The Company They Keep: Relation of Adolescents' Adjustment and Behavior to Their Friends' Perceptions of Authoritative Parenting in the Social Network

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Abstract:

Approximately 4,500 14- to 18-year-olds completed questionnaires concerning their parents' practices and their academic achievement, psychosocial competence, behavior problems, and internalized distress. Independent reports from participants' friends were used to measure authoritativeness in the peer network. Parental authoritativeness in the network benefits adolescents above and beyond the positive impact of parental authoritativeness at home. Network authoritativeness was associated with lower levels of delinquency and substance use among all participants, lower levels of school misconduct and peer conformity for boys, and greater psychosocial competence and lower levels of psychological distress among girls. The beneficial impact of network authoritativeness on adolescent behavior is (a) mediated mainly through its effect on adolescents' peers and (b) greatest among adolescents who perceive their own parents to be relatively more authoritative.

Article:

Ecologically oriented developmentalists influenced by Bronfenbrenner (1979, 1986) during the past two decades have emphasized the importance of considering the various levels of environment that influence individual growth and behavior. Originally, most research attention heeding Bronfenbrenner's advice focused attention on the level of the environment he termed the *microsystem.* Specifically, these studies have focused on the influence on children of their immediate surroundings, such as the family or the peer group. It is only more recently that researchers have begun to branch out in their consideration of context, extending the map of children's social worlds to include the larger and more distal influences in their lives, including their social networks outside the family.

Although many developmentalists believe that social networks are an important influence on the development of children, little theoretical work exists that might explain how these networks actually exert their influence. One exception is a model proposed by Coleman and Hoffer (1987), who suggested that community norms are maintained and enforced when unrelated adults within the community communicate with one another, and that children's socialization is facilitated when closure exists within the social network that encompasses the child and his or her parents. Contact among parents in a community, and between adolescents and nonfamilial adults, is presumed to benefit children through the increased prevalence of norm consensus within the community (Coleman, 1988).

Blyth and his colleagues (Blyth, Hill, & Thiel, 1982) have shown that when given opportunity to record all individuals who have an influence on their lives, early adolescents mention a large number of unrelated adults. In their study, approximately 10% of significant others named were nonrelated adults, most of whom resided within the same neighborhoods as the participants. It is likely that many of these adults were parents of adolescents' friends, because unrelated adults who do not have adolescent children of their own would have little interest in, or opportunity for, developing relationships with unrelated adolescents in their neighborhoods. Cochran (1990) suggested that the importance of nonrelated adults as influences in children's lives may also

increase as children grow older, with such individuals becoming especially influential during adolescence. It is likely that the increased freedom from parental supervision that occurs with age may result in adolescents having more opportunities to interact with adults in the community, and especially with the parents of their friends.

We found only one study of the actual influence of relationships with nonrelated adults on adolescent functioning, however. Cochran and Bo (1989) reported that having larger numbers of nonrelated adults within social networks is associated with better school performance and attendance and more positive social behavior among adolescent boys. It is interesting to note that these researchers did not find significant effects of nonkin adult relationships on antisocial outcomes such as alcohol use and delinquency.

The purpose of this article is to investigate whether adolescents are influenced by one particular set of nonrelated adults: their friends' parents. Specifically, we hypothesized that an adolescent will benefit from having friends who characterize their own parents as authoritative, over and above the benefits of having authoritative parents of his or her own. Authoritativeness, a style of parenting identified in the seminal studies of Baumrind (1967, 1971), combines high levels of parental warmth with high levels of firm control. Baumrind's original work on the dimensions of parenting style investigated the effects of her classification scheme on the adjustment of preschool children. She found that authoritative parenting was strongly associated with child competence, although its positive effects varied somewhat as a function of child gender. More recently, authoritative parenting has been shown to have beneficial effects on adolescent competence and adjustment across a wide array of domains, including academic achievement, mental health, behavior problems, and psychosocial competence (see Maccoby & Martin, 1983; Steinberg, 1990, for reviews).

In testing the hypothesis that authoritativeness in the adolescent's peer network will have beneficial effects on the child's development, we also ask whether any effect of authoritativeness in the social network is predominantly proximal or distal. Proximal influences occur through face-to-face contact between a nonkin adult and a child. In such instances, adults influence adolescents by acting as models, norm reinforcers, or sources of information (Case & Katz, 1992; Cochran, 1990).

Nonrelated adults also may influence adolescents distally; two mechanisms have been posited to explain this distal influence. First, nonrelated adults may affect adolescents through the adolescents' own parents, by providing emotional and instrumental support, by encouraging or discouraging specific parenting behaviors, or by providing models of various parenting practices (Case & Katz, 1992). Adolescents are then influenced by these network effects through the changed behavior of their own parents (for a review, see Cochran, 1990). Second, nonrelated adults may influence adolescents through the actions of the nonrelated adults' children. For example, a parent may inculcate a set of values or standards for behavior among his or her own children, who may then influence their peers to behave in a similar manner (Case & Katz, 1992). This second mechanism is considered within this article.

In addition to examining whether the parenting practices of one's friends' parents influence adolescents, whether proximally or distally, we also asked whether such an effect differs according to the home environment of the target adolescent. According to Coleman and Hoffer (1987), the positive outcomes of strong community ties may differentially affect children whose own families differ in their internal strength. Coleman and Hoffer offered two alternative scenarios for how the presence of a functional community may influence children: what we term *amplification* and *countermanding.* In the case of amplification, children who are already advantaged by the human and social capital within their own families are hypothesized to benefit most from residence in a functional community. In contrast, in the case of countermanding influence, the advantage conferred by the social structures of a functional community may benefit more those individuals who have fewer advantages within their own families. In the present study, we ask whether the parenting practices used in the adolescent's peer network amplify or countermand the practices that the youngsters experience at home.

Method

Participants

Our sample is drawn from students at nine high schools in Wisconsin and northern California. The schools were selected to yield a sample of students from different socioeconomic brackets, a variety of ethnic backgrounds (African American, Asian American, European American, and Hispanic American), different family structures (e.g., first-time two-parent, divorced, and remarried), and different types of communities (urban, suburban, and rural). Data for the present analyses were collected during the 1987-1988 school year by means of self-report surveys filled out by the students on 2 days of survey administration. (Because of its length, the survey was divided into two parts.)

Analyses conducted in our sample schools 1 year subsequent to the analyses presented in this article indicated that 60% of participants at that time reported knowing personally the parents of at least half of their school friends, and 91% reported knowing the parents of at least some of their school friends. This suggested to us that it was not inappropriate to conclude that our participants, for the most part, spent some time with their friends' parents.

Procedure

Recent reports suggest that the use of active-consent procedures in research on adolescents and their families (i.e., procedures requiring active parental written consent in order for their adolescents to participate in the research) may result in sampling biases that overrepresent well-functioning teenagers and families (e.g., Weinberger, Tublin, Ford, & Feldman, 1990). Although groups of participants and nonparticipants generated through such consent procedures may be comparable demographically (the dimension along which investigators typically look for evidence of selective participation), the procedure screens out a disproportionate number of adolescents who have adjustment problems or family difficulties. Because we were interested in studying adolescents with disengaged or hostile parents, as well as those with involved and warm parents, we were concerned that using the standard active-consent procedure (in which both parents and adolescents are asked to return signed consent forms to their child's school) would bias our sample toward families who were more authoritative. In addition, studies that consider outcome measures of deviant behaviors, such as substance abuse and delinquency, are virtually required to make use of self-report data, as more "objective" measures of such behaviors (such as official police reports) themselves suffer from biases and omissions (McCord, 1990).

After considering the age of our respondents and their ability to provide informed consent, and with the support of the administrators of our participating schools, the school districts' research review committees, representatives of the U.S. Department of Education (our chief funding agent), and our own institutions' human subjects committees, we decided to use a consent procedure that required "active" informed consent from the adolescents but "passive" informed consent from their parents. All parents in the participating schools were informed, by first-class mail, of the date and nature of our study well in advance of the scheduled questionnaire administration. (We provided schools with letters in stamped, unaddressed envelopes to be mailed by school officials to protect the privacy of the families.) Parents were asked to call or write to their child's school or our research office if they did not want their child to participate in the study. Fewer than 1% of the adolescents in each of the target schools had their participation withheld by their parents.

All of the students in attendance on each day of testing were advised of the purposes of the study and were asked to complete the questionnaires. Informed consent was obtained from all participating students. For each questionnaire administration, out of the total school populations, approximately 5% of the students chose not to participate (or had their participation withheld by parents), approximately 15% were absent from school on the day of questionnaire administration (this figure is comparable with national figures on daily school attendance), and approximately 80% provided completed questionnaires.

The use of this consent procedure had both costs and benefits. On the positive side, we had responses from a more representative sample of adolescents, including adolescents whose parents were not involved in school,

than one would otherwise have. On the negative side, however, our consent procedure did not permit us to obtain information from an equally representative set of parents. Rather than limit our study to the well-functioning parents who volunteered to participate in research of this sort, we chose to collect information on parenting practices from the adolescents themselves. We recognize that youngsters' reports of their parents' behavior may be colored by a variety of factors and should not be taken as objective assessments of parents' practices. Our use of adolescents' reports, however, permitted us to study a larger and more representative sample of young people than would have been the case if parents' participation in the study were required. Nevertheless, we recognize that it also is necessary to investigate the relation between parenting and adolescent adjustment using multiple methods and different sources of information. It is important to note, however, that information on the behavior of each adolescent's friends' parents was provided by the friends themselves and not by the target adolescent. Thus, any observed correlation between adolescent outcomes and the practices of their friends' parents cannot be an artifact of shared source variance.

Although over 11,000 adolescents participated in the survey, the number of participants used in the present analyses was reduced considerably by constraints imposed by the nature of the analyses. Only those students providing full answers to questions on parenting dimensions and demographics and who reported three or more identifiable friends who had provided information on their parents' behavior were retained in the analyses. This resulted in a sample of 4,431 students. Of this sample, 43% of participants were male, and 57% female. The sample was 19% seniors, 23% juniors, 28% sophomores, and 30% freshmen. Ethnic representation was as follows: 65% non-Hispanic White, 14% Asian American, 9% African American, 10% Hispanic American, and less than 1% each Native American, Middle Eastern, and Pacific Islander.

Despite this ethnic diversity, the sample was predominantly middle-class and professional (as indexed by parental education), with only about 8% of respondents from lower- or working-class origins, a homogeneity that is due, we believe, to the fact that less economically advantaged youths were less willing to provide the names of their friends on the questionnaire.[1] It is also important to bear in mind that participants in the study were students who attended school on the days of testing. Therefore, despite its ethnic heterogeneity, the sample on whom the analyses were performed is in all likelihood relatively more advantaged and more academically engaged than were nonparticipants.

Our requirement that participants included in the analyses provide the names of three or more friends who attended the same school and also provided questionnaire data resulted in the elimination from our sample of over half of all possible participants. We were concerned that this selective attrition would result in a sample of adolescents who were disproportionately well-adjusted. To test this possibility, we conducted a series of *t* tests comparing mean scores on all dependent variables for our retained participants versus those who did not report three or more identifiable friends. The results of the *t* tests indicated that, on all variables except school misconduct, psychological symptoms, and somatic symptoms, the retained participants were significantly more well-adjusted. More important than these mean differences, however, are differences in the variability in our outcome measures between the two samples of youngsters: Virtually without exception, there was significantly less variance in outcome scores among the students who participated fully in the study than among the students who did not. One important ramification of this is that our estimates of the effects of network authoritativeness are likely to be on the conservative side: Because variability in our outcome measures is constrained, it is more difficult to find significant relations between these measures and our independent variables.

Measures

Demographics. Students reported their sex, ethnicity, and the highest level of education completed by their parents.

Authoritativeness of respondent's parents. The questionnaire contained many items on parenting practices that were taken or adapted from existing measures (e.g., Dornbusch et al., 1985; Patterson & Stouthamer-Loeber, 1984; Rodgers, 1966) or developed for this program of work. On the basis of the previous work of Steinberg, Elmen, and Mounts (1989), a number of items were selected to correspond with the three dimensions

of authoritative parenting identified earlier, and these were subjected to exploratory factor analyses by using an oblique rotation. Three factors emerged, corresponding to the dimensions of Acceptance—Involvement, Behavioral Supervision and Strictness, and Psychological Autonomy Granting.[2] These factors are similar to those suggested in the earlier work of Schaefer (1965) and the recent work of Baumrind (1991a, 1991b). We labeled these scales in ways that both capture the item content of each and emphasize parallels between our measures and those used by other researchers.

The Acceptance—Involvement scale measures the extent to which the adolescent perceives his or her parents as loving, responsive, and involved (sample items: "I can count on her to help me out if I have some kind of problem" or "How often does your family do something fun together?"; 15 items, α = .72). The Strictness—Supervision scale assesses adolescents' experience of parental monitoring and limit-setting (sample items: "How much do your parents try to know where you go at night?"; "In a typical week, what is the latest you can stay out on school nights [Monday—Thursday]?"; or "How much do your parents really know what you do with your free time?"; 9 items, α = .76). The Psychological Autonomy Granting scale assesses the extent to which adolescents feel their parents use noncoercive, democratic discipline and encourage their offspring to express individuality within the family (sample items, reverse scored: "How often do your parents tell you that their ideas are correct and that you should not question them?" or "How often do your parents answer your arguments by saying something like 'You'll know better when you grow up'?"; 12 items, α = .82). The items comprising these three dimensions cover a wide variety of topics and index the child's perception of the parent's overall behavior, rather than the parent's specific socialization practices.

Composite scores were calculated on each of the three parenting dimensions. For most of the items, students were asked to describe the parent or parents with whom they lived. On those items for which students in two-parent homes were asked to answer separately for their mother and father, scores were averaged before forming composites. (Baumrind [1991b] reported that there is considerable convergence between mothers' and fathers' ratings.) On the basis of previous work and the theoretical model of authoritative parenting tested in this study, we constructed an ordinal measure of authoritativeness as follows: families scoring above the sample median on Acceptance-Involvement, Strictness-Supervision, and Psychological Autonomy (*authoritative)* were assigned an authoritativeness score of 3. Families scoring below the sample median on all three of the dimensions *(nonauthoritative)* were assigned an authoritativeness score of 0. Families scoring above the sample median on one *(somewhat nonauthoritative)* or two *(somewhat authoritative)* of the perceived parenting dimensions were assigned scores of 1 or 2, respectively. Previous work using these instruments and this operationalization (Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994; Steinberg, Lamborn, Dornbusch, & Darling, 1992; Steinberg, Mounts, Lamborn, & Dornbusch, 1991) has demonstrated that adolescents from authoritative families, so defined, score more positively than their peers and those from nonauthoritative families score lower than their peers on a wide range of outcome variables, including those tapping school performance and engagement, psychosocial competence, internalized distress, and behavior problems.

Authoritativeness in the peer network. Participants provided the names of up to five of their closest friends. Only those target participants who provided names of at least three friends who had also answered questions about their own parents' perceived parenting dimensions were retained in the present analyses. We calculated the authoritativeness of each friend's parents according to the procedure described earlier (i.e., each friend's parents received a score ranging from 0 to 3).

Target participants were then classified into one of five levels reflecting the prevalence of authoritativeness among their friends' parents:

Level 1, mostly nonauthoritative: At least half of the reported friends had nonauthoritative parents, and no friends had authoritative parents.

Level 2, some nonauthoritative: At least one of the reported friends had nonauthoritative parents, and no friends had authoritative parents.

Level 3, neither authoritative nor nonauthoritative: No reported friends had authoritative or nonauthoritative parents.

Level 4, some authoritative: At least one of the reported friends had authoritative parents.

Level 5, mostly authoritative: At least half of the reported friends had authoritative parents.

The degree of authoritativeness in the adolescent's home was only modestly correlated with the prevalence of authoritativeness in his or her peer network (*r = .14*).

Academic achievement. The questionnaire battery contained five measures of academic achievement. Students provided a self-report of their grade point average (GPA) scored on a conventional 4-point scale. Previous work has indicated that self-reported grades and actual grades taken from official school records are highly correlated (*r* = .80; Donovan & Jessor, 1985; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987).[3] Students also reported on the amount of time spent on homework each week, averaged across their four major classes (mathematics, English, social studies, and science). Time spent on homework responses were on a 6-point scale for each participant with responses ranging from *none* (1) *to about 4 hours or more* (6). Bonding to teachers and school orientation are two scales that were derived by factor analyzing a set of items that assesses the students' feelings of attachment to school (Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). Responses to these items were on a 4-point scale, from *strongly agree* (1) to *strongly disagree* (4). Bonding to teachers (five items; α = .75) assesses the student's attachment to his or her teachers. A sample item is, "I care what most of my teachers think of me." School orientation (six items; α = .69) measures students' valuing of and commitment to school. A sample item is, "I feel satisfied with school because I'm learning a lot." Finally, the academic competence subscale of the Youth Self-Perception Profile (Harter, 1982) includes five items asking about the student's perceptions of his or her intelligence in relation to classmates, ability to complete homework quickly, and capability in classwork (α = .73).

Behavior problems. Four measures were used to assess behavior problems. First, respondents provided information on their frequency of cigarette, alcohol, marijuana, and other drug use since the beginning of the school year, which was used to form an index of drug and alcohol use (α = .86; Greenberger, Steinberg, & Vaux, 1981). Second, respondents reported on their frequency of involvement in such delinquent activities as theft, carrying a weapon, vandalism, and using a phony I.D. since the beginning of the school year, used to form an index of delinquent activity (α = .82; Gold, 1970). Third, information was gathered on respondents' school misconduct since the beginning of the school year (cheating, copying homework, etc.; α = .68; Ruggiero, 1984). All three of these measures incorporated items measured on a 4-point scale with responses ranging from *never* (1) to *often* (4). Finally, a measure of susceptibility to antisocial peer pressure presented five hypothetical situations in which peers urge the target to participate in misconduct (α = .75; adapted from Berndt, 1979). Responses to these items were measured on a 4-point scale assessing whether an adolescent *definitely would* (1) to *definitely would not* (4) engage in the misconduct urged by peers.

Psychosocial competence. The four indexes of psychosocial competence include a measure of Global Self-Esteem (Rosenberg, 1965), the Social Competence subscale of the Adolescent Self-Perception Profile (Harter, 1982), and two subscales from the Psychosocial Maturity Inventory, Work Orientation and Self-Reliance (Form D; Greenbergei Josselson, Knerr, & Knerr, 1974). The Self-Esteem scale is a 10-item measure α = .87) of global self-worth adapted from Rosenberg (1965; sample item: "On the whole, I am satisfied with myself "). The measure contained items for which responses were scored on a 4-point scale ranging from *strongly agree* (1) to *strongly disagree* (4). The Social Competence measure (α = .78) includes five items that ask students whether they perceive themselves as popular, as having many friends, and as making friends easily. The participants are asked to read two alternatives (e.g., "Some teenagers feel that they are socially accepted, but other teenagers wish that more people their age would accept them") and choose the one that is more like themselves. The Work Orientation α = .73) and Self-Reliance (α = .81) subscales are each composed of 10 items. The Work Orientation scale measures the adolescent's pride in the successful completion of tasks. A

sample item, reverse coded, is "I find it hard to stick to anything that takes a long time." The Self-Reliance scale measures the adolescent's feelings of internal control and ability to make decisions without extreme reliance on others. A sample item, reverse coded, is "Luck decides most things that happen to me." Both subscales contained measures for which responses were scored on a 4-point scale ranging from *strongly agree* (1) to *strongly disagree* (4).

Internalized distress. Two indexes of internalized distress were adapted from the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977): Psychological Symptoms (anxiety, depression, tension, fatigue, insomnia, etc.; α = .88) and Somatic Symptoms (headaches, stomach aches, colds, etc.; α = .67). For each scale, participants were asked how often during the past month they had experienced the symptoms. They responded on a 4-point scale ranging from *never (1)* to *3 times or more* (4).

Means and standard deviations of the independent and dependent variables are presented in Table 1.

Table 1
Means and Standard Deviations of Variables

	Boys (n = 1,905)		Girls (n = 2,526)	
Variable	*M*	*SD*	*M*	*SD*
Home authoritativeness[a]	1.57	0.95	1.70	0.95
Network authoritativeness[a]	3.36	1.05	3.54	1.06
Grade point average[a]	2.95	0.77	3.03	0.74
Homework[a]	3.81	1.26	4.00	1.16
Bonding to teachers[a]	2.99	0.60	3.09	0.57
School orientation[a]	2.78	0.56	2.84	0.55
Academic competence[a]	3.01	0.58	2.89	0.64
Delinquency[a]	1.21	0.35	1.09	0.21
Drug and alcohol use	1.58	0.72	1.54	0.70
School misconduct[b]	2.38	0.70	2.34	0.63
Peer susceptibility[a]	2.10	0.63	1.92	0.57
Work orientation[a]	2.79	0.48	2.86	0.48
Self-reliance[a]	3.03	0.50	3.16	0.47
Self-esteem[a]	3.11	0.50	2.93	0.52
Social competence[c]	3.03	0.60	3.08	0.60
Psychological symptoms[a]	2.25	0.75	2.73	0.75
Somatic symptoms[a]	1.99	0.60	2.28	0.58

[a] $p < .001$ for contrast between boys and girls. [b] $p < .05$ for contrast between boys and girls. [c] $p < .01$ for contrast between boys and girls.

Plan of Analysis

In light of prior research indicating that the impact of authoritative parenting on some aspects of adolescent adjustment may vary as a function of ethnicity or family structure (see Steinberg et al., 1991) and that the impact of social networks on individual behavior may vary as a function of gender (Blyth et al., 1982; Cochran, 1990), all analyses were first conducted separately within groups defined by adolescent ethnicity and gender (e.g., African American boys, African American girls, Asian American boys, Asian American girls, etc.) and family structure and gender. Because results indicated no significant ethnic or family structure differences in patterns of relations between perceived parenting practices *and* adolescent outcomes, analyses were conducted with the sample split by sex only.

The analysis proceeded in two steps. First, we wished to examine the association between the parenting practices of each adolescent's close friends (as reported by those friends) and the adolescent's own behavior, after taking into account the perceived parenting practices of the adolescent's own parents. To do this, we conducted a series of hierarchical regression analyses in which we first entered a score reflecting the level of perceived authoritativeness in the respondent's home, next entered a score reflecting the prevalence of authoritativeness in the respondent's peer group, and finally entered a term reflecting the interaction between the two parenting measures. The interaction term was tested to examine whether the impact of perceived authoritative parenting in the adolescent's social network is differentially predictive of adjustment among adolescents whose own parents are described as relatively high versus relatively low in authoritativeness

themselves (i.e., whether authoritativeness in the peer network amplifies authoritativeness at home, countermands nonauthoritativeness at home, or neither).

The second series of analyses were conducted to determine whether any observed association between authoritative parenting in the adolescent's peer network and adolescent adjustment was mediated proximally by the behavior of the adolescent's peers themselves. In these analyses, hierarchical regressions were conducted in which we first entered a score reflecting the level of perceived authoritativeness in the respondent's home, next entered a score reflecting the prevalence of authoritativeness in the respondent's peer group, and finally entered a term reflecting the behavior of the adolescent's peers on the outcome in question. These analyses were conducted only for those outcomes that had been significantly predicted by the network parenting measure in the first series of regressions. Peer behavior was presumed to mediate the connection between network parenting and adolescent adjustment if a significant association between network parenting and adolescent adjustment diminished to nonsignificance once peer behavior was taken into account.

Our decision to enter network authoritativeness into the regression before entering peer behavior was based on our interest in testing a particular model examining the proximal (i.e., direct) and distal (i.e., indirect) influence of friends' parents on adolescent behavior. The moderate correlations (—.23 to .31) between network authoritativeness and our indexes of peer behavior suggest that their potentially differing roles in the socialization of adolescents can to some extent be disentangled.

Table 2
Correlations of All Variables by Sex

Variable	1	2	3	4	5	6	7
1. Home authoritativeness	—	.15***	.20***	.18***	.23***	.24***	.27***
2. Network authoritativeness	.12***	—	.14***	.09***	.06***	.04**	.15***
3. Grade point average	.19***	.14***	—	.41***	.19***	.27***	.54***
4. Homework	.12***	.08***	.35***	—	.14***	.21***	.26***
5. Bonding to teachers	.23***	.03	.16***	.15***	—	.46***	.23***
6. School orientation	.24***	.07***	.25***	.25***	.45***	—	.26***
7. Academic competence	.25***	.10***	.52***	.23***	.15***	.22***	—
8. Delinquency	−.17***	−.12***	−.19***	−.14***	−.24***	−.25***	−.15***
9. Drug and alcohol use	−.16***	−.15***	−.24***	−.09***	−.21***	−.28***	−.13***
10. School misconduct	−.17***	−.07***	−.17***	−.13***	−.23***	−.34***	−.15***
11. Peer susceptibility	−.22***	−.08***	−.21***	−.18***	−.27***	−.41***	−.12***
12. Word orientation	.25***	.07***	.26***	.23***	.20***	.47***	.34***
13. Self-reliance	.19***	.01	.20***	.16***	.13***	.25***	.32***
14. Self-esteem	.25***	.06***	.16***	.10***	.24***	.26***	.35***
15. Social competence	.15***	.00	.00	.09***	.18***	.08***	.22***
16. Psychological symptoms	−.18***	−.05	−.02	.03	−.11***	−.18***	−.12***
17. Somatic symptoms	−.09***	−.03	−.10***	.00	−.08***	−.15***	−.11***

Note. Correlations for girls are above the diagonal; correlations for boys are below the diagonal.
** $p < .05$. *** $p < .01$.

8	9	10	11	12	13	14	15	16	17
−.20***	−.19***	−.15***	−.23***	.28***	.21***	.26***	.16***	−.24***	−.14***
−.13***	−.12***	−.05**	−.08***	.09***	.08***	.09***	.06***	−.09***	−.02
−.21***	−.22***	−.17***	−.17***	.33***	.18***	.20***	.02	−.04	−.07***
−.14***	−.09***	−.07***	−.12***	.26***	.18***	.12***	.06**	.04***	−.01
−.19***	−.22***	−.19***	−.27***	.29***	.15***	.28***	.18***	−.14***	−.09
−.25***	−.31***	−.33***	−.38***	.45***	.24***	.27***	.12***	−.22***	−.17***
−.12***	−.15***	−.11***	−.16***	.39***	.34***	.39***	.30***	−.15***	−.11***
—	.43***	.26***	.36***	−.20***	−.12***	−.11***	−.01	.19***	.19***
.47***	—	.45***	.52***	−.19***	.01	−.10***	.12***	.26***	.21***
.36***	.44***	—	.49***	−.30***	−.00	−.09***	.09***	.24***	.22***
.40***	.50***	.48***	—	−.33***	−.15***	−.18***	.07***	.21***	.15***
−.20***	−.17***	−.28***	−.35***	—	.49***	.42***	.20***	−.19***	−.17***
−.17***	−.04	−.01	−.24***	.56***	—	.43***	.30***	−.07***	−.07***
−.12***	−.04	−.08***	−.12***	.39***	.41***	—	.34***	−.32***	−.21***
−.00	.13***	.08***	.05	.17***	.22***	.36***	—	−.12***	−.08***
.07**	.18***	.21***	.09***	−.15***	−.02	−.30***	−.16***	—	.54***
.10***	.20***	.18***	.16***	−.16***	−.08***	−.15***	−.02	.51**	—

Results

Correlations Between Independent and Dependent Variables

Table 2 presents the intercorrelations among all independent and dependent variables for male and female participants. As these matrices indicate, there are significant correlations between parental authoritativeness and all outcome variables for both boys and girls. There are also significant correlations between parental authoritativeness in the peer network and most outcome variables for both boys and girls. In addition, patterns of significant correlations among variables within each domain for both sexes indicate coherent groupings of outcome measures.

Relation Between Authoritative Perceived Parenting at Home and Adolescent Adjustment

As Tables 3 through 6 indicate, and consistent with much previous research, across all outcomes and among both sexes, adolescents' reports of their parents' behavior are significantly related to their scores on measures of adjustment. Specifically, higher levels of perceived authoritativeness are associated with lower levels of misconduct and internalized distress and higher levels of academic achievement and psychosocial adjustment.

Table 3
Unstandardized (B) and Standardized (β) Regression Coefficients for Relations Between Authoritativeness in the Adolescent's Home, Prevalence of Parental Authoritativeness in the Peer Network, and Indicators of Academic Achievement

Variable	Boys		Girls	
	B	*β*	*B*	*β*
Grade point average				
1. Home authoritativeness	.15	.19***	.15	.20***
2. Home authoritativeness	.14	.17***	.14	.18***
Network authoritativeness	.08	.11***	.08	.11***
3. Home authoritativeness	.08	.10	.04	.05
Network authoritativeness	.06	.08*	.03	.05
Interaction	.02	.08	.03	.16*
Time on homework				
1. Home authoritativeness	.16	.12***	.23	.18***
2. Home authoritativeness	.15	.11***	.21	.17***
Network authoritativeness	.08	.06***	.08	.07***
3. Home authoritativeness	.12	.09	.21	.17*
Network authoritativeness	.06	.05	.08	.07*
Interaction	.01	.03	.00	.00
Bonding to teachers				
1. Home authoritativeness	.14	.23***	.14	.23***
2. Home authoritativeness	.14	.23***	.14	.23***
Network authoritativeness	−.00	−.01	.02	.03
3. Home authoritativeness	.09	.14*	.23	.38***
Network authoritativeness	−.03	−.05	.06	.11***
Interaction	.02	.11	−.03	−.19**
School orientation				
1. Home authoritativeness	.14	.24***	.14	.24***
2. Home authoritativeness	.14	.24***	.14	.24***
Network authoritativeness	.02	.04	.00	.01
3. Home authoritativeness	.09	.16**	.15	.25***
Network authoritativeness	−.00	−.00	.01	.02
Interaction	.01	.10	.00	−.02
Academic competence				
1. Home authoritativeness	.15	.25***	.18	.27***
2. Home authoritativeness	.15	.24***	.17	.25***
Network authoritativeness	.04	.07***	.06	.11***
3. Home authoritativeness	.06	.10	.07	.10
Network authoritativeness	.00	.00	.02	.03
Interaction	.03	.16	.03	.19**

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

Table 4
Unstandardized (B) and Standardized (β) Regression Coefficients for Relations Between Authoritativeness in the Adolescent's Home, Prevalence of Parental Authoritativeness in the Peer Network, and Indicators of Behavior Problems

Variable	Boys		Girls	
	B	*β*	*B*	*β*
Delinquency				
1. Home authoritativeness	−.06	−.17***	−.04	−.20***
2. Home authoritativeness	−.06	−.16***	−.04	−.18***
Network authoritativeness	−.03	−.09***	−.02	−.11***
3. Home authoritativeness	−.09	−.25***	−.08	−.38***
Network authoritativeness	−.05	−.14***	−.04	−.21***
Interaction	.01	.10	.01	.25***
Drug and alcohol use				
1. Home authoritativeness	−.12	−.16***	−.14	−.20***
2. Home authoritativeness	−.11	−.14***	−.13	−.18***
Network authoritativeness	−.08	−.12***	−.07	−.10***
3. Home authoritativeness	−.15	−.21***	−.23	−.32***
Network authoritativeness	−.10	−.15***	−.11	−.18***
Interaction	.01	.08	.03	.17**
School misconduct				
1. Home authoritativeness	−.12	−.17***	−.10	−.15***
2. Home authoritativeness	−.12	−.16***	−.10	−.15***
Network authoritativeness	−.03	−.05**	−.02	−.03
3. Home authoritativeness	−.10	−.13	−.09	−.14*
Network authoritativeness	−.02	−.03	−.02	−.13
Interaction	−.01	−.04	.00	−.01
Susceptibility to antisocial peer pressure				
1. Home authoritativeness	−.15	−.22***	−.14	−.23***
2. Home authoritativeness	−.14	−.21***	−.13	−.23***
Network authoritativeness	−.03	−.05**	−.02	−.03
3. Home authoritativeness	−.08	−.12	−.08	−.30***
Network authoritativeness	−.00	−.01	−.04	−.08*
Interaction	−.02	−.12	.01	.10

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

Relation Between Authoritative Parenting in the Peer Network and Adolescent Adjustment

Academic achievement. Table 3 indicates that the level of authoritative parenting in the adolescent's peer network is positively related to his or her performance in school, even after taking into account adolescents' reports of the degree of authoritativeness in their own household. Among both male and female participants, there is a significant positive relation between network authoritativeness and GPA, time spent on homework,

and academic competence. In addition to these main effects of network parenting, inspection of the interaction terms indicates that for GPA, bonding to teacher, and academic competence, among girls, the positive relation between network parenting and adolescent adjustment varies as a function of the level of perceived authoritativeness in the adolescent's own home. The negative interaction term for bonding to teacher suggests that the positive effects of network authoritativeness are strongest for those adolescents who characterize their own parents as relatively less authoritative (a countermanding effect). The positive interaction terms for academic competence and GPA, however, suggest that the beneficial effects of network authoritativeness on these variables are strongest for girls whose own parents are themselves characterized as relatively more authoritative (an amplification effect).

Behavior problems. Among both boys and girls, authoritativeness in the peer network is associated with lower rates of delinquency and substance use, above and beyond the effects of perceived authoritativeness at home (see Table 4). Among boys, network authoritativeness is also negatively related to school misconduct and susceptibility to antisocial peer pressure. The interaction terms indicate that, among girls, the relation between network authoritativeness and minor delinquency and substance use is strongest for adolescents whose parents are described as relatively more authoritative (an amplification effect).

Psychosocial competence. Regression analyses examining the relation between network authoritativeness and adolescent psychosocial competence indicate significant main effects only among girls. Among girls, network authoritativeness is positively related to work orientation, self-reliance, and self-esteem, even after the effects of perceived authoritativeness at home are taken into account (Table 5). Among boys, the main effect of network authoritativeness is not significant, but the significant positive interaction term indicates that the beneficial impact of network authoritativeness on work orientation is strongest among boys who describe their parents as relatively more authoritative (an amplification effect).

Internalized distress. Among girls, parental authoritativeness in the peer network is associated with less psychological distress, even after taking into account the beneficial effects of having authoritative parents at home (see Table 6). Among boys, the main effect of network authoritativeness is not significant, but the positive interaction between psychological symptoms and network authoritativeness indicates that the beneficial influence of network authoritativeness is stronger among adolescents whose parents are described as relatively more authoritative (an amplification effect).

Mediating Role of Friends' Behavior

The results described thus far indicate that having friends who describe their parents as authoritative is associated with greater academic competence and less problem behavior among adolescent boys and girls and, among girls, with greater psycho-social competence and less psychological distress. These apparent benefits are over and above the advantages associated with describing one's own parents as authoritative. In the next series of analyses, we ask whether the positive impact of parental authoritativeness in the peer network is proximal (i.e., a direct influence of the friends' parents on the target adolescent) or distal (i.e., transmitted indirectly, through the behavior of the peers). Recall that this question was examined by reconsidering the relation between perceived network authoritativeness and adolescent adjustment while controlling not only for authoritativeness in the adolescent's home but also for the adolescent's peers' behavior.

Academic achievement. The relations between parenting in the peer network and adolescent academic competence are indeed mediated by the behavior of the adolescent's peers. Specifically, the previously significant relations between network authoritativeness and school performance, time spent on homework, and academic self-conceptions are each diminished to nonsignificance once the parallel characteristic of the adolescent's peers is taken into account. Among girls only, there re-network authoritativeness and psychosocial adjustment for girls is also mediated by the adjustment of peers, as the previously significant coefficients for work orientation, self-reliance, and self-esteem are diminished to nonsignificance by controlling for peer scores on these variables.

Table 5
Unstandardized (B) and Standardized (β) Regression Coefficients for Relations Between Authoritativeness in the Adolescent's Home, Prevalence of Parental Authoritativeness in the Peer Network, and Indicators of Psychosocial Competence

Variable	Boys		Girls	
	B	*β*	*B*	*β*
Work orientation				
1. Home authoritativeness	.13	.25***	.14	.28***
2. Home authoritativeness	.12	.24***	.14	.27***
Network authoritativeness	.02	.04	.02	.05**
3. Home authoritativeness	.03	.06	.15	.30***
Network authoritativeness	−.03	−.06	.03	.07*
Interaction	.03	.22*	−.01	−.04
Self-reliance				
1. Home authoritativeness	.10	.19***	.10	.21***
2. Home authoritativeness	.10	.19***	.10	.20***
Network authoritativeness	−.01	−.01	.02	.05**
3. Home authoritativeness	.05	.09	.10	.21***
Network authoritativeness	−.03	−.06	.02	.06
Interaction	.02	.12	.00	−.01
Self-esteem				
1. Home authoritativeness	.13	.25***	.14	.26***
2. Home authoritativeness	.13	.25***	.14	.25***
Network authoritativeness	.01	.03	.03	.05**
3. Home authoritativeness	.12	.24***	.11	.21***
Network authoritativeness	.01	.02	.01	.03
Interaction	.00	.02	.01	.06
Social competence				
1. Home authoritativeness	.10	.15***	.10	.16***
2. Home authoritativeness	.10	.16***	.10	.15***
Network authoritativeness	−.01	−.02	.02	.04
3. Home authoritativeness	.08	.13	.11	.18**
Network authoritativeness	−.02	−.03	.03	.05
Interaction	.01	.03	.00	−.03

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

Table 6
Unstandardized (B) and Standardized (β) Regression Coefficients for Relations Between Authoritativeness in the Adolescent's Home, Prevalence of Parental Authoritativeness in the Peer Network, and Indicators of Internalized Distress

Variable	Boys		Girls	
	B	*β*	*B*	*β*
Psychological symptoms				
1. Home authoritativeness	−.14	−.18***	−.19	−.24***
2. Home authoritativeness	−.14	−.18***	−.18	−.23***
Network authoritativeness	−.02	−.02	−.04	−.06***
3. Home authoritativeness	−.28	−.36***	−.13	−.16**
Network authoritativeness	−.08	−.16**	−.02	−.02
Interaction	.04	.22**	−.01	−.08
Somatic symptoms				
1. Home authoritativeness	−.06	−.09***	−.09	−.14***
2. Home authoritativeness	−.06	−.09***	−.09	−.14***
Network authoritativeness	−.01	−.02	.00	.00
3. Home authoritativeness	−.12	−.19**	−.10	−.16**
Network authoritativeness	−.04	−.07	−.00	−.01
Interaction	.02	.12	.00	.02

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

Internalized distress. The significant relation between perceived network authoritativeness and psychological symptoms among girls is reduced to nonsignificance by the addition of peer psychological symptoms to the regression equation, indicating that the relation between parental authoritativeness among one's peers and internalized distress is mediated through the psychological state of the peers themselves.

Discussion

The link between parental authoritativeness and adolescent adjustment is well established in the literature on the socialization of young people (Maccoby & Martin, 1983). The present investigation extends this connection between authoritative parenting and adolescent competence to yet a more distal context, by demonstrating that the prevalence of parental authoritativeness in an adolescent's network of peers is also associated with a variety of indicators of healthy adjustment, above and beyond the contribution of perceived authoritativeness in the adolescent's family of origin. Specifically, adolescents whose friends describe their parents as authoritative earn higher grades in school, spend more time on homework, have more positive perceptions of their academic competence, and report lower levels of delinquency and substance use. In addition, boys whose friends describe their parents as authoritative report lower levels of peer conformity and are less likely to engage in school misconduct. Among girls, higher levels of network authoritativeness are associated with better psychological functioning (as indexed by higher scores on our measures of work mains a trend (B = .03, β = .05), $t(3, 1460)$ = 1.79, p = .07, in the relation between network authoritativeness and academic competence after controlling for the average academic competence of their peers.

Behavior problems. Most of the relations between perceived network authoritativeness and adolescent problem behavior also are mediated by the behavior of the adolescent's peers. Among boys, the previously observed significant relations between network authoritativeness and substance use, school misconduct, and susceptibility to antisocial peer pressure all become nonsignificant once friends' scores on the same outcome variables are

taken into account. Among girls, this is also the case with respect to substance use. It is interesting to note, however, that the negative relation between perceived network authoritativeness and delinquency remains significant for both boys (B = -.02, β = -.06), t(3, 1379) = -2.35, $p < .05$, and girls (B = -.01, β = -.07), t(3, 1894) = -3.07, $p < .01$, after controlling for peer delinquency, suggesting that an adolescent's friends' parents may have a proximal effect on his or her behavior in this specific domain. That is, the deterrent effect of network authoritativeness on adolescent delinquency is not mediated solely through the proximal influence of peers.

Psychosocial adjustment. The relation between perceived orientation, self-reliance, and self-esteem) and lower levels of psychological distress, such as depressed affect or anxiety.

The results presented here also suggest a mechanism through which authoritative parenting in the adolescent's peer network may operate. The influence of authoritativeness among the adolescent's friends' parents is not, for the most part, direct but is indirect, with the proximal influence being the friends' behavior. Our interpretation of the results is that authoritative parenting is associated with adolescent competence, and competent youngsters are attracted to, and influence, each other. We recognize, however, that this research effort has tested only one of several possible models to account for these findings, and that longitudinal and experimental data are needed to further understand the causal and temporal relations among these variables. The preliminary results reported here nevertheless should encourage other investigators to examine further the direct and indirect roles of nonfamilial adults in adolescents' socialization.

Although the design of this study does not allow us to disentangle the contributions of peer socialization versus peer selection, prior research has shown that both processes operate in domains such as problem behavior (e.g., Kandel, 1978) and academic achievement (Epstein, 1983). In all likelihood, therefore, well-adjusted adolescents from authoritative homes select (and are selected by) similarly competent—and to a certain extent, similarly raised—peers, and experiences within their peer group serve to amplify and maintain their higher level of adjustment. In contrast, less competent adolescents from nonauthoritative homes are more likely to select comparably less competent peers—from comparably nonauthoritative homes—and their peer group amplifies and maintains their disadvantage (see also Brown, Mounts, Lamborn, & Steinberg, 1993).

A different mechanism must be proposed to account for the link between network authoritativeness and delinquency, however. Among both boys and girls, the relation between network authoritativeness and involvement in delinquent activities remains significant even after controlling for the level of delinquency among the adolescents' peers. The possibility cannot be dismissed that these relations remained significant only by chance, although the fact that the same finding emerged independently among both boys and girls argues against this. We think it plausible that the prevalence of authoritativeness among one's friends' parents may proximally diminish the likelihood of an adolescent engaging in delinquent activities, perhaps because of the higher level of shared social control provided by a network of authoritative parents—an interpretation consistent with research on the impact of parental vigilance on communitywide delinquency (see also Sampson & Groves, 1989). By definition, authoritative parents are careful monitors of their children's behavior; intentionally or inadvertently, they may monitor their children's associates as well.

As one of the first studies to date to examine the potential impact of friends' parents on adolescent behavior, the results presented here are in need of replication and should be viewed with caution. Because of the reluctance of less economically advantaged adolescents to provide the names of their friends, the sample within which these analyses have been performed, while ethnically diverse, is predominantly a sample of adolescents from middle-class and professional families. We do not know whether the effects of authoritativeness in the peer network vary at different levels of family socioeconomic status, nor do we know if the results reported here would be comparable in a sample of less well-adjusted teens. Within this socioeconomically and psychologically advantaged group, however, we do find that the observed effects of network authoritativeness are comparable across ethnic groups. Researchers involved in similar research efforts in the future should be aware that poorer

and less well-adjusted adolescents may be less likely to provide the information necessary for conducting network analyses, and they should take special measures to overcome this restriction.

It is also important to bear in mind that the reports of parenting practices and outcome variables in this study were obtained from adolescents themselves. As has been argued elsewhere, there is an extensive literature documenting that adolescents can accurately and reliably report on their parents' practices (see Golden, 1969; Moscowitz & Schwarz, 1982) and on their own academic achievement (Dornbusch et al., 1987), problem behavior (McCord, 1990), psychological distress (Roberts, Andrews, Lewinson, & Hops, 1990), and psychosocial competence (Greenberger & Bond, 1976). Moreover, longitudinal analyses of this same data set have shown that the predictive validity of our self-report measures of parenting cannot be explained by common source or method variance (Steinberg et al., 1994). Most important, our measures of authoritativeness among peers' parents, as well as our measures of peer behavior, are obtained from peers themselves and are not based on target adolescents' perceptions. Nevertheless, we recognize that future studies of adolescent socialization by peers and non-familial adults would be strengthened by the use of data from multiple methods and sources.

In the present study, the influence of network authoritativeness is more consistently observed among girls than boys, and, more-important, this influence is observed in different domains for the two sexes. Only among girls are effects of network authoritativeness observed in the areas of psychosocial adjustment and internalized distress. In contrast, misconduct is more consistently related to network authoritativeness among boys than girls. One reason for this sex difference may inhere in Cochran and Bo's (1989) suggestion that boys are mainly influenced by extensive casual involvement with nonrelated adults, whereas girls are influenced by intimate involvement. That network authoritativeness among girls is associated with such outcomes as work orientation, self-reliance, self-esteem, and psychological distress may reflect the fact that girls' relationships with significant others are more intimate, and thus more likely to influence internal psychological states. Behavioral outcomes, such as misconduct, may be more influenced by the casual interactions with network adults experienced by boys.

Theorists have disagreed over whether the potential beneficial impact of membership in a network high in social capital is likely to be strongest among those who are already advantaged (what Coleman and Hoffer [1987] referred to as *amplification)* or, in contrast, among those with limited resources of their own (i.e., *countermanding).* Consideration of the interaction effects found in the present study suggest that, where network authoritativeness differentially influences adolescents whose parents vary in their own levels of authoritativeness, the effect is more often than not one of amplification. In other words, adolescents who characterize their own parents as relatively more authoritative appear to benefit more from membership in a peer network with other authoritatively reared youngsters than do adolescents in similar networks but who are from less authoritative homes. It may be the case that adolescents may need certain "home advantages" to be able to take advantage of the social capital in their networks.

On the basis of the work presented here, it appears that Coleman's (1988) ideas concerning the importance of social capital within a network are important notions that can assist researchers interested in extending the current understanding of influences on child adjustment beyond those of parents and peers separately. This research indicates that membership in a community of peers and adults who encourage adjustment and good behavior on the parts of other adolescents within the community is beneficial above and beyond the presence of such positive influences within the immediate family. It is expected that future research efforts that focus even more clearly on the influence of time spent with community adults will find even stronger effects of functional communities and the social capital within them.

Notes:

[1] Researchers interested in collecting similar data should bear this in mind. We did not find that less-advantaged students were reluctant to complete the questionnaires in general, but they specifically balked at providing the names of their friends.

[2] As we report elsewhere in detail (Steinberg, Mounts, Lamborn, & Dornbusch, 1991), this factor structure is virtually identical across ethnic, social class, and family structure groups.
[3] The use of our particular consent procedure prohibited our obtaining grades from official school records in many of our schools. In Wisconsin, for example, active parental consent is required to gain access to school records. Given the advantages of the passive consent procedure we used, and in light of the high correlation between actual grades and high school students' reports, we believe that using self-reports of school performance was justified.

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