasons for not counter-balancing the stories are of course speculative, and could easily be criticised.

The main intentions of this study were however to investigate whether preschool children's conflict management skills were situated as a function of variation in the opponent's conflict behaviour, or whether their skills were constant and independent of the opponent's conflict behaviour. The results clearly show that their skills were situated. They acted differently from situation to situation. Future research should investigate whether there are important order effects in a study like this or if the information and influence in each separate situation are more important. However, order effects should not just be seen as a source of bias, but also as a learning process, and are therefore very interesting to study - not always just as things to avoid.

It is also important to recognise that studying how children act in hypothetical peer conflict in puppet interview situations is not the same as studying how they act in real-life conflict situations with peers. However, Mize and Ladd (1988) have investigated whether the quality of the interpersonal strategies that preschool children suggested in response to hypothetical social dilemmas during puppet interviews was predictive of their social behaviour with peers. Their findings indicate that preschool children's responses to hypothetical social dilemmas during puppet interviews correlate with observed prosocial and aggressive behaviours, and with teacher ratings of prosocial and aggressive behaviours. Additionally, Eisenberg et al. (1994) have studied children's responses to hypothetical social dilemmas during puppet interviews in relation to their actual (observed) and rated social behaviour. Both parents and teachers rated the children's behaviour. Their findings provide, in general, moderate support for the validity of the puppet interview method with hypothetical social dilemmas. "In summary, our data suggest that children's enacted puppet measures of social behaviour in peer problem situations correlate with measures of actual social responding, particularly in social conflict contexts" (Eisenberg et al., 1994, p. 230).

However, questions can be raised regarding the conclusions about the possibility of predictions in both Mize and Ladd's (1988) study and Eisenberg et al.'s (1994), since: some of the correlating values in the results are low; teacher or adult ratings are not an unquestionable measure of children's behaviour; the hypothetical situations do not entirely correspond to the observed situations, so the structuring resources are not controlled; and the possibility that the children's actions could be situated is not considered since the variable values coded for the individual child from a large number of observed social situations have been amalgamated to generalised values (e.g., a generalised value for prosocial behaviour), which are compared to generalised values amalgamated from the interview - on that point, the comparisons will not be sensible to the structuring resources variation (e.g., variation in the opponent's behaviour).

These objections against Mize and Ladd (1988) and Eisenberg et al. (1994) mean that some degree of uncertainty related to the idea of predicting the subjects' responses to real-life situations remains.

One of the main problems with the hypothetical social dilemma interview method is that this procedure excludes a lot of factors that are more or less important in real-life situations. Examples of such factors are emotions (distress, anxiety, arousal, sympathy, anger, etc.), motives, personal risks, the social influence of peer bystanders, social status and power, and the presence of real people and real social relationships. In addition, when children are in a conflict situation, the process of communicating conflicting claims, obligations, expectations, and interests is a shared one. On that point, it is essential to explore the interaction processes in a social context (Adalbjarnardóttir, 1992). However, the use of hypothetical dilemmas enables researchers to get responses from all the children to the same social situations and is economical in terms of the time and resources needed to collect data (Eisenberg et al., 1994). Further research should, however, also use an observation method to explore the children's conflict management skills in their social context, related to the questions of situatedness, conflict situation variation, and ecology validity. Further research should also investigate children's conflict behaviour in terms of situatedness in relation to age, social status, sex (same-sex vs. opposite sex), friendship, and so on, to research it in all its complexity.

Implications for Practitioners

The present findings point to two general implications for practitioners in educational settings. First, explanations and interventions in relation to conflicts between preschool children cannot be reduced to intrapsychological processes or to the character of the child. More attention should be paid to situational variability or to social psychological processes, not only to understand and intervene better in actual conflicts, but also to understand children better and help them to develop social skills in the longer term. Both individual and distributed cognitions influence children's behaviour in conflict situations. Therefore, intervention programs designed to help individual children perceived as socially unskilled, aggressive, or antisocial in conflicts with peers should consider both intrapsychological processes and group processes. A conflict situation is a learning situation in which the children involved seem to function as each other's role models. Therefore, explanations and interventions at a group level are important components of a program designed to cope with conflicts between children, and to help them develop appropriate conflict management skills.

This leads to the second implication. An important proactive step should be to build a prosocial climate or atmosphere in the class or peer group. It is reasonable to suppose that children generally tend to develop a more aggressive repertoire of conflict strategies in groups with an aggressive social climate, and tend to develop a friendlier repertoire of conflict strategies in groups with a friendly social climate. This study indicates that preschool children are guided and scaffolded by the structuring resources in the conflict situation - that a lot of children use the opponent as a role model for their own behaviour. In these situated learning processes, conflict management skills are distributed or mediated between the children in the group. Therefore, to build a good social atmosphere based on prosocial norms and skills in the peer group seems to be very important for the teaching practice of conflict management skills.

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