Bridging the Gap: Parent-Child Play Interaction and Peer Interactive Competence

Kevin MacDonald and Ross D. Parke
University of Illinois at Urbana-Champaign

MACDONALD, KEVIN, and PARKE, ROSS D. *Bridging the Gap: Parent-Child Play Interaction and Peer Interactive Competence.* CHILD DEVELOPMENT, 1984, **55**, 1265–1277. A multimeasure, multicontext study of the relationship between father-child and mother-child play and children's competence with preschool peers was conducted. 13 boys and 14 girls, ages 3–4 years, and their parents participated. Children were videotaped while playing with each parent separately for 20 min in their homes. Children's social competence with their peers was independently evaluated by 3 measures: (1) rankings of preschool teachers of popularity with peers, (2) *Q*-sort ratings of children's competence by their teachers, and (3) assessments of social interaction with 3 different preschool peers on separate occasions. Differential patterns of maternal and paternal behavior were associated with the social competence of boys and girls. Paternal physical play, engagement, and maternal verbal behavior were positively related to children's peer relations, especially for boys. Paternal directiveness was negatively related to popularity for boys and girls, while maternal directiveness was positively linked with popularity for girls. Opportunities for learning to regulate affect are hypothesized to contribute to these relationships. The study illustrates the linkages between family and peer social systems.

Recent models of social development have recognized the embeddedness of the child in a variety of social systems and have emphasized the need to discover the links between the various social worlds of childhood (Hartup, 1979; Lewis & Fiering, 1981). Social systems theory (Sameroff, 1983) provides a useful perspective by its emphases on the interdependence of the family and peer system and the reciprocal causalities occurring both within and between these systems. Both descriptive research, in which the variations in properties of central aspects of each system are systematically related, as well as experimental research, in which modifications in one system are introduced in order to explore the impact within and across systems, are useful approaches to uncovering the links between systems. The present study is in the first tradition and provides a description of the interrelationships between mother and father play interaction and peer competence.

It is assumed that these links can be established directly and indirectly. Direct interaction with family members such as parents and siblings may provide opportunities to learn, rehearse, and refine social skills such as initiating, maintaining, and conflict resolving that are common to successful social interaction not only in family contexts but in other social contexts (e.g., peer settings) as well (Asher, Renshaw, & Hymel, 1982). Another view stresses the direct link between families and peers through the establishment of a secure attachment, which in turn mediates the child's subsequent adaptation to peers (Sroufe, 1979). Indirectly, in infancy and early childhood, family and peer systems are linked by the opportunities provided by parents for peer interaction.

In recent years, examinations of this issue have been dominated largely by only one of these viewpoints—the impact of infant-parent attachment on later social competence. A number of investigators (Arend, Gove, & Sroufe, 1979; Easterbrooks & Lamb, 1979; Pastor, 1981; Waters, Wippman, & Sroufe, 1979) have found associations between attachment classification and measures of peer competence assessed up to age 3. While this approach has demonstrated a link between the parent-child and peer social systems, the alternative approach, which seeks to discover specific aspects of the parent-child relationships that are related to so-

This research was supported in part by the following grants: NICHD grant HEW PH5 05915, NICHD training grant HDO 7205-01, and National Foundation March of Dimes. Thanks are extended to the following individuals for their helpful comments on earlier drafts of the manuscript: Steven Asher, Ashley Beitel, Barbara Tinsley, and Connie Lowe and Jo Ann Townsley for their assistance in the preparation of the manuscript. Requests for reprints should be sent to either author at the Department of Psychology, University of Illinois, Champaign, Illinois 61820.

[*Child Development*, 1984, **55**, 1265–1277. 0009-3920/84/5504-0053$01.00]

cial competence, has received less emphasis. As Eckerman and Stein (1983) point out, there is a need for more molecular constructs that permit detailed tracing of clear antecedents and consequences of social functioning in addition to more global constructs such as attachment.

The principal aim of this study is to examine the relationship between specific features of parent-child interaction and peer competence. Fathers as well as mothers are included in view of the evidence indicating differences in interactive style of mothers and fathers (Clarke-Stewart, 1980; Lamb, 1977a, 1977b; Power & Parke, 1982), as well as evidence from earlier child-rearing studies that suggest that both mothers' and fathers' behaviors are related to children's social relations (Baldwin, 1948; Hoffman, 1961; Winder & Rau, 1962). Although limited by reliance on either interview methods or global rating scoring systems, these early studies provide suggestive guidelines concerning the parental variables that may relate to peer relations. Parental directiveness, especially paternal control, is expected to be negatively related to peer competence, while parental responsivity and involvement are hypothesized to be positively linked to peer interaction. An observationally based assessment of these aspects of parent-child interaction will provide a more adequate evaluation of their relationship to peer competence. A second aim of the study is to extend the examination of stylistic differences in mother and father play beyond infancy to the preschool period.

Method

Overview of procedures.—The study involved collecting two sets of data and examining their interrelationships. On the parent-child side, there were assessments of the parents playing with their children in a home setting. On the child-peer side, there were behavioral assessments of the children interacting with three different peers on separate occasions. In addition, the children were ranked by their teachers according to their social popularity (Connolly & Doyle, 1981), and the teachers performed a *Q*-sort describing the children's social behavior.

Subjects.—The subjects were 27 Caucasian nursery school children aged 36–59 months and their parents. The sample included 14 girls and 13 boys recruited from three nursery schools in a small Midwestern city. All parents were middle class and well educated. Parents were sent a letter describing the study and later contacted by telephone. Only families with both parents living with the child were included in the study, and approximately 25% of the parents thus contacted volunteered for the study.

Home observation procedure.—Children were videotaped in their homes with their mother and father separately and on different days. Each play session was 20 min. The order of mother-child and father-child sessions was counterbalanced. For the first 10 min, the parents were asked to play with their children "as they normally do," or, if they do not play with their children, to perform any other activity they typically do together. In the second 10 min, the experimenter stated that he was interested also in physical play (i.e., activities such as tickling, wrestling, and playing horsey), and that he would like to see some examples of this type of play if that is part of their normal activity together. If they did not normally play with the child in this manner, it was suggested that they could continue playing in the way they had been or switch to an activity of their choice.

Home observational measures.—The videotapes were divided into 10-sec epochs and scored for a variety of physical and verbal behaviors as indicated below:

1. Physical play: The number of epochs in which the parent and child engaged in physical play together. Physical play included a wide range of active play styles characterized by wrestling, tickling, swinging the child in the air, and so on, but was not restricted to these specific activities, and included physically active parent-child interactions that did not correspond readily to any of the usual categories of physical play.

2. Positive affect of the child with the parent: Each 10-sec epoch was rated on a four-point scale, with a rating of 1 indicating neutral affect; 2, low-level laughter; 3, moderate laughter; and 4, intense laughter. A child's total positive affect score was the sum of his or her ratings for each 10-min session (i.e., 60 epochs). Negative affect was too infrequent to merit scoring.

3. Directiveness: Instances in which a parent issues a command to the child.

4. Parental engagement: Number of epochs in which the parent was actively participating in the child's activity as opposed to merely observing the activity.

5. Number of verbal interchanges: This category was arrived at by counting the num-

ber of times the parent spoke to the child. An interchange was bounded on both sides either by a statement by the child or by a pause of at least 5 sec.

Teacher assessment.—Two nursery school teachers were asked to rank the children in their classes according to the frequency and extensiveness with which they were sought out as playmates by other children, that is, their social popularity (Connolly & Doyle, 1981). The rankings were then averaged to give final popularity scores. In addition, the teachers completed the California *Q*-sort (Baumrind, 1968). Again, two teachers completed the sort, and their rankings of the items were averaged.

Peer observations.—Each child was videotaped for 12 min with a same-sex peer from his or her nursery school class in a mobile playroom. Each child was observed interacting with each of three different classmates. The rear of a recreational vehicle was partitioned into a play area measuring 2.3 × 2.0 m and an area from which videotapes were recorded. The play area was heavily carpeted and contained a canvas-covered innertube (jumpoline), an inflated ball, a pillow, and, after 6 min of the play session, an inflated 1.3-m-tall bobo doll. The children also had access to two rotatable seats that were situated on a platform 30 cm above the playing surface.

Peer observation measures.—The videotapes were rated by two independent raters on the following seven-point scales: (1) easygoing–irritable; (2) much acrimony and verbal fighting–no acrimony and verbal fighting; (3) no negative affect–much negative affect; (4) child is dominant over other child–child is subordinate to other child; (5) child often takes the initiative, directs, or makes suggestions–child never takes the initiative, directs, or makes suggestions; (6) secure–fearful; (7) ill at ease–relaxed and easygoing; (8) disjointed, awkward interaction–coordinated, harmonious interaction; (9) high agreement on joint activity choices—low agreement, much negotiation and disagreement.

The intercorrelations among these measures revealed four clusters, which, in turn, were used as dependent variables. The *Abrasive Interaction* cluster was composed of the following ratings: (1) irritability, (2) negative affect, and (3) acrimony. Intercorrelations for these ratings averaged .86 for boys and .65 for girls. The *Dominance* cluster consisted of two ratings: (1) dominant, and (2) takes initiative, directs, and makes suggestions; these ratings correlated .94 for boys and .95 for girls. The third cluster measured how *Relaxed* the child was in the peer sessions and was indexed by the secure and relaxed ratings; these intercorrelated .91 for boys and .92 for girls. The fourth cluster, labeled *Harmonious Interaction,* consisted of ratings 7 and 8 (coordinated, harmonious, and high agreement on joint activities), which were highly intercorrelated (r = .95 for boys and .97 for girls). The intercorrelations among the four clusters of ratings were low, averaging −.31 for boys and −.24 for girls.

Coding and reliability.—The following parental behaviors were scored each time they occurred, regardless of how many times they occurred within an epoch: directiveness, ending pauses, and verbal interchanges. Since the remaining behaviors often occurred for a considerable time, they were scored if an instance occurred during a 10-sec epoch. These included physical play and engagement. A total of six coders were used to code the videotapes, with five coders analyzing the parent-child tapes and two the peer tapes. No coders were used on both sets of tapes, with the exception that one of the authors (KM), who coded some of the parent-child tapes, also checked the reliability of the coding of the peer tapes. Reliability was calculated as the quotient of the number of agreements divided by the number of agreements plus disagreements. Reliability was above .90 for all these behaviors.

For the ratings, correlations were calculated between the ratings of two independent observers. The correlation for the affect ratings of the parent-child interactions was based on a sample of ratings made by the five coders and was based on 461 epochs. For positive affect, the correlations for the ratings of the children's interactions with peers were based on the ratings of two independent observers for each tape, with a total of three raters being used. These raters had no knowledge of the parent-child tapes. The correlations for these ratings ranged from .62 to .87, with only the rating for irritable–easygoing (.62) being below .75.

Results

Sex and session differences for parent-child interaction.—Fathers engaged in significantly more physical play with their children than mothers ($p < .01$), while mothers engaged in more object-mediated play ($p < .01$) with their children than fathers. Children playing with fathers had higher total

affect ratings than when playing with mothers ($p < .05$). Mothers and fathers did not differ in directiveness or in any aspect of verbal behavior. Both parents talked more to girls than boys ($p < .01$). There were a number of significant session effects that showed that physical play ($p < .001$) and affective expressiveness ($p < .001$) were higher in the second session, while object-mediated play occurred more in the first session ($p < .001$). Both parental ($p < .05$) and child directiveness ($p < .001$) were greater in the second session than in the first session, which suggests that providing an opportunity for physical play increases mutual directiveness on the part of both parents and children.

Sex differences in peer interactive behavior.—A repeated-measures analysis of variance involving sex of child and session revealed no order of session effect. Boys engaged in more wrestling ($p < .04$) and more hitting, kicking, and throwing objects ($p < .02$) than girls. Girls were higher in suggesting ($p < .01$) and pretending ($p < .01$). There were no other differences in behavior frequencies for the boys and girls. Analyses of the behavior ratings indicated that boys' interactions were rated as faster paced ($p < .02$) and as more often involving physically intense play with either objects ($p < .05$) or other children ($p < .01$).

Associations between parent variables and child social behavior.—In order to examine the relationships between parental behavior and peer competence, a series of correlations between parental variables and the following peer measures are presented: (*a*) teacher rankings of popularity, (*b*) teacher *Q*-sort ratings of the children, and (*c*) peer-interaction measures. Similar patterns of results, not presented here, were found using ratings of the parent-child sessions and coded behaviors in the peer sessions.

a) Parent behavior and teacher rankings of popularity: Table 1 shows the correlations between parental variables and the teacher rankings of popularity. For boys, both maternal and paternal behaviors were related to teacher popularity rankings. Boys whose mothers were engaging, directive, verbally stimulating, and who elicited positive affect during play were rated as popular. Paternal engagement was also positively correlated with popularity, but paternal directiveness was negatively related to the teacher ratings. Girls' popularity rankings were positively correlated with paternal physical play and affect during play and negatively related to paternal directiveness and verbal interchanges. The correlations between the rankings of the girls and mother-daughter interaction showed a positive relationship between maternal directiveness and social popularity.

Examination of the intercorrelations among the parent measures revealed strong associations among physical play, directiveness, and engagement for both boys and girls. Physical play between fathers and sons is positively correlated with directiveness ($r = +.66$, $p < .01$) and engagement ($r = +.53$, $p < .01$), while engagement and directive-

TABLE 1

CORRELATIONS AND PARTIAL CORRELATIONS (in Parentheses) BETWEEN PARENTAL VARIABLES AND TEACHER RANKINGS OF POPULARITY

PARENTAL BEHAVIOR	FATHERS		MOTHERS	
	Session 1	Session 2	Session 1	Session 2
Boys:				
Physical play	...	(.56)**	...	...
Affect of child with parent	...	(.41)*	.52**(.61)**	.42* (.45)*
Parental directiveness	−.43*	−.37*	.51**	...
Parental engagement	.46**(.65)**	.37* (.55)**	.53**(.32)	.62**(.61)**
Verbal interchanges	...	...	.43* (.43)*	.63**(.67)**
Girls:				
Physical play	.36* (.40)*	.71***(.76)***	(.45)*	...
Affect of child with parent	...	.47** (.40)*	...	.40*
Parental directiveness	...	−.56**	.58**	.37*
Parental engagement	(−.42)*	...	...	...
Verbal interchanges	−.40* (−.41)*	...	...	...

* $p < .10$.
** $p < .05$.
*** $p < .01$.

ness are not significantly correlated ($r = +.22$, N.S.). For fathers and girls, there were no significant correlations among these variables. Maternal physical play is positively correlated with directiveness for both boys ($r = +.64$, $p < .01$) and girls ($r = +.63$, $p < .01$) but nonsignificantly correlated with engagement ($r = +.40$, $p < .10$, for boys, and $r = -.01$ for girls). Maternal directiveness and engagement were not significantly correlated. Since these analyses suggest that physical play and directiveness are correlated, further correlational analyses between teacher popularity rankings and parental behaviors were run controlling for parental directiveness. The partial correlations are shown in parentheses on Table 1.

Both paternal physical play engagement and the affect of the child with the father in the second session show higher associations with teacher popularity rankings of boys with this variable controlled and revealed a higher correlation between first-session physical play for both sexes of parents and teacher rankings for girls.

In summary, popular boys have mothers and fathers who are engaging and elicit affect during play, mothers who are verbally stimulating, and fathers who are low in directiveness and physically playful. Girls whose teachers rate them as popular have physically playful and affect-eliciting but nondirective fathers, and directive mothers.

b) Parent behavior and teacher *Q*-sort items: The teacher *Q*-sort items provide a more detailed picture of the specific aspects of children's social behavior that are associated with parental interactions. Using the prior analyses as a guide, only those parental variables that were most highly correlated with teacher popularity scores are presented in Tables 2 and 3. For boys, these variables are paternal engagement and physical play, controlling for directiveness, as well as paternal directiveness and maternal verbal interchange, while for girls these are paternal physical play, controlling for directiveness, and maternal directiveness. Paternal engagement and physical play as well as maternal verbal interchange are generally positively associated with desirable attributes such as helpfulness, leadership, involvement, and clear communication skills and negatively associated with undesirable attributes such as being apprehensive, being unable to get along with others, and an unwillingness to share. In addition, these parental behaviors correlate with a peer versus an adult orientation. Paternal directiveness, in contrast, is associated with negative social attributes, such as socially withdrawn, seldom being sought out by other children, being hesitant with other children, and being a spectator in social activities. Moreover, an adult orientation, indexed by concern about adult approval and forming an attachment to the teacher, is positively correlated with paternal directiveness. For girls, paternal physical play is again associated with desirable social attributes such as high positive emotional expressiveness and clarity of communication as well as originality, novelty, and creativity. Maternal directiveness, as in the case of paternal directiveness with boys, is associated with attraction to adults as well as some attributes that may facilitate peer acceptance, such as emotional expressiveness and social assertiveness (lack of hesitancy to engage others).

In summary, boys show a consistent profile of positive characteristics being associated with paternal engagement and physical play and maternal verbal behavior. A negative array of attributes that are less likely to lead to peer acceptance is linked with paternal directiveness for boys. Girls who have physically playful fathers and to a lesser extent directive mothers show a consistent set of positive social attributes as well as aspects of intellectual competence.

c) Parent behavior and peer interaction: For analyses, the ratings across all three play sessions were averaged for each child. Table 4 shows the significant correlations and partial correlations (controlling for directiveness) between mother and father behavior and peer interaction ratings for boys and girls. Boys with positive peer relations as indexed by being relaxed with peers and/or having harmonious peer interactions had fathers who were high in physical play, elicited positive affect during their interactions with their sons, engaged their child during play, and were not highly verbal in their interactions. In addition, boys who dominated the interactions and were high in initiative taking had fathers who were high in their physical play and engaging. Boys' negative peer relations as rated by the abrasiveness of their interactions were positively correlated with paternal directiveness and negatively related to paternal physical play and affect. Paternal verbal behavior was also related positively to abrasive peer interaction. In contrast, while maternal physical play and child affect generated during play did not relate to boys' peer play, maternal engagement and verbal behavior yielded positive correlations, with boys

TABLE 2

PARTIAL CORRELATIONS BETWEEN TEACHER *Q*-SORT ITEMS AND SELECTED PARENTAL VARIABLES: BOYS

	Father's Engagement[a]	Father's Physical Play[a]	Father's Directiveness	Mother's Verbal Interchange
Helpful to peers	.58**	...	−.41*	.65**
Other children seldom seek his company	−.42*	−.45*	.53**	−.43*
Peer leader	.60**	.46**	−.50**	.57**
Suggests activities	.48*	...	...	...
Likes fixed goal activities	.42*	...	...	...
Communicates messages clearly	.58**	...	−.53**	...
Characteristically unoccupied	−.40*	...	...	−.76***
Uncurious about the new	−.45*	−.42*	.48**	...
Unaware, turned off, "spaced out"	−.40*	...	...	−.47**
Indirect in dealing with peers	−.44*	...	.48*	...
Becomes involved in whatever he does	.60**	...	...	.89***
Vaguely apprehensive	−.80***	−.54**	.78***	−.53**
Seeks contact with adults	−.44*	−.40*	...	−.47**
Hesitant with other children	−.48*	...	.49*	−.38*
Lacks ability to get along with others	−.54**	−.43*	...	−.65***
Samples activities aimlessly, lacks goals	−.57**	...	...	−.49**
Attracts attention	.52**	.52**	−.53**	...
Likes to compete	.54**	...	−.47*	...
Unwilling to share possessions	−.41*	−.53**	...	−.38*
Well-coordinated and agile	.70**	.58**	−.53**	.46**
Disoriented in his physical environment	−.61**	−.45*	.62**	−.59**

TABLE 2 (*Continued*)

	Father's Engagement[a]	Father's Physical Play[a]	Father's Directiveness	Mother's Verbal Interchange
Changeable	...	.65**	−.48*	...
Hesitates to engage	...	−.43*	.72***	−.70***
Selective in peer contacts	...	...	...	.44*
High energy level	...	...	.57**	.43*
Spectator in social activities	...	...	.50**	−.39*
Physically courageous	...	...	−.59**	.49**
Withdraws from excitement or commotion	...	...	.53**	...
Stretches to meet demands for excellence	...	...	...	.38*
Thoughtless of other children's possessions	...	...	...	−.51**
Possessive about playmates	...	...	−.50**	.37*
Socially withdrawn	...	...	.47*	−.56**
Sympathetic to peers' distress	...	...	−.40	.38
Concerned about adult disapproval	...	...	.62**	...
Tests limits set by adults	...	...	−.47*	...
Indirect in asking for help	...	...	.42*	...
Expresses negative feelings openly and directly	...	...	−.42*	.40*
Forms attachment to teacher	...	...	.53**	−.41*

NOTE.—Second session only.
[a] Controlled for directiveness.
* $p < .10$.
** $p < .05$.
*** $p < .01$.

TABLE 3

PARTIAL CORRELATIONS BETWEEN TEACHER Q-SORT ITEMS AND SELECTED PARENTAL VARIABLES: GIRLS

	Father's Physical Play	Mother's Directiveness
Self-directed	...	−.42*
Expressive of positive emotions	.43*	.54**
Vaguely apprehensive	...	−.38*
Seeks contact with adults	...	.38*
Indirect in asking for help	−.52**	−.58**
Expresses negative feelings openly and directly	...	.51**
Forms attachment to teacher	...	.55**
Hesitates to engage	...	−.41*
Communicates message clearly	.45**	...
Characteristically unoccupied	−.37*	...
Uncurious about the new	−.44*	...
Ordinary, unoriginal in verbal behavior	−.60**	...
Likes to learn new cognitive tasks	.44*	...
Creative and original in use of materials	.37*	...
Physically courageous	.60**	...
Stretches to meet demands for excellence	.39*	...
Withdraw from excitement or commotion	−.59**	...

NOTE.—Both sessions combined.

* $p < .10$.

** $p < .05$.

being relaxed and harmonious, as well as dominant in their peer relations. Maternal engagement and verbal interchange were, in turn, negatively related to the abrasiveness of the boys' interaction pattern.

In summary, the same parental variables, namely, maternal verbal behavior and paternal physical play and engagement, that are associated with teacher rankings of popularity are related to an observed pattern of harmonious, relaxed, and dominant interaction with peers. Similarly, paternal directiveness—a variable that was related to low popularity ranking—was correlated with an abrasive peer interaction pattern for boys.

For girls, harmonious and relaxed peer interactions were positively related to father verbal behavior, while abrasive peer interaction and dominance were positively related to father physical play and father engagement and negatively related to father verbal interchanges and to the extent to which fathers maintained the verbal conversation as indexed by ending pauses. On the maternal side, directiveness was highly and positively correlated with abrasive peer interactions for girls. Being relaxed with peers and being dominant were both negatively associated with maternal verbal behavior. In summary, the maternal variables that are associated with peer popularity as rated by the teacher are related to an observed pattern of abrasive and dominant interaction with peers for girls.

Discussion

The findings of the study confirm earlier results concerning the nature of sex differences in peer-peer play (Di Pietro, 1981) and extend prior reports (Clarke-Stewart, 1980; Lamb, 1977; Parke & Tinsley, 1981; Power & Parke, 1982) of mother and father differences in play style from infancy to nursery school–age children.

Of greater significance are the results that demonstrate that these stylistic differences of mothers and fathers are related to popularity ratings and peer interaction patterns of boys and girls, but in different ways. For boys, the extent to which the mother verbally engaged her son was a significant correlate of peer popularity. Possibly, these boys learn verbal strategies that both help them in initiating and maintaining peer interaction. A second factor, directiveness, bears a more complex relationship with peer popularity, in part dependent on whether mother or father is being directive. While maternal directiveness is positively associated with popularity, paternal directiveness is negatively linked with popularity ratings. Others (Baumrind, Note 1) have found a similar negative rela-

tionship between paternal directiveness and boys' social behavior with peers. Directiveness may contribute to the development of social interaction skills differently depending on the degree and frequency of directiveness. Directiveness at moderate levels may provide opportunities to learn to control the direction, tempo, and content of social interaction, whereas at high levels, few opportunities to practice these skills are afforded. Maternal and paternal directiveness may relate differentially to boys' as well as girls' popularity, then, due to the differing degrees of directiveness on the part of mothers and fathers. In the present case, father-son combinations tended to exhibit more directiveness than other parent-child combinations. Moreover, a median split of the sample of boys into those with high- and low-directive fathers and a similar split of the sample of girls into those with high- and low-directive mothers showed that the high-directive fathers were significantly more directive than the high-directive mothers (t test; $p < .025$). Girls may thus have the opportunity to learn regulatory social skills and at the same time be provided a model of assertiveness—a characteristic that may well be related to popularity in girls. The likelihood of adopting the mother as a model is increased due to the fact that mothers who were directive were also highly engaging. As others have shown (e.g., Hetherington & Frankie, 1967), a combination of power and warmth is likely to increase the imitation of a dominant parent. This pattern underscores the fact that some aspects of parental behavior that are viewed as negative, such as directiveness, may, at least in the case of girls, produce positive socialization outcomes.

A further factor of importance for boys as well as girls is parents' physical play. In contrast to attention given to the cognitive-learning aspects of play (Rubin, Fein, & Vandenberg, 1983), the opportunities for learning affect recognition and regulation in the context of play have received limited attention, and generally only in infancy (Power & Parke, 1982; Stern, 1974). Through physically playful interaction with their parents, especially fathers, children may be learning the social communicative value of their own affective displays as well as how to use these signals to regulate the social behavior of others. In turn, they may learn to accurately decode the social and affective signals of other social partners. Field and Walden (1982) present evidence that children's sociometric status was related to children's ability to correctly identify facial expressions of emotion. It is interesting that only after controlling directiveness does the contribution of physical play become evident. Possibly children who interact with highly controlling parents have fewer opportunities to acquire and practice at least the initiating aspects of these skills. Independent assessment of children's skills in both encoding and decoding social and affective signals as a function of parental interactive style would begin to address these hypothesized underlying processes.

Closely related is the parent's ability to generate positive affect in the child in the course of play. This factor was also clearly implicated as a contributor to peer popularity. Perhaps children who are affectively expressive during parent-child interactions are also emotionally expressive in their peer interactions. This pattern is consistent with the recent finding of Sroufe, Schork, Motti, Lawroski, and La Freniere (1983), who found positive relationships between affective expressiveness and peer social competence.

The study also raises some methodological questions concerning the relative value of teacher ratings and direct observations as approaches to the measurement of social competence. In our data, some apparent discrepancies exist between the teacher ratings and the observed peer interactions, especially for girls. While paternal physical play is associated with high popularity ratings for girls, this paternal behavior is associated with an observed abrasive and dominant interaction style. While teachers may view this more assertive style as positive, it would be worthwhile through the use of sociometric ratings to determine whether peers respond positively to this type of interactive style. In developing this measure, Connolly and Doyle (1981) did not establish the differential validity of the measure for boys and girls separately, and our findings suggest that the validity, as indexed by its relationship with observed behavior, may be higher for boys than girls. Clearly, further attention to the relative merits of alternative ways of measuring peer competence is necessary.

Examination of the relationships between earlier attachment classifications and these concurrent measures of social interaction would be worthwhile in order to assess the relative utility of these two approaches. It is assumed that these varying levels of analysis are, however, not incompatible. Possibly the parental behaviors that promote secure attachment, such as opportunities for controlling the pace of social in-

TABLE 4

CORRELATIONS AND PARTIAL CORRELATIONS (in Parentheses) BETWEEN PARENTAL BEHAVIOR AND RATINGS OF THE CHILD WITH PEERS

	PARENTAL BEHAVIOR									
	Physical Play		Affect of Child		Parental Directiveness		Engagement		Verbal Interchange	
PEER RATINGS	Father	Mother	Father	Mother	Father	Mother	Father	Mother	Father	Mother
Boys:										
Abrasive:										
Session 1	(−.50)**	...	(−.50)**	...	.42*	...	...	...	...	...
Session 2	−.42*	...	...	...	...	...	...	−.61*** (−.61)***	.59** (.63)**	−.47** (−.50)**
Dominant:										
Session 1	...	...	...	...	...	...	.68*** (.70)***	.53** (.46)**	...	...
Session 2	.52** (.37)*	(.49)**	...	...	...	...	.52** (.42)*	...	...	...
Relaxed:										
Session 1	...	...	...	...		.41*	.67*** (.80)***	.79*** (.76)***	...	.50** (.39)*
Session 2	...	...	...	...		...	(.43)*	.49** (.44)*	...	.37* (.47)**
Harmonious:										
Session 1	.49** (.67)***	...	.40* (.57)**	...		...	(.41)*	.45* (.50)**	...	...
Session 2	...	...	...	...		...	...	.52** (.60)**	.52** (.53)**	.55** (.54)**

TABLE 4 (*Continued*)

Peer Ratings	Parental Behavior									
	Physical Play		Affect of Child		Parental Directiveness		Engagement		Verbal Interchange	
	Father	Mother	Father	Mother	Father	Mother	Father	Mother	Father	Mother
Girls:										
Abrasive:										
Session 1	...	...	...	...	...	.78***	...	...	−.44* (−.37)*	...
Session 2	.68** (.68)	...	.69*** (.69)***	...	...	.41*	.37* (.42)*	...	...	...
Dominant:										
Session 1	...	...	...	...	...	...	...	...	...	...
Session 2	.52** (.37)*	...	.47**	...	...	...	...	...	...	−.42*
Relaxed:										
Session 1	...	...	...	...	...	...	...	...	...	...
Session 2	...	...	...	...	.36*	...	...	...	...	...
Harmonious:										
Session 1	...	...	...	...	...	...	...	...	...	.51** (.44)*
Session 2	−.36*	...	−.38*	...	...	...	...	...	...	.64** (.56)**

* $p < .10$.
** $p < .05$.
*** $p < .01$.

teraction, are, in turn, related to being engaging, playful, and nondirective.

It is clear that the direction of effect in these parent-peer relationships remains unspecified. While these domains are highly interrelated, it is plausible that socially skillful children are able to engage their parents more effectively and require less directiveness. While earlier longitudinal studies of the antecedents of peer social competence suggest that parents do, in fact, contribute to their toddlers' emerging social skill repertoire, further longitudinal and experimental studies that focus on the parental processes outlined in this paper are necessary.

In addition, this approach represents only one avenue through which parents influence peer development. Examination of parental provision of opportunities for peer interaction, as well as a detailed study of how parents manage peer-peer interactions when supervising these activities, are both worthwhile. Clearly, family and peer systems are linked in a variety of ways, and the assessment of the relative importance of these possible routes across mothers and fathers and across children at different ages merits attention.

Reference Note

1. Baumrind, D. *Family socialization and developmental competence project.* Paper presented at the Social Science Research Council Conference on Intimacy, New York, New York, May 1983.

References

Arend, R., Gove, F., & Sroufe, L. A. Continuity of individual adaptation from infancy to kindergarten: A predictive study of ego-resiliency and curiosity in preschoolers. *Child Development,* 1979, **50,** 950–960.

Asher, S. R., Renshaw, P. D., & Hymel, S. Peer relations and the development of social skills. In S. G. Moore & C. R. Cooper (Eds.), *The young child* (Vol. **3**). Washington, D.C.: National Association for the Education of Young Children, 1982.

Baldwin, A. L. Socialization and the parent-child relationship. *Child Development,* 1948, **19,** 127–136.

Baumrind, D. *Manual for the preschool behavior Q-sort.* Berkeley: Institute of Human Development, University of California, 1968.

Clarke-Stewart, A. The father's contribution to children's cognitive and social development in childhood. In F. Pedersen (Ed.), *The father-infant relationship.* New York: Praeger, 1980.

Connolly, J., & Doyle, A. Assessment of social competence in preschoolers: Teachers versus peers. *Developmental Psychology,* 1981, **17,** 50–58.

Di Pietro, J. Rough and tumble play: A function of gender. *Developmental Psychology,* 1981, **17,** 50–58.

Easterbrooks, M. A., & Lamb, M. E. The relationship between the quality of mother-infant attachment and infant competence in initial encounters with peers. *Child Development,* 1979, **50,** 380–387.

Eckerman, C. O., & Stein, M. R. The toddler's emerging interactive skills. In K. Rubin & H. Ross (Eds.), *Peer relationships and social skills in childhood.* New York: Springer, 1983.

Field, T. M., & Walden, T. A. Production & discrimination of facial expressions by preschool children. *Child Development,* 1982, **53,** 1299–1311.

Hartup, W. The social worlds of childhood. *American Psychologist,* 1979, **34,** 944–950.

Hetherington, E. M., & Frankie, G. Effects of parental dominance, warmth and conflict on imitation in children. *Journal of Personality and Social Psychology,* 1967, **6,** 119–125.

Hoffman, L. W. The father's role in the family and the child's peer-group adjustment. *Merrill-Palmer Quarterly,* 1961, **7,** 97–105.

Lamb, M. E. Father-infant and mother-infant interaction in the first year of life. *Child Development,* 1977, **48,** 167–181. (a)

Lamb, M. E. The development of mother-infant and father-infant attachments in the second year of life. *Developmental Psychology,* 1977, **13,** 637–648. (b)

Lewis, M., & Fiering, C. Direct and indirect interactions in social relationships. In L. Lipsitt (Ed.), *Advances in infancy research* (Vol. **1**). New York: Ablex, 1981.

Parke, R. D., & Tinsley, B. The father's role in infancy: Determinants of involvement in caregiving and play. In M. E. Lamb (Ed.), *The role of the father in child development* (2d ed.). New York: Wiley, 1981.

Pastor, D. L. The quality of mother-infant attachment and its relationship to toddler's initial sociability with peers. *Developmental Psychology,* 1981, **17,** 326–335.

Power, T. G., & Parke, R. D. Play as a context for early learning: Lab and home analyses. In L. M. Laosa & I. E. Sigel (Eds.), *The family as a learning environment.* New York: Plenum, 1982.

Rubin, K. H., Fein, H. G., & Vandenberg, B. Play. In P. H. Mussen (Ed.), *Handbook of child psychology* (4th ed.) (Vol. **4**): *Social development,* E. M. Hetherington (Vol. Ed.). New York: Wiley, 1983.

Sameroff, A. J. Developmental systems: Contexts

and evolution. In P. H. Mussen (Ed.), *Handbook of child psychology* (4th ed.) (Vol. **1**): *History, theory and methods*, W. Kessen (Vol. Ed.). New York: Wiley, 1983.

Sroufe, L. A. Socioemotional development. In J. Osofsky (Ed.), *Handbook of infant development*. New York: Wiley, 1979.

Sroufe, L. A., Schork, E., Motti, F., Lawroski, N., & La Freniere, P. The role of affect in social competence. In C. Izard, J. Kagan, & R. Zajonc (Eds.), *Emotions, cognition and behavior*. New York: Plenum, 1983.

Stern, D. N. Mother and infant at play: The dyadic interaction involving facial, vocal, and gaze behaviors. In M. Lewis & L. Rosenblum (Eds.), *The effect of the infant on its caregiver*. New York: Wiley, 1974.

Waters, E., Wippman, J., & Sroufe, L. A. Attachment, positive affect and competence in the peer group: Two studies in construct validation. *Child Development*, 1979, **50**, 821–829.

Winder, C. L., & Rau, L. Parental attitudes associated with social deviance in preadolescent boys. *Journal of Abnormal and Social Psychology*, 1962, **64**, 418–424.