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One Social World: The Integrated Development of Parent-Child and Peer Relationships

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For several decades researchers have been concerned with the place of peer relationships in the broader arena of social development. Numerous investigators have suggested that peer relationships may serve unique developmental functions and must be investigated in their own right (Hartup, 1980). For example, Harlow (Harlow & Harlow, 1965) distinguished a "peer affectional system," centered on play, from an "infant-mother affectional system," centered on nurturance. More recently, Furman and Wehner (1994) argued that distinctive basic needs were best met within peer relationships. They argued that an initial core need for "tenderness" was best met within parent-child relationships, whereas needs such as "companionship" may be best met within the peer world. Meeting these needs, as well as needs for acceptance, intimacy, and sexuality, which also are part of peer experience, is critical in human adaptation.

One focus of much developmental writing has been the role of peer experiences as preparation for effective adult functioning, especially successful intimate relationships. Peer relationships are a critical arena for developing notions of equity and reciprocity, for practicing conflict resolution, and for learning to control aggression (e.g., Hartup, 1980; Hartup & Laursen, 1994). Moreover, because adult intimate relationships are symmetrical (occurring between those who are roughly age-mates and where neither can call upon the authority of greater chronological maturity), a special role for close childhood friendships has been underscored. Over

the course of childhood and adolescence, beginning with same-gender friendships, issues of trust, loyalty, and, ultimately, self-disclosure and sharing of confidences are worked out with agemates. Such capabilities, along with the capacity to sustain closeness in the face of conflict, are deemed to be critical features of adult intimate relationships.

In a classic paper, subtitled "Two Social Worlds," Hartup (1980) anticipated much of the aforementioned discussion on the unique contributions of peer relationships to development. At the same time, he discussed the integration of peer experiences and parent-child relationships. He described how early parent-child relationships might "set the stage" for peer relationships, perhaps leaving an imprint that could be discerned in an individual's interaction with peers. He pointed to an "instrumental base," wherein interactive patterns first evolved in relationships with parents are practiced and elaborated in the world of peers. In addition, he suggested that relations with parents provide a critical emotional base, such that some children bring a positive orientation to their initial encounters with peers. In these ways family relationships "maximize the probability that successful peer experiences will ensue" (p. 288). Moreover, he argued, the peer system does not replace or duplicate the parent-child system, but rather supports it. "The two social worlds of the child seem actually to interact as a complementary synergism" (p. 287).

The major goal of this chapter is to examine the complementarity between family and peer experiences in guiding the course of development, and to do so in light of the extensive empirical base of a longitudinal study from birth through adulthood (e.g., Egeland, Carlson, & Sroufe, 1993; Sroufe, Carlson, & Shulman, 1993). In the developmental view presented, the importance of peer experiences is supported, while at the same time their integration with family experiences is underscored. Peer experiences make unique contributions to social development, but the quality of peer experiences is dependent on foundations laid down in the parent-child caregiving system. Successful peer relationships at any age promote social competence at subsequent ages, but at the same time are conditional upon prior peer experiences, the history of relationships within the family, and current support. In short, parent-child and peer relationships are part of one social world.

Supporting such a viewpoint involves three empirical demonstrations: (a) that peer relationships assessments at any given age do, in fact, predict later social competence; (b) that such predictive peer competencies are themselves predicted by qualities of parent-child relationships that precede them; and (c) that peer and parent-child assessments together predict later social functioning better than does either domain alone. All of this is predicated on an effective, age-sensitive conceptualization of peer competence itself.

THE DEVELOPMENT OF PEER COMPETENCE

Peer relationships represent a developmental system, and this fact is central for the integration proposed. Peer competence develops both in the sense that different tasks are pivotal to peer relationships at each advancing phase of development, and in the sense that peer experiences at each age provide a foundation for negotiating subsequent issues with peers. Demonstrating linkages between parent-child and peer relationships requires first an understanding of this developmental system.

The major issue for the preschool child is to engage the world of peers (e.g., Sroufe, Carlson, & Shulman, 1993). This includes evolving the capacity for sustaining and coordinating interaction with individual peers, as well as participating successfully in group activities. At this age, peer partners also are just evolving interactive capacities. Therefore, initiating and responding to others and sustaining interaction, especially in highly stimulating group situations, calls upon not only interactive and play skills but a considerable capacity for emotional regulation. In fact, those who are successful at this phase (as determined by sociometrics, teacher ratings, or observed participation and centrality in the peer group) are noted to be more affectively positive in bids and responses to peers, to modulate arousal effectively, and to maintain behavioral organization in prolonged interactive bouts (e.g., Sroufe, Schork, Motti, Lawroski, & LaFreniere, 1984).

The issues to be negotiated in the world of peers during middle childhood become much more elaborated and complex (see Table 11.1). First, the capacity for friendships is evolving. A major developmental task is to form durable specific friendships, characterized by loyalty, mutual support, and closeness. Numerous writers have underscored the importance of these special relationships for developing the capacity for intimacy. At the same time, peer groups become much more stable and organized, taxing the child to find an effective place within a more well-defined network. Hartup (1980) described the groups of preschoolers as "aggregates of individuals," whereas those of older children are more tightly organized and are characterized by "reciprocity and synchrony." Peer groups in middle childhood also are strongly rule governed, and to be effective children must master and adhere to the group norms. One of the most notable of these rule systems concerns behavior with respect to the opposite gender in public settings (Thorne, 1986). Rules governing interaction with opposite-gender peer group members must be closely followed, in a manner such that a distinct boundary is maintained between genders (Sroufe, Bennett, Englund, Urban, & Shulman, 1993). Finally, in middle childhood, there is the additional complexity of coordinating loyalty to friends with the demands of group functioning. For competent children the two are mutually supporting: friendships enhance acceptance by and participation in

TABLE 11.1
Changing Issues in Childhood Peer Relationships

<i>Preschool: "Positive Engagement of Peers"</i>	
A. Selecting Specific Partners	
B. Sustaining Interactive Bouts	<ol style="list-style-type: none"> 1. negotiating conflicts in interaction 2. maintaining organization in the face of arousal 3. finding pleasure in the interactive process
C. Participation in Groups	
<i>Middle Childhood: "Investment in the Peer World"</i>	
A. Forming Loyal Friendships	
B. Sustaining Relationships	<ol style="list-style-type: none"> 1. negotiating relationship conflicts 2. tolerating a range of emotional experiences 3. enhancement of self in relationships
C. Functioning in Stable, Organized Groups	<ol style="list-style-type: none"> 1. adhering to group norms 2. maintaining gender boundaries
D. Coordinating Friendships and Group Functioning	
<i>Adolescence: "Integrating Self and Peer Relationships"</i>	
A. Forming Intimate Relationships	<ol style="list-style-type: none"> 1. self-disclosing same-gender relationships 2. cross-gender relationships 3. sexual relationships
B. Commitment in Relationships	<ol style="list-style-type: none"> 1. negotiating self-relevant conflicts 2. emotional vulnerability 3. self-disclosure and self-identity
C. Functioning in a Relationship Network	<ol style="list-style-type: none"> 1. mastering multiple rule systems 2. establishing flexible boundaries
D. Coordinating Multiple Relationships	<ol style="list-style-type: none"> 1. same-gender and cross-gender 2. intimate relationships and group functioning

the group, and group settings provide an important context for enhancing friendship relationships (Shulman, Elicker, & Sroufe, 1994). Less competent children may be unable to achieve this coordination.

Thus, peer relationships, including friendships and group functioning, are qualitatively different in middle childhood and the preschool period, in terms of durability, coherence of organization, degree of emotional sharing, and extent of mutual coordination and reciprocity. At the same time, such advances build upon foundations laid out in the preschool period. Sustained give and take, practice with affect regulation, investment, and sheer enjoyment of earlier peer experiences support the greater emo-

tional involvement and complexity of relationships in middle childhood. Strong empirical connections most likely will be demonstrated when researchers attend to developmental changes in manifestation of competence across these two periods.

Further complexities challenge the adolescent (Table 11.1). Friendships and group functioning cross gender lines. More intimate relationships emerge, with friends and with sexual partners, based on deeper exploration of self and other. Friendships with same-gender and opposite-gender partners, intimate sexual relationships, same-gender group activities and mixed-gender group functioning all must be coordinated, each to the enhancement of every other. The level of coordination and reciprocity and the level of intimacy are greatly increased, with consequent challenges for emotional regulation. The degree of emotional vulnerability and self-identity relevance of relationships is qualitatively beyond that of the middle childhood period. Again, however, the way to these advances has been prepared by experiences in the preceding periods. Sustaining emotional closeness in the face of misunderstandings and conflict has been practiced in middle childhood, as has dealing with the complexities of competing demands within a network of relationships, albeit one that is not nearly as complex as that faced by teenagers.

CONTINUITY OF INDIVIDUAL FUNCTIONING IN PEER RELATIONSHIPS

This developmental view of peer relationships, with each phase providing the foundation for subsequent competent functioning, is supported amply by empirical data. In the Minnesota longitudinal study data have been obtained on peer competence across the years of childhood and adolescence. These data include broad characterizations of competence with the total sample ($N = 175$), which are summarized in Table 11.2, but not discussed in detail here. (Generally, teacher rankings of peer competence across ages tend to correlate about .40 or better, depending on the age gap covered.)

Detailed data are also available on all aspects of peer functioning across ages for an intensively studied subsample. The latter children were seen in a laboratory preschool, a 4-week summer camp at age 10, and a series of weekend retreats at age 15. This small sample study ($N = 35-41$ across ages) is unique in that multiple types of peer assessments were available at each developmental period. Assessments included ratings made by teachers or counselors at the end of the term or camp, ratings made by coders based on videotaped records, detailed behavior observation data, ratings based on interviews of the participants, and sociometric measures. These measures showed strong convergence at each age (e.g., ratings of depend-

TABLE 11.2
Social Competence Stability for the Total Sample

	Preschool	Elementary		Adolescence
		Early	Late	Total
Preschool teacher ratings (4 years)	—	.29** (n = 81)	.39*** (n = 82)	.42*** (n = 78)
Elementary teacher rankings				
Early (Grades K-1)	—		.56*** (n = 188)	.74*** (n = 189)
Late (Grades 3-6)			—	.89*** (n = 191)
Total (Grades 1, 2, 3, 6)				.45*** (n = 181)
Adolescent parent/teacher composite score (16 years)				—

Note. Pearson product-moment correlations are two-tailed.
* $p < .05$. ** $p > .01$. *** $p < .001$.

ency correlated most highly with observed frequency of adult-child contact; ratings of peer competence with observed social isolation). Moreover, by sampling from them to tap key constructs at different ages, method variance may be minimized. The following results are based primarily on the following kinds of data: (a) in preschool, competence ratings by teachers; (b) in middle childhood, behavior observation of friendship (association scores) and isolation, and ratings of gender boundary maintenance based on video records of encounters across genders; and (c) in adolescence, ratings by counselors of competence and "capacity for relationship vulnerability," and a rating of friendship intimacy based on a friendship interview. (Occasionally other measures are utilized to illustrate certain points.) Definitions of these and other measures may be found in Table 11.3. Different sets of coders were responsible for each variable, and all were blind to previous data.

Results were powerful. Peer competence at any given age, keyed to the salient issues outlined earlier, was found to predict peer competence at every later period (see Tables 11.4 and 11.5). For example, the correlations between teacher-based preschool social competence ratings and various

TABLE 11.3
Definitions of Key Measures

INFANCY

Attachment

Number of times securely attached in the Ainsworth Strange situation at 12 to 18 months (0, 1, or 2)

Early Care

Composite (standardized) of four variables: number of times securely attached, rating of support in 24-month tool problem situation, 30-month Caldwell HOME scale (total), and rating of parental support in 42-month teaching task

PRESCHOOL

Teacher rating of peer competence based on a paragraph description of the competent preschooler (composited across three teachers)

MIDDLE CHILDHOOD

Friendship

Observed proportion of times child was with the most common partner (based on a child sampling procedure)

Isolation

Observed proportion of times child was isolated (based on a child sampling procedure)

Gender Boundary Maintenance

Rating made by coders following repeated review of videotaped record of child's encounters with members of the opposite gender. Based on frequency of active efforts to disown interest in contact with opposite gender (insults, physical distance, etc.) and to maintain closeness with same gender (e.g., seeking partners when other gender members were nearby)

Popularity

A composite score based on nominations as liked (spontaneous and elicited under direct questioning) and disliked

EARLY ADOLESCENCE

Family Balance I: Security

Rating based on videotaped parent-child interaction of the degree of security or emotional safety experienced (manifest in spontaneous expression of views, taking positions and maintaining them even when not held by the other)

General Family Support

A composite of ratings of security, support for autonomy, and overall effective functioning of the parent-child dyad in the taped sessions

ADOLESCENCE

Peer Competence

Composited rating of four counselors, based on a paragraph description of the socially competent adolescent

Capacity for Relationship Vulnerability

Composited rating of four counselors, based on a paragraph description, emphasizing the ability to capitalize on the range of opportunities available at the camp, including those that called for engaging members of the other gender in emotionally involving situations (e.g., an evening party or one-on-one conversations)

Friendship Intimacy

A composite of ratings of closeness and coherence regarding their relationship with a best friend as revealed in an interview transcript

Social Competence Stability for the Subsample

	1	2	3	4	5	6	7
Preschool rating (4 years)							
1 Social competence	—	.57*** (n = 41)	.30 (n = 41)	.47** (n = 35)	.57** (n = 35)	.50*** (n = 39)	.39* (n = 38)
Camp indices (10 years)							
2 Friendship score		—	.55*** (n = 47)	.40** (n = 41)	.38* (n = 41)	.48*** (n = 45)	.64*** (n = 44)
3 Boundary maintenance rating			—	.58*** (n = 41)	.48** (n = 41)	.31* (n = 45)	.31* (n = 44)
Camp reunion indices (15 years)							
4 Social competence ranking				—	.88*** (n = 41)	.47** (n = 40)	.36* (n = 40)
5 Capacity for vulnerability rating					—	.49*** (n = 40)	.38* (n = 44)
Adolescent indices (16 years)							
6 Parent teacher composite score						—	.38** (n = 40)
7 Friendship interview							—

Note. Pearson product-moment correlations are two-tailed.
* $p < .05$. ** $p > .01$. *** $p < .001$.

Table 11.5
Correlations Between Measures of Social Competence in Middle Childhood and Adolescence for the Subsample ($n = 41$)

Social Competence Measures	Adolescence (Camp Reunion)					
	Counselor Rankings		Counselor Ratings		Observation	Nomination
	Emotional Health	Social Competence	Social Skills	Capacity for Vulnerability	Isolation	Sociometric
Middle Childhood						
Counselor rankings						
Emotional health	.49***	.53***	.52***	.52***	-.34**	.41**
Social competence	.45**	.57***	.56***	.52***	-.55***	.50***
Counselor ratings						
Social skills	.29	.41**	.40**	.38**	-.57***	.34*
Observations						
Friendship score	.31*	.40**	.41**	.38**	-.04	.42**
Isolation score	-.32*	-.40**	-.37*	-.37*	.45**	-.32*
Child nominations						
Sociometric	.11	.24	.26	.12	-.40*	.39**

Note. Pearson product-moment correlations are two-tailed.
* $p < .05$. ** $p > .01$. *** $p < .001$.

measures of social competence in the middle childhood summer camp (age 10) ranged from .46 to .57. The correlation between nursery school teacher and adolescent camp counselor ratings of competence was .47. Moreover, many specific relationships were theoretically compelling. For example, the capacity for friendship intimacy in adolescence, as rated from an interview about a specific relationship, correlated .64 with the observation-based measure of intensity of friendship in middle childhood (the amount of time spent with a particular partner during summer camp). This is stronger than the relationship of adolescent friendship intimacy with any other early measure of competence, and it is much stronger than the correlation of the middle childhood friendship competence score with general competence in adolescence ($r = .48$; Ostoja-Starzewska, 1996). An even more striking finding, paradoxical on the surface but demanded by the developmental theory under investigation, is the relationship between gender boundary maintenance in middle childhood and cross-gender intimacy in adolescence (Sroufe, Carlson, & Shulman, 1993). For example, the correlation between gender boundary maintenance in middle childhood and the capacity for relationship vulnerability scale in adolescence (again, see Table 11.3 for definition) was .48 ($p < .005$). It was those who followed the norm of maintaining gender boundaries in middle childhood who were most effectively involved with members of the opposite gender in our adolescent retreats, not those who had been "precociously" involved with the other gender in middle childhood. (Additional correlations between a broad range of middle childhood and adolescent peer competence measures are shown in Table 11.5.)

Finally, we carried out a hierarchical multiple regression analysis, using both preschool competence (composited teacher ratings) and middle childhood competence (a composite of the friendship score and the gender boundary maintenance score) to predict counselor ratings of adolescent social competence. The results showed that both preschool ($F[1, 33] = 9.15$, $R^2 = .22$, $p < .01$) and middle childhood (F change $[2, 32] = 7.51$, R^2 change = .15, $p < .01$) measures contributed to the adolescent outcome and that a total of 37% ($R = .61$) of the variance was accounted for. Thus, the first aspect of our thesis is confirmed. Using developmental assessment, early peer experience strongly predicts later peer competence.

ATTACHMENT HISTORY AND PEER COMPETENCE

A second tenet of our developmental position is that peer competence has roots in patterns of dyadic regulation in the preceding parent-child relationship. Although various family relationships (those with fathers, siblings, etc.) have clear relevance for peer competence (e.g., Sroufe, Cooper,

& DeHart, 1996), a primary focus has been early attachment relationships with the primary caregivers and other aspects of early care. Individual differences in the quality of these relationship experiences are predicted to be linked to peer relationships in all phases of development.

There are a number of bases for this prediction, many of which have been summarized previously (e.g., Elicker, Englund, & Sroufe, 1992; Kerns, 1996; Sroufe, 1983, 1988). First, a history of emotional availability and responsiveness, which defines a secure attachment relationship, is a foundation for positive expectations concerning relationships with others, a basic sense of connectedness, and a belief that relating to others will be rewarding. This is the *motivational* base for peer relationships. Second, parental responsiveness leads to a complementary sense of effectance; that is, that the child can have an impact on the caregiver and, ultimately, the broader world. Herein lie the roots of a sense of self-worth and self-esteem, as has now been amply demonstrated by research (e.g., Sroufe, 1983). The child believes not only that others will respond positively but that he or she can master the challenges the social world brings. This is the *attitudinal* base for positive peer relationships. Third, secure attachment provides a literal foundation for mastery of the environment, through its support of exploration. Those with secure histories come to the peer world with exploratory and mastery capacities that make them attractive to others. This includes both a range of object manipulation skills that promote successful play and, of great significance, a capacity to have fun. This is the behavioral or *instrumental* base of positive peer relationships. Fourth, the pattern of smooth, modulated affect regulation achieved within the secure infant-caregiver dyad becomes the prototype for the self-regulation of emotion required in the peer world; that is, the *emotional* base for peer relationships. Indeed, attachment may be defined as the dyadic regulation of emotion. The development of the attachment relationship itself is characterized by a progressively greater role for the child over the first 2 years of life, from emotional regulation orchestrated by the caregiver to joint regulation to guided self-regulation by the child (Sroufe, 1996). Thus, the child has been prepared for the emotional regulation required in peer encounters by the history of regulation within the attachment relationship.

Finally, there is the *relational* base. Certain expectations and understandings regarding reciprocity are laid down even in infancy, when it is the caregiver who must follow the infant's lead, creating a semblance of reciprocity that will only truly be a capability of the child in later years (Hayes, 1984). As discussed by Sroufe and Fleeson (1986), in participating in this vital, responsive relationship infants learn more than the role of the nurtured one; rather, they learn something basic about the nature of relationships. For infants with secure histories, reciprocity in peer relationships will make sense, both in terms of expected patterns of affective

exchange and in terms of knowledge about how relationships work. When one signals, the other replies. When one offers, the other receives. When one is in need, the other responds. A bold prediction from attachment theory is that those with secure histories later will be more empathic with peers. Having experienced empathic care, the child will be oriented toward empathic response to the needs of others, once the necessary cognitive development has taken place.

As was the case regarding the stability of individual differences in peer competence, these predictions of a relation between attachment history and later peer relationships have been repeatedly confirmed, age by age (Table 11.6). A host of peer competence indices across ages were significantly related to differences in infant attachment security and to early care more generally (see Table 11.3 for a definition of this variable).

In preschool, the children ranked most highly in social competence by teachers were almost uniformly those with secure histories and those ranked lowest were those with histories of anxious attachment. These judgments were confirmed by detailed behavioral observations of time spent in the group, amount of isolation, frequency of agonistic encounters, expression of positive and negative affect, and involvement or emotional distance in play pairs (Pancake, 1988; Sroufe, 1983; Sroufe et al., 1984; Troy & Sroufe, 1987). Both teacher ratings (Sroufe, 1983) and analysis of videotaped episodes involving children's reactions to distressed classmates (Kestenbaum, Farber, & Sroufe, 1989) strongly confirmed the prediction concerning secure attachment and empathy. In addition, responses of those with histories of avoidant attachment (rooted in histories of chronic rebuff when the infant expresses tender needs) either involved ignoring and simply walking away or were precisely "anti-empathic"; that is, the child's reaction maximized the other's distress (e.g., hitting a child in the stomach who complained of a stomach ache). (Measures of infant temperament were not related to these peer competence measures, and IQ was controlled by group matching in subject selection for the preschool.)

Caregiving history also was powerfully related to targeted aspects of peer competence in middle childhood (see Table 11.6). Thus, those with secure histories, compared to those with anxious attachment histories, were almost twice as likely (83% vs. 47%) to form friendships in the camps (usually with others having secure histories). Moreover, their friendships had greater saliency (they spent more time with their particular friend). Those with secure histories were also observed to spend more time in groups of three or more children, commonly engaged in organized activities (building a fort, setting up a shop; Hiester, Carlson, & Sroufe, 1993). Further, they were better able to coordinate friendships with group participation, and were rated higher on maintaining gender boundaries (and lower on violating

TABLE 11.6
Correlations Between Family Support and Social Competence Outcome Measures for the Subsample and Total Sample

	Attachment Security (n)	Early History Composite (n)	Family Support (n)
	12 - 18 Months	12 - 42 Months	13 Years
Subsample			
Preschool teacher ratings	.31 (41)	.47** (41)	.37* (38)
Camp indices (10 years)			
Friendship score	.30* (47)	.55** (47)	.31* (44)
Boundary maintenance rating	.43* (47)	.42** (47)	.24 (44)
Camp reunion indices (15 years)			
Social competence	.46* (41)	.44** (41)	.34* (40)
Capacity for vulnerability	.41* (41)	.38* (41)	.37* (40)
Adolescent parent/teacher composite score (16 years)	.37* (45)	.42** (45)	.25 (42)
Adolescent friendship interview (16 years)	.21 (44)	.41** (44)	.30* (42)
Total sample			
Preschool teacher ratings	.21 (84)	.36** (84)	.23* (75)
Elementary teacher rankings			
Early (K-1)	.09 (187)	.31** (190)	.17* (172)
Late (3-6)	.12 (188)	.38** (191)	.32** (173)
Total (1, 2, 3, 6)	.13 (189)	.35** (192)	.26** (173)
Adolescent parent/teacher composite score (16 years)	.20* (178)	.27** (181)	.16* (167)
Adolescent friendship interview (16 years)	.10 (170)	.25** (173)	.19* (156)

Note. Pearson product-moment correlations are two-tailed.
* $p < .05$. ** $p > .01$. *** $p < .001$.

gender boundaries) than those with insecure histories (e.g., Elicker et al., 1992; Shulman et al., 1994; Sroufe, Bennett, et al., 1993).

Attachment history, and early care more generally, also proved to be strongly related to diverse measures of peer competence in adolescence, up to 15 years after the infant assessments. These findings held for the total sample, and even more strongly for the more adequately assessed subsample (see Table 11.6). For the subsample, counselor ratings of global competence and ratings targeted at features of competence specific to adolescence all were significant. One key rating, "capacity for vulnerability,"

tapped the teen's ability to capitalize on the range of relationship opportunities available at the weekend retreat. It was clearly related to attachment history ($r = .41$).

These counselor rating findings were corroborated by interview-based assessments of the adolescent's knowledge of the social network (Weinfield, Ogawa, & Sroufe, 1997) and by detailed behavioral data. For example, all eight teenagers who formed couple relationships during the retreats had been securely attached, and a significantly greater percentage of those who became part of established mixed-gender "crowds" also had secure attachment histories (Sroufe, Carlson, & Shulman, 1993).

In a recent dissertation based on the camp reunion (Englund, 1997), assessments were made of functioning in small and larger group problem-solving situations. This was a "revealed differences" format, in which the group had to decide how to spend \$150 in the ensuing segments of the retreat, then carry forward their plan to the larger group, working out a shared solution. Blind ratings of videotaped behavior revealed that those with secure histories were more competent overall and were rated higher in self-confidence and leadership. They were also significantly more likely to be elected spokesperson for their group.

THE ROLE OF FAMILY RELATIONSHIPS AND PEER EXPERIENCES IN SOCIAL COMPETENCE

The final empirical issue concerns whether family experiences and peer experiences are complementary in promoting later social competence. Do peer experiences add to the prediction of middle childhood and adolescent peer competence over and above that predicted by attachment history and other family experience? Is there support for a developmental model in which attachment history promotes successful entry into the peer group, with peer experiences then supporting the developmental trajectory toward later social competence? We examine specifically whether there is a cumulative impact of ongoing experience and whether pathways to competence vary depending on the particular aspect of competence outcome assessed. We conducted a series of multiple regressions, using different combinations of variables, to address these questions.

Early Parent-Child and Preschool Peer Experiences as Predictors of Middle Childhood Peer Competence

The major hypothesis here was supported in that both attachment (or early parenting history more generally) and preschool peer competence independently predicted broad aspects of competence in middle childhood

TABLE 11.7
Hierarchical Regression Predicting Social Competence in Middle Childhood and Adolescence

Independent Variables	R^2				Overall		
	Change	Beta	B	T	R^2	F	df
I. Prediction of friendship score in middle childhood for subsample.							
A. 1. Infant attachment (12-18 month attachment)	.13	.35	.06	2.35*	.13	5.54*	1, 39
2. Infant attachment Preschool ratings (4 years)	.24	.51	.05	3.75***	.36	10.71***	2, 38
B. 1. Early parental care (12-18 month attachment, 24-, 30-, 42-month parental care)	.27	.52	.11	3.76***	.27	14.14***	1, 39
2. Early parental care Preschool ratings	.14	.32	.07	2.24*	.40	12.89***	2, 38
II. Prediction of counselor rankings of adolescent social competence for the subsample.							
A. 1. Infant attachment	.21	.46	7.73	3.22**	.21	10.37**	1, 39
2. Infant attachment Camp friendship score	.08	.30	2.39	2.66*	.25	7.80***	2, 38
B. 1. Early parental care	.19	.44	9.84	3.04**	.19	9.25**	1, 39
2. Early parental care Camp friendship score	.03	.22	20.43	1.24	.22	5.46**	2, 38

* $p < .05$. ** $p < .01$. *** $p < .001$.

(friendship scores at camp, camp ratings, and teacher rankings in elementary school), with multiple correlations ranging from the high .40s to .60 (Table 11.7). Multiple regression analyses showed that attachment continued to predict middle childhood competence even after the effects of preschool competence were taken into account. Attachment security supports the emergence of preschool peer competence and yet continues to make a unique contribution to the more personal relationships of middle childhood and to competence with peers in the school setting. At the same time, preschool peer competence made a unique contribution to later social competence. Peer competence in middle childhood reflected the convergence of family and peer experiences.

Follow-up regression analyses of these data yielded somewhat different results using attachment and the broader early history variable as measures of early parental care (parenting from 12-42 months; see Table 11.3 for definition). With the early history variable all three predictions were sig-

nificant (early history to preschool, preschool to middle childhood, and early history to middle childhood). Using the attachment variable, the attachment to preschool prediction no longer attains significance, but attachment to middle childhood does, and preschool also still predicts middle childhood.

It is important to note that for one aspect of peer competence in middle childhood—gender boundary maintenance—only attachment history (or the broader measure of early care) accounted for significant variance in the regression analyses. Thus, preschool competence, at least as assessed, was not relevant to this emergent aspect of competence. Individual differences in gender boundary maintenance seem to be more a product of parent–child relationships (though, of course, the normative developmental issue is strongly defined by peers).

Early Competence and Middle Childhood Peer Competence as Predictors of Adolescent Peer Competence

The developmental picture here is complex. Middle childhood competence measures consistently do predict adolescent assessments in simple correlations (see Table 11.5). They do add to predictions of adolescent competence after taking into account attachment history (Table 11.7). However, when they are combined in regression analyses with attachment and preschool variables they are in many cases no longer significant. Thus, none of our middle childhood *camp* measures added to predictions of our camp reunion outcomes at age 15. However, teacher-based ratings at *elementary school*, especially for Grades 3 to 6, did make a significant contribution to both ratings of general social competence (F change [3, 31] = 7.08, R^2 change = .12, $p < .05$) and capacity for vulnerability (F change [3, 31] = 4.51, R^2 change = .08, $p < .05$) in the reunion, raising the multiple correlation from the mid .60s to .70. This, of course, suggests greater overlap of our assessments in the social settings of preschool and summer camp, rather than weakness of the camp measures. Again, the latter show substantial correlations with adolescent outcomes in simple correlations.

Still, the power of early experience with peers and caregivers is noteworthy. By age 5, much of the variance in adolescent social competence can be accounted for. Even though numerous capacities are only nascent or not at all apparent in the preschool period (e.g., coordinated group activities, intimacy), the motivational and emotional qualities that are present early predict well to competence with peers throughout the juvenile period. Moreover, much that remains to develop in the peer domain is forecast by infant attachment security and other aspects of early parent–child support.

Middle Childhood Peer Competence and Early Adolescent Parent–Child Relationships as Predictors of Adolescent Peer Competence

Results here are parallel to those in the preceding section. Thus, whereas assessments of parent–child relationships in early adolescence (age 13) modestly predict competence with peers 2 or 3 years later, they generally do not add to variance already accounted for by middle childhood peer competence assessments (multiple correlations in the .40s to .60s). There was one interesting exception. When social competence at summer camp (e.g., the composite friendship and gender boundary maintenance variable at age 10) was entered first in predicting ratings of capacity for relationship vulnerability in adolescence, the Family Balance I/Security score at age 13 (see Table 11.3 for definition) did add significant variance (F change [2, 37] = 4.43, R^2 change = .08, $p < .05$). This variable also predicted friendship intimacy at age 16, based on an interview (Ostojca-Starzewska, 1996). Thus, it seems that family experience continues to influence aspects of peer competence centered on trust, vulnerability, or freedom to experience emotion and emotional closeness.

DISCUSSION

Hartup (1980) anticipated these data two decades ago when he theorized that the parent–child and peer relationship systems are complementary. Attachment history, early care, and early peer experiences converge to predict later social competence, with peer experience making an independent contribution by the preschool period. Taken together, such predictions can be quite strong using highly reliable assessments, with multiple correlations in the .60s to .70. Later parenting experience also supports peer experience in predicting certain aspects of later competence.

Moreover, Hartup was correct in suggesting that early parent–child relationships “set the stage” for successful entry into the peer group and for negotiating specific age-related competence issues. This is the conclusion from the strong correlations between attachment security (and early caregiving history) and preschool peer competence and from the regression analysis results showing that attachment predicts specific age-related issues (e.g., friendship and gender boundary-maintenance in middle childhood; capacity for relationship vulnerability in adolescence), even after preschool peer competence (or middle childhood competence) is taken into account; that is, there is a direct as well as an indirect effect of attachment on peer competence in middle childhood and adolescence.

When peer competence is viewed as a developmental system, integrated with family experiences, a particular perspective on peer relationships

emerges. Our perspective differs somewhat from that of others (e.g., Furman & Wehner, 1994) in stressing a dynamic, epigenetic view of peer relationships. Peer experiences are not simply added on to parenting experiences but develop within the context they provide. Those with secure histories are better able to embrace the opportunities provided by the peer world. They eagerly, and in an emotionally flexible manner, join the preschool playgroup; they seek the closeness of special friendships in middle childhood and maintain age-appropriate gender boundaries; and they are capable of the emotional vulnerability inherent in self-disclosing adolescent relationships. They have experienced reciprocal and mutual relating previously and can therefore readily master the challenge of maintaining autonomy within the connectedness of the group setting, as well as maintain boundaries between and coordinate various relationships.

Those with histories of anxious attachment often find such challenges daunting or beyond understanding. They do not expect others to be positively engaging (e.g., Suess, Grossmann, & Sroufe, 1992), they do not understand emotional closeness, or they are overwhelmed by the emotional arousal that is inevitably attendant upon relating to peers (Pancake, 1988; Sroufe et al., 1984). This may take the form of self-isolation (Elicker et al., 1992; Sroufe, 1983), antipathy to others (Kestenbaum et al., 1989), exclusivity in friendships or oscillation between allegiance to friends or group loyalty (Shulman et al., 1994), and preoccupation with teachers or counselors (Sroufe, Fox, & Pancake, 1983; Urban, Carlson, Egeland, & Sroufe, 1991).

Thus, peer experiences cannot easily compensate for attachment or other parenting experiences, because the very children most in need of positive peer experiences are those least likely to have them. Expecting others to be rejecting or interpreting their actions as rejecting and turning away prevents children from learning that peers will reciprocate. When associated with aggressive behavior, such expectations actually lead to rejection (Crick & Dodge, 1994; Suess et al., 1992). Being preoccupied with bringing needs for tenderness to teachers likewise precludes rehabilitative peer experiences. Eschewing the closeness of friendships removes the base for self-disclosure, and a jealous, clinging friendship can separate children from the group experiences where much is learned about norm-governed behavior, problem solving, and coordinated behavior. Being unable to modulate emotion makes all aspects of peer relationships unduly challenging, especially sustaining closeness in the face of conflict and tolerating the stimulation of group activities.

For most children there is a cascading effect, wherein early family relationships provide the necessary support for effectively engaging the world of peers, which, in turn, provides the foundation for deeper and more extensive and complex peer relationships. Each phase supports the unfolding of subsequent capacities.

CONCLUSION: A DEVELOPMENTAL PERSPECTIVE ON SOCIAL RELATIONSHIPS

An elaborated developmental view is supported by these findings. Each phase of peer competence builds on earlier peer experience and, yet, continues to be dependent on attachment history and other aspects of early parent-child support. Moreover, although it was generally the case that social competence drew on both experiences with peers and experiences with parents, certain aspects of competence draw more heavily upon one domain or the other. For example, friendship competence in middle childhood was more strongly related to earlier peer experiences ($r = .57$) than to attachment history ($r = .30$), although each relationship was significant. In contrast, gender boundary maintenance was less strongly related to earlier peer competence ($r = .30$) than it was to attachment history ($r = .43$).

Both family support and peer experiences underlie developing aspects of social competence, but in differing ways and to various degrees. Certain aspects, while relying on the emotional base of early parenting experience, apparently require more practicing and elaboration in interaction with peers. Thus, special friendships and group leadership are features of emerging competence that are strongly related to earlier assessments of peer behavior. Other features, such as gender boundary maintenance, while necessitated by peer group encounters, seem to be more strongly related to attachment history. Gender boundary maintenance itself strongly predicted capacity for relationship vulnerability in adolescence, which was not as strongly related to other aspects of prior peer competence (but was related to attachment history and ongoing security in the family).

Masten and her colleagues (Masten et al., 1995) argue that certain features of adolescent peer competence are emergent; that is, they are not predicated on earlier aspects of peer competence. They point in particular to "romantic competence," arguing that it is not related to earlier peer competence. Some of our findings are similar. However, issues here are complicated and caution is in order. Our own work suggests that even emergent capacities are not without support. Some of this may be discerned only with a broad net of earlier peer competence measures, and some support for emerging capacities may come from earlier experiences outside of the peer domain. In particular, peer issues regarding interpersonal boundaries and trust or intimacy (crucial to romantic competence) may have their foundations in the history of trusting, emotionally supportive relationships with parents.

A strong test of this notion is forthcoming as our ongoing longitudinal study is now focused on young adult romantic relationships, assessed both through interview and behavioral observation. We suspect that again both

earlier peer experiences (especially those concerned with boundary maintenance, capacity for vulnerability, and intimacy) and parental emotional support, including attachment history, will prove to be important foundations for effective adult relationships. With regard to intimacy aspects of these relationships, attachment security and subsequent experiences of family closeness may play an especially important role, as has been suggested by others (e.g., Kerns, 1996; Owens, Crowell, Pan, Treboux, O'Connor, & Waters, 1996). It may be that attachment history may be more strongly related to qualitative assessments of adult intimacy than it was to our assessments of individual friendships in middle childhood and adolescence.

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