

## How Siblings Resolve Their Conflicts: The Importance of First Offers, Planning, and Limited Opposition

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Sixty-four sibling dyads (4–12 years old; 61% males; 83% European-American) were asked to resolve an ongoing conflict. Older siblings provided leadership by suggesting, modifying, justifying, and requesting assent to plans for conflict resolution. Younger siblings countered and disagreed, but also contributed to planning and agreed to their siblings' plans. Compromises were associated with first offers that met both children's goals, future-oriented planning, and limited opposition. Win–loss outcomes followed offers favoring only one child and arguments over older siblings' plans. Conflicts were unresolved when negotiations included frequent accusations and opposition, but little planning. Thus mutually beneficial conflict resolution required that children shift focus from debating past wrongs to developing plans to meet their unrealized goals in future interaction.

As sibling relations combine intimacy and incompatible goals, sibling conflict is virtually inevitable; however, there are important differences in how everyday differences in goals are pursued. Sibling conflicts can offer opportunities for persuasive negotiation in which individuals clarify their differing perspectives and seek collaborative resolutions (Dunn & Slomkowski, 1992; Herrera & Dunn, 1997; Rinaldi & Howe, 1998). Alternatively, oppositional tactics can escalate as children use increasingly powerful means to reciprocate one another's harmful actions (Katz, Kramer, & Gottman, 1992; Perlman & Ross, 2005; Phinney, 1986; Vuchinich, 1987). This distinction, often captured by the terms "constructive" and "destructive" conflict, is central to understanding conflict processes, and to assessing the role of conflict and conflict resolution in children's development (Deutsch, 1973; Deutsch & Coleman, 2000; Shantz & Hartup, 1992). Destructive conflict is hostile, unresolved, and undermines interpersonal

relationships; constructive conflict includes reasoning, resolutions of differing goals, and enhanced interpersonal understanding. Indeed, Erikson (1963), Piaget (1932), and Sullivan (1953) have all argued that children's early experiences of conflict profoundly affect their developing knowledge of social rules, relationships, and interpersonal processes. Shantz (1993; Shantz & Hobart, 1989) has elaborated on the dual role of conflict negotiation for both differentiating self from others (by recognizing the pursuit of divergent goals) and coordinating relationships with others (especially by reconciling incompatible goals). Constructive conflict management and mutually agreeable resolutions of conflicting goals is of particular importance because the sibling relationship is life long, sibling conflict is frequent, and the harmony of the household is seriously undermined by constant sibling bickering (e.g., Brody, Stoneman, McCoy, & Forehand, 1992; Howe, Rinaldi, Jennings, & Petrakos, 2002; Ross et al., 1996). Moreover, very high levels of sibling conflict are associated with poor peer relationships, academic difficulties, conduct problems, and aggression that extend beyond the boundaries of the family (e.g., Bank, Burraston, & Snyder, 2004; Bank, Patterson, & Reid, 1996; Brody, 1998; Wolke & Samara, 2004). Yet researchers have paid limited attention to what constitutes constructive conflict and to whether constructive sibling conflict brings about mutually agreeable resolutions to disputes.

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In this study, we examine sibling conflict negotiation to explore how children's strategies are related to dispute resolution. We study sibling negotiation by adopting procedures that researchers have used to study conflict resolution between spouses and between parents and their children (e.g., Brody et al., 1992; Gottman, 1979, 1994; Rueter & Conger, 1995; Smetana & Gains, 1999; Vuchinich, 1999; Vuchinich, Vuchinich, & Wood, 1993). We asked siblings to select, discuss, and attempt to resolve an ongoing problem in their relationship. We examined how negotiation strategies used by either child contribute to the resolution of contentious issues, thereby testing the common assumption (e.g., Deutsch, 1973) that constructive conflict management strategies bring about satisfactory resolutions of differences. We propose that future-oriented planning is a central element of constructive negotiation. In the present case, future-oriented planning consists of suggesting, evaluating, and adopting plans of action that could potentially prevent or resolve future conflict concerning an issue of past contention.

### *Conflict Resolution*

Compromises are desirable outcomes because both parties can achieve some of their conflict goals; however, family members rarely achieve mutually agreeable compromise resolutions to their disputes (Eisenberg, 1992; Montmayor & Hanson, 1985; Raffaelli, 1992; Smetana, Daddis, & Chuang, 2003; Stein & Albrow, 2001; Vuchinich, 1987, 1999). For example, in analyses of conflicts occurring during dinner table conversations, the most common type of ending was stand-off (no resolution), followed by submission by one of the parties, and then compromise (Vuchinich, 1987). Sibling conflicts follow this same general pattern (DeHart, 1999; Howe, Fiorentino, & Gariépy, 2003; Howe et al., 2002; Raffaelli, 1992, 1997; Siddiqui & Ross, 1999). Home observations of siblings between 2 and 7 years of age indicate that disputes end either without resolution or in submissions more than 80% of the time; fewer than 12% of sibling conflicts end in compromise (Howe et al., 2003; Siddiqui & Ross, 1999). Nor does the picture change much with development: children in middle childhood through adolescence report that sibling conflicts involve destructive tactics more than constructive ones, and end without satisfactory resolutions (Raffaelli, 1992; Rinaldi & Howe, 1998). Raffaelli found that 10–15-year-old siblings report that only 9% of disputes between them end in

compromise; about a third of their disputes end with one child submitting and another third end without resolution.

It is not difficult to appreciate why compromise is so rarely achieved. Because individuals view conflicts from differing perspectives, it is often hard, especially in the heat of battle, for them to understand their opponents' motivations and to appreciate the harmful impact of their own actions (Stein & Bernas, 1999; Wilson, Smith, Ross, & Ross, 2004). Combatants typically presume that their own goals and actions are just. They also assume that the validity of their position is readily apparent even to their adversaries; consequently, they regard their adversary's opposition as self-interested and hostile (Vorauer & Claude, 1998). In short, conflict is often associated with a mindset more conducive to destructive conflict than to compromise.

To study negotiating precursors to compromise, we have to examine conflicts that yield a higher frequency of compromise than has typically been observed in past research. In the current study, we removed the conflict from its original context by asking the children to re-visit an unresolved issue of contention. Presumably, the sting of the earlier harms will have faded somewhat and discussion can be pursued with less emotion. By asking the children to *resolve* their differences, we establish a goal that might not have motivated their original dispute (Valsiner & Cairns, 1992). We expected that these two modifications would increase the likelihood of compromise. Even with the modifications, however, we anticipated that many siblings would not achieve a compromise. Siblings were asked to resolve a conflict that they had been unable to resolve earlier and important goals were at stake. We expected that whether or not they would compromise would depend heavily on the content and tenor of their negotiations.

The existing literature on sibling conflict provides little information on how children's conflict strategies are related to their resolutions of conflict, perhaps because compromise or conciliatory resolutions are so rare. Typically, researchers study either conflict outcomes or conflict strategies, or record both strategy and outcome as a joint category (e.g., adversarial conflicts in which children stand firm *and* outcomes are wins and losses; DeHart, 1999; Dunn & Munn, 1986; Howe et al., 2002; Raffaelli, 1997). In an exception to this trend, Ram and Ross (2001) examined young siblings' conflict of interest negotiations and related strategies and outcomes. For siblings between 4 and 8 years, contentious verbal negotiation was associated with a failure to resolve

differences, whereas problem-solving tactics were linked to mutually satisfactory resolutions. In the Ram and Ross study, siblings negotiated the ownership of a new set of desirable toys and positive strategies predominated; hostility could have been limited because negotiations did not involve issues of past contention. In this study, we asked siblings to negotiate an unresolved conflict that involved past harm or controversy.

### *Conflict Negotiation*

Two central and separable aspects of conflict negotiation strategies were examined in the current study: expressing opposition and planning a means of resolving differences. Both are important elements in goal-based theories of interpersonal conflict (e.g., Emery, 1992; Shantz & Hartup, 1992; Stein & Albro, 2001; Stein, Trabasso, & Liwag, 1994). Overt opposition is the hallmark of conflict: actions that advance one party's goals likely interfere with the other's goal attainment. The form of opposition is likely to vary, however, and reflects essential differences in how siblings pursue conflicting interests. As conflict goals are pursued, hostile or benevolent actions are returned in kind, leading either to escalating spirals of hostility or to reasoned negotiation (Perlman & Ross, 2005; Phinney, 1986; Vuchinich, 1984). Because conflicts can harm relationships, relationship concerns can also affect the strategies opponents adopt (Stein & Albro, 2001; Stein & Bernas, 1999). Children might surrender preferred toys rather than jeopardize their relationships with siblings. Alternatively, children may choose to pursue their own goals forcefully and risk harming their relationships. Determined to win and fearless of the interpersonal consequences, siblings can accuse each other of wrongdoing and deride or dismiss one another's arguments (Howe et al., 2002; Tesla & Dunn, 1992). Although counterproductive to the maintenance of positive relationships, such strategies can establish or reinforce dominance within the pair (Muntigl & Turnbull, 1998; Teven, Martin, & Neupauer, 1998; Turnbull, 2003).

Disputants can also adopt strategies that mitigate the hostility of the interaction and save face for both opponents (Turnbull, 2003). They can justify their positions and explain the basis of their opposition to an adversary's claims (Eisenberg & Garvey, 1981; Muntigl & Turnbull, 1998; Perlman & Ross, 2005). There is little reason to suppose, however, that such discussions will enable siblings to achieve mutually satisfactory conflict resolutions. In negotiations, a focus only on past behavior is likely to reinstate

memories of unrealized goals and harmful interpersonal actions. Children recall their own self-serving versions of past events in which they regard themselves as the more innocent and aggrieved party (Stein et al., 1994; Wilson et al., 2004). For conflict negotiations to be productive, individuals must seek changes in current circumstances that will allow them to achieve their goals (Stein et al., 1994). In their negotiations children must shift their discussion from analyzing the ways in which their individual goals were thwarted in the past conflict to devising better ways for realizing those goals in future encounters (Rogoff, Baker-Sennett, & Matusov, 1994; Stein & Albro, 2001; Stein et al., 1994; Vuchinich, 1999). A focus on future-oriented planning allows children to reinstate and anticipate the achievement of valued goals.

In the case of sibling conflict resolution, future-oriented planning is an interpersonal event. Children need to coordinate their efforts to achieve their own goals and flexibly adjust to demands that arise from the competing desires of their siblings (Rogoff et al., 1994; Trabasso & Stein, 1994). If children do not appreciate that their siblings' goals stem from legitimate concerns, they are unlikely to find mutually beneficial and agreeable resolutions of their differences (Ross, Recchia, & Carpendale, 2005). The planning process itself can result in a better understanding of what each child wants to achieve, and how integrative resolutions, which satisfy the central goals of both children, can be achieved (Ram & Ross, 2001). The motivation for compromising may also be enhanced by discussing proposed resolutions as children come to realize that agreement is unlikely if their siblings' goals are not considered in their planning. Thus future-oriented planning provides both the means and the motivation for compromising with others. Past researchers have not examined the nature and modification of children's original plans as siblings confront objections and strive to achieve mutual agreement. In the present study, we conduct a detailed analysis of conflict negotiations and examine how original offers are modified through mutual planning and related to conflict outcomes.

### *The Current Study*

Our first goal was to determine whether issues that are of continuing contention can be resolved in a conflict negotiation between siblings. If the issues are resolved, does the resolution tend to be a win-loss, with one sibling relinquishing his or her claims, or a compromise, in which both siblings achieve their goals at least in part?

Second, we test hypotheses related to the children's ages and their positions as older and younger siblings. We expect the use of planning strategies to increase with the age of the disputants. Older children have a better understanding of conflict processes, and, in particular, of the possibility that combatants could legitimately interpret the same event from different perspectives (Carpendale & Chandler, 1996; Ross et al., 2005). They should therefore be more willing and more adept at devising solutions that consider the goals of both adversaries. At the same time, older siblings should be better able to take advantage of their younger siblings by proposing and convincingly supporting plans to realize only their own goals. Older siblings generally emerge as winners in sibling disputes (Dunn & Munn, 1986; Phinney, 1986; Ross et al., 1996; Tesla & Dunn, 1992) and manage positive interaction between themselves and their younger counterparts (Brody, Stoneman, & MacKinnon, 1982; Stoneman & Brody, 1993). Thus we expect that older siblings will win when only one of the children achieves their goals in a dispute, and that older siblings will generally assume a leadership role in negotiations, especially in constructive and future-oriented discussions. Mitigated opposition should also increase with age, as children become better able to support their positions with reasoned arguments and counter the arguments of their siblings (e.g., Ram & Ross, 2001; Tesla & Dunn, 1992). It is less clear whether differences in the frequency of unmitigated or hostile opposition should be expected between older and younger siblings. Conceivably, unmitigated opposition is easily expressed and therefore unrelated to age.

Third, we hypothesize that the quality of children's relationships should be associated with their negotiation strategies and outcomes (Stein & Albrow, 2001). When children appraise one another positively, opposition should be mitigated rather than hostile, mutual planning should be more likely, initial offers should be more positive, and compromises should occur.

Fourth, we examine patterns of opposition and hostility in order to test predicted relationships between the quality of children's negotiations and the outcomes achieved. We predict that hostile oppositional strategies will be linked to unresolved conflicts and that mitigated opposition will lead to conflict resolution involving either win-loss solutions or compromises. Because both wins and compromises in the negotiations require mutual agreement, both outcomes would be countermanded by hostile rather than mitigated opposition (Eisenberg & Garvey,

1981; Howe et al., 2002; Muntigl & Turnbull, 1998; Phinney, 1986). Further, we suggest that joint planning, in which siblings modify their initial plans in response to one another's contributions, will be especially associated with compromises (Ram & Ross, 2001; Stein & Albrow, 2001). We also expect that initial offers will impact negotiation processes and outcomes: Early offers to compromise should limit opposition and foster compromise, offers of concessions should lead to quick wins for the other child, and plans offering only a loss to the opponent should be associated with hostile opposition and failures to resolve differences.

## Method

### *Participants*

Families were recruited through the school system in metropolitan Chicago to participate in a multi-session (14 in total) intervention study focused on conflict in family relationships. After securing school or district approval, we sent letters to all families with children enrolled in kindergarten through the fourth grade in 20 largely middle-class, ethnically diverse schools. Families who indicated interest in the study (132 in total) were contacted by telephone to determine their eligibility for participation. To be eligible, families had to include one or two parents and two children between the ages of 4 and 12 living together in the family home, all relevant family members had to be willing to participate, and no serious developmental delays or ongoing physical or mental health problems could be present in the family (96 families). An additional 32 families decided not to participate after an orientation meeting or a first or second session when the total time commitment became clear to them.

Fifty-eight families with four participating family members (mother, father, older child, and younger child) and 6 families with three participating family members (mother and two children) provided data for the current report. Older siblings (34 boys and 30 girls) were 8.9 years of age on average ( $SD = 1.17$ , range = 6.2–12.4 years). Younger siblings (44 boys and 20 girls) were 5.8 years of age ( $SD = 0.93$ , range = 3.6–7.9 years). The average age difference between the siblings was 3.14 years ( $SD = 1.17$ , range = 1.0–5.4 years). There were between two and seven children in these families ( $M = 2.84$ ,  $SD = 0.82$ ). Fifty-three families were Caucasian, 7 African American, 3 Latino, and 1 was of mixed ethnicity. Five families reported incomes under

\$30,000, 6 reported incomes between \$30,000 and 50,000, 22 reported incomes between \$50,000 and 75,000, and 31 reported incomes over \$75,000. Twelve parents had only high school education, 2 had vocational training, 26 had some college education (up to 2 years), and 40 were college graduates. An additional 42 parents had some graduate or professional training beyond the bachelor level. Seventy-eight percent of the mothers and 95% of the fathers held full- or part-time jobs, with occupations including professionals ( $N = 38$ , e.g., police officers, lawyers, therapists, architects, physicians, and carpenters), educators ( $N = 23$ , e.g., teachers, day-care workers, and librarians), business people ( $N = 45$ , e.g., marketing or sales positions people, construction managers, executive recruiters, public relations personnel), and homemakers ( $N = 12$ ). Two parents described themselves as unemployed; one was a student and one was retired.

Although the time demands of the study limited family participation, data on mothers' responses on the Child Behavior Checklist (CBCL; Achenbach, 1991), completed in the first meetings with the families, indicate that our sample did not depart greatly from U.S. national norms on children's internalizing or externalizing problems. Proportions of children identified as either borderline or clinical with respect to internalizing and externalizing problems were roughly comparable to the norms (17% of our sample vs. 16% of the norm sample for internalizing problems and 15% of our sample vs. 16% of the norm sample for externalizing problems).

### *Procedure*

The entire study included multiple visits to each family's home, interview and observational data, conflict negotiations, and conflict negotiation training in a random subset of families. The current data were drawn from the second and third sessions; up to this point, research procedures in all families were identical. In the second session family members met the researchers individually and privately and completed scales concerning their psychological well-being and relationships with all other family members (Ross, Stein, Trabasso, Woody, & Ross, 2005), and mothers completed the CBCL as described above. In the current study we make use of the children's relationship questionnaires with respect to their siblings. Each child rated the qualities that their siblings brought to the relationship ("my sister likes me, is nice to me, likes to do things with me, fights, shares, helps, is mean, and tries to hurt me"). Items were read aloud to each child individ-

ually who responded using a 5-point rating scale ranging from "never" ("not at all" for the liking item) to "a lot." Items for each child's rating of the sibling were summed (with fights, is mean, and hurts reverse scored), yielding a composite measure for each child's appraisal of his or her sibling.

During the next scheduled session children were interviewed separately about conflicts and good times with one another. Then the interviewer, speaking with both children, listed and briefly described the unresolved conflicts from each child's interview, ascertained that both children remembered the events referred to, and asked the children to decide which of the past conflicts they wanted to discuss together. Of the issues selected for discussion, 39 were first described in the prior interview by the older siblings and 18 were first described by the younger siblings; both children had described the selected conflict in their interview in only 7 cases. Siblings who had not previously described the conflict were interviewed about it before the conflict negotiation. Preliminary analyses indicated no associations between children's negotiations and which child initially reported the past conflict.

The conflict negotiations, the focus of the current analyses, took place in a room in the children's home immediately after the conflict had been nominated and described. The children were asked to discuss the problem together and to try to resolve the conflict in a mutually satisfactory way (e.g., "You guys talk together and work out some sort of solution that you're both happy with."). They were told that they would have 10 min to discuss the problem, after which the researcher would return, but would give them an additional 3 min if they wished. If the children resolved their differences earlier, they could notify the researcher that they had completed their discussion. The children were left alone to complete their negotiations and understood that they were being videotaped with a visible recorder present in the room.

### *Measures*

Transcripts of the children's discussions were prepared from the videotaped records of the sessions. The verbal transcripts were supplemented with nonverbal actions that contributed to the communication (e.g., head shakes or nods, raised fists, hand shakes). Before coding, the transcripts were parsed into the smallest meaningful units (generally clauses or single actions). Those units in which children expressed their opposition to their siblings or made plans for the resolution of their differences

Table 1  
*Coding Categories*

|                             |                                                                                                                                                                             |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Negotiation outcomes        |                                                                                                                                                                             |
| Compromise                  | Both agree to a plan that realizes the goals of both disputants in whole or part                                                                                            |
| Win-loss                    | Both agree to a plan through which only one party appears to gain                                                                                                           |
| No resolution               | No plan is agreed upon by the parties; differences are not reconciled                                                                                                       |
| First offers for resolution |                                                                                                                                                                             |
| Compromise                  | Suggested plan, if implemented, meets some of each child's goals                                                                                                            |
| Win for self                | Suggested plan, if implemented, meets only own goals                                                                                                                        |
| Concession                  | Suggested plan, if implemented, meets only other's goals                                                                                                                    |
| Opposition                  |                                                                                                                                                                             |
| Accuse                      | Blame other; describe other's harmful or negative action or state                                                                                                           |
| Disagree                    | Reject a claim, position, or suggestion of the other without giving a reason. Disagree with plans not included here but in dispute plans as indicated below                 |
| Counter                     | An argument that opposes the other's argument or justifies alternative suggestions. Counter plans not included here but in dispute plans as indicated below                 |
| Dismiss                     | Treat the move (premise/assumption/statement) of the other as irrelevant or nonsensical. Challenge an opponent's position in a way that suggests that it cannot be defended |
| Planning                    |                                                                                                                                                                             |
| Suggest plan                | Propose a resolution of differences, in whole or in part                                                                                                                    |
| Justify plan                | Cite a reason for adopting a plan (e.g., citing evidence or principles in support of a plan, hazards of failing to adopt the plan)                                          |
| Modify plan                 | Offer a change to an existing plan, including complementary additions, greater specification, or general statements that incorporate more cases                             |
| Request assent              | Ask for agreement to a plan                                                                                                                                                 |
| Agree to plan               | Agree to a plan proposed by the sibling                                                                                                                                     |
| Dispute plan                | Disagree or counterargue, as defined above, with respect to a plan                                                                                                          |

were coded as opposition or planning moves (see Table 1). Consecutive clauses or actions by the same child that received the same opposition or planning code were counted as a single negotiation move. Additionally, transcripts were coded for information on negotiation outcomes and first offers for resolution.

Seven coders were responsible for coding numbers of moves and negotiation strategies, and all coders participated in establishing reliability. In total, 22% of the sessions were included in the reliability sample;  $\kappa$  was .85 for number of moves and .82 for negotiation strategy. Four coders categorized outcomes and first offers, and 70% of the sessions were included in the reliability sample for these codes.  $\kappa$  was .89 for negotiation outcomes and .80 for first offers. Consensus was achieved with respect to all coding disagreements.

## Results

First, we describe how the negotiations ended. This allows us to assess whether or not children could achieve compromises in conflict, whether their conflicts ended in a win for one of the children, or if children could not resolve their differences. Second,

we examine the general process of negotiation, emphasizing the roles of older and younger siblings, and assessing the extent to which older siblings take a leadership role in the negotiations, especially with respect to mitigated opposition and future-oriented planning, as predicted. We also consider the relationships between the children's negotiation strategies and their chronological ages. Third, we examine expectations that siblings who value their relationships, as indicated by their positive appraisals of one another, employ more positive negotiation strategies and resolve their differences by compromising. Fourth, to reduce the number of variables and to explore the structure of sibling negotiations, we conduct a factor analysis of children's negotiation strategies. We report how opposition and planning behaviors of both older and younger siblings relate to one another within the context of the children's negotiations. Based on the results of the factor analysis, we then consider how children's negotiation processes are associated with qualitative features of their disputes. We examine whether initial offers are associated with negotiation strategies, and test predicted relationships between the quality of opposition and future-oriented planning and negotiation outcomes.

Children selected a wide variety of issues for the negotiations. They negotiated past harmful actions, such as hitting, excluding, deceiving, or taunting the sibling, property issues resulting from damaging the other's possessions or taking them without permission, and goal interference, which entailed unwanted efforts either to control or to intrude on another's activities (e.g., by limiting sibling interference when friends are visiting or directing sibling activities such as dressing appropriately or organizing a pantry efficiently). These issues were reliably coded ( $\kappa = .79$ ), and occurred with relatively equal frequency (20, 19, and 25 times, respectively). Because preliminary analyses indicated that the type of issue negotiated did not predict conflict outcomes or negotiation processes, this variable is excluded from the analyses reported below. Additionally, preliminary analyses indicated that gender of older and younger siblings individually or in combination did not qualify any findings reported below. It should be noted, however, that power could be an issue with respect to analyses of the gender constellations and that effects of gender constellation could be found in larger samples.

### Negotiation Outcomes

In 27 negotiations, children agreed on a compromise between their original positions. In 15 negotiations, they settled their issues with win-loss resolutions, in which the goal of only one of the children was realized. Older siblings tended to emerge as winners (11 wins for older vs. 4 wins for younger); however, this difference was not statistic-

ally significant by the binomial test. In the remaining 22 negotiations, the dyads failed to resolve their differences.

### Negotiation Strategies of Older and Younger Siblings

Children almost always concluded their negotiations in less than 10 min and spent an average of 43 moves ( $SD = 32.6$ , median = 32) discussing their disagreements. Older children made more frequent contributions to the conflict discussions than did their younger sisters or brothers,  $M = 26.3$  moves,  $SD = 21.0$  versus  $M = 16.8$  moves,  $SD = 12.5$ ,  $F(1, 63) = 41.47$ ,  $p < .01$ ,  $\eta^2 = .40$ . Nonetheless, younger siblings were far from silent partners: they contributed substantially to the negotiations. To understand how children negotiated, we focus on the qualities of argumentation and resolution—how children expressed their opposition to one another and how they made plans to avoid or resolve similar conflicts in the future.

*Opposition.* Oppositional moves constituted only a minority of the children's talk—27% for both older and younger siblings; however, the extent of their disagreement and the manner in which they expressed their differences differed among families and between siblings. A multivariate analysis of variance (MANOVA) comparing the frequencies of older and younger siblings' oppositional strategies yielded a significant effect of birth order,  $F(4, 60) = 3.72$ ,  $p < .01$ ,  $\eta^2 = .20$ . Significant univariate effects were found for accusing and disagreeing with siblings (see Table 2). Older siblings were more likely to accuse and younger siblings to disagree than their

Table 2  
Older and Younger Siblings' Negotiation Strategies

|                | Older sibling |      | Younger sibling |      | $F(1, 63)$ | $\eta^2$ |
|----------------|---------------|------|-----------------|------|------------|----------|
|                | $M$           | $SD$ | $M$             | $SD$ |            |          |
| Opposition     |               |      |                 |      |            |          |
| Accuse         | 1.42          | 2.79 | 0.70            | 1.41 | 4.74*      | .070     |
| Disagree       | 0.72          | 1.21 | 1.22            | 2.00 | 8.18**     | .115     |
| Counter        | 1.45          | 2.85 | 1.25            | 2.15 | 2.18       | .033     |
| Dismiss        | 0.53          | 1.18 | 0.38            | 1.08 | 0.86       | .013     |
| Planning       |               |      |                 |      |            |          |
| Suggest plan   | 1.52          | 2.31 | 0.52            | 1.57 | 13.44**    | .176     |
| Justify plan   | 0.28          | 0.72 | 0.02            | 0.13 | 8.76**     | .122     |
| Modify plan    | 1.08          | 1.63 | 0.45            | 1.18 | 8.00**     | .113     |
| Request assent | 1.41          | 2.65 | 0.22            | 0.57 | 12.05**    | .161     |
| Agree to plan  | 0.63          | 0.98 | 1.14            | 1.73 | 9.93**     | .136     |
| Dispute plan   | 0.13          | 0.42 | 0.03            | 0.18 | 1.63       | .025     |

Note. \* $p < .05$ , \*\* $p < .01$ .

brothers or sisters. No differences were found for the use of counterarguments or for dismissing siblings' contributions.

*Planning.* Planning occurred at about the same frequency as opposition—26% of older children's moves and 25% of younger children's moves involved making plans for resolving their differences. Older siblings assumed a leadership role in negotiating plans to resolve conflict (see Table 2). A MANOVA comparing older and younger siblings' use of planning strategies yielded a significant effect of birth order,  $F(6, 58) = 2.79, p < .05, \eta^2 = .22$ , and all but one variable differentiated the children. Compared with their brothers and sisters, older siblings were more than twice as likely to suggest, justify, modify, and request assent to plans; younger siblings were more likely to agree to plans, and no differences were found between the children in disputing plans. Only one younger sibling justified a plan, and thus this variable was dropped from further analyses.

*Ages of older and younger siblings.* We conducted regression analyses to determine if variations in the chronological ages of the siblings were related to conflict outcomes and negotiation strategies. The findings complement those obtained in the comparisons of older and younger siblings. The age of the younger sibling and the age difference between the children were not related to conflict outcomes; however, the age of the older sibling was related to outcomes,  $F(2, 61) = 3.69, p < .05, \eta^2 = .11$ . Least significant difference test (LSD) contrasts indicated that dyads that failed to resolve their conflicts contained chronologically younger elder siblings than did dyads that compromised,  $M = 8.4, SD = 1.10$  versus  $M = 9.3, SD = 1.14$ ; older siblings in win-loss dyads did not differ in age from those in either of the other two groups,  $M = 9.1, SD = 1.13$ .

Regression analyses were next conducted to examine the effects of the children's ages on their own and their siblings' negotiation strategies; in six separate analyses children's negotiation strategies were examined as predictors of older and younger siblings' ages, and of the age difference between the children. The age of the younger sibling was not related to either child's strategies, nor were significant relationships found with the age differences between the two. In contrast, the older siblings' age was related to the strategies used by both older and younger siblings,  $F(10, 53) = 2.45, p < .05, R^2 = .32$ , and  $F(10, 53) = 2.78, p < .01, R^2 = .33$ , respectively. For older siblings, one univariate relationship was significant; older siblings' plan justifications were positively related to their ages,  $t = 2.59, p < .01, \beta = .38$ . For younger siblings, three planning strat-

egies were associated with their older siblings' ages; when their siblings were chronologically older, younger siblings were less likely to suggest plans,  $t = 2.17, p < .05, \beta = -.29$ , and more likely to request assent to plans,  $t = 2.30, p < .05, \beta = .34$ , and to agree to plans,  $t = 4.39, p < .01, \beta = .62$ .

#### *Children's Negotiations and the Quality of Their Sibling Relationships*

Children appraised the qualities of their sisters and brothers on eight 4-point scales. Their responses were summed across the items, with higher numbers reflecting more favorable ratings. Older siblings' ratings of their younger siblings averaged 20.8 ( $SD = 4.47$ ) and younger siblings' ratings of their older counterparts averaged 20.8 ( $SD = 5.31$ ). We correlated children's appraisals with their negotiation strategies. In regression analyses, younger siblings' ratings failed to predict either their own or their siblings' negotiation strategies; also, older siblings' ratings were unrelated to their younger siblings' negotiation strategies. In contrast, older siblings' ratings of their younger brothers and sisters predicted their own negotiation strategies,  $F(10, 50) = 2.43, p < .05, R^2 = .32$ . When older siblings rated their younger counterparts more favorably, they were less likely to accuse,  $t = 2.70, p < .01, \beta = -.42$ , and dismiss,  $t = -2.86, p < .01, \beta = -.44$ , but more likely to engage in counterarguments with them,  $t = 3.63, p < .01, \beta = .59$ . Finally, older siblings' appraisals of younger siblings were marginally related to the outcomes children achieved,  $F(2, 61) = 2.50, p < .10, \eta^2 = .08$ ; significant LSD contrasts between children who compromised and those who did not resolve conflict issues,  $M = 22.00, SD = 3.53$  versus  $M = 19.05, SD = 5.13$ , revealed that more favorable appraisals of younger siblings were associated with a greater likelihood of compromise; those whose conflicts ended in win-loss outcomes did not differ in appraisals from either of these groups,  $M = 21.07, SD = 4.51$ .

#### *Conflict Outcomes and the Negotiation Process*

*First offers.* Older siblings made more first offers (41 by older siblings and only 7 by younger,  $p < .01$  by the binomial test). In 16 negotiations neither child made a suggestion for how issues could be resolved. In their first offers, children proposed a compromise (21 such offers by older siblings and 3 by younger), suggested a win for themselves (16 times by older children and 2 by younger), and conceded to their siblings (4 times by older children and 2 by younger).

Table 3

*Relationships between Negotiation Outcomes and Children's First Offers For Resolving Conflict Issues*

|                | Outcome    |          |               | Total offers |
|----------------|------------|----------|---------------|--------------|
|                | Compromise | Win-loss | No resolution |              |
| First offer    |            |          |               |              |
| Compromise     | 22 (92)    | 1 (4)    | 1 (4)         | 24 (38)      |
| Concession     | 1 (17)     | 5 (83)   | 0             | 6 (9)        |
| Win for self   | 4 (22)     | 9 (50)   | 5 (28)        | 18 (27)      |
| No offer       | 0          | 0        | 16 (100)      | 16 (25)      |
| Total outcomes | 27 (42)    | 15 (23)  | 22 (34)       | 64           |

*Note.* Percentages of each outcome and each type of offer are provided in parentheses.

All four wins for younger siblings resulted from their older siblings' initial concessions. The nature of the first offers was not related to which child (older vs. younger) made the proposal,  $\chi^2_{(df=2, N=48)} = 1.95$ , *ns*.

In contrast, the negotiators' first offers (or lack thereof) strongly predicted the outcomes of the negotiations. Negotiations including compromises as a first offer almost always ended in compromise; negotiations with either concessions or proposed wins for self as a first offer tended to conclude in win-loss outcomes; finally, negotiations in which children failed to make offers always ended without resolution,  $\chi^2_{(df=6, N=64)} = 74.17$ ,  $p < .01$ ,  $V = .76$ . The primary exceptions to the rule that outcomes mirrored first offers occurred when children suggested wins for self; in these cases they also sometimes ended the negotiation either by compromising or by failing to find a solution (see Table 3).

*Dyadic structure of negotiations.* To examine the influence of negotiation strategies, we first conducted a factor analysis to create dyadic negotiation categories. Both the opposition and the planning strategies of each of the two siblings were simultaneously entered into a principal components analysis to examine relationships among negotiation strategies. Data from both siblings were entered as a single case and thus the family was the unit of analysis; however, each child's behavior was entered as separate scores (e.g., older accuse and younger accuse were two separate variables entered for each family). This allowed us to discover dyadic patterns of negotiation between the children while avoiding problems that might result from a lack of independence of data from two interacting children from the same family. Based on the scree plot of factor eigenvalues, a four-factor solution was selected, and subjected to an oblique (Oblimin) rotation. Com-

Table 4

*Factor Analysis of Children's Negotiation Strategies*

| Negotiation strategy | Factor 1 | Factor 2    | Factor 3    | Factor 4      |
|----------------------|----------|-------------|-------------|---------------|
|                      | Argument | Older plans | Argue plans | Younger plans |
| Accuse               |          |             |             |               |
| Older                | .72      | —           | —           | —             |
| Younger              | .70      | —           | —           | —             |
| Disagree             |          |             |             |               |
| Older                | .72      | —           | —           | —             |
| Younger              | .75      | —           | —           | —             |
| Counter              |          |             |             |               |
| Older                | .93      | —           | —           | —             |
| Younger              | .86      | —           | —           | —             |
| Dismiss              |          |             |             |               |
| Older                | .67      | —           | —           | —             |
| Younger              | .59      | —           | —           | —             |
| Suggest plan         |          |             |             |               |
| Older                | —        | .81         | —           | —             |
| Younger              | —        | —           | —           | .45           |
| Justify plan         |          |             |             |               |
| Older                | —        | .74         | —           | —             |
| Modify plan          |          |             |             |               |
| Older                | —        | .61         | .47         | —             |
| Younger              | —        | —           | —           | .87           |
| Request assent       |          |             |             |               |
| Older                | —        | .79         | —           | —             |
| Younger              | —        | —           | —           | .85           |
| Agree to plan        |          |             |             |               |
| Older                | —        | —           | .58         | —             |
| Younger              | —        | .80         | —           | —             |
| Dispute plan         |          |             |             |               |
| Older                | —        | —           | .78         | —             |
| Younger              | —        | —           | .88         | —             |

*Note.* All factor loadings > .40 have been entered into this table.

monalities among the variables averaged .65 (range = .39–.82, with all but one being above .50) and the factor analysis produced a simple structure, with only one variable having salient loadings on more than one factor (see Table 4).

Factor 1 (argument, accounting for 26% of the variance) comprised all of the opposition codes of both older and younger siblings—accusations, disagreements, counterarguments, and dismissals. Planning moves divided into three factors, which, for the most part, separated the strategies of older and younger siblings, as well as disagreements with proposed plans. Factor 2 (older plans, 21% of the variance) consisted of plan suggestions, justifications, modifications, and requests for assent by older siblings and agreement to plans by younger siblings. Factor 3 (argue plans, 9.2% of the variance) was comprised of both siblings' disputing suggested plans, as well as older siblings' agreements with

Table 5

*Relations of Children's Negotiation Strategies With Conflict Outcomes and First Offers*

|               | Argument<br>$\alpha = .89$ | Older plans<br>$\alpha = .85$ | Argue plans<br>$\alpha = .76$ | Younger plans<br>$\alpha = .61$ |
|---------------|----------------------------|-------------------------------|-------------------------------|---------------------------------|
| Outcomes      |                            |                               |                               |                                 |
| Compromise    | 3.19 (4.90) <sup>a</sup>   | 6.15 (4.61) <sup>a</sup>      | 1.33 (1.33) <sup>a</sup>      | 2.07 (2.77) <sup>a</sup>        |
| Win-loss      | 9.53 (14.61)               | 8.20 (10.33) <sup>a</sup>     | 2.67 (3.81) <sup>b</sup>      | 1.00 (1.51)                     |
| No resolution | 11.91 (12.98) <sup>b</sup> | 1.14 (2.03) <sup>b</sup>      | 0.18 (0.50) <sup>a</sup>      | 0.23 (0.75) <sup>b</sup>        |
| First offers  |                            |                               |                               |                                 |
| Compromise    | 2.67 (2.78) <sup>a</sup>   | 6.04 (4.72) <sup>a</sup>      | 1.25 (1.26)                   | 1.92 (2.87) <sup>a</sup>        |
| Concession    | 2.50 (3.02) <sup>a</sup>   | 5.00 (3.79)                   | 1.33 (1.03)                   | 0.83 (1.17)                     |
| Win for self  | 12.56 (14.76) <sup>b</sup> | 7.61 (9.50) <sup>a</sup>      | 2.33 (3.61) <sup>a</sup>      | 1.28 (1.78)                     |
| No offer      | 11.72 (13.75) <sup>b</sup> | 0.13 (0.34) <sup>b</sup>      | 0.0 (0.0) <sup>b</sup>        | 0.13 (0.50) <sup>b</sup>        |

Note. Significant LSD contrasts related to conflict outcomes are indicated by different superscripts within each column for outcomes and for first offers. Alpha values refer to the reliability of each factor score. (LSD = least significant difference test).

plans. Factor 4 (younger plans, 8.8% of the variance) comprised younger children's plan suggestions, modifications, and requests for assent. The four factors were relatively independent of one another; interfactor correlations ranged from  $-.19$  to  $.20$ .

*Relating negotiation strategies to outcomes.* To examine the relation of strategies to outcomes and offers, the variables that loaded on each factor were summed to create four factor scores. To eliminate redundancy among the factors, variables with cross-loadings were added only to the factor on which they loaded most strongly. The four negotiation factor scores were entered as dependent variables into a MANOVA that compared negotiations that resulted in compromise, win-loss, and no resolution outcomes. The effect of outcome was significant,  $F(8, 118) = 4.35$ ,  $p < .01$ ,  $\eta^2 = .23$ , and followed by univariate LSD tests (see Table 5). Children's arguments were more frequent in no resolution discussions than in compromises, with win-loss outcomes not differing significantly from either of the other outcomes. Both children's planning occurred more often when they compromised than when they failed to resolve their differences; however, unlike their younger counterparts, older siblings also planned often in win-loss discussions. Arguments over plans occurred most often with win-loss outcomes.

*Relating negotiation strategies to first offers.* Not surprisingly, the relations of negotiation strategies to first offers resembled those found with outcomes, as outcomes and offers were strongly related to one another (see Table 5). Similar to the above analysis, the negotiation scores entered as dependent variables into a MANOVA indicated a significant effect of first offers,  $F(12, 177) = 2.72$ ,  $p < .01$ ,  $\eta^2 = .16$ . Sibling pairs who suggested a win for self, or who failed

to make an offer at all were more argumentative in their negotiations than those who either conceded or suggested compromises. Both children planned more often when the children offered to compromise than when no initial offers were made; older siblings' planning and both children's arguments over plans occurred most often when a win for self was suggested.

## Discussion

In observational studies of naturalistic conflicts, most disputes between children and their siblings are unresolved and compromise is exceedingly rare (Howe et al., 2002, 2003; Siddiqui & Ross, 1999). In the current study, we asked siblings to re-examine an earlier unsettled conflict and attempt to resolve it through discussion. Of the sibling dyads, 42% compromised with one another, suggesting that compromise was easier to attain in the current context, but was still far from inevitable. An additional 23% of the siblings achieved a win-loss agreement. Consequently, almost two thirds of the sibling dyads were able to resolve their conflicts. Apparently, when the heat of battle has subsided and children are given the task of resolving their differences, many can do so. Whether or not the resolutions children achieved helped them to avoid or resolve conflicts in future encounters is another question, however. One would hope that children who resolved their conflicts would adhere to their agreements so that future conflict over those issues could be avoided. If not, the children could at least refer to the terms and principles incorporated in their prior agreements to make future resolutions easier to arrive at.

As anticipated, older siblings took a leadership role in proposing, promoting, and gaining agreement to their plans for resolving conflicts; younger siblings' most frequent strategies were to agree to plans and to make suggestions or modifications themselves. Contrary to our predictions, older children did not use mitigated opposition more often than their younger siblings. Indeed, both children's use of counterarguments was impressive, given that such arguments are regarded as both sophisticated strategies and as mitigated, face-saving means of objecting to others' views or positions (Kuhn & Udell, 2003; Turnbull, 2003). Counterarguments both explain diverging positions and provide the basis for further discussion (Eisenberg & Garvey, 1981). In comparison, dismissive statements, which undermine the value of the partners' actual or potential contributions to the discussion (Turnbull, 2003), were relatively rare and also not different for older and younger children.

Although children's negotiation strategies, particularly their planning moves, were strongly associated with their positions as older or younger siblings, the children's chronological ages, especially those of the younger sibling, did not exert much influence on the negotiation strategies. In this sample the average age difference between the siblings was 3 years; the range in ages of older siblings was 6 years and that for younger siblings was more than 4 years. Howe et al. (2002) and Raffaelli (1992) also reported that conflict strategies were not related to the ages of the children, with both preschoolers and adolescents. With respect to negotiation strategies, we found only one significant correlation—a positive relationship between the older siblings' chronological ages and their tendencies to justify their plans. While it is consistent with the literature that older children would be better able and more likely to marshal arguments that further their own proposals (Dunn & Munn, 1987; Phinney, 1986; Ram & Ross, 2001; Tesla & Dunn, 1992), the current findings suggest that the position of being the elder of two siblings has a more pervasive impact on children's negotiation strategies. Importantly, the age of the older sibling influenced the negotiation strategies of their younger brothers and sisters, who were more agreeable when their siblings were relatively older; younger siblings also made fewer plan suggestions of their own when brothers and sisters were older. These findings suggest that younger siblings were more inclined to accept the leadership of relatively older siblings who, in turn, furthered the negotiation by using more convincing justifications. Such dyads were also more likely to compromise than to leave issues

unresolved. It is consistent with the dominating role that older siblings play in the negotiations that their ages, rather than the ages of younger siblings, influence negotiation strategy and outcome.

Prior research indicates that older siblings are more powerful adversaries, likely to both initiate and win when young children fight; they are also more likely to provide models for imitation, manage sibling games, guide their problem solving, distract, conciliate, and make reference to rules (Abramovitch, Corter, Pepler, & Stanhope, 1986; Brody et al., 1982; Dunn & Munn, 1986; Perlman, Siddiqui, Ram, & Ross, 2000; Ram & Ross, 2001; Stoneman & Brody, 1993). The current findings add to that literature by detailing how older siblings exert their influence in resolving conflict with their younger brothers and sisters.

Relationships between the siblings were also associated with the quality of their negotiations and with the outcomes they achieved. Again, the leadership of the older siblings was decisive in that their appraisals of their younger brothers and sisters were associated with the outcomes of the negotiations and with the oppositional strategies older siblings adopted during the negotiations. Although younger siblings' appraisals are as reliable and as valid as those of their older counterparts (Ross et al., 2005; Ross, Woody, Smith, & Lollis, 2000), they were not associated with negotiation strategies or outcomes in the current study. Dyads in which older siblings appraised their younger counterparts more positively were more likely to compromise and less likely to fail to resolve their differences than were other siblings. Older siblings in those dyads more often mitigated their opposition by countering the arguments of their younger siblings. Counterarguments show respect for the views of others, even while disagreeing with them. In contrast, older siblings who rated their younger siblings negatively were more likely to accuse and dismiss them. As suggested by the literature, older siblings who were most negative about their younger siblings were willing to pursue their own goals with hostile opposition despite the risk to their relationship (Howe et al., 2002; Stein & Albro, 2001; Stein & Bernas, 1999). These older children were unlikely to compromise their own goals and allow their siblings to achieve some of what they wanted in their negotiations.

A major objective of this study was to identify negotiation patterns and relate them to outcomes. Our factor analysis of negotiation strategies indicated an almost complete separation of opposition and planning strategies. Importantly, all of the

factors were linked to the children's conflict resolutions. As might be expected, compromise solutions were associated with decreased opposition, whereas the failure to reach a resolution was related to increased opposition. More striking perhaps, the failure to attain a resolution was associated with minimal use of all future-oriented planning strategies by both older and younger siblings; even argumentation over plans was negligible. Children fail to resolve their differences and to achieve valued goals when their discussions do not bridge the divide between past and future, but focus on accusations and denials for past wrongs. In those dyads planning often does not even begin, as indicated by the absence of first offers in 16 of the 22 unresolved negotiations.

In contrast, flexible planning by both children seemed to be an important element of negotiations leading to mutually beneficial resolutions in conflict negotiations. Compromise negotiations were associated with limited argumentation in general and in specific reference to suggested plans, as well as frequent planning by both siblings. Compromise negotiations bear all the hallmarks of future-oriented planning with others (Rogoff et al., 1994); they are *interpersonal*, in that both children's planning contributes to compromise resolutions, *coordinated*, as evidenced especially by the children explicitly seeking agreement from their siblings, *flexible*, in that resolutions are modified on-line as negotiations continue, and *goal oriented*, as children seek and find solutions that allow them to realize valued conflict goals. An important addition to the literature on future-oriented planning is the link between planning strategies and compromises. Since the initial suggestions of the children in such negotiations most often consisted of compromises as opposed to self-interested resolutions, it is likely that compromise suggestions produced compatible planning activities rather than the reverse. Moreover, children whose initial plans offered a compromise seldom failed to reach a compromise as a final outcome. Children did negotiate and modify these early suggestions, but the tone had been set for resolving differences rather than for continued hostility.

Although win-loss negotiations also ended with agreement by the children, these negotiations differed from compromises. Negotiation strategies included planning by older siblings but not by their younger counterparts and plans were disputed by both children. Despite their eventual agreement, these discussions generally began with suggestions that were in the interest of only one of the children (usually the older sibling). Although there was not a

sufficient number of win-loss resolutions to allow us to consider wins by older and younger siblings separately, it is intriguing that all four wins by younger siblings occurred when their older siblings opened negotiations with concessions. These negotiations included apologies by the older siblings for wrongfully blaming or not sharing ill-gotten gains with younger siblings. Thus, older children generally won when their own plans were in their own interest, and when they forcefully advocated these plans despite opposition by their younger siblings. Younger siblings won when their older brothers and sisters decided that they ought to do so.

Each sibling negotiation has its own unique character, as well as conforming to the general patterns revealed by our statistical analyses. In the absence of space limitations, we would provide multiple examples of each type of negotiation, especially focusing on differences related to conflict outcomes. We limit ourselves to two illustrations: one of a compromise negotiation and the other of a discussion that was not resolved. We selected the compromise because this outcome is rarely observed in naturalistic sibling conflict and because of the flexibility and considerations of mutual interests that characterize compromise negotiations. The unresolved discussion provides an informative contrast to the compromise.

The negotiation presented in Table 6 illustrates many elements that contribute to compromises. The issue, raised by the older sibling, is that her younger brother always wants to play with her gerbils and might mishandle them. In her prior interview, she identified this issue as important, recurring, and unresolved. She begins the negotiation with an offer that takes account of her younger brother's goals ("and then you could come in for fifteen minutes and play with my gerbils. . ."), and immediately requests his assent ("Do you think that would be good?"), which is readily attained ("yeah"). The offer is amended throughout the negotiation and the younger sibling eventually adds his own modification to the plan ("I will help with gerbil sitting and gerbil feeding"), which is accepted into their planned resolution.

The unresolved negotiation depicted in Table 7 was described by the younger sibling as a conflict that still bothered her. In her interview she alleged that her brother had taken her basketball and refused to return it. Although rare in unresolved disputes, the older brother begins the negotiation with a plan for resolving differences; however, his plan considers only his own goal of playing with the basketball while ignoring his sister's complaints. She repeat-

Table 6

*A Negotiation Ending in Compromise*

- 
- O Walter, do you think that we could um maybe fif, maybe I could play with my gerbil for fifteen minutes and then you could come in for fifteen minutes and play with my gerbils without. Do you think that would be good?
- Y Yeah.
- O Or do you have another idea? What else do you think? Or do you think that I should have half an hour with my gerbils by myself and then you could come in fifteen minutes?
- Y Or I could have, we could both have twenty minutes.
- O We both yeah that would that would be just about perfect. You have twenty minutes with the gerbils with George (a third, younger sibling) also with me all three of us together and then I could be by myself for twenty minutes. You think that would be good?
- Y Yeah and then I could be by myself for twenty minutes.
- O You think that would be a good idea?
- Y Yeah, and last I am by myself for twenty minutes.
- O Ok when you are by yourself I have to be with you so you do not hurt the gerbils by accident, like you do not pull off their tail by accident, or something like that or you do not squeeze too hard. You know what I mean?
- Y (nods and smiles)
- O The big one for thirty minutes, me and you for twenty minutes, me and George for twenty minutes, and me by myself for twenty minutes. You think that had be a good idea?
- Y Uh huh.
- O What else do you think we, do you need anything else you want to have a special time for feeding time? Do you want to help out with gerbil feeding or something like that?
- Y Sure. I will help with gerbil sitting and gerbil feeding.
- O Ok. That's a good idea.
- Y While I am gerbil sitting I can feed them.
- O Yeah. Well gerbil sitting yeah, yeah, that had be a good idea also. How about if you wait, wait here for a second. I am going to go get
- Y What if we, what if we filled up the whole big ball and we put the two gerbils in there.
- O That's the same as gerbil sitting. Now I am going to go get Marc (the researcher), ok?
- Y Ok.
- 

*Note.* O, the older sibling, is 9½ years old and Y, the younger sibling, is 5½. Parentheses designate actions that contribute to the ongoing negotiations.

edly accuses him of violating her ownership rights, supporting her own claim (she has a witness), and rejecting her brother's plans. He, in turn, dismisses her contribution ("you don't say that"). The discussion ends when the brother calls the interviewer without attaining his sister's agreement to his plan.

Although a third party might see the possibility of a compromise (e.g., the brother might agree to ask his sister's permission to play with the basketball and she might agree not to withhold permission unreasonably), they do not even begin to consider such a solution.

Table 7

*A Negotiation Ending Without Resolution*

- 
- O Okay. We should just, um, we should just . . .
- Y But you took my [basketball].
- O [(Slaps younger on the cheek)]. We, we should just keep on going. . .
- Y But you took my basketball.
- O Playing, and then you get two shots and that's all.
- Y No. You took my basketball [without asking].
- O [(stands up and points finger at C2) Listen little girl]. You don't say that cuz I didn't take your basketball.
- Y Yes you did. And then Linus knows and said [you did].
- O [Look.] We're coming up with a solution. We should just keep on playing basketball and then you get two shots (making chopping motions with his hand).
- Y No. No.
- O Deal. Or three [three].
- Y [I'm] not gonna let you play with my basketball.
- O We're ready (into the microphone to summon the interviewer).
- 

*Note.* O, the older sibling, is 9 years old and Y, the younger sibling, is 6. Square brackets indicated overlapping speech or actions and parentheses designate actions that contribute to the ongoing negotiations.

Reflecting on Shantz's (1993; Shantz & Hobart, 1989) dual lessons that children can derive from their conflicts, the compromise clearly contains a stronger message concerning interpersonal interdependence with the melding of the children's goals, whereas, in the unresolved dispute, the children repeatedly support and witness one another's support of their own original positions. Interdependence in the unresolved conflict is conveyed only in the negative—as the conflict stands, they cannot both achieve what they want.

The current study showed that siblings could productively discuss and resolve issues of past contention, and that older siblings provide leadership within the negotiations. Such leadership was found particularly in older siblings' more frequent planning and in the influence of older siblings' ages and appraisals of their brothers and sisters on the quality of conflict negotiations and outcomes. The findings confirm predictions in the conflict literature that hostile opposition prevents compromise resolutions. Interestingly, mitigated or reasoned opposition is closely related to other forms of opposing and is likewise associated with children's failures to resolve their differences. Additionally, these findings link research on children's conflict to an emerging emphasis on future-oriented processes (Haith, Benson, Roberts, & Pennington, 1994; Rogoff et al., 1994; Trabasso & Stein, 1994). In the children's conflict negotiations, future-oriented planning proved to be a critical element of conflict resolution, and flexible, mutual planning was specifically associated with compromise resolutions.

This promising beginning also leaves many questions unanswered; it would be important to know if resolutions arrived at through negotiation are adhered to when issues arise again, and to devise and test strategies that might allow more creative, active participation by younger siblings or more frequent agreeable resolutions. Furthermore, the long-standing hypothesis that children learn from conflict engagement (Erikson, 1963; Piaget, 1932; Shantz, 1993; Sullivan, 1953) should be examined in light of the very different processes found in compromise, win-loss, and unresolved negotiations. Important as future-oriented planning has proven to be in this study, it would be interesting to see how discussions of past goals and emotions interleave with planning for the future, especially in forging conflict resolutions that last.

Finally, it is important to recognize that with rare exceptions (Rinaldi & Howe, 1998; Vuchinich, 1984, 1987; Wolke & Samara, 2004), most of the literature on conflict between young siblings is drawn from

British (e.g., Dunn & Munn, 1987), Canadian (e.g., Abramovitch et al., 1986; Howe et al., 2002; Ross et al., 1996), and U.S. samples (e.g., Bank et al., 2004; Brody et al., 1982; Herrera & Dunn, 1997; participants in this study) that were, for the most part, Caucasian and English speaking. While these samples are not identical culturally, the study of sibling conflict would be enriched and generalizability enhanced by a broader sampling of children from diverse ethnic and national backgrounds.

Although it would be premature to provide childrearing advice on the basis of the current findings, the potential implications are intriguing. Families seldom revisit children's past transgressions (Miller, Sandel, Liang, & Fung, 2001), nor do parents often ask children to attempt, after the fact, to achieve agreement on issues of contention (Ross et al., 1996). Perhaps there is some wisdom in encouraging children to forget past conflicts and move on. However, children may not so readily forget earlier grievances—the participants in our study had little difficulty enumerating unresolved conflicts with their siblings. By not encouraging after-the-fact negotiations, parents may be losing a valuable opportunity to inspire children to take their siblings' interests into account and to develop effective conflict resolution skills.

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