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Peer Relations as a Developmental Context

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There is no lack of evidence that peer relations matter. We can look first at the comments that centenarians made when they were asked to explain the secrets to living for more than 100 years. One of the most frequently mentioned secrets for having a long life of health and happiness was the importance of having good friends. As a second example, the son of one of us (W.M.B.) looked into his child care classroom one day and then refused to go in. He declared, “I am going home.” When asked to explain his decision, the boy stated his reason emphatically: his best friend was absent. Without his friend, there was apparently no other reason to justify his further presence on this day. A third form of evidence for the importance of friends comes from one of the best-selling series of books of all time: the Harry Potter series. On the surface they seem to be mere fantasy stories of magic, wizardry, and adventure. After all, Harry is forced to deal with all sorts of challenges, games, and tasks that are far beyond the day-to-day experiences that children have today or have ever had. There is no doubt that in these stories Harry and his two companions, Hermione and Ron, have experiences that most children cannot even imagine. Nevertheless, even the “muggles” among us will recognize that the power of the stories about Harry Potter comes from their depictions of what it is like to go through the many challenges of growing up in the company of one’s friends.

At every point in the life cycle—old age, preschool, and school age—peer relations provide an important context for development. Starting at a young age, we live in a peer-rich world. Young children spend large amounts of time in the presence of their agemates. Interaction with peers occurs in classrooms, in after-school activities, in

neighborhood playgrounds, and via electronic media. Adolescents and adults typically share the most basic activities and experiences of their lives—work, play, recreation, and romance—with persons of their own age. Older persons often share the later years of their lives with their friends, especially if their spouses have died and if their families live far away.

The importance of the peer system has not been lost on developmental psychologists (Hartup & Stevens, 1997). For over a century psychologists have developed theories and conducted empirical studies to identify and understand the features and effects of children's and adolescents' experiences with their peers. The findings from their studies have provided convincing evidence of the significant role that peers play in development (see Bukowski, Brendgen & Vitaro, 2007). Experiences with peers are associated with the good (e.g., happiness, health, school achievement, and multiple aspects of well-being) and the not so good (e.g., aggression, depressed affect, school dropout, and drug use). In this chapter we show how peer relations affect development in both positive and negative ways during childhood and adolescence.

WHY STUDY PEER RELATIONS?

Peer relations have been implicated in multiple developmental processes. Peers are mentioned in the best known theoretical accounts of development, and there is an impressive database regarding the association between indices of competent functioning with peers and subsequent well-being. In the following sections we point to different perspectives on and motivators for research on peer relations. From one point of view, the peer domain is seen as a context in which the basic mechanisms of social learning processes account for behavioral change. A second perspective recognizes that the peer domain constitutes a social “world” whose processes and effects are distinct from the social world that includes adults. Accordingly, it provides unique and important opportunities for development. A third motivation or perspective regarding peer relations is data driven. It emphasizes the empirical evidence that functioning with peers in childhood is a strong, if not the strongest, predictor of adult adjustment. In a final section we discuss the need to see peer relations as a multilevel system.

Opportunities for Social Learning and Experiences

One of the simplest motivations for research on peer relations has to do with time and amount of contact. The peer domain is a primary social world for children and adolescents. Even preschool children can spend large amounts of time with their peers. The classroom and schoolyard, neighborhood playgrounds, summer camps, sports teams, and specialty performance classes (e.g., dancing, singing, and playing a musical instrument in a band or orchestra) are largely peer-based activities. This vast amount of contact with peers provides multiple opportunities for fundamental socialization experiences. In their interactions with each other, humans, like other social animals, are known to affect each other via two basic processes of social learning. First, it has been known for several decades that peers reward and punish each other for various forms of positive and negative behavior (see Hartup, Glazer, & Charlesworth, 1966). Second, peers imitate each other. Given their similarity and proximity to each other, they are natural role models for each other (Hartup & Coates, 1967). Via these basic

forms of social learning, peers “shape” each other along multiple dimensions of behavior, from aggression to altruism.

As part of their time together and in their contact with each other, children offer each other particular forms of experience. These experiences can be affective or behavioral, and they can be positive, negative, or neutral. Positive experiences include opportunities for acceptance, companionship, and intimacy (Furman & Buhrmester, 1985). Another form of positive experience can be protection against negative experiences such as victimization, exclusion, and rejection (see Davies, 1984; Hodges, Malone & Perry, 1997). An example of a neutral form of experience is exploration. Promoting each other’s involvement in new activities is a key component to peer-based processes such as play and collaborative learning (Azmitia & Montgomery, 1993). It can also be part of the initiation into or encouragement of drug use and other forms of risk (Grosbras et al., 2007). Each of these forms of positive, negative, and neutral experience that come from contact with peers is given further treatment in the remainder of this chapter.

A Unique Social World of Potential Equality

It is not just time, however, that matters. Children also provide each other with unique experiences that derive from the potential for equality in their relationships. Whereas interaction between children and their parents, teachers, and other adults is typically marked by inequalities of competence and power, interactions between peers is, almost by definition, more likely to be characterized by equality. The significance of this distinction between their hierarchical, or “vertical,” interactions with adults and their more egalitarian, or “horizontal,” interactions with peers comes in the larger number of opportunities for experiences of negotiation, co-construction, and affection based on an equal footing. Piaget (1932) pointed to the importance of peer *interaction*, especially peer discourse, conflict resolution, and negotiation, as critically important for the development of higher levels of operational thinking, especially in the social domain. Piaget argued that interaction with peers provided opportunities for children to explore and negotiate conflicting ideas, discuss different points of view, and find ways of reconciling differences between them. For Piaget these opportunities for co-construction with peers were an important context for adaptive development, especially in regard to the understanding of others’ internal states, including thoughts, emotions, and intentions.

Vygotsky (1978) also emphasized the importance of co-construction with peers. He proposed that via cooperation and by taking advantage of each other’s particular forms of expertise, children can resolve problems that neither would be capable of alone (Doise & Mugny, 1984; Golbeck, 1998). By fitting into the upper range of one’s friend’s competence, a child can stimulate the friend’s level of functioning and cognitive development (Hartup, 1996).

Aside from their effects on cognitive development, children’s experiences with peers have also been identified as important experiences underlying emotional development and adjustment. A point of theoretical convergence between the views of a set of sociologists known as the symbolic interactionists and those of the American psychiatrist Harry Stack Sullivan (1953) is the claim that that people define themselves according to how they believe they are perceived by others. According to the symbolic interactionists, one’s recognition of how one is perceived and treated by others forms the basis not only of the self-concept but also of how one perceives others. Mead

(1934) claimed that exchanges among peers that involve cooperation, competition, conflict, and/or friendly discussion afford opportunities for learning about the self and for understanding others.

Sullivan (1953) was particularly interested in the experience of peer relations during pre- and early adolescence. Sullivan described these close relationships as relations between “chums” or coequals. Sullivan theorized that relationships with coequals at this time of the lifespan were the first true interpersonal experiences based on reciprocity and exchange between equals. He claimed that the effect of these was to promote a sense of well-being due to the opportunities that they provided for self-validation. Sullivan believed that the positive experiences of having a “chum” could be so powerful as to allow an early adolescent to overcome “warps” that may have resulted from prior family experiences. He also argued that the experience of being isolated from the group during this period would lead early adolescents to have concerns about their adequacy and their acceptability as a desirable peer. Accordingly, Sullivan (1953) proposed that children and early adolescents who are incapable of creating a place for themselves within the peer group would develop enduring feelings of inferiority and a sense of psychological distress.

Empirical Evidence of the Association between Childhood Peer Relations and Adult Adjustment

Consistent with Sullivan’s theory, a large number of studies have shown that measures of functioning among peers during childhood and early adolescence are associated with measures of externalizing and internalizing during adulthood. Results of prospective longitudinal studies provide evidence of the negative effects of problematic peer relations during childhood and early adolescence. These negative outcomes cover a wide range of subsequent adjustment problems, including aspects of criminality, school dropout, admissions to psychiatric hospitals, dishonorable discharges from military service, and unemployment (Parker & Asher, 1987). Peer rejection in particular is known to be associated with subsequent externalizing problems, including delinquency, conduct disorder, attentional difficulties, and substance abuse (Kupersmidt & Coie, 1990), and internalizing problems across the lifespan, including low self-esteem, anxiety problems, loneliness, and depressive symptoms (Kraatz-Keily, Bates, Dodge, & Pettit, 2000; Sandstrom, Cillessen, & Eisenhower, 2003). There is evidence also that children who have less than positive relations with peers are vastly more likely to fail a subsequent grade (Ollendick, Weist, Borden, & Greene, 1992), have more trouble adjusting after a school transition (Coie, Lochman, Terry, & Hyman, 1992), and show a higher risk of subsequent absenteeism (DeRosier, Kupersmidt, & Patterson, 1994). Friendlessness in childhood has been shown to be a particular risk factor for multiple forms of maladjustment problems in adulthood (Bagwell, Newcomb, & Bukowski, 1998).

Peer Relations as a Multilevel Experience

Either explicitly or implicitly, any theory that is aimed at explaining a phenomenon needs to provide a description of what the phenomenon is. Providing a description of what peer relations consist of is not easy, as they include a wide range of features and experiences. These experiences not only come in different forms, but they also occur at different levels of social complexity, specifically the individual, interaction,

relationship, and group levels (Hinde, 1987). Events and processes at each level are distinct from events and processes at other levels, even as they are constrained and influenced by them. The level of the *individual* refers to the characteristics and tendencies that children bring to their involvement with peers. These include social skills, typical modes of social behavior (e.g., aggression or withdrawal), temperaments and patterns of physiological response to arousal, social perceptions and cognitions, and social needs. The level of the *interaction* includes what children actually do with each other. This would include play, talk, participation in self- or adult-structured activities, and activities in schools. The shared experience of interactions provides the basis for *relationships*. Relationships are enduring patterns of interaction between two children that are organized around particular themes, roles, or shared views maintained by the two relationship partners. Friendship is the most common form of relationships for persons of all ages. Each of these three levels is situated in a *group* context. Groups consist of set of individuals who are organized by structural characteristics (i.e., the children in a classroom) or by affective ties or common activities or interests. The dynamics and structural properties of groups can be at least partially distinct from the experiences that group members have at lower levels of social complexity.

Summary

Peer relations research has been seen in the literature on social development for over 100 years (Monroe, 1898). This enduring interest in understanding what peer relations are and with how these experiences affect development comes from at least three sources. First is the status of the peer group as a social context that affords the basic forms of socialization experience, such as rewards and modeling. Second is the body of theoretical accounts that ascribe functional developmental significance to the opportunity for “coequal” interaction between peers. Well-known theorists such as Piaget, Vygotsky, and Sullivan have argued that peer relations are a critical context for cognitive and emotional development. A third source is the extensive database showing that measures of functioning among peers during childhood and adolescence are powerful predictors of subsequent adjustment and well-being. Risk status for externalizing problems, internalizing problems, and academic difficulties has been shown to be associated with problematic peer relations in childhood and adolescence. Individually and together, these perspectives show that peer relations are essential to development, as they provide the context for the acquisition of critical skills needed for adequate functioning during adulthood. In the next three sections, we describe the features and effects of peer relations during three developmental periods—specifically, early childhood, the school-age period, and adolescence.

EARLY CHILDHOOD: PLAY AND BASIC SKILLS

Many young children gleefully join the world of their peers as soon as they have the opportunity to be around other children. Few other interactions match the level of ecstatic joy of preschool-age children greeting each other and running off to play cops and robbers or hide and seek or pretending to be married. Researchers’ efforts to capture the excitement of early peer interactions have been shaped by the settings in which young children have been observed (Howes & Lee, 2006). Early studies of preschool peer relations were conducted in laboratory nursery schools where children were taken

a few mornings a week for a socialization experiences with peers. These peer experiences were important, as children were spending most of their time at home being cared for by their mothers, perhaps in the company of their siblings. As more women joined the workforce, researchers had opportunities to observe infants, toddlers, and preschoolers who were spending whole days together. "The nursery school experience might be compared to a date, while the childcare experience is more like living together" (Howes & Lee, 2006, p. 137). Not surprisingly, young children's interactions seem more sophisticated when they have opportunities to interact all day, sometimes for years.

Beginning in infancy, children form relationships with their peers, as well as their caregivers, and seem to follow a similar developmental sequence in generating these relationships (Hay, 1985). Initially, infants are able to identify peers as possible social partners; at about 6 months of age, they smile and make nondistressed vocalizations toward other infants (Vandell, Wilson, & Buchanan, 1980). Next they begin to communicate with peers. By about 6 months of age, they begin to direct vocalizations, smiles, gestures, and touches toward other infants (Vandell et al., 1980). In the second year, infants begin to engage in simple patterns of interactions involving cooperative games and conflict episodes (Hay, 1985). By 18 months to 2 years of age, children begin to modify their behaviors in response to partners (Hay, 1985). Even 18-month-olds are more likely to separate from their mothers and go to a different room to play with toys in the presence of an unfamiliar peer (Gunnar, Senior, & Hartup, 1984), and 25-month-olds in Soviet child care centers were less likely to cry in the presence of a stranger when a peer was present (Ispa, 1981). Infants as young as 6 months establish patterns of interaction that are distinct to particular relationships (Hay, Nash, & Pederson, 1981), and toddlers form distinct relationships with patterns of contingent interactions that are distinct from what would be predicted by either partner's interactions with other peers (Ross & Lollis, 1989). Together these experiences promote the development of a concept of the other and of the relationship (Hay, 1985).

Theoretical Perspectives on Early Childhood Peer Relations

Theorists have viewed peer relations in early childhood as limited by children's cognitive development (Selman, 1980). In part this claim may arise from an overreliance on young children's verbal reports instead of observations of their ongoing interactions with well-acquainted peers (Howes, 1996). Sullivan (1953) characterized toddlers and preschoolers as being strongly motivated by the need to have peers to play with them (Buhrmester, 1996). On the basis of children's interview responses, young children expect friends to play with them and to stay close by (Bigelow, 1977), and they view friendships in terms of momentary interactions determined by proximity and liking to do similar activities (Selman, 1980). Naturalistic observations of preschoolers at play yield a much richer picture of early relationship processes, all of which serve the central goal of this developmental period—coordinated play (Gottman, 1986).

Preschool Play

Toddler play features much gleeful repetition, often having to do with gross motor activities, and can be characterized as "more bodily joyful than toyful" (Lokken, 2000, p. 174). From observations of children from infancy through preschool, Howes and Matheson (1992) developed a peer play scale that describes the sequence in which

children develop increasingly sophisticated forms of play: parallel play, parallel aware play, simple social play, complementary and reciprocal play, cooperative social pretend play, and complex social pretend play. More than half of children younger than 2 engage in pretend play, and pretend play episodes involve an average of 3.1 strategies (behaviors such as imitation, joining, and verbal recruitment; Howes, 1985).

Naturalistic observations of older preschoolers getting to know one another and playing together with friends suggest that coordinated play requires establishing common ground and successful escalation of affect and activities and is supported by amity, skills in information exchange, conflict management, and the willingness to engage in early forms of self-exploration (Gottman, 1986). Preschoolers who “hit it off” develop a “me-too climate of acceptance,” in which they can engage in shared fantasy play, often around themes of growth or transformation or related to working out fears (Gottman, 1986, p. 195). In the following example, Billy (age 4) and Jonathan (age 3) are playing a fantasy game in a tub of water.

B: And I hate sharks. But I love to eat sardines.

J: I love to eat shark.

B: Yeah, but they're so big!

J: But we can cut their tail.

B: But what happens if we cut them to two?

J: It would bite us, it would swim, and we would have to run. Run very fast, run to our homes.

B: Yeah, but ummm ...

J: By the trees. Mr. Shark bited the door down and we would have to run way in the forest.

B: Yeah, but ... if he bited all the trees down.

J: And then we would have to shoot him. Yeah, and the shark is poison.

B: But pink is. Red is, yellow is.

B: Yeah, but people are too. What happened if the shark ate us?

J: We would have to bite him, on his tongue.

B: Yeah, what happened if we bite him so far that we made his tongue metal?

J: Yeah.

B: Then he couldn't have breaked out of metal.

J: He can eat metal open. Sharks are so strong they can even bite metal.

B: Yes.

J: How about concrete? Concrete could make it? (Gottman, 1986, p. 161)

In this exchange, we see the two boys confront the fear of sharks and enjoy negotiating the details of the best way to manage shark attacks with glee and excitement, some discord, but also a fairly high rate of agreement. This level of amity may have been facilitated by the fact that these two children were of the same gender.

From the start of the toddler period, children prefer playing mostly with peers of the same gender, especially in child care or preschool settings (Serbin, Moller, Gulko, Powlishta, & Colburne, 1994). Observational studies show that 50–60% of 3- to 6-year-old children's interactions are with peers of the same gender, that 70–80% of the variance in play partner choice is predicted by gender, and that frequency of same-

gender play is consistent across time (Martin & Fabes, 2001). Children may develop strong preferences for same-gender peers because boys and girls develop different play styles due to gender differences in physiological and emotional arousal (Fabes, 1994), because girls withdraw from boys because of boys' more rough style of play (Maccoby, 1998), because preschool children are more reinforced by peers and teachers for same-gender behavior (Fagot, 1994), or because they have developed solid concepts of gender that lead them to prefer children who are "like me" (Martin, 1994).

The widespread observation of gender segregation is so striking that experts have suggested that girls and boys grow up in separate gender cultures in same-gender groups in which they socialize each other in different interaction styles and different expectations for relationships (Maccoby, 1998). In support of this theory, observations of preschool peers show that for boys, playing with other boys predicts increases in forceful, rough-and-tumble style of play, whereas for girls, playing more with girls predicts decreases in activity level and aggression and playing more near adults (Martin & Fabes, 2001). As powerful as gender segregation seems to be in child-care or group contexts, it is important to remember that other-gender interactions do occur. Even in preschool classrooms, children move in and out of same- and other-gender interactions to some degree (Martin, Fabes, Hanish, & Hollenstein, 2005). Still, the vast majority of interactions between peers in group settings are with same-gender peers, which likely has a great impact on children's activities and the friendships they form in preschool. (See Leaper & Bigler, Chapter 12, this volume.)

Individual Differences and Early Childhood Peer Relations

Whereas research on young children's peer interactions has often focused on descriptions of the behavior of typically developing children, research on older children's peer relationships has examined the functions that peer relations might serve and origins and outcomes of individual differences (Howes, 1996). This section reviews research on preschool children's friendships, social networks, and status in the larger peer group and considers the relations between each level of the peer system and children's psychological adjustment.

Friendships

Children seem to show strong preferences for playing with particular peers long before they can talk about friendship (Howes, 1996). In one observational study of friendships in child-care classrooms for infants, toddlers, and preschoolers, friendship was defined as mutual preference for interaction, complementary and reciprocal play, and shared positive affect (Howes, 1983). When friendship is defined in behavioral terms, even infants and toddlers are observed to have friends, and 75% of preschoolers had a friend (Howes, 1983). Toddler friendships persist across time (Howes, 1988, 1996). Preschool friendships may serve some of the same functions as older children's friendships: companionship, intimacy, and mutual affection (Howes, 1996). Being able to form reciprocal friendships in preschool relates to children's affective social competence and skills in sending emotional signals and in regulating emotional experiences (Dunsmore, Noguchi, Garner, Casey, & Bhullar, 2008). Even preschoolers have "best friends"; having a best friend in a sample of 3- to 7-year-olds was related to being female and to being high on prosocial behavior (Sebanck, Kearns, Hernandez, & Galvin, 2007).

Many friendships in preschool settings are between children of the same gender; other-gender friendships decrease as children move into preschool (Howes & Phillipsen, 1992). Although other-gender friendships may “go underground” at school, they may continue in neighborhoods and other settings (Gottman, 1986). Young children who establish other-gender friendships before the preschool period continue to interact with these other-gender friends at school; “for children enrolled in child care as infants, early friendships were more powerful than gender segregation” (Howes & Phillipsen, 1992, p. 241).

In addition to offering opportunities for companionship and, at times, high glee, early friendships are important opportunities for young children to learn and practice important skills. Over the course of a school year, pairs of young children in stable friendships showed the greatest increases in complexity of play (Howes, 1983), and children who engaged in more sophisticated play were more prosocial and less aggressive (Howes & Phillipsen, 1992). Preschoolers are more likely to respond to another child’s crying if that child is a friend (Howes & Farver, 1987). Conflicts between friends are frequent but are more likely to be resolved by compromise and mutual disengagement and more likely to be followed by continued interaction than conflicts between nonfriends (Hartup, Laursen, Stewart, & Eastenson, 1988). Being able to form friendships in early childhood relates to positive adjustment for children (Hay, Payne, & Chadwick, 2004).

Peer Groups and Social Networks

Even as early as preschool, group interactions may shape individuals in important ways (Boivin, Vitaro, & Poulin, 2005). As children move through the preschool years, boys’ social networks seem to increase in size, whereas girls’ social networks become smaller (Benenson, 1994). Although most research on peer group homophily (the tendency of children to interact with others similar to them) and peer group influence has been conducted with older samples, the few studies available suggest that even young children tend to spend time with children who are similar to them on important characteristics. For example, preschool children interact with peers who are similar to them on aggression, whether aggression (defined as name-calling, teasing, and physical harm; Farver, 1996) is measured by observations by teacher ratings (Snyder, Horsch, & Childs, 1997), or by peer nominations (van den Oord, Rispen, Goudena, & Vermande, 2000).

Remember also that boys interact primarily with groups of other boys and that boys’ same-gender play predicts increases in aggression and activity level, whereas girls play mostly with other girls and same-gender play predicts decreases in aggression and activity level (Martin & Fabes, 2001). The consequences of playing with same-gender peers may be especially profound for children who are at risk because of temperamental arousability. For highly arousable girls, play with same-gender peers predicted a decrease in behavior problems, whereas for highly arousable boys, play with same-gender peers predicted an increase in behavior problems (Fabes, Shepard, Guthrie, & Martin, 1997).

Peer Status

In addition to having friends and playing in groups, preschoolers also develop status within their classroom-based peer groups. Status for preschoolers typically refers to

the extent to which they have more or less positive social standing with peers. Preschoolers' social status has often been measured by sociometric interviews in which young children are asked to look at pictures of classmates and identify other children whom they do and do not like (Asher, Singleton, Tinsley, & Hymel, 1979).

Sociometric studies reveal that some preschool children experience more glee and acceptance with peers than others. Preschoolers who are well liked by peers are more prosocial (Ladd, Price, & Hart, 1988). Children disliked by preschool classmates score higher on physical and relational aggression (Crick, Casas, & Mosher, 1997). However, even in preschool, the relation between aggressive behavior and peer rejection may be complex and may depend on other characteristics of the child. Preschoolers characterized as bistrategic—high on aggression but also high on prosocial ways of controlling resources—were actually preferred by peers and were viewed by teachers as more morally mature (Hawley, 2003). The relation between social withdrawal and peer status may be similarly complex (see Rubin, Coplan, & Bowker, 2009, for a review). Quiet, solitary, constructive play by preschoolers has been viewed as harmless (Rubin, 1982) and perhaps a behavioral indicator of social uninterest (Rubin & Asendorph, 1993) but also as a possible tactic for young children coping with social wariness (Henderson, Marshall, Fox, & Rubin, 2004). Social withdrawal may be associated with being disliked by peers, especially for boys (Coplan, Gavinski-Molina, Lagace-Seguin, & Wichmann, 2001).

For young children, forming successful relationships with peers is an incredible accomplishment that requires considerable skill in joint attention, causal understanding, imitation, language, and emotion regulation (Hay et al., 2004). Although many young children are able to form relationships and interact smoothly in groups, some are not, and even preschool peer relations may well have a “darker side” (Hartup, 2003). Peer difficulties in preschool can be remarkably stable (Howes & Phillipsen, 1998). Peer problems in early childhood likely result from and predict poor psychological adjustment (Hay et al., 2004). However, in seeking to understand the causes and consequences of peer problems, it is important to remember that for many young children, early peer interactions are sources of fun, companionship, and even high glee. In the words of Hay et al. (2004), “it is time for psychologists and psychiatrists to turn their attention once again to the serious study of fun” (p. 100).

PEER RELATIONS IN THE SCHOOL-AGE PERIOD: EXPANSION AND FOCUS

Although the school-age years are often portrayed as a period of latency (i.e., not much more than a quiet time between the rapid changes of childhood and those of adolescence), it is actually a period of much change and consolidation. It is a time of increased activity with peers and an expansion of the peer group beyond contexts that are close to the family or selected by it. During early childhood, peer interactions make up about 10% of a child's social time; by age 10 this amount is more than 30% (Rubin, Bukowski & Parker, 2006). Beyond the increase in time spent together, the features of peer interaction change, and peer relationships take on a heightened significance. These changes are both quantitative and qualitative as the purpose of many peer-based experiences change. Moreover, the effects of peer relations change. In this section we show how peer interaction changes during the school-age period, and then we discuss how relationships change.

What Do Peers Do with Each Other?

During the school-age period the level of negative behavior between peers does not differ much from early childhood, but the forms of negative behavior do (see Dodge, Coie, & Lynam 2006). Indirect forms of aggression, such as verbal and relational aggression (insults, derogation, threats, gossip), increase as direct physical aggression decreases. The purpose of aggression changes also. Compared with preschoolers, the aggressive behavior of 6- to 12-year-olds is less frequently aimed at object possession and more likely to be directed at others. The frequency of “mock” or “nonliteral” aggression, such as rough-and-tumble play, appears to fit a U-shaped developmental function (Pellegrini, 2002). Although this form of play makes up 5% of preschoolers’ social activities, it makes up 10–17% during the early school-age years and then decreases to about 5% by age 12 (Humphreys & Smith, 1984).

Increases in positive forms of interaction during the school-age years tend to be small (Eisenberg, Fabes & Spinrad, 2006). Modest increases can be seen in heightened levels of generosity, helpfulness, or cooperation that children engage in with their peers. In parallel, by middle childhood, increases are found in the frequencies of games with or without formal rules. In these latter activities, children’s interactions with peers are highly coordinated, involving both positive (cooperative, prosocial) and negative (competitive, agonistic) forms of behavior (Rubin, Fein, & Vandenberg, 1983).

One form of interaction that becomes much more frequent during the school-age years is conversation (Zarbatany, Hartmann, & Rankin, 1990). Peers like to talk to each other, whether in a face-to-face context, over the old-fashioned telephone, or via more modern communication devices such as mobile phone and Internet-based systems. One component of this more frequent amount of conversation is an increased frequency of gossip (Eder & Enke, 1991; Kuttler, Parker, & La Greca, 2002; Parker & Gottman, 1989). Gossip provides a means of sharing information about group dynamics and activities and of establishing positions in the group hierarchy. There is evidence that most school-age children recognize talk about a nonpresent peer as a form of gossip, and they recognize that it can be inaccurate and injurious (Kuttler et al. 2002).

The dark side of peer interaction in the school-age period is manifested in bullying and victimization (Espelage, Bosworth, & Simon, 2000; Olweus, 1993). Bullying refers to repeated acts of either verbal or physical aggression aimed at particular peers (i.e., victims). Bullying makes up a substantial portion of the aggression that occurs in the peer group (Olweus, 1993). The aspect of bullying that distinguishes it from other forms of aggressive behavior is its specific aim at a particular peer. Bullying is directed at certain peers, and victims compose up to 10% of the school population (NICHD Early Child Care Research Network, 2001; Olweus, 1984; Perry, Kusel, & Perry, 1988). Bullies are known to have particular tendencies, including relatively weak control over their aggressive impulses and a tolerance for aggressive behavior (Olweus, 1993). They are known to use force without emotion and to do so outside of the ongoing flow of interaction among peers (Perry, Perry, & Kennedy, 1992).

It is known that victims tend to show particular characteristics also. Two well-known “risk” indicators for being victimized are elevated scores on measures of aggression and of social withdrawal (Olweus, 1978; Perry et al., 1988). Nearly every study that has assessed the association between aggressiveness and victimization has revealed a positive correlation (e.g., Camodeca, Goossens, Terwogt, & Schuengel, 2002; Hanish & Guerra, 2000, 2004; Hodges et al., 1997; Snyder et al., 2003). The findings regarding aggression appear to be culturally invariant.

Victimization has been shown to be positively associated with aggression in samples drawn from North American, Southern Asian (Khatri & Kupersmidt, 2003) and East Asian (Schwartz, Farver, Chang, & Lee-Shin, 2002; Xu, Farver, Schwartz, & Chang, 2003) samples.

It is important to recognize that victimization can occur at multiple levels of social complexity (Graham & Juvonen, 2000; Schafer, Werner, & Crick, 2002), including the dyad (Crick & Nelson, 2002) and the group (Bukowski & Sippola, 2001). Two sets of ideas explain why aggression and social withdrawal are associated with victimization. One idea distinguishes between the processes related to withdrawal and aggression (Olweus, 1993). It claims that withdrawn children are victimized because they are easy and nonthreatening prey and are unlikely to retaliate when treated badly, whereas aggressive children are victimized because their irritating behavior provokes negative reactions from others. Another view uses a single model to explain victimization (Bukowski & Sippola, 2001). It claims that children victimize peers who do not promote the basic group goals of coherence, harmony, and evolution. According to this view, aggressive and withdrawn children do not promote these positive aspects of group functioning, and as a result they are victimized.

Peer Relations as Affective Experiences

Aside from the behaviors that make up the peer interactions, the peer experiences of school-age children have an affective component that involves liking and disliking. As in early childhood, the patterns of peer interactions during the school-age years are largely determined by these forms of affect. Children are known to spend vastly more time with the peers they like than with those they dislike (Bukowski & Hoza, 1989). A repercussion of this pattern is that children who are more disliked than liked (i.e., those who are rejected; Newcomb & Bukowski, 1983) have many fewer opportunities for interaction than children who are more liked than disliked (i.e., are "popular"). The characteristics of rejected children in the school-age period are roughly the same as those of disliked preschool children. They show high rates of reactive and poorly regulated aggression and/or tend to be withdrawn or uninvolved with others. Neither of these factors is likely to promote a child's attractiveness to the other children who make up the peer group.

Relationships

One of the most pronounced changes in relationships during middle childhood concerns children's understanding of what defines *friendship*. Although even young children recognize that friendship consists of reciprocity and shared affect, it is not until the school-age years that friendship is perceived to have an enduring quality that transcends the present moment. Whereas young school-age children (7-year-olds) see friendship in terms of rewards and costs (i.e., friends are individuals who are interesting or rewarding to be with), older children (10-year-olds) see the importance of shared social values and perceptions for friendship (Bigelow, 1977). They recognize that friendship involves loyalty and dedication. These older children also possess more intimate knowledge of their friends (Berndt, 2002) and think about their friends in a more differentiated and integrated manner (Peevers & Secord, 1973).

The experience of friendship changes during the school-age years also. At this time friendship choices become more stable, and they are more likely to be reciprocated in

middle childhood than at earlier ages, perhaps as a result of the more positive and abstract qualities that are ascribed to friendship at this time (Berndt & Hoyle, 1985). Friendship also takes on important functions and forms of significance in regard to affect and experience. During this time friendless children are more likely to be lonely and victimized by peers (Boulton, Trueman, Chau, Whitehand, & Amatya, 1999; Brendgen, Vitaro, & Bukowski, 2000; Kochenderfer & Ladd, 1996). Moreover friendship can protect at risk children from being victimized (Hodges et al. 1997), and it can reduce the negative effects associated with victimization (Hodges, Boivin, Vitaro, & Bukowski, 1999). Friendship has been shown to also reduce the negative impact of being from a nonoptimal (e.g., either rigid, chaotic, or enmeshed) family (Gauze, Bukowski, Aquan-Assee, & Sippola, 1996). These findings confirm Sullivan's (1953) claim that friendship can be a security system for older school-age children.

These effects are likely due to the features that emerge in friendship during the school-age years. Newcomb and Bagwell (1995) have shown that children are more likely to behave in positive ways with friends than with nonfriends or to ascribe positive characteristics to their interactions with friends. They reported specifically that in their interactions with friends, relative to interactions with nonfriends, children show more affective reciprocity and emotional intensity and enhanced levels of emotional understanding. Although there are no differences between friends and nonfriends in the frequency of conflict, there is ample evidence that friends and nonfriends resolve conflicts in different ways. Friends tend to resolve conflicts in a way that will preserve or promote the continuity of their relationship (Laursen, Finkelstein, & Townsend Betts, 2001). It is likely that this style of conflict resolution is associated with the conception at this age that friendship is an enduring experience.

In addition to the friendships they form, children can also form *antipathies*, or relationships based on mutual disliking (Hartup & Abecassis, 2002). Overall, the frequency of antipathies is rare, but it is known to vary across classrooms (Abecassis, Hartup, Haselager, Scholte, & Van Lieshout, 2002). In some classrooms as many as 58% of the children participate in an enemy relationship. Just as friendship is distinct from being liked, antipathies are distinct from being disliked (Hodges & Card, 2003). The effects of antipathy are not clear (Abecassis, 2003). Children who are in antipathy relationships show higher levels of depressed affect than those shown by other children, and the presence of a mutual antipathy appears to exacerbate the effect of other negative experiences. Perhaps a benefit of being in an antipathy relationship is the opportunity to gain a clearer sense of the cost of being disliked and perhaps also a clearer sense of self as children recognize the features that they like and dislike in others.

ADOLESCENCE: THE INTENSIFICATION OF FRIENDSHIP

The central feature in the development of peer relationships during adolescence is the increased significance of friendship as teens establish autonomy from parents. Adolescents in the United States spend more time interacting with friends than with parents (Csikszentmihalyi & Larson, 1984), and they report relying as much on friends as on parents for closeness and support during middle and late adolescence (Furman & Buhrmester, 1992). Friendships also become closely linked to adolescents' psychological well-being and development.

We have seen already that the nature of friendship undergoes important changes across preschool and middle childhood, although some features remain constant. During adolescence, friends become collaborators in a quest to understand themselves and validate one another. Sullivan argued that adolescent friendships satisfy needs of *intimacy* and *consensual validation* (Buhrmester & Furman, 1986). Adolescents describe friendship more abstractly in terms of interpersonal dynamics, such as loyalty/commitment (“we trust each other, he is always there for me”) and intimacy (“I can tell her anything, she understands me”), and in terms of compatible personalities (“we like the same things”). Although these changes in conceptions of friendship partially reflect cognitive growth from concrete to formal operational thought (Selman, 1981), they also parallel changes in interactions that researchers have directly observed. Gottman (1986) observed that adolescent friendships (ages 13–17) are even more talk-focused, with *joint self-exploration* being the focal concern. Confidential self-disclosure and gossip are used not only to build solidarity but also to explore and evaluate similarities and differences between oneself and peers, as well as how one stacks up against abstract ideals. Numerous questionnaire studies confirm that there are significant increases in intimate self-disclosure between friends across middle and late adolescence (see Buhrmester & Prager, 1995; McNelles & Connolly, 1999).

Scholars also find interesting differences between boys’ and girls’ friendships (Rose & Rudolph, 2006) in middle adolescence. Girls more often than boys define friendship in terms of intimacy and supportiveness, especially during middle adolescence (McDougall & Hymel, 2007). Observational studies find that girls spend more time talking to each other than boys do (Möller, Hymel, & Rubin, 1992), whereas questionnaire studies consistently find that female friends report greater intimate self-disclosure than male friends do during middle and late adolescence but not necessarily during childhood (Buhrmester & Prager, 1995; Rose & Rudolph, 2006). Recently, however, scholars have begun to question the two cultures/worlds theory (Thorne, 1993; Underwood, 2004; Zarbatany, McDougall, & Hymel, 2000). They are concerned that the two cultures/worlds framework exaggerates stereotypic differences between boys’ and girls’ friendships, when, in fact, the core features of their friendships are highly similar: for both sexes, mutual liking and spending enjoyable time together are the most important features of friendship. Moreover, the magnitude of sex differences is generally not large compared with variability within sexes, suggesting that there is more overlap than differences in the nature of boys’ and girls’ friendships. Thus it is misleading to suggest that all boys’ friendships are fundamentally different from all girls’ friendships.

Starting in late elementary school, adolescents report an increasing number of other-gender friendships (Connolly, Furman, & Konarski, 2000). Whereas Sullivan (1953) suggested that these relationships might be motivated by emergent sexual needs, more recent studies find that adolescents report that other-gender friendships are not necessarily sexually motivated and that they have many of the same features of same-gender friendships (McDougall & Hymel, 2007). Although other-gender friendships start in childhood as less close and intense than same-gender friendships, they become increasingly intimate across middle and late adolescence (Sharabany, Gershoni, & Hofman, 1981). Dexter Dunphy’s (1963) ethnographic research on Australian youths paints a slightly different picture of the function of other-gender friendships. He suggested that there is a progression across adolescence, starting with networks of same-gender friends he called cliques, moving to an intermingling of boys’ and girls’ cliques

in larger crowds, which culminates during late adolescence by moving to smaller, mixed-gender cliques that often include romantic couples. Dunphy, therefore, contended that mixed-gender friendships scaffold the development of romantic relationships by providing a social context in which males and females can meet and start dating. Recent studies support this view (Connolly et al., 2000) and further suggest that cross-gender friendships help prepare adolescents for romantic relationships by fostering better understanding of gender differences in interests, interaction styles, and expectations for romance (Connolly, Craig, Goldberg, & Pepler, 2004).

Determinants of Friendship in Adolescence

Researchers have sought to understand the factors that determine the number of friends that youths have, the qualities of their friendships, and the characteristics of the peers with whom they are friends. A sizable minority of adolescents—perhaps 25%—have no peers who claim them as friends. Why? Because a basic requirement of friendship is that peers like each other, many of the factors that determine peer-group acceptance and rejection also play a role in friendship formation. Similar to the correlates of peer-group status, chronic friendlessness is associated with aggressiveness and lack of prosocial skills (Wojslawowicz Bowker, Rubin, Burgess, Booth-Laforce, & Rose-Krasnor, 2006) and especially with social timidity, sensitivity, and withdrawal (Parker & Seal, 1996).

So what factors determine whether any two adolescents become friends? At a fundamental level, peers must have contact with each other in order for friendships to get started, a condition scholars refer to as *propinquity*. Youths become friends with peers whom they are frequently around in a classroom, neighborhood, sports team, or religious groups. Most often the structure of youths' social contacts is stratified and segregated demographically, so that a youth's pool of potential friends is likely to include peers who are similar to him or her in terms of race, ethnicity, education, and economic characteristics (Kandel, 1978; Savin-Williams & Berndt, 1990).

Beyond the similarity created by societal structures, youths are also motivated to make friends with peers based on *similarity* in terms of their interests, abilities, preferences, and social reputations (Aboud & Mendelson, 1998). Scholars use the term *homophily* to denote the tendency of "birds of a feather" to "flock together" in terms of friends having similar characteristics (Kandel, 1978; Prinstein & Dodge, 2008). Research has shown that friends, compared with nonfriends, tend to be more similar to each other in terms of a wide range of characteristics, including academic performance (Epstein, 1983), levels of aggression and deviance (Cairns, Cairns, Neckerman, Gest, & Gariépy, 1988; Dishion, Patterson, Stoolmiller, & Skinner, 1991), substance use (Kandel, 1978; Urberg, Chen, & Shyu, 1991), and even levels of psychological problems, such as depressive symptoms and shyness (Haselager, Hartup, van Lieshout, & Riksen-Walraven, 1998; Hogue & Steinberg, 1995).

Although similarity can bring peers to the doorstep of a potential friendship, adolescents must exercise certain *social skills* in order to build and maintain a mutually satisfying friendship (Buhrmester, 1996; Samter, 2003). Although considerable research has identified the skills associated with being accepted or rejected by childhood peer groups, researchers have only begun to identify the skills that are unique to dyadic friendship during adolescence. Scholars generally assume that social skills can be thought of in terms of the interpersonal tasks involved in building and maintaining

satisfying relationships (Asher & McDonald, 2009; Dodge, McClaskey, & Feldman, 1985) and that the skills unique to friendship likely change with age in concert with the changing expectations and core interactional processes of friendships. For example, one study found that skills in initiating relationships, appropriate self-disclosure, and providing emotional support become more strongly associated with friendship quality during adolescence as compared with childhood (Buhrmester, 1990). Youths who are more skilled at handling these friendship tasks are able to make higher quality friendships as they move from elementary school to junior high school, which is known to be a difficult social transition (Aikins, Bierman, & Parker, 2005).

In addition to whether youths are good or bad at certain skills, qualitative differences in behavioral and attachment-security *styles* also affect the qualities of friendships. Aggressive adolescents' friendships are more conflicted, less supportive, and of shorter length than typical youths' friendships (Coie et al., 1999; Grottpeter & Crick, 1996), whereas shy/withdrawn youths' friendships are less fun and less supportive (Rubin, Wojslawowicz, Rose-Krasnor, Booth-Laforce, & Burgess, 2006). Adolescents with secure attachment styles report that their friendships are of higher quality than those with insecure styles (Furman, 2001; Zimmermann, 2004). Also, friends who both have secure styles show better connection with each other and similar conversational patterns when they are observed interacting than do pairs in which one or both of the friends are insecure (Weimer, Kerns, & Oldenburg, 2004).

Friends' Influence

Early in this chapter, we discussed Sullivan's (1953) well-known view that peers, and especially close friends, make sizable contributions to the course of children's development. In general terms, he suggested that with age, peers increasingly affect how youths think and feel about themselves on a daily basis. Sullivan also argued that there are interpersonal challenges uniquely faced in friendship that are not present in relationships with parents, and thus friendships are the formative context in which youths normatively gain certain social knowledge and skills. For example, it is not until close friends open up and confide to one another their private insecurities and dreams that they must assume the role of intimate support providers. Finally, Sullivan thought that experiences with friends can, at times, undo lessons learned in earlier parent-child relationships. For example, a close, supportive friendship can show adolescents that people can be trustworthy and caring even if their parents were unavailable or rejecting.

There is little doubt that experiences with friends affect youths' emotional lives. By gathering detailed information about adolescents' activities and moods over the course of a week, Larson and Richards (1991) found that highs and lows of moods directly paralleled the events that transpired with peers. On the positive side, the emotional high point of a week for many teenagers was Saturday night, when they went out with friends. At the same time, being home alone on the weekend can be a lonely low point of the week.

Numerous other studies have found that more enduring aspects of youths' emotional well-being and behavioral adjustment are correlated with the number and quality of youths' friendships. For example, loneliness is especially tied to peer relations. Youths who are friendless or have low-quality friendships have been found to be chronically lonely (Parker & Asher, 1993; Renshaw & Brown, 1993) and have lower self-esteem (Berndt, 2002; Keefe & Berndt, 1996). Friendships that are characterized

by conflict and unbalanced affections are associated with depressive symptoms, especially among girls (Prinstein, Borelli, Cheah, Simon, & Aikins, 2005; Selfhout, Branje, & Meeus, 2009). Youths whose friendships involve more arguments and hostility also tend to evidence more disruptive and aggressive behavioral problems in school (Dunn, 2004; Poulin, Dishion, & Haas, 1999).

We should not, however, automatically interpret such correlations as indicating that friendship experiences causally shape adolescent characteristics. As all introductory psychology students are taught, correlation does not necessarily mean causation. In some cases, a correlation may reflect a reverse direction of cause. For example, the similarity between friends may be a selection effect rather than a consequence of the sustained interaction between the friends (Vitaro, Boivin, & Bukowski, 2009). In other cases, correlations reflect reciprocal or transactional causes across time. For instance, levels of adolescents' interpersonal skills are correlated with having friendships that are more supportive in quality (Buhrmester, 1990). Here prosocial skills likely alternate between being a cause and a consequence of friendship: Skills enhance a child's effectiveness in forming friendships, and, in turn, reinforcing experiences within friendships improve the adolescent's level of competence (Barry & Wentzel, 2006). In still other cases, a correlation may be due to a "third variable" that causally shapes both friendship experiences and youths' dispositions. For example, because children who are not accepted by the peer group are also less likely to have high-quality friendships, correlations between friendship and child outcomes may be caused by low group status rather than friendship per se (Vitaro et al., 2009).

There is clear-cut evidence that friendships affect subsequent adolescent outcomes, but *the effects can be positive or negative*. On the positive side, having friends can help adolescents avoid potential adjustment problems. For example, longitudinal studies have found that having at least one close friend during early and middle adolescence reduced the risk of depressive symptoms during young adulthood, even after accounting for levels of depressive symptoms during adolescence (Bagwell, Schmidt, Newcomb, & Bukowski, 2001; Pelkonen, Marttunen, & Aro, 2003). Friendships also seem capable of "undoing" negative effects resulting from unfortunate experiences in the family. Sullivan (1953) argued that positive friendships in preadolescence can offset the damage created by abusive or neglecting parents. Recent evidence seems to confirm this. Many studies show that cold and conflicted relationships with parents put children at increased risk for subsequent externalizing and internalizing problems outside the family. However, among children from at-risk families, those that have high-quality friendships end up developing fewer problems than those who are friendless or have low-quality friendships (Bukowski, Motzoi, & Meyer, 2009). Thus friendship can "buffer" children against problems that they were otherwise expected to develop.

The evidence is less clear, however, as to whether positive features of friendship contribute directly to more positive adolescent outcomes. For instance, Sullivan's (1953) theory argues that intimate friendships during early adolescence validate a child's sense of personal worth, and thus researchers have expected to find that friendship intimacy is associated with the growth of an increasingly positive sense of self-esteem (Berndt, 2004). Carefully conducted longitudinal studies, however, have found limited support for this view. Although higher levels of self-esteem are correlated with better quality friendships at any point in time, there is little indication that friendship quality predicts *changes* (either for the better or worse) in self-esteem across time (Keefe & Berndt, 1996). This is a good example of the axiom that correlation does

not necessarily equal causation. Researchers remain puzzled by the fact that friendship quality is correlated with, but does not apparently cause, changes in self-esteem (Bukowski et al., 2009).

There is much stronger evidence that friendships precipitate changes in problematic outcomes (Vitaro et al., 2009). It is important to note, however, that it is the *characteristics of the friend*, in terms of his or her attitudes and interaction styles, that seem to be most responsible for changing the course of a youth's development. Numerous studies have documented that adolescents whose friends are disruptive and aggressive become increasingly disruptive and aggressive themselves across time (Dishion et al., 1991). This causal effect was experimentally demonstrated by a study intended to prevent at-risk adolescent boys from developing more serious conduct problems. Participants were randomly assigned to several types of treatment, one of which involved learning self-regulation skills in small groups that included other boys who were also at risk (because they, too, showed early signs of disruptive behavior). This small-group treatment backfired. Rather than preventing conduct problems, 1 and 3 years later teachers reported that the boys who had been in these groups had more, rather than fewer, conduct problems compared with the control group (Dishion, McCord, & Poulin, 1999). Why? A careful analysis of video recordings of the small-group treatment sessions revealed that the boys had engaged in what the researchers called "deviance training"; that is, the boys (who were already inclined to be disruptive) reinforced each other through laughter and nonverbal feedback whenever someone in the group broke the rules or used inappropriate language (Dishion, Spracklen, Andrews, & Patterson, 1996). Indeed, there may even be benefits in at-risk youths not having friends, at least in terms of preventing conduct problems, because they often befriend other deviant peers. For example, disruptive and rejected children have been found to become less delinquent and aggressive if they did not have friends (Vitaro, Brendgen, & Wanner, 2005; Kupersmidt, Burchinal, & Patterson, 1995).

But not all friends have "bad" characteristics, so having friends with "good" characteristics should also, at least in theory, "rub off" on adolescents. Indeed, there is some, although more limited, evidence of such positive effects of friends. For instance, one study found that teenagers' school involvement and grades improved over the course of a school year if they started out with friends who were high versus low achievers (Berndt & Keefe, 1995). Thus the effect of friends' characteristics can be either positive or negative, depending on the nature of the friends' characteristics (Berndt, 1999).

There are also cases in which friends simultaneously have both positive and negative effects. Take the interesting case of "corumination" among friends. Corumination occurs when friends disclose their problems to one another, but then repeatedly go over and over the details of the problem and their feelings about them (Rose, 2002). This is most common among girls' friendships. The positive effect of such discussions is that it makes the friends feel greater intimacy and support in their relationships. The negative effect of corumination is that it results in girls perseverating on their problems, which has the effect of increasing their anxiety and depression across time (Rose, Carlson, & Waller, 2007). Similarly, although having a deviant friend may increase a youth's own level of deviance, the friendship also provides needed companionship, acceptance, and validation that can prevent feelings of loneliness and isolation (Brendgen et al., 2000). In both these examples, the benefit of friendship is that it satisfies social needs, whereas the cost comes from picking up maladaptive habits from the friend.

SUMMARY/WHAT'S NEXT?

This chapter shows that research on the features and effects of peer relations has a rich and enduring place in the social developmental literature. Theory about peer relations refers to a rich set of constructs and processes that occur at multiple levels of social complexity and that involve several forms of action, including behavior, cognition, affect, and the “self.” In spite of this rich history, however, many basic questions about peer relations remain unanswered or even unasked. Some of these issues are related to process, whereas others have to do with variations in effects across individuals and with “where” peer relations happen. Two process-oriented issues appear to be especially pressing. One concerns the presumption that experiences with peers are antecedent to “outcomes” such as depressed affect and measures of the self. There is a need to consider whether affect and the self can be “determinants” of peer experiences, as well as being outcomes. Work on these questions would be especially useful if it were framed according to processes of attraction, as well as processes of influence. A second process-oriented question concerns the circumstances in which peer influence is most likely to happen. Research on peer influence has typically considered whether it happens and how individual change is influenced by friend characteristics. There is also a need to know whether some individuals (e.g., those with low self-esteem or who come from a minority background) are more likely to be influenced by peers than are others.

“Where” questions deserve attention, also. Peer relations occur in particular places. There is evidence already that the “place” where peer relations occur matters (Chen, French, & Schneider, 2006). Nevertheless, little is known about how the specific characteristics of particular places affect what peer experiences consist of and how they affect development. Most studies so far have been satisfied with identifying place effects and have not tried to explain the reasons that account for them. This type of research is needed. The “places” that need to be studied are diverse—classrooms, neighborhoods, urban versus rural locations, socioeconomic circumstances, and, of course, the electronic village of cyberspace. Knowing how peer relations function in each of these contexts will add to our understanding of what peer experience is and how it influences well-being and adjustment.

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SUGGESTED READINGS

- Buhrmester, D., & Furman, W. (1987). The development of companionship and intimacy, *Child Development*, 58, 1101–1113.
- Bukowski, W. M., & Adams, R. (2005). Peer relations and psychopathology: Markers, mechanisms, mediators, moderators, and meanings. *Journal of Clinical Child and Adolescent Psychology*, 34, 3–10.
- Roseth, C. J., Johnson, D. W., & Johnson, R. T. (2008). Promoting early adolescents' achievement

- and peer relationships: The effects of cooperative, competitive, and individualistic goal structures. *Psychological Bulletin*, 134, 223–246.
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships, and groups. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology* (6th ed., pp. 571–645). New York: Wiley.
- Underwood, M. K., Galen, B. R., & Paquette, J. A. (2001). Top ten challenges for understanding gender and aggression in children: Why can't we all just get along? *Social Development*, 10, 248–266.

REFERENCES

- Abecassis, M. (2003). I hate you just the way you are: Exploring the formation, maintenance and need for enemies. In E. Hodges & N. Card (Eds.), *Enemies and the darker side of peer relation* (pp. 5–22). New York: Jossey-Bass.
- Abecassis, M., Hartup, W. W., Haselager, G. J. T., Scholte, R. H. J., & Van Lieshout, C. F. M. (2002). Mutual antipathies and their significance in middle childhood and adolescence *Child Development*, 73, 1543–1556.
- About, F., & Mendelson, M. (1998). Determinants of friendship selection and quality: Developmental perspectives. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), *The company they keep: Friendship in children and adolescence* (pp. 87–112). New York: Cambridge University Press.
- Aikins, J., Bierman, K., & Parker, J. (2005). Navigating the transition to junior high school: The influence of pre-transition friendship and self-system characteristics. *Social Development*, 14(1), 42–60.
- Asher, S., & McDonald, K. (2009). The behavioral basis of acceptance, rejection, and perceived popularity. In K. H. Rubin, W. M. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 232–248). New York: Guilford Press.
- Asher, S. R., Singleton, L. C., Tinsley, B. R., & Hymel, S. (1979). A reliable sociometric measure for preschool children. *Developmental Psychology*, 15, 443–444.
- Azmitia, M., & Montgomery, R. (1993). Friendship, transactive dialogues, and the development of scientific reasoning. *Social Development*, 2, 202–221.
- Bagwell, C., Newcomb, A. F., & Bukowski, W. M. (1998). Preadolescent friendship and rejection as predictors of adult adjustment. *Child Development*, 69, 140–153.
- Bagwell, C., Schmidt, M., Newcomb, A., & Bukowski, W. (2001). Friendship and peer rejection as predictors of adult adjustment. In D. W. Nagle & C. A. Erdley (Eds.), *The role of friendship in psychological adjustment* (pp. 25–49). San Francisco: Jossey-Bass.
- Barry, C., & Wentzel, K. (2006). Friend influence on prosocial behavior: The role of motivational factors and friendship characteristics. *Developmental Psychology*, 42(1), 153–163.
- Benenson, J. F. (1994). Ages four to six years: Changes in the structures of play networks of girls and boys. *Merrill-Palmer Quarterly*, 40, 478–487.
- Berndt, T. (1999). Friends' influence on students' adjustment to school. *Educational Psychologist*, 34(1), 15–28.
- Berndt, T. (2002). Friendship quality and social development. *Current Directions in Psychological Science*, 11, 7–10.
- Berndt, T. (2004). Children's friendships: Shifts over a half-century in perspectives on their development and their effects. *Merrill-Palmer Quarterly*, 50(3), 206–223.
- Berndt, T. J., & Hoyle, S. G. (1985). Stability and change in childhood and adolescent friendships. *Development Psychology*, 21, 1007–1015.
- Berndt, T., & Keefe, K. (1995). Friends' influence on adolescents' adjustment to school. *Child Development*, 66(5), 1312–1329.
- Bigelow, B. J. (1977). Children's friendship expectations: A cognitive-developmental study. *Child Development*, 48, 246–253.
- Boivin, M., Vitaro, F., & Poulin, F. (2005). Peer relationships and the development of aggressive behavior in early childhood. In R. E. Tremblay, W. W. Hartup, & J. Archer (Eds.), *Developmental origins of aggression* (pp. 376–397). New York: Guilford Press.

- Boulton, M. J., Trueman, M., Chau, C., Whitehand, C., & Amatya, K. (1999). Concurrent and longitudinal links between friendships and peer victimization: Implications for befriending interventions. *Journal of Adolescence, 22*, 461–466.
- Brendgen, M., Vitaro, F., & Bukowski, W. (2000). Deviant friends and early adolescents' emotional and behavioral adjustment. *Journal of Research on Adolescence, 10*(2), 173–189.
- Buhrmester, D. (1990). Friendship, interpersonal competence, and adjustment in preadolescence and adolescence. *Child Development, 61*, 1101–1111.
- Buhrmester, D. (1996). Need fulfillment, interpersonal competence, and the developmental contexts of early adolescent friendships. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), *The company they keep: Friendship in childhood and adolescence* (pp. 158–185). New York: Cambridge University Press.
- Buhrmester, D., & Furman, W. (1986). The changing functions of friendship in childhood: A neo-Sullivanian perspective. In V. J. Derlega & B. A. Winstead (Eds.), *Friendship and social interaction* (pp. 43–62). New York: Springer-Verlag.
- Buhrmester, D., & Prager, K. (1995). Patterns and functions of self-disclosure during childhood and adolescence. In K. J. Rotenberg (Ed.), *Disclosure processes in children and adolescents* (pp. 10–56). New York: Cambridge University Press.
- Bukowski, W. M., Brendgen, M., & Vitaro, F. (2007). Peers and socialization: Effects on externalizing and internalizing problems. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 355–381). New York: Guilford Press.
- Bukowski, W., & Hoza, B. (1989). Popularity and friendship: Issues in theory, measurement, and outcome. In T. J. Berndt & G. W. Ladd (Eds.), *Peer relationships in child development* (pp. 15–45). Oxford, UK: Wiley.
- Bukowski, W., Motzoi, C., & Meyer, F. (2009). Friendship as process, function, and outcome. In K. H. Rubin, W. M. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 217–231). New York: Guilford Press.
- Bukowski, W. M., & Sippola, L. K. (2001). Groups, individuals, and victimization: A view of the peer system. In J. Juvenon & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 355–377). New York: Guilford Press.
- Cairns, R., Cairns, B., Neckerman, H., Gest, S., & Gariépy, J. (1988). Social networks and aggressive behavior: Peer support or peer rejection? *Developmental Psychology, 24*(6), 815–823.
- Camodeca, M., Goossens, F. A., Terwogt, M. M., & Schuengel, C. (2002). Bullying and victimization among school-age children: Stability and links to proactive and reactive aggression. *Social Development, 11*, 332–345.
- Chen, X., French, D., & Schneider, B. (2006). *Peer relationships in cultural context*. New York: Cambridge University Press.
- Coie, J., Cillessen, A., Dodge, K., Hubbard, J., Schwartz, D., Lemerise, E., et al. (1999). It takes two to fight: A test of relational factors and a method for assessing aggressive dyads. *Developmental Psychology, 35*(5), 1179–1188.
- Coie, J. D., Lochman, J. E., Terry, R., & Hyman, C. (1992). Predicting early adolescent disorder from childhood aggression and peer rejection. *Journal of Consulting and Clinical Psychology, 60*, 783–792.
- Connolly, J., Craig, W., Goldberg, A., & Pepler, D. (2004). Mixed-gender groups, dating, and romantic relationships in early adolescence. *Journal of Research on Adolescence, 14*(2), 185–207.
- Connolly, J., Furman, W., & Konarski, R. (2000). The role of peers in the emergence of heterosexual romantic relationships in adolescence. *Child Development, 71*(5), 1395–1408.
- Coplan, R. J., Gavinski-Molina, M. H., Lagace-Seguin, D., & Wichmann, C. (2001). When girls versus boys play alone: Gender differences in the associates of nonsocial play in kindergarten. *Developmental Psychology, 37*, 464–474.
- Crick, N. R., Casas, J. F., & Mosher, M. (1997). Relational and overt aggression in preschool. *Developmental Psychology, 33*(4), 589–600.
- Crick, N. R., & Nelson, D. A. (2002). Relational and physical victimization within friendship: Nobody told me there'd be friends like these. *Journal of Abnormal Child Psychology, 30*, 599–607.
- Csikszentmihalyi, M., & Larson, R. (1984). *Being adolescent: Conflict and growth in the teenage years*. New York: Basic Books.

- Davies, B. (1982). *Life in the classroom and playground*. Oxford, UK: Routledge.
- DeRosier, M., Kupersmidt, J., & Patterson, C. (1994). Children's academic and behavioral adjustment as a function of the chronicity and proximity of peer rejection. *Child Development*, *65*, 1799–1813.
- Dishion, T., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and problem behavior. *American Psychologist*, *54*(9), 755–764.
- Dishion, T., Patterson, G., Stoolmiller, M., & Skinner, M. (1991). Family, school, and behavioral antecedents to early adolescent involvement with antisocial peers. *Developmental Psychology*, *27*(1), 172–180.
- Dishion, T., Spracklen, K., Andrews, D., & Patterson, G. (1996). Deviancy training in male adolescent friendships. *Behavior Therapy*, *27*(3), 373–390.
- Dodge, K. A., Coie, J. D., & Lynam, D. (2006). Aggression and antisocial behavior in youth. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 719–788). New York: Wiley.
- Dodge, K., McClaskey, C., & Feldman, E. (1985). Situational approach to the assessment of social competence in children. *Journal of Consulting and Clinical Psychology*, *53*(3), 344–353.
- Doise, W., & Mugny, G. (1984). *The social development of the intellect*. Oxford, UK: Pergamon Press.
- Dunn, J. (2004). *Children's friendships: The beginning of intimacy*. Malden, MA: Blackwell.
- Dunphy, D. (1963). The social structure of urban adolescent peer groups. *Sociometry*, *26*, 230–246.
- Dunsmore, J. C., Noguchi, R. J. P., Garner, P. W., Casey, E. C., & Bhullar, N. (2008). Gender specific linkages of affective social competence with peer relations in preschool children. *Early Education and Development*, *19*, 211–237.
- Eder, D., & Enke, J. L. (1991). The structure of gossip: Opportunities and constraints on collective expression among adolescents. *American Sociological Review*, *56*, 494–508.
- Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In W. Damon (Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development*. (5th ed.). New York: Wiley.
- Epstein, J. (1983). The influence of friends on achievement and affective outcomes. In J. Epstein & N. Karweit (Eds.), *Friends in school* (pp. 177–200). New York: Academic Press.
- Espelage, D. L., Bosworth, K., & Simon, T. R. (2000). Examining the social context of bullying behaviors in early adolescence. *Journal of Counseling and Development*, *78*, 326–333.
- Fabes, R. A. (1994). Physiological, emotional, and behavioral correlates of gender segregation. In C. Leaper (Ed.), *Childhood gender segregation: Causes and consequences* (pp. 19–34). San Francisco: Jossey-Bass.
- Fabes, R. A., Shepard, S. A., Guthrie, I. K., & Martin, C. L. (1997). Roles of temperamental arousal and gender-segregated play in young children's social adjustment. *Developmental Psychology*, *33*, 693–702.
- Fagot, B. I. (1994). Peer relations and the development of competence in boys and girls. In C. Leaper (Ed.), *Childhood gender segregation: Causes and consequences* (pp. 53–66). San Francisco: Jossey-Bass.
- Farver, J. M. (1996). Aggressive behavior in preschoolers' social networks: Do birds of a feather flock together? *Early Childhood Research Quarterly*, *11*, 333–350.
- Furman, W. (2001). Working models of friendships. *Journal of Social and Personal Relationships*, *18*(5), 583–602.
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology*, *21*, 1016–1022.
- Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development*, *63*, 103–115.
- Gauze, C., Bukowski, W. M., Aquan-Assee, J., & Sippola, L. K. (1996). Interactions between family environment and friendship and associations with self-perceived well-being during early adolescence. *Child Development*, *67*, 2201–2216.
- Golbeck, S. L. (1998). Peer collaboration and children's representation of the horizontal surface of liquid. *Journal of Applied Developmental Psychology*, *19*, 571–592.
- Gottman, J. (1986). The world of coordinated play: Same- and cross-sex friendship in young children. In J. M. Gottman & J. G. Parker (Eds.), *Conversations with friends: Speculations on affective development* (pp. 139–190). New York: Cambridge University Press.

- Graham, S., & Juvonen, J. (2000). *Peer harassment in school*. New York: Guilford Press.
- Grosbras, M.-H., Jansen, M., Leonard, G., McIntosh, A., Osswald, K., Poulsen, C., et al. (2007). Neural mechanisms of resistance to peer influence in early adolescence. *Journal of Neuroscience*, 27, 8040–8045.
- Grotspeter, J., & Crick, N. (1996). Relational aggression, overt aggression, and friendship. *Child Development*, 67(5), 2328–2338.
- Gunnar, M., Senior, K., & Hartup, W. W. (1984). Peer presence and the exploratory behavior of 18- and 30-month-old children. *Child Development*, 35, 1103–1109.
- Hanish, L. D., & Guerra, N. G. (2000). Predictors of peer victimization among urban youth. *Social Development*, 9, 521–543.
- Hanish, L. D., & Guerra, N. G. (2004). Aggressive victims, passive victims, and bullies: Developmental continuity or developmental change? *Merrill-Palmer Quarterly*, 50, 17–38.
- Hartup, W. W. (1996). The company they keep: Friendships and their developmental significance. *Child Development*, 67, 1–13.
- Hartup, W. W. (2003). Toward understanding mutual antipathies in childhood and adolescence. *New Directions in Child and Adolescent Development*, 102, 111–123.
- Hartup, W. W., & Abecassis, M. (2002). Friends and enemies: Their significance in child development. In P. Smith & C. Hart (Eds.), *Handbook of social development* (pp. 285–307). London: Blackwell.
- Hartup, W. W., & Coates, B. (1967). Imitation of a peer as a function of reinforcement from the peer group and rewardingness of the model. *Child Development*, 38, 1003–1016.
- Hartup, W. W., Glazer, J. A., & Charlesworth, R. (1967). Peer reinforcement and sociometric status. *Child Development*, 38, 1017–1024.
- Hartup, W. W., Laursen, B., Stewart, M. I., & Eastenson, A. (1988). Conflict and the friendship relations of young children. *Child Development*, 59, 1590–1600.
- Hartup, W. W., & Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin*, 121, 355–370.
- Haselager, G., Hartup, W., van Lieshout, C., & Riksen-Walraven, J. (1998). Similarities between friends and nonfriends in middle childhood. *Child Development*, 69(4), 1198–1208.
- Hawley, P. H. (2003). Strategies of control, aggression, and morality in preschools: An evolutionary perspective. *Journal of Experimental Child Psychology*, 85, 213–235.
- Hay, D. F. (1985). Learning to form relationships in infancy: Parallel attainments with parents and peers. *Developmental Review*, 5, 122–161.
- Hay, D. F., Payne, A., & Chadwick, A. (2004). Peer relations in childhood. *Journal of Child Psychology and Psychiatry*, 45, 84–108.
- Henderson, H. A., Marshall, P. J., Fox, N. A., & Rubin, K. H. (2004). Psychophysiological and behavioral evidence for varying forms and functions of nonsocial behaviors in preschoolers. *Child Development*, 75, 251–263.
- Hinde, R. A. (1987). *Individuals, relationships and culture*. Cambridge: Cambridge University Press.
- Hodges, E., Boivin, M., Vitaro, F., & Bukowski, W. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology*, 35(1), 94–101.
- Hodges, E. V. E., & Card, N. A. (Eds.). (2003). *Enemies and the darker side of peer relations*. San Francisco: Jossey-Bass.
- Hodges, E. V. E., Malone, M. J., & Perry, D. G. (1997). Individual risk and social risk as interacting determinants of victimization in the peer group. *Developmental Psychology*, 33, 1032–1039.
- Hogue, A., & Steinberg, L. (1995). Homophily of internalized distress in adolescent peer groups. *Developmental Psychology*, 31(6), 897–906.
- Howes, C. (1983). Patterns of friendship. *Child Development*, 54, 1041–1053.
- Howes, C. (1985). Sharing fantasy: Social pretend play in toddlers. *Child Development*, 56, 1253–1258.
- Howes, C. (1988). Peer interaction of young children. *Monographs of the Society for Research in Child Development* (Serial No. 217).
- Howes, C. (1996). The earliest friendships. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), *The company they keep: Friendship in childhood and adolescence* (pp. 66–86). New York: Cambridge University Press.

- Howes, C., & Farver, J. (1987). Toddler's responses to the distress of their peers. *Journal of Applied Developmental Psychology, 8*, 441–452.
- Howes, C., & Lee, L. (2006). Peer relations in young children. In L. Balter & C. S. Tamis-LeMonda (Eds.), *Child psychology: A handbook of contemporary issues* (pp. 135–151). New York: Psychology Press.
- Howes, C., & Matheson, C. C. (1992). Sequences in the development of competent play with peers: Social and social pretend play. *Child Development, 28*, 961–974.
- Howes, C., & Phillipsen, L. (1992). Gender and friendship: Relationships within peer groups of young children. *Social Development, 1*, 230–242.
- Howes, C., & Phillipsen, L. (1998). Continuity in children's relations with peers. *Social Development, 7*, 340–349.
- Humphreys, A., & Smith, P. K. (1987). Rough-and-tumble play, friendship, and dominance in school children: Evidence of continuity and change with age. *Child Development, 58*, 201–212.
- Ispa, J. (1981). Peer support among Soviet day care toddlers. *International Journal of Behavioral Development, 4*, 255–269.
- Kandel, D. B. (1978). Homophily, selection, and socialization in adolescent friendships. *American Journal of Sociology, 84*(2), 427–436.
- Keefe, K., & Berndt, T. (1996). Relations of friendship quality to self-esteem in early adolescence. *Journal of Early Adolescence, 16*(1), 110–129.
- Khatri, P., & Kupersmidt, J. B. (2003). Aggression, peer victimization, and social relationships among Indian youth. *International Journal of Behavioral Development, 27*(1), 87–95.
- Kochenderfer, B., & Ladd, G. (1996). Peer victimization: Cause or consequence of school maladjustment? *Child Development, 67*, 1305–1317.
- Kraatz-Keily, M., Bates, J. E., Dodge, K. A., & Pettit, G. S. (2000). A cross-domain analysis: Externalizing and internalizing behaviors during 8 years of childhood. *Journal of Abnormal Child Psychology, 28*, 161–179.
- Kupersmidt, J., Burchinal, M., & Patterson, C. (1995). Developmental patterns of childhood peer relations as predictors of externalizing behavior problems. *Development and Psychopathology, 7*(4), 825–843.
- Kupersmidt, J. B., & Coie, J. D. (1990). Preadolescent peer status, aggression, and school adjustment as predictors of externalizing problems in adolescence. *Child Development, 61*, 1350–1362.
- Kuttler, A. F., Parker, J. G., & La Greca, A. M. (2002). Developmental and gender differences in preadolescents' judgments of the veracity of gossip. *Merrill-Palmer Quarterly, 48*, 105–132.
- Ladd, G. W., Price, J. M., & Hart, C. H. (1988). Predicting preschoolers' peer status from their playground behaviors. *Child Development, 59*, 986–992.
- Larson, R., & Richards, M. (1991). Daily companionship in late childhood and early adolescence: Changing developmental contexts. *Child Development, 62*(2), 284–300.
- Laursen, B. (1996). Closeness and conflict in adolescent peer relationships: Interdependence with friends and romantic partners. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), *The company they keep: Friendship in childhood and adolescence* (pp. 186–210). New York: Cambridge University Press.
- Laursen, B., Bukowski, W., Aunola, K., & Nurmi, J. (2007). Friendship moderates prospective associations between social isolation and adjustment problems in young children. *Child Development, 78*(4), 1395–1404.
- Laursen, B., Finkelstein, B., & Townsend Betts, N. (2001). A developmental meta-analysis of peer conflict resolution. *Developmental Review, 21*(4), 423–449.
- Lokken, G. (2000). Tracing the social style of toddler peers. *Scandinavian Journal of Educational Research, 44*, 163–176.
- Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge, MA: Harvard University Press.
- Martin, C. L. (1994). Cognitive influences on the development and maintenance of gender segregation. In C. Leaper (Ed.), *Childhood gender segregation: Causes and consequences* (pp. 35–52). San Francisco: Jossey-Bass.
- Martin, C. L., & Fabes, R. A. (2001). The stability and consequences of young children's same-sex peer interactions. *Developmental Psychology, 37*, 431–446.

- Martin, C. L., Fabes, R. A., Hanish, L. D., & Hollenstein, T. (2005). Social dynamics in the preschool. *Developmental Review, 25*, 299–327.
- McDougall, P., & Hymel, S. (2007). Same-gender versus cross-gender friendship conceptions: Similar or different? *Merrill-Palmer Quarterly, 53*(3), 347–380.
- McNelles, L., & Connolly, J. (1999). Intimacy between adolescent friends: Age and gender differences in intimate affect and intimate behaviors. *Journal of Research on Adolescence, 9*(2), 143–159.
- Mead, G. H. (1934). *Mind, self, and society* (Charles W. Morris, Ed.). Chicago: University of Chicago Press.
- Moller, L., Hymel, S., & Rubin, K. (1992). Sex typing in play and popularity in middle childhood. *Sex Roles, 26*(7), 331–353.
- Monroe, W. S. (1898). Social consciousness in children. *Psychological Review, 5*, 68–70.
- Newcomb, A., & Bagwell, C. (1995). Children's friendship relations: A meta-analytic review. *Psychological Bulletin, 117*(2), 306–347.
- Newcomb, A. F., & Bukowski, W. M. (1983). Social impact and social preference as determinants of children's peer group status. *Developmental Psychology, 19*, 856–867.
- 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.
- Ollendick, T. H., Weist, M. D., Borden, M. G., & Greene, R. W. (1992). Sociometric status and academic, behavioral, and psychological adjustment: A five-year longitudinal study. *Journal of Consulting and Clinical Psychology, 60*, 80–87.
- Olweus, D. (1978). *Aggression in the schools: Bullies and whipping boys*. Oxford, UK: Hemisphere.
- Olweus, D. (1984). Stability in aggressive and withdrawn, inhibited behavior patterns. In R. M. Kaplan, V. J. Konecni, & R. W. Novaco (Eds.), *Aggression in children and youth* (pp. 104–136). The Hague: Nijhoff.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Oxford, UK: Blackwell.
- Parker, J., & Asher, S. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology, 29*(4), 611–621.
- Parker, J. G., & Asher, S. R. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin, 102*, 357–389.
- Parker, J. G., & Gottman, J. M. (1989). Social and emotional development in a relational context: Friendship interaction from early childhood to adolescence. In T. J. Berndt & G. W. Ladd (Eds.), *Peer relations in child development* (pp. 95–131). New York: Wiley.
- Parker, J., & Seal, J. (1996). Forming, losing, renewing, and replacing friendships: Applying temporal parameters to the assessment of children's friendship experiences. *Child Development, 67*(5), 2248–2268.
- Peevers, B. H., & Secord, P. F. (1973). Developmental changes in attribution of descriptive concepts to persons. *Journal of Personality and Social Psychology, 27*, 120–128.
- Pelkonen, M., Marttunen, M., & Aro, H. (2003). Risk for depression: A six-year follow-up of Finnish adolescents. *Journal of Affective Disorders, 77*, 41–51.
- Pellegrini, A. D. (2002). Rough-and-tumble play from childhood through adolescence: Development and possible functions. In P. K. Smith & C. H. Hart (Eds.), *Blackwell handbook of childhood social development* (pp. 438–453). London: Blackwell.
- Perry, D. G., Kusel, S. J., & Perry, L. C. (1988). Victims of peer aggression. *Developmental Psychology, 24*, 807–814.
- Perry, D. G., Perry, L., & Kennedy, E. (1992). Conflict and the development of antisocial behavior. In C. Shantz & W. W. Hartup (Eds.), *Conflict in child and adolescent development*. New York: Cambridge University Press.
- Piaget, J. (1932). *The moral judgment of the child*. Glencoe, IL: Free Press.
- Poulin, F., Dishion, T., & Haas, E. (1999). The peer influence paradox: Friendship quality and deviancy training within male adolescent friendships. *Merrill-Palmer Quarterly, 45*(1), 42–61.
- Prinstein, M. J., Borelli, J. L., Cheah, C. S. L., Simon, V. A., & Aikins, J. W. (2005). Adolescent girls' interpersonal vulnerability to depressive symptoms: A longitudinal examination of reassurance-seeking and peer relationships. *Journal of Abnormal Psychology, 114*, 676–688.

- Prinstein, M., & Dodge, K. (2008). Current issues in peer influence research. In M. J. Prinstein & K. A. Dodge (Eds.), *Understanding peer influence in children and adolescents* (pp. 3–13). New York: Guilford Press.
- Renshaw, P., & Brown, P. (1993). Loneliness in middle childhood: Concurrent and longitudinal predictors. *Child Development, 64*(4), 1271–1284.
- Rose, A. (2002). Co-rumination in the friendships of girls and boys. *Child Development, 73*(6), 1830–1843.
- Rose, A., Carlson, W., & Waller, E. (2007). Prospective associations of co-rumination with friendship and emotional adjustment: Considering the socioemotional trade-offs of co-rumination. *Developmental Psychology, 43*(4), 1019–1031.
- Rose, A., & Rudolph, K. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin, 132*(1), 98–131.
- Ross, H. S., & Lollis, S. P. (1989). A social relations analysis of toddler peer relationships. *Child Development, 60*, 1082–1091.
- Rubin, K. H. (1982). Nonsocial play in preschoolers: Necessarily evil? *Child Development, 53*, 651–657.
- Rubin, K. H., & Asendorph, J. (Eds.). (1993). *Social withdrawal, inhibition, and shyness in childhood*. Hillsdale, NJ: Erlbaum.
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships and groups. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology* (6th ed., pp. 571–645). New York: Wiley.
- Rubin, K. H., Coplan, R. J., & Bowker, J. C. (2009). Social withdrawal in childhood. *Annual Review of Psychology, 60*, 141–171.
- Rubin, K. H., Fein, G., & Vandenberg, B. (1983). Play. In P. H. Mussen (Series Ed.) & E. M. Hetherington (Vol. Ed.), *Handbook of child psychology: Vol. 4. Socialization, personality and social development* (pp. 693–774). New York: Wiley.
- Rubin, K., Wojslawowicz, J., Rose-Krasnor, L., Booth-LaForce, C., & Burgess, K. (2006). The best friendships of shy/withdrawn children: Prevalence, stability, and relationship quality. *Journal of Abnormal Child Psychology, 34*(2), 143–157.
- Samter, W. (2003). Friendship interaction skills across the life-span. In J. O. Greene & B. R. Burlleson (Eds.), *Handbook of communication and social interaction skills* (pp. 637–684). Mahwah, NJ: Erlbaum.
- Sandstrom, M. J., Cillessen, A. H. N., & Eisenhower, A. (2003). Children's appraisal of peer rejection experiences: Impact on social and emotional adjustment. *Social Development, 12*, 530–550.
- Savin-Williams, R., & Berndt, T. (1990). Friendship and peer relations. In S. Feldman & G. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 277–307). Cambridge, MA: Harvard University Press.
- Schafer, M., Werner, N. E., & Crick, N. R. (2002). A comparison of two approaches to the study of negative peer treatment: General victimization and bully/victim problems among German schoolchildren. *British Journal of Developmental Psychology, 20*, 281–306.
- Schwartz, D., Farver, J. M., Chang, L., & Lee-Shin, Y. (2002). Victimization in South Korean children's peer groups. *Journal of Abnormal Child Psychology, 30*, 113–125.
- Seban, A. M., Kearns, K. T., Hernandez, M. D., & Galvin, K. B. (2007). Predicting having a best friend in young children: Individual characteristics and friendship features. *Journal of Genetic Psychology, 168*, 81–95.
- Selphout, M. H. W., Branje, S. J. T., & Meeus, W. H. J. (2009). Developmental trajectories of perceived friendship intimacy, constructive problem solving, and depression from early to late adolescence. *Journal of Abnormal Child Psychology, 37*(2), 251–264.
- Selman, R. L. (1980). *The growth of interpersonal understanding: Developmental and clinical analyses*. New York: Academic Press.
- Selman, R. (1981). The child as a friendship philosopher. In S. R. Asher & J. M. Gottman (Eds.), *The development of children's friendships* (pp. 242–272). New York: Cambridge University Press.
- Serbin, L. A., Moller, L. C., Gulko, J., Powlishta, K. K., & Colburne, K. A. (1994). The emergence of gender segregation in toddler playgroups. In C. Leaper (Ed.), *Childhood gender segregation: Causes and consequences* (pp. 7–18). San Francisco: Jossey-Bass.

- Sharabany, R., Gershoni, R., & Hofman, J. (1981). Girlfriend, boyfriend: Age and sex differences in intimate friendship. *Developmental Psychology*, 17(6), 800–808.
- Snyder, J., Brooker, M., Patrick, M. R., Snyder, A., Schrepferman, L., & Stoolmiller, M. (2003). Observed peer victimization during early elementary school: Continuity, growth, and relation to risk for child antisocial and depressive behavior. *Child Development*, 74, 1881–1898.
- Snyder, J., Horsch, E., & Childs, J. (1997). Peer relationships of young children: Affiliative choices and the shaping of aggressive behavior. *Journal of Clinical Child Psychology*, 26, 145–156.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.
- Thorne, B. (1993). *Gender play: Girls and boys in school*. New Brunswick, NJ: Rutgers University Press.
- Underwood, M. K. (2004). Gender and peer relations: Are the two gender cultures really all that different? In J. B. Kupersmidt & K. A. Dodge (Eds.), *Children's peer relations: From developmental science to intervention to policy* (pp. 21–36). Washington, DC: American Psychological Association.
- Urberg, K., Cheng, C., & Shyu, S. (1991). Grade changes in peer influence on adolescent cigarette smoking: A comparison of two measures. *Addictive Behaviors*, 16(1), 21–28.
- van den Oord, E. J. C. G., Rispens, J., Goudena, P. P., & Vermande, M. (2000). Some developmental implications of structural aspects of preschoolers' relations with classmates. *Journal of Applied Developmental Psychology*, 21, 616–639.
- Vandell, D. L., Wilson, K. S., & Buchanan, N. R. (1980). Peer interaction in the first year of life: An examination of its structure, content, and sensitivity to toys. *Child Development*, 51, 481–488.
- Vitaro, F., Boivin, M., & Bukowski, W. M. (2009). The role of friendship in child and adolescent psychosocial development. In K. Rubin, W. M. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 568–588). New York: Guilford Press.
- Vitaro, F., Brendgen, M., & Wanner, B. (2005). Patterns of affiliation with delinquent friends during late childhood and early adolescence: Correlates and consequences. *Social Development*, 14(1), 82–108.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Weimer, B., Kerns, K., & Oldenburg, C. (2004). Adolescents' interactions with a best friend: Associations with attachment style. *Journal of Experimental Child Psychology*, 88(1), 102–120.
- Wojslawowicz Bowker, J., Rubin, K., Burgess, K., Booth-LaForce, C., & Rose-Krasnor, L. (2006). Behavioral characteristics associated with stable and fluid best friendship patterns in middle childhood. *Merrill-Palmer Quarterly*, 52(4), 671–693.
- Xu, Y., Farver, J., Schwartz, D., & Chang, L. (2003). Identifying aggressive victims in Chinese children's peer groups. *International Journal of Behavioral Development*, 27(3), 243–252.
- Zarbatany, L., Hartmann, D. P., & Rankin, D. B. (1990). The psychological functions of preadolescent peer activities. *Child Development*, 61, 1067–1080.
- Zarbatany, L., McDougall, P., & Hymel, S. (2000). Gender-differentiated experience in the peer culture: Links to intimacy in preadolescence. *Social Development*, 9(1), 62–79.
- Zimmermann, P. (2004). Attachment representations and characteristics of friendship relations during adolescence. *Journal of Experimental Child Psychology*, 88(1), 83–101.