Day care experiences and the development of conflict strategies in young children

Elly Singer , Anne-Greth Van Hoogdalem , Dorian De Haan & Nienke Bekkema

Day care experiences and the development of conflict strategies in young children

Elly Singer*, Anne-Greth Van Hoogdalem, Dorian De Haan and Nienke Bekkema

Faculty of Social Science, Department of Development Psychology, Utrecht University, PO Box 80.140, 3508 TC Utrecht, The Netherlands

This paper presents a study of learning experiences in peer conflicts among two- and three-year-olds in Dutch daycare centres. Data were collected from individual sampling of 96 children during their free play. As in earlier studies, the results we obtained showed that three-year-olds used fewer unilateral strategies and more bilateral strategies than did two-year-olds. Bilateral strategies increased the likelihood children would play together after the conflict, but decreased the likelihood one of them would win. Unilateral strategies increased the likelihood one of them would win the conflict, but the use of physical force decreased the likelihood they would play together afterwards. Teachers often focused on the (alleged) perpetrator of the conflict and on punishing the use of physical force. But they were seldom focused on helping to reconcile the opponents. This study suggests that the children's interest in peer relationships is a strong incentive to use bilateral strategies. Therefore, teachers should value and support peer relations rather than focusing on the perpetrators.

Keywords: daycare centres; peer conflicts; conflict strategies; physical power; reconciliation; teacher's role

Introduction

In daycare centres, where children play together in groups, conflicts arise almost inevitably. These conflicts are very important experiences in which young children learn more about social relations, social rules, and the effects and consequences of conflict strategies (Corsaro, 2005; Rourou, Singer, Bekkema, & de Haan, 2006; Kernam & Singer, 2011; Verbeek, Hartup, & Collins, 2000). In general, two conflict strategies can be distinguished: unilateral strategies, such as physical force, coercion, and standing firm, in which the perspectives and wishes of the opponent are not taken into account; and bilateral strategies, such as pro-social behaviour, compromise, and negotiation, in which the perspectives and wishes of the opponent are taken into account (Verbeek et al., 2000). The use of physical force, such as hitting or kicking is at its peak in two- and three-year-olds (Cummings, Iannotti, & Zahn-Waxler, 1989; Tremblay, 2000, 2002). But children at this young age also use pro-social behaviour to maintain their peer relationships (Caplan, Vespo, Pedersen, & Hay, 1991; Singer, 2002; Verba,

---

1994). As children get older, a transition in conflict strategies takes place: the use of unilateral strategies decreases and the use of bilateral strategies increases (Caplan et al., 1991; Laursen, Finkelstein, & Townsend Betts, 2001; Tremblay et al., 2004). This transition is related to developmental processes in the child. At around three, most children develop the social skills that are important for bilateral strategies. They develop a theory of mind, which is the ability to understand mental states – perceptions, feelings, desires, and beliefs – in the self and in the other (Leslie, 1990; Wellman, 1990). Their abilities in language, emotion regulation, and impulse control increase as well (Eisenberg & Fabes, 1998; Lightfoot, Cole, & Cole, 2008; Tremblay, 2000).

The development of positive peer relationships is related to the relationship history in the family, especially to the quality of the parent–child attachment relationships, and the peer group history (Howes, 2010; Mitchell-Copeland, Denham, & DeMulder, 1997; NICHD Early Child Care Research Network, 1997; Pianta, Hamre, & Stuhlman, 2002). The peer group history of children in daycare centres is influenced by the quality of the centre. The NICHD studies and other studies show that poor quality care in the centre is associated with aggressive children, whereas high-quality care promotes children's social skills (NICHD Early Child Care Research Network, 2001, 2003; Rosenthal & Gatt, 2010; Vandell, Burchinal, Vandergrift, Belsky, & Steinberg, 2010). The NICHD studies also show that more time spent at a daycare centre in the first year of life is related to problem behaviour in a child, even as late as when they are 15 years old (Vandell et al., 2010).

This paper presents a study of peer conflicts among two- and three-year-old children in daycare centres. Like many earlier studies, we expected that particular conflict strategies are related to age: as children grow older unilateral strategies tend to decrease while bilateral strategies tend to increase (Caplan et al., 1991; Laursen et al., 2001; Tremblay et al., 2004). The goal of our study was to explore whether the age differences were related to the children's learning experiences in the daycare centre. Therefore, we explored the learning experiences in peer conflicts. First, we studied the relationships between the use of specific conflict strategies and the outcome of conflicts: the likelihood of maintaining the peer relationship after a conflict and the likelihood of one child winning the conflict. Second, we studied the characteristics of teacher interventions in peer conflicts and whether the teacher reinforced one type of strategy or another.

Several theoretical approaches are relevant in studying the social learning experiences of two- and three-year-old children during peer conflicts. First, there is the social relational model. This approach focuses on the relationship between conflict strategies and relational interests during conflict management (Killen & de Waal, 2000; Verbeek et al., 2000; de Waal, 2000a, 2000b). A conflict may help to define the relationship between opponents, which results in a more intimate and productive relationship than would be the case without any conflict at all (de Waal, 2000b). However, a conflict can also damage the relationship (Aureli & de Waal, 2000). To reduce the negative impact of conflict and to keep the overall balance of the relationship positive, opponents may use bilateral strategies. Two- and three-year-olds try to reconcile, for instance, by offering the other an object, attempting body contact, and offering verbal apologies (Killen & Turiel, 1991; Killen & de Waal, 2000; Verbeek et al., 2000). Based on the social relational model, we expected that bilateral conflict strategies would increase the likelihood of maintaining the relationship after a conflict; such strategies are used more often when the opponents played together than when they played apart from one another before the conflict (Rende & Killen, 1992).

The second approach to studying the social learning experiences is the social-cognitive learning theory. This theory predicts that strategies that are rewarded by the achievement of a goal will be used more often (Bandura, 2001; Chapman & McBride, 1992). In the case of peer conflicts, children always have two different kinds of interests and goals (Singer & de Haan, 2007). On the one hand, the relational interests and goals we discussed above. On the other hand, self-centred goals of winning the conflict. Examples of self-centred goals in peer conflicts of young children are: winning the possession of a play object (Durkin, 1995), entering into the play activities of another child (Corsaro, 2005), stopping unwanted actions (Shantz, 1987), and controlling the play ideas (Eisenberg & Garvey, 1981). In this study, we explored the relationship between uni- and bilateral conflict strategies and the likelihood of achieving self-centred goals.

Social-cognitive learning theory also led us to expect that the teacher influences the kind of strategies that children use in peer conflicts. Earlier studies show how teachers are generally focused on reducing unilateral strategies, specifically the use of physical force, and increasing bilateral strategies (Roseth et al., 2008). Teachers may affect the transition from unilateral strategies to bilateral strategies by modelling and by giving a good example of bilateral strategies (Bandura, 1986; Chapman & McBride, 1992). Teachers may also affect the children by punishing the use of unilateral strategies, specifically the use of physical force, and by rewarding the use of bilateral strategies. Finally, teachers may affect the children by creating a context in which children learn social and moral rules (Singer & de Haan, 2007). The teachers foster a moral sense of fairness by blaming the correct perpetrator of the conflict, by focusing on reconciliation of the opponents, and by giving explanations (Hoffman, 2000). Rosenthal and Gatt (2010), indicating that a conflict is a social affair in which not only the opponents, but also the audience learn from the peer conflict. Therefore, teachers need to address more than just the children involved in the conflict; they should include all children who have witnessed the conflict. We expected that the teachers would use interventions that reinforce bilateral conflict strategies.

Method

Participants

The study used 23 groups in 23 licensed Dutch daycare centres. Most daycare centres were located in major urban areas – Amsterdam, Rotterdam, The Hague, and Utrecht – and some in smaller municipalities in the Netherlands. All centres had qualified teachers and a heterogeneous composition of cultural backgrounds among the children. The mean group size during observations was 10 children and two teachers. In total, 96 two- and three-year-old focus children were selected: at least two native Dutch children and or two Moroccan or Antillean children in each centre. Because this study was part of a larger project, children from different cultural backgrounds were selected (Rourou et al., 2006).

Method

Our research design followed the ethical norms and was carried out with the informed consent of the parents of the focus children, as well as the parents of the other children present during data collection. The children's needs and wishes were respected. The

two researchers visited the groups before they started with audio- and video-taping to familiarise with the children. They explained to the children that they wanted to learn how children were playing at the centre. Data were collected by focal individual sampling. Each focus child was video and audio-taped on two different days for 30 minutes during their free play. Free play was defined as a situation in which children were free to choose the activity they wanted to do. We used portable wireless audio equipment and a video camera, and the children wore a lapel microphone connected to the pocket transmitter in a little rucksack. In a few cases, a child refused to wear the audio equipment. In these cases, the equipment was removed and placed close to where the child was playing. The researchers did not intervene in the peer conflicts. In the case of violent conflicts, the teachers were always quick to intervene and to help the children after the conflict. The 96 hours of tape obtained was checked for peer conflicts in which the focus children were involved. A conflict was defined as 'an incident in which one child protests, retaliates against, or resists the actions of another child' (Rourou et al., 2006).

Selected peer conflicts

Of the peer conflicts that occurred, only those that met three criteria were included in this study. The first criterion was that the conflict did not involve more than two children. Conflicts among three or more children were excluded. Second, only conflicts that lasted more than three moves (action–reaction–action–reaction) were included. Mishaps that consisted of conflicts, including two or three moves were excluded (van Hoogdalem, Singer, Bekkema, & Sterck, 2008). Third, we limited the age differences between the opponents, because we hypothesised that children might use different strategies towards a same age opponent than towards an older or younger opponent. We only included young–young opponents (both two years old with at most six months difference in age); old–old opponents (both opponents three years old with at most six months age difference); and young–old opponents (one two-year-old and one three-year-old with an age difference of at least nine months). In this way, we were able to include 518 conflicts in this study.

Instruments

For each selected peer conflict, we determined the conflict strategies of both opponents, whether opponents played together or apart from one another before and after the conflict, the winner and loser of the conflict, and the characteristics of teacher intervention.

Conflict strategies

For both opponents, we determined the conflict strategies they used. A distinction was made between unilateral and bilateral strategies. Unilateral strategies included non-verbal and verbal opposition, expressions of anger, distress, and other negative emotions. For example, the opponent who pulled on the object or yelled at the other opponent was using unilateral strategies. Within the category of unilateral strategies, a distinction was made between strategies using physical force and those that did not. If an opponent hit, kicked, or bit the other opponent, then physical force was used. Bilateral strategies included non-verbal actions, such as offering an object, positive contact, smiling, and verbal actions, such as proposing a compromise and saying

nice things. For example, the opponent who shared objects was using a bilateral strategy. Also an opponent who hugged or laughed used bilateral strategies. We determined for both opponents whether unilateral and bilateral strategies were used.

Playing together or apart

For each conflict, we determined whether the opponents in the conflict played together or apart from one another before the conflict and whether they played together or apart from one another directly after the conflict. Children played together when they were within 3 feet (0.91 m) of one another and were engaged in a similar activity with incidental eye contact (referred to as parallel play) or with social interactions (referred to as associative play; e.g. Howes & Matheson, 1992; Kontos, Burchinal, Howes, Wisseh, & Galinsky, 2002).

Winning or losing

For each conflict, we determined whether or not there was a clear winner and loser: whether one of the children obtained his or her self-centred goal. A conflict that started over the possession of an object was won by the child who possessed the object directly after the conflict (Durkin, 1995). In some conflicts, there was no clear winner or loser because a third child took the object or the opponents decided to share. A conflict that started because one child wanted to join in was won when the child successfully entered into the play activities of the opponent or when the opponent successfully stopped the child from joining (Corsaro, 2005). A conflict that started because of unwanted actions was won when such behaviour was successfully stopped, or continued in spite of the resistance (Shantz, 1987). A conflict over play ideas was won by the child whose play idea was accepted (Singer & De Haan, 2007). In some conflicts, there was no clear winner or loser because a compromise was reached.

Characteristics of teacher interventions

For each conflict, we determined whether or not a teacher had intervened in the conflict, and we distinguished three characteristics for such interventions. First, we determined whether the teachers used unilateral strategies (specifically physical force) or whether bilateral strategies were used by the teacher. Unilateral strategies included non-verbal and verbal directives and expressions of anger. If the teacher intervened by telling the children what to do or forbade specific behaviour, or expressed anger by yelling, she/he was using unilateral strategies. If the teacher grabbed a child by the arm or removed him or her from the conflict, then physical force was used. Bilateral strategies included non-verbal actions, such as modification and positive contact such as hugging; and verbal actions, such as proposing a compromise or reducing the hostility; and positive emotions, such as friendly and confirmative behaviour. The teacher who took a child on his or her lap, proposed a different activity, offered an object, or positively touched a child used bilateral strategies. As the second characteristic of teacher intervention, we described whether and how the teacher punished and/or rewarded the specific conflict strategies used during the conflict. And we determined whether the teacher blamed one of the opponents and whether she correctly identified the perpetrator according to the researchers who observed the onset of the conflict on the video.

Third, we determined whether attention was focused on one or both opponents and whether the teacher was focused on reconciliation and support of the children's relationship. And we determined whether the teacher involved the bystanders, the peers who witnessed the conflict.

So we distinguished with regard to strategies:

    1 = the teachers used unilateral strategies with or without physical force
    2 = the teachers used bilateral strategies

We distinguished with regard to teacher's rewards and blaming:

    1 = the teacher blamed or rewarded specific conflicts strategies
    2 = the teacher blamed one of the opponents as the perpetrator, correctly or incorrectly according to the researchers.

We distinguished with regard to reconciliation:

    1 = the teacher was focused on one or both opponents and on reconciliation
    2 = the teacher involved bystanders who witnessed the conflict

Reliability

To calculate the inter-reliability of coders with the Cohen's coefficient κ, a random sample of 4% of the conflicts was independently coded by two researchers. The reliability of the conflict strategies was 0.77 ($n = 21$); for whether opponents played together or apart from one another before and after the conflict, the reliability was 0.93 ($n = 21$); and for teacher intervention, the reliability was 0.82 ($n = 21$).

Statistics

All variables were entered in SPSS and further analysed. Because the assumptions for parametric tests were not met non-parametric χ^2-tests were used. Tests were two-tailed and the 0.05 level of confidence defined significance. Fifteen out of in total 257 different children – focus children as well as peers with whom they came in conflict - were significantly involved in more conflicts ($>2SD$). However findings were not subjected to outliers; excluding outliers gave similar results so they were not excluded from this study.

Results

In total, 518 conflicts were analysed in which 257 different children were involved. On average each child was involved in four conflicts (SD $= 4.00$). We analysed differences in age and use of conflict strategies, as well as gender differences. Because we had not found differences between the ethnic groups in the use of conflict strategies in earlier analyses of our data, we have not analysed differences in this regard in this study (Rourou et al., 2006). Moreover, since there were hardly any differences in the young–young, old–old, and young–old pairs of opponents in the conflict strategies used, this variable will not be further considered here. The children most often used

only unilateral strategies (63%); 26% used both unilateral and bilateral strategies; a minority of 4% used only bilateral strategies; 7% of the children only used strategies that could not be classified as uni- or bilateral, for instance, looking very surprised when his or her play object was forcefully taken from them.

Age differences

The use of unilateral strategies did significantly differ between two- and three-year-old children, $\chi^2 = 5.63$; df = 1; $p = 0.02$. The use of physical force, a subcategory of unilateral strategies, did not significantly differ between two- and three-year-old children, $\chi^2 = 1.14$; df = 1; $p = 0.29$. On the other hand, the use of bilateral strategies did significantly differ between two- and three-year-olds, $\chi^2 = 10.40$; df = 1; $p = 0.00$. The significant difference in the use of unilateral strategies was small, whereas the significant difference in the use of bilateral strategies was large (Table 1).

Additional analyses showed that boys and girls did not significantly differ in their use of unilateral strategies, $\chi^2 = 0.00$; df = 1; $p = 0.97$, or bilateral strategies, $\chi^2 = 1.76$; df = 1; $p = 0.19$.

Playing together or apart

In 389 of the 518 conflicts, no teacher intervened. Of the conflicts without teacher intervention, 59% started from a play situation in which the opponents played together. Bilateral strategies were significantly more often used by opponents who played together before the conflict (in 57% of these conflicts) than by opponents who played apart before the conflict (47% of these conflicts), $\chi^2 = 4.44$; df = 1; $p = 0.04$. When one or both opponents used bilateral strategies, the likelihood of playing together after the conflict was significantly higher than when no bilateral strategies were used, $\chi^2 = 22.18$; df = 1; $p = 0.00$: in 68% of the conflicts with bilateral strategies compared with 44% of the conflicts without bilateral strategies. When one or both opponents used physical force, the likelihood of playing together after the conflict was significantly lower than when no physical force was used, $\chi^2 = 4.05$; df = 1; $p = 0.04$: in 53% of the conflicts with physical force compared with 63% of the conflicts without physical force.

Winning or losing

Of the conflicts without teacher intervention, 82% ended with a clear winner and loser. The use of unilateral strategies had a significant effect on winning and achieving a self-

Table 1. Percentage of conflicts in which specific conflict-strategies are used by two- and three-year-olds.

	Unilateral strategies		Bilateral strategies
	Without physical force	With physical force	
Two-year-olds	45%	47%	25%
Three-year-olds	43%	44%	35%

Note: Children can use both unilateral and bilateral strategies during a conflict.

centred goal, $\chi^2 = 15.55$; df $= 1$; $p = 0.00$: when a child used unilateral strategies he or she won in 52% of the cases, compared with 31% of conflicts in which no unilateral strategies were used. The use of physical force had no significant effect on winning the conflict, $\chi^2 = 3.40$; df $= 1$; $p = 0.56$. The use of bilateral strategies had a significant effect on losing the conflict, $\chi^2 = 22.82$; df $= 1$; $p = 0.00$: when a child used bilateral strategies, he or she lost in 63% of the cases, and when a child did not use bilateral strategies, he or she won in 45% of the cases.

Characteristics of teacher interventions

Teachers intervened in 25% of the 518 peer conflicts. Conflict started again after teacher intervention in 22% of the cases. In 88% of the conflicts in which a teacher intervened, the teacher used unilateral strategies such as directing the children what to do, forbidding specific behaviour, or expressing anger by yelling. Physical force, a subcategory of unilateral strategies, was used by teachers in 20% of the conflicts. In these cases, the teacher grabbed a child by the arm or picked the child up and removed him or her from the scene. Teachers used bilateral strategies in 40% of the conflicts. In these cases, the teacher took a child on his or her lap, proposed another activity, offered an object, or positively touched a child. Sometimes teachers referred to the rule not to take an object from a peer and sometimes the teacher referred to the rule to share. In most interventions, however, teachers did not offer any explanation.

Teachers punished the use of unilateral strategies by children in 53% of the conflicts: 65% of these punishments were directed against the use of physical force. Punishments included reprimands as well as taking away an object or separating the children. Teachers rewarded the use of bilateral strategies in only four cases. In these conflicts, the teacher complimented the child for exchanging objects, for giving back an object, for stopping running, and for reconciling by giving a kiss.

In 60% of the conflicts, teachers pointed to one of the opponents as the perpetrator. In this respect, the observers who saw the entire conflict on videotape often disagreed with the teachers (in 30% of the cases). In 53% of the conflicts, teachers addressed one of the opponents, and in 47% they addressed both opponents. Except for one conflict, the teacher's focus was never on reconciling the children, but on the moral issue of which child was right or wrong. Although children nearby looked upset when peers shouted or hit one another during a peer conflict, the teachers only once addressed the bystanders in their interventions.

Discussion

Contrary to earlier studies, no significant difference in the use of physical force in peer conflicts was found among two- and three-year-old children. As in earlier studies, we did find a small significant difference in the use of unilateral strategies in general: three-year-old children used significantly fewer unilateral strategies than did two-year-old children. Also like earlier studies, we found that three-year-old children used significantly more bilateral strategies than two-year-olds. To obtain more insight into the social learning experiences in daycare centres, which may be related to the transition from unilateral to bilateral strategies, we explored the relationship between the conflict strategies used and the likelihood of maintaining the peer relationship after the conflict and the likelihood of winning the conflict. We also explored the relationship between the characteristics of teacher interventions and the outcome of peer conflicts.

Based on the social relational model, we expected that bilateral conflict strategies would increase the likelihood of maintaining the relationship and continuing joint play afterwards, and that bilateral conflict strategies were more often used by children involved in joint play before the conflict. When one of the opponents used physical force, the likelihood of their playing together after the conflict decreased. These findings confirmed our expectations.

Extrapolating from social-cognitive learning theory, we explored the relationship between the use of conflict strategies and the achievement of goals. The achievement of the relational goal we discussed above. With regard to the self-centred goals, unilateral strategies increased the likelihood of winning a conflict and bilateral strategies decreased it.

In general, teachers' behaviour during interventions did not reinforce bilateral conflict strategies. They often modelled unilateral strategies and focused on whether an individual child was right or wrong, seldom on rewarding bilateral behaviour or on reconciliation. But teachers often punished the use of one specific unilateral conflict strategy: the use of physical force.

Our study suggests that three-year-olds use more bilateral strategies and fewer unilateral strategies compared with two-year-olds because they tend to invest more in continuing the relationship. Three-year-olds have more daycare experience, and therefore they have more experience in seeing that unilateral conflict strategies can stop joint play. And three-year-old children spend a higher percentage of their time in joint play (Howes & Matheson, 1992). This is supported by additional analyses that showed three-year-old opponents started conflicts significantly more often during joint play situations than did two-year-old opponents: 69% and 53%, respectively, in all conflicts. Perhaps the social interest in playing with peers is so strong that children accept the danger of losing the conflict by using bilateral conflict strategies. In our study, the behaviour of the teachers cannot explain why three-year-olds more often used bilateral conflict strategies than did two-year-olds. The teachers more often used unilateral strategies than bilateral strategies. They seldom rewarded the use of bilateral strategies. Although teachers punished the use of physical force, the two-year-old children used that conflict strategy as often as the three-year-olds.

Our study underscores the importance of teacher support for development of positive peer relationships and high quality daycare. Children's interest in peer relationships is a strong incentive to use bilateral strategies.

Acknowledgement

Notes on contributors

Elly Singer is an associate professor of developmental psychology at the University of Utrecht, and of education at the University of Amsterdam. She studied the history of early childhood education and care and developmental theories in their social-political context. Since the 1990s, she has been involved in ethological studies of young children in group settings. She has published her work in Dutch and international journals on young children's humour, conflicts, friendship and on group dynamics. With Margaret Kernan, she has edited *Peer relationships in early childhood education and care* (2011).

Anne-Greth Van Hoogdalem, MSc, has a masters degree in biology, specialising in behaviour, well-being, addictions and neurobiology. At Utrecht University's Department of Developmental

Psychology, she studied the social relations (conflicts and friendships) of two- and three-year-old children in Dutch day-care centres. At the moment, she studies the verbal and non-verbal strategies of four- and five-year-old children in Dutch schools during tasks and free play at the Inholland University of Applied Sciences.

Dorian De Haan is an associate professor of developmental education at the Inholland University of Applied Sciences, and of developmental psychology at Utrecht University. As a linguist, her focus is on the interactions between children and teachers in (multi-ethnic) institutions of child care and the primary school. She has published her work on micro-analyses of verbal and non-verbal interactions in young children. With Elly Singer, her published work includes *The social lives of young children, Play, conflict and moral learning in day-care groups* (2007).

Nienke Bekkema, MSc, has a masters degree in special child education and care. At Utrecht University's Department of Developmental Psychology, she studied peer interactions in multi-cultural child-care centers. She investigated the behavior and psychosocial health care of children. At the Dutch Institute for Health Services Research (NIVEL), she is studying palliative care for people with intellectual disabilities.

References

Aureli, F., & de Waal, F.B.M. (2000). Why natural conflict resolution? In F. Aureli & F.B.M. de Waal (Eds.), *Natural conflict resolution* (pp. 3–10). Berkeley, CA: University of California Press.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52,* 1–26.

Caplan, M., Vespo, J., Pedersen, J., & Hay, D.F. (1991). Conflict and its bilateral in small groups of one- and two-year-olds. *Child Development*, *62,* 1513–1524.

Chapman, M., & McBride, M.L. (1992). The education of reason: Cognitive conflict and its role in intellectual development. In C.U. Shantz & W.W. Hartup (Eds.), *Conflict in child and adolescent development* (pp. 36–69). Cambridge: Cambridge University Press.

Corsaro, W.A. (2005). *The sociology of childhood* (2nd ed.). Thousand Oaks, CA: Pine Forge Press.

Cummings, E.M., Iannotti, R.J., & Zahn-Waxler, C. (1989). Aggression between peers in early childhood: Individual continuity and developmental change. *Child Development*, *60,* 887–895.

Durkin, K. (1995). *Developmental social psychology – from infancy to old age*. Oxford: Blackwell Publishing.

Eisenberg, N., & Fabes, R.A. (1998). Prosocial development. In W. Darmon & N. Eisenberg (Eds.), *Handbook of child psychology: Vol. 3 Social, emotional, and personality development* (5th ed., pp. 701–778). New York, NY: John Wiley and Sons.

Eisenberg, A.R., & Garvey, C. (1981). Children's use of verbal strategies in resolving conflicts. *Discourse Processes*, *4,* 149–170.

Hoffman, M.L. (2000). *Empathy and moral development*. New York, NY: Cambridge University Press.

van Hoogdalem, A.G., Singer, E., Bekkema, N., & Sterck, E.H.M. (2008). Young children who intervene in peer conflicts in multicultural child care centers. *Behavior*, *145,* 1653–1670.

Howes, C. (2010). A model for studying socialization in early childhood education and care settings. In M. Kernan & E. Singer (Eds.), *Peer relationships in early childhood education and care* (pp. 15–26). London: Routledge.

Howes, C., & Matheson, C.C. (1992). Sequences in the development of competent play with peers: Social and social-pretend play. *Developmental Psychology*, *28,* 961–974.

Kernan, M., & Singer, E. (Eds.). (2011). *Peer relationships in early childhood education and care*. London: Routledge.

Killen, M., & Turiel, E. (1991). Conflict bilateral in pre-school social interactions. *Early Education Development*, *2,* 240–255.

Killen, M., & de Waal, F.B.M. (2000). The evolution and development of morality. In F. Aureli & F.B.M. de Waal (Eds.), *Natural conflict bilateral* (pp. 352–372). Berkeley, CA: University of California Press.

Kontos, S., Burchinal, M., Howes, C., Wisseh, S., & Galinsky, E. (2002). An eco-behavioral approach to examining the contextual effects of early childhood classrooms. *Early Childhood Research Quarterly*, *17,* 239–258.

Laursen, B., Finkelstein, B.D., & Townsend Betts, N. (2001). A developmental meta-analysis of peer conflict bilateral. *Developmental Review*, *21,* 432–449.

Leslie, A.M. (1990). Some implications of pretense for mechanisms underlying the child's theory of mind. In J.W. Astington, P.L. Harris, & D.R. Olson (Eds.), *Developing theories of mind* (pp. 19–46). New York, NY: Cambridge University Press.

Lightfoot, C., Cole, M., & Cole, S.R. (2008). *The development of children*. New York, NY: Worth Publishers.

Mitchell-Copeland, J., Denham, S., & DeMulder, E. (1997). Q-Sort assessment of child-teacher attachment relationships and social competence in the preschool. *Early Education and Development*, *8,* 27–39.

NICHD Early Child Care Research Network. (1997). The effects of infant care on infant–mother attachment security: Results of the NICHD study of early child care. *Child Development*, *68,* 860–879.

NICHD Early Child Care Research Network. (2001). Child care and children's peer interaction at 24 and 36 months: The NICHD study of early child care. *Child Development*, *72,* 1478–1500.

NICHD Early Child Care Research Network. (2003). Does amount of time spent in child care predict sociometric adjustment during the transition to kindergarten. *Child Development*, *74,* 976–1005.

Pianta, R.C., Hamre, B., & Stuhlman, M. (2002). *Relationships between teachers and children* (Vol. 7). New York, NY: Wiley.

Rende, R.D., & Killen, M. (1992). Social interactional antecedents of conflict in young children. *Early Child Research Quarterly*, *7,* 551–563.

Rosenthal, M., & Gatt, L. (2010). Training early years practitioners to support young children's social relationships. In M. Kernan & E. Singer (Eds.), *Peer relationships in early childhood education and care* (pp. 113–126). London: Routledge.

Roseth, C.J., Pellegrini, A.D., Dupuis, D.N., Bohn, C.M., Hickey, M.C., Hilk, C.L., & Peshkam, A. (2008). Teacher intervention and US preschoolers' natural conflict resolution after aggressive competition. *Behavior,* *145*, 1601–1626.

Rourou, A., Singer, E., Bekkema, N., & de Haan, D. (2006). Cultural perspectives on peer conflicts in multicultural Dutch child care centres. *European Early Childhood Education and Research Association Journal*, *14,* 35–55.

Shantz, C.U. (1987). Conflicts between children. *Child Development*, *58,* 282–305.

Singer, E. (2002). The logic of young children's (nonverbal) behaviour. *European Early Childhood Education Research Journal*, *10,* 55–65.

Singer, E., & de Haan, D. (2007). *The social lives of young children – play, conflict and moral learning in day-care groups*. Amsterdam: SWP.

Tremblay, R.E. (2000). The development of aggressive behaviour during childhood: What have we learned in the past century? *International Journal of Behavioral Development*, *24,* 129–141

Tremblay, R.E. (2002). *Development of physical aggression from early childhood to adulthood* (pp. 1–6). Canada: Canada Research Chair in Child Development, University of Montreal.

Tremblay, R.E., Nagin, D.S., Séguin, J.R., Zoccolillo, M., Zelazo, P.D., Boivin, D. & Japel, C. (2004). Physical aggression during early childhood: Trajectories and predictors. *Pediatrics,* *114*, 43–50.

Vandell, D.L., Burchinal, M., Vandergrift, N., Belsky, J., & Steinberg, L. (2010). Do effects of early child care extend to age 15 years? Results from the NICHD study of early child care and youth development. *Child Development*, *81,* 737–756.

Verba, M. (1994). The beginnings of peer collaboration in peer interaction. *Human Development*, *37,* 125–139.

Verbeek, P., Hartup, W.W., & Collins, W.A. (2000). Conflict management in children and adolescents. In F. Aureli & F.B.M. de Waal (Eds.), *Natural conflict bilateral* (pp. 34–53). Berkeley, CA: University of California Press.

de Waal, F.B.M. (2000a). Primates a natural heritage of conflict bilateral. *Science, 289,* 586–590.

de Waal, F.B.M. (2000b). The first kiss – foundations of conflict bilateral research in animals. In F. Aureli, & F.B.M. de Waal (Eds.), *Natural conflict bilateral* (pp. 15–33). Berkeley, CA: University of California Press.

Wellman, H.H. (1990). First steps in the child's theorizing about the mind. In J.W. Astington, P.L. Harris, & D.R. Olson (Eds.), *Developing theories of mind* (pp. 64–92). New York, NY: Cambridge University Press.