Age and Sex Differences in Perceptions of Networks of Personal Relationships

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FURMAN, WYNDOL, and BUHRMESTER, DUANE. *Age and Sex Differences in Perceptions of Networks of Personal Relationships.* CHILD DEVELOPMENT, 1992, **63**, 103–115. In this study, 549 youths in the fourth grade, seventh grade, tenth grade, and college completed Network of Relationship Inventories assessing their perceptions of their relationships with significant others. The findings were largely consistent with 7 propositions derived from major theories of the developmental courses of personal relationships. In particular, mothers and fathers were seen as the most frequent providers of support in the fourth grade. Same-sex friends were perceived to be as supportive as parents in the seventh grade, and were the most frequent providers of support in the tenth grade. Romantic partners moved up in rank with age until college, where they, along with friends and mothers, received the highest ratings for support. Age differences were also observed in perceptions of relationships with grandparents, teachers, and siblings. Finally, age differences in perceived conflict, punishment, and relative power suggested that there was a peak in tension in parent-child relationships in early and middle adolescence. Discussion centers around the role various relationships are perceived as playing at different points in development.

Throughout the course of development, individuals have personal relationships with a number of people in their networks, including parents, siblings, relatives, teachers, friends, and romantic partners. Although research has examined the developmental course of many of these relationships, most investigations have considered each type of relationship in isolation. The few studies examining more than one relationship have usually been limited to comparisons of parent-child relationships and friendships (e.g., Hunter, 1985; Hunter & Youniss, 1982) or to comparisons of relationships in young children's networks (Lewis, Feiring, & Kotsonis, 1984). Systems theorists, however, have called for studies of networks of relationships and their interrelations so that an integrated account of children and adolescents' social lives can be obtained (Bronfenbrenner, 1979; Hartup, 1979; Lewis & Feiring, 1979).

Heeding this call, a number of investigators have begun to examine children's and adolescents' social networks (e.g., Blyth, 1982; Bryant, 1985; Cauce, Felner, & Primavera, 1982; Coates, 1987; Reid, Landesman, Treder, & Jaccard, 1989). Recently, Furman and Buhrmester (1985a) adopted such a network perspective and assessed elementary school children's perceptions of conflict, relative power, and six types of support in dyadic relationships with numerous types of network members. These data allowed them to compare systematically the similarities and differences in relationships with each network member, thereby yielding information about the perceived contributions that each relationship makes to children's social lives. The present cross-sectional study extended this work by examining differences in perceptions of relationships among four developmental periods—preadolescence (grade 4), early adolescence (grade 7), mid-

dle adolescence (grade 10), and late adolescence (college).

Our goal was to create a broad descriptive account of age differences in perceptions of the central relationships in youths' networks. The value of such a broad picture is that it can capture general patterns that are missed in more fine-grained studies of specific relationships. That is, a network perspective allows one to evaluate and interpret age differences in perceptions of one relationship in comparison to those in other relationships. Thus, it allows one to evaluate developmental theories and facilitate the interpretation and integration of findings from more focused studies.

We thought that the youths' perceptions would provide unique and valuable information about their impressions and evaluations of their relationship experiences. The youth is in a unique position of being the only "insider" privy to the history of interactions that occur across a wide variety of public and private contexts (Furman, 1984; Olson, 1977). His or her perceptions are certainly not identical with an outside observer's perceptions of the interactions in a relationship. They are likely to reflect the relationship's history and the youth's subjective interpretation of interactions as well as the actual interactions themselves. As such, they are likely to affect their interactions with people in their networks. Moreover, they are interesting phenomena in their own right, as some research suggests that such subjective evaluations of relationships may have a stronger impact on adjustment than objective indices (Barrera, 1981). These ratings also provide one of the few common metrics available for comparing the diverse set of relationships and age groups examined here.

As a means of organizing our investigation, we reviewed major theories of social development and compiled a list of propositions about age changes in relationships. Sullivan's (1953) theory of socioemotional development, Blos's (1967) conceptualization of the development of autonomy, and Youniss and Smollar's (1985) integration of Piaget and Sullivan's insights proved particularly valuable. We examined past research on age differences in observed interactions, as well as perceptions of relationships, as we believed changes in interactions may lead to and reflect changes in perceptions. By integrating the insights of these theorists and previous research, we derived seven propositions that could be evaluated empirically.

1. *Marked age differences occur in the network members that children and adolescents report relying upon the most as sources of support. Specifically, preadolescent children report that they depend most on parents, early and middle adolescents report that they turn most often to friends, and late adolescents report that they depend most on romantic partners.* Several lines of reasoning converge to create this broad picture. Blos (1967) contended that adolescents' struggle to establish autonomy leads to decreased emotional dependency on parents, but they simultaneously come to rely more on peers for support and guidance because they cannot function completely independently. Similarly, Sullivan (1953) proposed a series of significant developmental shifts in whom children relied upon most often to fulfill particular social needs (Buhrmester & Furman, 1986). Specifically, he argued that young adolescents establish intimate chumships with peers in an effort to satisfy a need for an egalitarian "collaborative" relationship. In so doing, adolescents come to rely less and less on parents to meet social needs. Furthermore, he suggested that as sexuality needs intensify after puberty, their fulfillment becomes integrated with the fulfillment of intimacy needs through romantic relationships. These transformations in the network entail changes in a number of specific relationships.

2. *Parent-child relationships during adolescence are seen as less supportive, more conflicted, and more egalitarian in nature than during preadolescence.* Blos (1967) conceptualized this transformation in terms of separation and individuation. During early adolescence, parent-child conflict escalates as youths struggle to renegotiate dependency bonds and authority relationships. Eventually, during late adolescence, conflict subsides as a rapprochement is eventually reached in a new form of parent-offspring relationship. Youniss and Smollar (1985) also believed that parent-child relationships become less asymmetrical in adolescence, in part because of the experience of having egalitarian experiences with peers.

3. *Sibling relationships are seen as gradually becoming less intense and more egalitarian with age.* Although there has been relatively little theorizing about the developmental course of sibling relationships, Bossard (1948) suggested that adolescents may move away from the family as a whole as they individuate from their parents. It is not clear, however, whether the

separation from siblings is accompanied by elevated or decreased conflict. If the striving for autonomy extends to relationships with siblings, then a rise in sibling conflict may occur during early adolescence. However, if autonomy issues are not played out in sibling relationships, a general distancing of siblings may occur, leading to fewer occasions for conflict.

4. *Other significant adults, including grandparents and teachers, are seen as less frequent sources of support as children grow older.* During early childhood, grandparents and teachers often serve as secondary attachment figures, helping to fulfill children's needs for nurturance and assistance (Tinsley & Parke, 1984). The significance of personal relationships with these adults typically diminishes with age, because the needs older children experience are better met by others.

5. *Same-sex friendships are perceived as increasingly supportive during early adolescence.* Sullivan (1953) argued that during preadolescence and early adolescence the need for intimacy and desire for "consensual validation" increase, which are both best satisfied in same-sex friendships. Blos (1967) also described such changes, but in his view the changes result from unmet dependency needs emanating from the struggle to individuate from parents.

6. *Romantic relationships are thought to become increasingly supportive during late adolescence.* As noted previously, Sullivan (1953) contended that the integration of intimacy and sexual needs occurs in late adolescents' and young adults' romantic relationships. From a different perspective, Erikson (1950) argued that intimacy in romantic relationships occurs after the resolution of the identity crisis.

7. *Girls' same-sex friendships are perceived as more supportive than boys' friendships.* Previous research has consistently found that girls' interactions with friends are likely to be perceived as more intimate than boys' (Buhrmester & Furman, 1987; Furman & Buhrmester, 1985a; Hunter & Youniss, 1982; Sharabany, Gershoni, & Hoffman,

1981). It is not clear, however, if these differences apply to other relationships.

Method

Participants

The participants were 107 fourth-grade (53 males, 54 females; M age = 9 years, 4 months old), 119 seventh-grade (67 males, 67 females; M age = 12-5), 112 tenth-grade (51 males, 65 females; M age = 15-6), and 216 college students (123 males, 98 females; M age = 19-3). Most were Caucasian children from middle- to upper-middle-class families. Approximately 90% were from intact families, whereas the remaining 10% were from stepfamilies or one-parent families. The college students were attending a medium-size private university in a large city; almost all lived in dormitories away from their family's home. The younger students attended suburban public schools in the same metropolitan area.

Procedure and Measure

Revised versions of Furman and Buhrmester's (1985a) Network of Relationships Inventory (NRI) were administered to college students individually and to classrooms of fourth- seventh-, and tenth-grade students. The college students received course credit for participating.

The present version of the NRI assesses 10 relationship qualities, which include seven provisions of support derived from Weiss's (1974) theory: (a) reliable alliance—a lasting dependable bond, (b) enhancement of worth, (c) affection, (d) companionship, (e) instrumental help, (f) intimacy, and (g) nurturance of the other. Additionally, three other characteristics were rated: (a) conflict, (b) punishment, and (c) relative power of the child and other person.[1]

Subjects rated each of these qualities in their relationships with each of the following people: (a) mother or stepmother, (b) father or stepfather, (c) older brother, (d) younger brother, (e) older sister, (f) younger sister, (g) grandparent, (h) closest same-sex friend,[2] (i) romantic partner. These people were selected on the basis of Furman and

[1] Subjects also rated relationships on four other dimensions—satisfaction, importance, similarity, and inclusion. These results are not reported because they fell outside of the conceptual focus of the current study. The importance ratings were, however, used to identify the subject's most important sibling.

[2] The college students were asked to describe their closest local same-sex friend and their closest same-sex friend living elsewhere. In this paper, results for the one designated as most important are presented. Supplementary analyses of scores for each of the two friendships revealed, however, the same pattern of results.

Buhrmester's (1985a) finding that most children had spontaneously named them as important people in their networks; although other people may be important for some children, the majority had not named anyone else. If subjects knew more than one person in a category, they were instructed to rate the relationship with the one which was most important to them. If they rated more than one sibling, scores for the one rated as most important were included in the primary analyses. We chose to do this rather than select one randomly to insure comparability with ratings of best friends and romantic partners, who were implicitly the subjects' most important peer relationships. If there was no one who fit in a particular category, the subject was omitted from analyses of that particular relationship.

The subjects were asked to rate how much a relationship quality occurred in each relationship (e.g., "How much free time do you spend with each of these persons?") Questions were phrased in concrete terms to insure that children of all grades would understand them and interpret them similarly (e.g., for relative power, "Who tells the other person what to do more often, you or this person?"). Ratings were done on standard five-point Likert scales. In the version administered to the fourth-, seventh-, and tenth-grade students, each relationship quality was assessed by three items. In the version administered to college students, each quality was assessed by six items.[3] Only the three items on each scale that were identical in the two versions were used to derive the 10 scale scores for each of the relationships. The college version also did not include questions about punishment or teachers.

The seven different provisions were combined into one dimension because they were highly intercorrelated and because Weiss (1974) had thought of them all as social provisions. The internal consistency coefficients for the support composite and the conflict, punishment, and relative power scales for the different relationships were

calculated for each grade level and found to be satisfactory (M alpha $= .81$). Alphas did not vary as a function of grade. The four scales were relatively independent of one another, $-.30 < r\text{'s} < .30$, except for the conflict and punishment scales, which were moderately correlated, $M\ r = .43$.

Results and Discussion

As an initial screening test, a multivariate repeated-measures analysis of variance was conducted in which grade and sex were independent variables, relationship type was a repeated variable, and relationship qualities (support, conflict, and power) were dependent variables.[4] Significant effects were found for grade, sex, relationship, grade × relationship, and sex × relationship, all Wilks's lambda's $< .01$. To examine the specific propositions previously delineated, ANOVAs were conducted comparing rankings of relationships at each grade level (Proposition 1) and age and sex differences in each relationship (Propositions 2–7).

Comparisons among Relationships
Proposition 1.—Marked age differences were expected to occur in the network members that children and adolescents report relying upon the most as sources of support. To compare the relative ranking of relationships at each grade level, separate ANOVAs were conducted on the support, conflict, punishment, and relative power scores for the set of relationships at each grade level. Relationship type was a within-subject variable, whereas sex was a between-subjects variable. Follow-up analyses of significant effects were conducted using Newman-Keuls tests. Mean scores at each grade level are presented in Table 1.

For support scores, significant main effects of relationship type were found at each of the four grade levels, all $F\text{'s} > 6.50$, $p\text{'s} < .05$. Additionally, analyses of the college students' scores revealed a significant interaction between relationship type and sex, $F(5,500) = 2.84$, $p < .05$. Consistent with

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[3] Copies of the two versions of the NRI are available from the first author.

[4] Ratings of relationships with romantic partners were not included in these analyses because a significant proportion of the children (48%) did not have these relationships; ratings for teachers were also excluded because college students had not been asked to describe these relationships. Supplementary repeated-measures analyses of variance were conducted to compare the various ratings of those youths who did have one of these relationships. References in the text to differences between romantic partners or teachers and the other relationships are based on these analyses. Similarly, ratings of punishment were not included because college students had not completed those ratings, but supplementary analyses of the punishment, support, conflict, and relative power measures for the fourth-, seventh-, and tenth-grade samples revealed the same significant multivariate effects.

TABLE 1

MEANS AND STANDARD DEVIATIONS OF RATINGS BY GRADE AND RELATIONSHIP TYPE

	GRADE			
	4	7	10	13+
Support:				
Mother	3.90(.61)[1,a]	3.51(.76)[1,b]	3.32(.68)[2,c]	3.42(.70)[1,b,c]
Father	3.89(.74)[1,a]	3.39(.90)[1,b]	2.98(.95)[3,c]	3.16(.70)[2,c]
Sibling	3.43(.85)[2,3,a]	2.99(1.00)[2,c]	3.11(.87)[3,b,c]	3.22(.67)[1,2,b]
Grandparent	3.64(.70)[2,a]	3.01(.77)[2,b]	2.75(.76)[4,6,c]	2.68(.69)[3,c]
Teacher	2.61(.85)[5,a]	1.86(.62)[3,b]	1.93(.60)[5,b]	. . .
Same-sex friend	3.41(.85)[3,a,b]	3.61(.87)[1,a]	3.57(.81)[1,a]	3.37(.62)[1,b]
Romantic friend	2.77(1.22)[4,c]	3.08(1.07)[2,b,c]	3.19(.93)[2,a,b]	3.50(.90)[1,a]
Conflict:				
Mother	1.98(.75)[2,b]	2.37(.99)[2,a]	2.30(.98)[2,a]	2.07(.99)[1,b]
Father	1.94(.74)[2,b]	2.26(.99)[2,a]	2.30(1.00)[2,a]	1.98(.81)[1,b]
Sibling	3.01(1.13)[1,b]	3.36(1.18)[1,a]	2.69(1.08)[1,c]	1.94(.81)[1,d]
Grandparent	1.59(.69)[3,a]	1.38(.60)[4,b]	1.20(.47)[4,b]	1.30(.64)[2,b]
Teacher	1.64(.73)[3,a]	1.81(.91)[3,a]	1.36(.56)[4,b]	. . .
Same-sex friend	2.01(.97)[2,a]	1.94(.83)[3,a]	1.66(.70)[3,b]	1.54(.63)[2,b]
Romantic friend	1.68(.78)[3,a,b]	1.47(.64)[3,4,b]	1.74(.77)[3,4,b]	1.88(.88)[1,a]
Punishment:				
Mother	2.28(.99)[1,b]	2.83(1.08)[1,a]	2.60(1.01)[1,a]	
Father	2.25(1.01)[1,b]	2.84(1.17)[1,a]	2.66(1.12)[1,a]	
Sibling	1.97(1.10)[2,a]	2.15(1.24)[2,a]	1.55(.82)[2,b]	
Grandparent	1.71(.75)[2,a,b]	1.82(.91)[3,a]	1.51(.61)[2,b]	
Teacher	1.85(.84)[2,b]	2.09(.92)[2,a]	1.64(.65)[2,c]	
Same-sex friend	1.39(.64)[3,a]	1.51(.68)[3,a]	1.32(.58)[2,a]	
Romantic friend	1.35(.59)[3,a]	1.30(.57)[3,a]	1.51(.70)[2,a]	
Relative power:				
Mother	2.19(.98)[2,a]	1.91(.81)[2,b]	1.84(.66)[4,b]	2.30(.75)[4,a]
Father	2.18(.98)[2,a]	1.97(.83)[2,a,b]	1.73(.65)[4,b]	2.04(.78)[5,a]
Sibling	2.93(1.14)[1,b]	2.98(1.19)[1,b]	3.34(.93)[1,a]	3.24(.76)[1,a]
Grandparent	2.33(.93)[2,a]	2.28(.75)[2,a]	2.26(.71)[3,a]	2.50(.70)[3,a]
Teacher	2.07(.88)[1,a]	1.72(.73)[3,b]	1.89(.60)[4,a]	. . .
Same-sex friend	2.84(.82)[1,b]	2.95(.49)[1,a,b]	3.04(.30)[2,a]	3.09(.39)[2,a]
Romantic friend	2.97(.95)[1,a]	2.85(.62)[1,a]	2.85(.57)[2,a]	3.05(.55)[2,a]

NOTE.—Higher scores indicate perceptions of more of a quality. Higher scores on relative power indicate greater perceptions of power by the child. The numbers in superscripts indicate the rank order of the means across relationships within each grade. Means with different number ranks in the same column are significantly different from each other. The letters in superscripts indicate the rank order of means across grade levels within each type of relationship. Means with different letters in the same row are significantly different from each other. Sex effects and interactions with sex are described in the text. The numbers in parentheses are standard deviations.

our first proposition, fourth graders rated their mothers and fathers as the most frequent providers of support. In the seventh grade, they shared this position with same-sex friends, and they fell to second and fourth place in the tenth grade. Same-sex friends were perceived to be relatively low in the hierarchy in the fourth grade (tied for fourth with siblings) but were at the top of the hierarchy in the seventh and tenth grades. Romantic friends were in the sixth position in the fourth grade, tied for third in the seventh grade, and tied for second in the tenth grade. In college, males rated romantic relationships as the most supportive, whereas females saw relationships with

mothers, friends, siblings, and romantic partners as the most supportive.

These findings are largely consistent with those from past studies that examined perceptions of a limited number of relationships or relationship features (Buhrmester & Furman, 1987; Hunter & Youniss, 1982; Sharabany et al., 1981). The strength of the present network approach is that it enables us to map the age differences in perceptions of a wide spectrum of relationships simultaneously and formally compare each relationship's relative position in the hierarchy. Although our findings are consistent with both Sullivan's (1953) and Blos's (1967) theories

of development, the explanation of these age-related differences need not be limited to a single theoretical perspective. Rather, a number of different factors probably contribute to these differences. For example, the reported greater reliance on friends rather than parents for support during early and middle adolescence may reflect: (*a*) advances in cognitive abilities that foster the examination of one's self, which in turn motivates adolescents to seek same-age confidants who share their desires for self-exploration (Gottman & Mettetal, 1986) and consensual validation (Sullivan, 1953); (*b*) pubertal changes, which awaken adolescent concerns about sexuality and physical appearance, which are most comfortably discussed with peers; (*c*) the development of interests and concerns outside the family context; and (*d*) the emerging autonomy from the family, which leads adolescents to turn to friends for emotional support in dealing with family tensions and to fill the void left by their attempts to demonstrate emotional independence from parents (Blos, 1967). Similarly, the ascendance of romantic partners as perceived sources of support during late adolescence is probably not only linked to the drive for sexual intimacy (Sullivan, 1953) but also to culturally derived expectations to begin the search for romantic partners with whom they may want to have lasting relationships.

For the conflict, punishment, and relative power scores, significant differences were found among the relationships at all grade levels, all F's > 11.00, p's < .01, but their ranking was relatively similar across the four grade levels. For example, in grades 4, 7, and 10, siblings received the highest ratings of conflict, and mothers and fathers received the second highest ratings. In college, the ratings for all relationships tended to be relatively low, resulting in a tie among these three and romantic relationships. For punishment, mothers and fathers were always ranked highest, whereas same-sex friends and romantic friends were ranked lowest.

Many theorists have emphasized the contributions of peer conflict to development (see Shantz, 1987), but these results indicate that the bulk of conflict is thought to occur with family members, particularly siblings. Although conflict with family members may differ in many respects from conflict with peers, it should not be overlooked as an important contributor to the reduction

of egocentrism and the growth of interpersonal understanding.

Finally, relationships with the various adults (parents, teachers, and grandparents) were ranked as the most asymmetrical, whereas those with other children (siblings, same-sex friends, and romantic friends) were ranked as the most egalitarian. The analyses of the conflict, punishment, and relative power scores did not reveal any significant sex effects or interactions with sex except that seventh-grade girls reported having less power in their relationships than did boys, $F(1,37) = 5.48$, $p < .05$.

Proposition 2.—Parent-child relationships were expected to be seen as less supportive, more conflicted, and more egalitarian in nature during adolescence than during preadolescence. To examine this and subsequent propositions, separate grade × sex ANOVAs were conducted on each of the four scores for each of the seven types of relationships to identify the specific effects of grade, sex, and their interaction. Newman-Keuls follow-up tests were used to identify the bases of significant effects. Significant F values are presented in Table 2, and results of the post hoc comparisons are contained in Table 1. A brief summary is presented in the following sections.

The findings provide consistent support for Proposition 2. Perceptions of support for both parents were greater in the fourth grade than in the seventh and tenth grade. College women's ratings of support from mothers were greater than those in seventh and tenth grade, whereas college men's scores were similar to tenth graders (girls, fourth M = 3.90, seventh M = 3.48, tenth M = 3.43, college M = 3.61; boys, fourth M = 3.91, seventh M = 3.53, tenth M = 3.19, college M = 3.26). Men's and women's scores differed significantly in the tenth grade and college. Both males' and females' ratings of support from fathers tended to be greater in college than in the tenth grade, $p < .10$. Boys also tended to perceive their relationships with fathers to be more supportive than did girls, $F(1,519) = 2.98$, $p < .10$. These sex differences are consistent with prior work suggesting that parents are more responsive to same-sex children (Baumrind, 1971; Margolin & Patterson, 1975; Noller, 1980).

Perceptions of conflict with both parents were greater in the seventh and tenth grade than in the fourth grade or college. Similarly, ratings of punishment from parents were

TABLE 2

Significant Grade and Sex Effects on Relationship
Qualities

	Grade	Sex	Grade × Sex
Mother:			
Support	14.92**	4.30*	2.70*
Conflict	4.64**		
Punishment	7.64**		
Relative power	10.62**	9.64**	
Father			
Support	26.03**	2.98+	
Conflict	5.14**		
Punishment	7.56**		
Relative power	5.66**	4.89*	
Sibling:			
Support	3.78*	5.76*	
Conflict	37.63**		
Punishment	6.57**		
Relative power	3.51*	8.27**	
Grandparent:			
Support	39.65**		
Conflict	7.52**		
Punishment	4.36*		
Relative power	2.66*		
Teacher:			
Support	37.61**	4.14*	3.50*
Conflict	10.21**	9.94**	
Punishment	8.79**	10.44**	
Relative power	6.21**		
Same-sex friend:			
Support	3.27*	18.21**	
Conflict	12.01**		
Punishment	2.68+		2.78+
Relative power	6.21**		
Romantic friend:			
Support	6.60**	6.60*	
Conflict	3.08*		
Punishment			
Relative power			3.60**

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

greater in the seventh and tenth grade than in the fourth grade. Perceptions of the youths' power in their relationships with each parent decreased between the fourth and tenth grade and the increased again in college. Boys thought they had more power in these relationships than girls thought they had, but the absolute levels of scores for both sexes fell below the scale's midpoint, indicating that both parents were thought to have more power than either their sons or daughters had.

The multifeature assessment allowed us to create a portrait of perceptions of parent-child relationships that revealed age and sex differences on a number of dimensions. In general, the results are consistent with Proposition 2 and the view that during adolescence a transformation occurs in relationships with parents (Grotevant & Cooper, 1986; Youniss & Smollar, 1985). The course of this transformation is best seen in Figure 1.

Perceived support is lower in early and middle adolescence, but this age difference should not be overstated. The network approach makes the scope of the age differences particularly clear by permitting comparisons with other relationships in the adolescents' lives. Even when perceived support from parents is at its lowest in middle adolescence, the ratings of these rela-
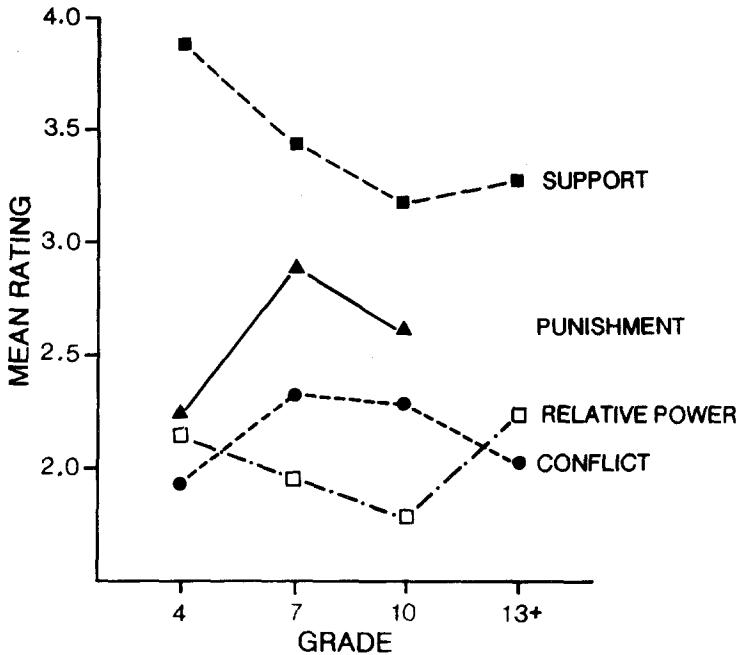
FIG. 1.—Age differences in characteristics of parent-child relationship

tionships are still exceeded only by those for friends.

At the same time, perceived conflict and punishment with parents is greater in early and middle adolescence, as others have found (see Steinberg, 1989). Again, though, the difference is modest, amounting to about a third of a standard deviation. The findings concerning perceptions of relative power, however, were not consistent with the view that the power structure of parent-child relationships becomes gradually less asymmetrical over the course of adolescence. Perceived power actually decreases during middle adolescence. This reduced sense of power may be more perceived than real, as observational studies have actually found adolescents to have more influence in family decisions than preadolescents (Jacob, 1974). Adolescents' striving for autonomy may increasingly expand the desired boundaries for self-determination, thereby creating a situation where desired levels of self-determination may outrace parents' willingness to grant that self-determination. Thus, adolescents may feel that parents give them less power than they "ought" to have, even though their actual levels of self-determination and influence with parents may be greater in adolescence. Such arguments over autonomy issues may also be one

of the reasons why youths perceived conflict to be more frequent during this period.

Our findings also indicate that some rapprochement is seen as occurring in late adolescence. Perceived conflict was less frequent, and the adolescent's sense of power was greater. Perceptions of support also tended to be greater, despite the fact that most of the sample of college students lived away from home. This reappraisal has been reported by other investigators as well (Pipp, Shaver, Jennings, Lamborn, & Fischer, 1985; Shaver, Furman, & Buhrmester, 1985). These relationships may be appreciated more when there are few occasions for power struggles over the management of their daily lives, the most common basis of conflicts (Montemayor, 1983). It would be interesting to determine if parents' perceptions are also different when their children are in high school and in college.

Proposition 3.—Sibling relationships were expected to be seen as being less intense and more egalitarian with age. Consistent with this prediction, grade × sex ANOVAs and follow-up tests revealed that perceptions of support were highest in the fourth grade and lowest in the seventh grade, with scores for tenth graders and college students falling in the middle. Ratings of conflict were substantially lower in the

two oldest grades. Similar findings were found for punishment. Finally, analyses of relative power scores revealed that individuals perceived having more power in the tenth grade and college than in the fourth or seventh grade.

These findings suggest that early in adolescence, youth are less reliant on these relationships or want to see themselves as less reliant, but they are still faced with the frequent clashes almost inherent in these relationships. The perceptions of lower conflict in middle and late adolescence may reflect the lower rates of interaction among siblings at this age (Buhrmester & Furman, 1990; Raffaelli & Larson, 1987). This difference may also reflect adolescents' tendency to distance themselves from family and invest more in peer relationships. Finally, the perceptions of greater support in late adolescence suggest that some rapprochement occurs in these relationships as well as those with parents.

Ratings also varied as a function of the sex of the subject. Girls saw their sibling relationships to be more supportive than did boys. On the other hand, girls thought that they had less power in their sibling relationships than boys indicated they had in theirs. Similar differences in perceptions of power with parents were found. It may be that parents and siblings foster traditional sex-role stereotypes.

The age and sex differences, however, may mask individual differences in the relationships. When we have interviewed children about their sibling relationships (e.g., Furman & Buhrmester, 1985b), it appeared to us that the majority of these relationships were perceived as somewhat distant in adolescence, but some of them were important sources of social support. An important task for future work is to study the nature and bases of such individual differences in the developmental course of sibling relationships or others in the social network.

Proposition 4.—Grandparents and teachers were expected to be seen as less frequent sources of support as children grow older. As expected, a grade × sex ANOVA revealed that perceptions of support from both grandparents and teachers were highest in the fourth grade. Grandparents and teachers are supplemental attachment figures during early childhood, but adolescents may believe that they need them less often. In the case of teachers, the change from having one or two teachers in elementary school

to having many teachers in secondary school may also reduce the likelihood of forming personal ties.

For grandparents, ratings of conflict and punishment were also higher in the fourth grade than in the tenth grade, suggesting that the relationship becomes more distant with age. There were also no grade differences in the perceived power balance in relationships with grandparents, suggesting that adolescent autonomy struggles may not typically extend to relationships with grandparents. Grandparents are generally not responsible for the day-to-day management of adolescents' lives, a frequent source of friction in adult-adolescent relationships. By contrast, and consistent with previous research (Epstein & McPartland, 1976; Hirsch & Rapkin, 1987), friction with teachers was elevated during early adolescence. Ratings of punishment were higher and feelings of power were lower in the seventh grade than either the fourth or tenth grade. A similar pattern was found for conflict, except that the difference between grades 4 and 7 did not achieve significance.

Several sex differences were also found in relationships with teachers. Girls thought they received more support from teachers, but examination of the significant sex × grade interaction revealed that this difference held only for fourth graders (girls' fourth $M = 2.79$, seventh $M = 1.80$, tenth $M = 2.03$, boys' fourth $M = 2.42$, seventh $M = 1.92$, tenth $M = 1.83$). Boys' perceptions of conflict and punishment were greater than girls' (conflict M's 1.75 vs. 1.48; punishment M's 2.01 vs. 1.72). Interestingly, relationships with teachers were the only ones in which sex differences in conflict and punishment were observed, which contrasts with the well-documented sex difference in social interactions with groups of peers (see Maccoby, 1989). Apparently, such differences may not apply to perceptions of most close dyadic relationships.

Proposition 5.—The proposition that relationships with same-sex friends would be perceived as more supportive during adolescence received some support. A significant grade effect for the composite support scores was found, but supplementary analyses revealed that the nature of the grade differences varied substantially from provision to provision. (In contrast, analyses of specific provisions for other relationships revealed consistent patterns across provisions.) In particular, intimacy and affection scores

were significantly greater in the seventh and tenth grades than the fourth grade, whereas corresponding differences were not found for the other provisions. Perceptions of companionship and nurturance of the friend were lower in college than in the tenth grade, whereas no differences were observed on the other provisions or, in the case of reliable alliance, scores were greater in college. Numerous investigators, using questionnaires, interview, and observational techniques, have reported similar age differences in intimacy (see Buhrmester & Furman, 1987); the current study extends our understanding by demonstrating that such differences do not occur on all provisions of support. The specific nature of these differences is quite consistent with Sullivan's (1953) theory of the development of chumships. It is also noteworthy that perceptions of intimacy and affection are greater during early and middle adolescence, the period of greatest family tension. This parallel lends credence to the view that perception of greater dependence on friends is a consequence of the process of developing autonomy from parents (Blos, 1967).

Conflict with friends was seen as less frequent in the tenth grade and college than in the fourth or seventh grade, whereas perceptions of power in the relationship were greater in the tenth grade and college than in the fourth grade.

Proposition 6.—As expected, relationships with romantic partners were seen as more supportive by older youth. These findings are consistent with Sullivan's (1953) and Erikson's (1950) idea that the desires for sexuality and intimate exchange converge in romantic relationships during late adolescence. Analyses of conflict scores also revealed a significant grade effect, with scores in college greater than those in the tenth grade. For relative power, there was a significant interaction between grade and sex. Examination of cell means revealed that boys saw an increase in power in the relationship as they got older, whereas girls saw a decrease (boys' fourth $M = 2.81$, seventh $M = 2.86$, tenth $M = 3.09$, college $M = 3.19$, girls' fourth $M = 3.10$, seventh $M = 2.84$, tenth $M = 2.70$, college $M = 2.85$).

In other research we have conducted (Gavin & Furman, 1989), age differences in children's perceptions of their peer groups were examined. The general peer group was seen as less supportive and more conflictual

in early adolescence (grades 7–8) than in preadolescence (grades 5–6), whereas here friends and romantic partners were seen as more supportive. Apparently, close dyadic relationships are seen as sources of support during a difficult period when youths may be vying for status in the general peer group. The contrasting findings illustrate the importance of distinguishing between the functions served by friendships and peer groups (Furman & Robbins, 1985).

Young men felt there was more support from romantic partners than did young women, $M = 3.40$ versus 3.22. Wheeler, Reis, and Nezlak (1983) found that college students of both sexes were more satisfied and more willing to disclose personal information when interacting with women than men. The present findings suggest this difference may emerge by preadolescence.

Proposition 7.—Consistent with expectations and prior research (see Berndt, 1988), the grade × sex ANOVA of support scores in same-sex friendships revealed that girls' ratings of support were significantly higher than boys', M's = 3.62 versus 3.31. As noted previously, similar sex differences also appeared in perceptions of relationships with siblings and mothers. On the other hand, boys saw their relationships with fathers and romantic partners to be more supportive than did girls. Thus, the present network approach makes it clear that sex differences in support completely depend upon the specific relationship.

Limitations and Future Directions
The present sample consisted primarily of Caucasian children from middle- to upper-middle-class families. It is unclear if a similar pattern of differences would be found in samples from different ethnic or social class backgrounds. Investigators have discussed ethnic differences in children's social relationships, particularly familial ones (see Powell, 1984), but as yet few studies examining age differences in perceptions of social networks in different subcultures have been conducted.

A longitudinal study would be another important extension, as it would provide information about change and continuity of perceptions of different relationships and would control for any cohort effects. In another sample, 45 fifth- and sixth-grade participants who had completed NRIs on the same set of relationships except romantic partners were readministered the measure

3 years later. The results concerning mean differences paralleled those presented here. Additionally, the amount of perceived support in the various relationships was found to be moderately stable (mean $r = .39$). Conflict was less stable in most relationships, although it was remarkably stable in sibling relationships ($r = .54$). The present results are also consistent with longitudinal studies that have examined changes in networks with the transition to college (e.g., Shaver et al., 1985). Such consistencies help rule out the possibility that the observed differences between high school and college students reflect differences between the general population of high school students and that subset who attend college.

The results described here are based on children's self-reports about their relationships. The questions were phrased in concrete terms to insure that all of the children interpreted them in a similar manner. We avoided using abstract terms and concepts because we did not want any observed differences to reflect developmental differences in children's comprehension of the concepts. If anything, then, the present results may underestimate the size of age differences. For example, adolescents may have reported receiving even greater levels of support from friends if they had been asked about abstract types of support such as personal validation. At the same time, their reports are not objective accounts of their relationships, even though such perceptions have been found to be significantly correlated with other peoples' perceptions (Furman, Jones, Buhrmester, & Adler, 1988). In fact, it seems likely that some perceptions are not based on actual interactions (e.g., college students reporting frequent support in parent-child relationships). An important task for subsequent research will be to develop paradigms for observing youths' interactions with various members of their network.

In general, future investigators should consider simultaneously examining children's relationships with various members of their social network. By taking a network perspective, we can move toward a comprehensive picture of the development of social relationships.

References

Barrera, N. (1981). Social support in the adjustment of pregnant adolescents: Assessment issues. In B. H. Gottlieb (Ed.), *Social networks and social support* (pp. 69–96). Beverly Hills, CA: Sage.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph*, 4(1), (Whole).

Berndt, T. J. (1988). The nature and significance of children's friendships. In R. Vasta (Ed.), *Annals of child development* (Vol. 5, pp. 155–186). Greenwich, CT: JAI.

Blos, P. (1967). The second individuation process of adolescence. *Psychoanalytic Study of the Child*, 12, 162.

Blyth, D. A. (1982). Mapping the social world of adolescents: Issues, techniques, and problems. In F. C. Serafica (Ed.), *Social-cognitive development in context* (pp. 240–272). New York: Guilford.

Bossard, J. H. S. (1948). *The sociology of child development*. New York: Harper & Brothers.

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.

Bryant, B. (1985). The neighborhood walk: A study of sources of support in middle childhood from the child's perspective. *Monographs of the Society for Research in Child Development*, 50(3, Serial No. 210).

Buhrmester, D., & Furman, W. (1986). The changing functions of friends in childhood: A neo-Sullivanian perspective. In V. J. Derlega & B. A. Winstead (Eds.), *Friendship and social interaction* (pp. 41–62). New York: Springer-Verlag.

Buhrmester, D., & Furman, W. (1987). The development of companionship and intimacy. *Child Development*, 58, 1101–1103.

Buhrmester, D., & Furman, W. (1990). Age differences in perceptions of sibling relationships in childhood and adolescence. *Child Development*, 61, 1387–1398.

Cauce, A. M., Felner, R. D., & Primavera, J. (1982). Social support in high risk adolescents: Structural components and adaptive impact. *American Journal of Community Psychology*, 10, 417–428.

Coates, D. L. (1987). Gender differences in the structure and support characteristics of black adolescents' social networks. *Sex Roles*, 17, 667–687.

Epstein, J., & McPartland, J. (1976). The concept and measurement of the quality of school life. *American Educational Research Journal*, 50, 13–30.

Erikson, E. (1950). *Childhood and society*. New York: Norton.

Furman, W. (1984). Some observations on the study of personal relationships. In J. C. Masters & K. Yarkin-Levin (Eds.), *Interfaces be-*

tween developmental and social psychology (pp. 15–42). New York: Academic Press.

Furman, W. (1989). Developmental changes in children's social networks. In D. Belle (Ed.), *Children's social networks and social supports*. New York: Wiley.

Furman, W., & Buhrmester, D. (1985a). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology, 21*, 1016–1024.

Furman, W., & Buhrmester, D. (1985b). Children's perceptions of the qualities of sibling relationships. *Child Development, 56*, 448–461.

Furman, W., Jones, L., Buhrmester, D., & Adler, T. (1988). Children's parents', and observers' perspective on sibling relationships. In P. G. Zukow (Ed.), *Sibling interaction across culture* (pp. 165–183). New York: Springer-Verlag.

Furman, W., & Robbins, P. (1985). What's the point? Issues in the selection of treatment objectives. In B. Schneider, K. Rubin, & J. Leddingham (Eds.), *Children's relations: Issues in assessment and intervention* (pp. 41–54). New York: Springer-Verlag.

Gavin, L., & Furman, W. (1989). The development of cliques in adolescence. *Developmental Psychology, 25*, 827–834.

Gottman, J., & Mettetal, G. (1986). Speculations about social and affective development: Friendship and acquaintanceship through adolescence. In J. M. Gottman & J. G. Parker (Eds.), *Conversations of friends: Speculations on affective development* (pp. 192–240). Cambridge: Cambridge University Press.

Grotevant, H., & Cooper, C. (1986). Individuation in family relationships: A perspective on individual differences in the development of identity and role-taking skill in adolescence. *Human Development, 29*, 82–100.

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

Hirsch, B. J., & Rapkin, B. D. (1987). The transition to junior high school: A longitudinal study of self-esteem, psychological symptomatology, school life, and social support. *Child Development, 58*, 1235–1243.

Hunter, F. T. (1985). Adolescents' perceptions of discussions with parents and friends. *Developmental Psychology, 21*, 433–440.

Hunter, F. T., & Youniss, J. (1982). Changes in functions of three relationships during adolescence. *Developmental Psychology, 18*, 806–811.

Jacob, T. (1974). Patterns of family conflict and dominance as a function of child age and social class. *Developmental Psychology, 10*, 1–12.

Lewis, M., & Feiring, C. (1979). The child's social network: Social object, social functions, and their relationship. In M. Lewis & L. A. Rosenblum (Eds.), *The child and its family* (pp. 9–27). New York: Plenum.

Lewis, M., Feiring, C., & Kotsonis, M. (1984). The social network of the young child: A developmental perspective. In M. Lewis (Ed.), *Beyond the dyad* (pp. 129–160). New York: Plenum.

Maccoby, E. E. (1990). Gender and relationships: A developmental account. *American Psychologist, 45*, 513–520.

Margolin, G., & Patterson, G. R. (1975). Differential consequences provided by mothers and fathers for their sons and daughters. *Developmental Psychology, 11*, 537–538.

Montemayor, R. (1983). Parents and adolescents in conflict: All families some of the time and and some families most of the time. *Journal of Early Adolescence, 3*, 83–103.

Noller, P. (1980). Cross-gender effects in two-child families. *Developmental Psychology, 16*, 159–160.

Olson, P. H. (1977). Insiders' and outsiders' views of relationships: Research studies. In G. Levinger & H. L. Rausch (Eds.), *Close relationships: Perspectives on the meaning of intimacy*. Amherst: University of Massachusetts Press.

Pipp, S., Shaver, P., Jennings, S., Lamborn, S., & Fischer, K. W. (1985). Adolescents' theories about the development of their relationships with parents. *Journal of Personality and Social Psychology, 48*, 991–1001.

Powell, G. J. (Ed.). (1984). *The psychosocial development of minority children*. New York: Brunner/Mazel.

Raffaelli, M., & Larson, R. W. (1987). *Sibling interactions in late childhood and early adolescence*. Paper presented at the meetings of the Society for Research in Child Development, Baltimore, MD.

Reid, M., Landesman, S., Treder, R., & Jaccard, J. (1989). "My family and friends": Six- to twelve-year-old children's perceptions of social support. *Child Development, 60*, 896–910.

Shantz, C. U. (1987). Conflicts between children. *Child Development, 58*, 283–305.

Sharabany, R., Gershoni, R., & Hoffman, J. E. (1981). Girlfriend, boyfriend: Age and sex differences in intimate friendship. *Developmental Psychology, 17*, 800–808.

Shaver, P., Furman, W., & Buhrmester, D. (1985). Aspects of a life transition: Network changes, social skills and loneliness. In S. Duck & D. Perlman (Eds.), *The Sage series in personal relationships* (Vol. I, pp. 193–220). London: Sage.

Steinberg, L. (1989). *Adolescence*. New York: Knopf.

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: W. W. Norton.

Tinsley, B. R., & Parke, R. D. (1984). Grandparents as support and socialization agents. In M. Lewis (Ed.), *Beyond the dyad* (pp. 161–194). New York: Plenum.

Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others*. Englewood Cliffs, NJ: Prentice-Hall.

Wheeler, L., Reis, H. T., & Nezlak, J. (1983). Loneliness, social interaction, and sex roles. *Journal of Personality and Social Psychology*, **45**, 945–953.

Youniss, J., & Smollar, J. (1985). *Adolescent relations with mothers, fathers, and friends*. Chicago: University of Chicago Press.