



Published in final edited form as:

Am J Orthopsychiatry. 2008 January ; 78(1): 47–53. doi:10.1037/0002-9432.78.1.47.

Relationship Network Quality: Adolescent Adjustment and Perceptions of Relationships With Parents and Friends

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Abstract

Early, mid-, and late adolescents ($N = 406$) from an ethnically diverse community completed questionnaires describing positive and negative features of relationships with their mothers, fathers, and same-sex best friends. School grades, self-reported adjustment problems, and self-worth differed as a function of both the number of relationships that adolescents described as high on positive features and the number of relationships that adolescents described as high on negative features. Adolescents with relationships that were uniformly good quality (i.e., high on positive features and low on negative features) were better adjusted than adolescents with relationships that were uniformly poor quality (i.e., low on positive features and high on negative features). The results failed to support the proposition that a single high quality relationship buffers against suboptimal levels of support in other relationships.

Keywords

adolescence; parents; friends; close relationships

Close relationships are a cornerstone of successful adaptation and a reliable marker of individual adjustment. Supportive relationships have been linked to adolescent social and academic competence, but models of relationship influence remain speculative (Collins & Steinberg, 2006). Few studies have examined both positive and negative aspects of parent-adolescent and friend relationships, and individual differences in relationship networks are not well understood. In the present study, early, mid-, and late adolescents from an ethnically diverse community were classified into groups according to the number of relationships with mothers, fathers, and best friends that were high on positive features and the number that were high on negative features. Participants in these relationship networks were contrasted in terms of school grades, self-reported adjustment problems, and academic and behavioral self-concepts.

The present investigation describes links between adolescent adjustment and the perceived quality of parent–child and friend relationships. Adolescents of all ages rank these relationships as their closest and most influential, and they have been implicated in a variety of adjustment outcomes (Collins & Laursen, 2000). We focus on perceptions of relationship quality, because subjective views are better predictors of well-being than objective indices of behavior in

relationships (Gottlieb, 1985). Perceptions of quality encompass positive and negative features of the relationship. Positive features of relationships include companionship, affection, and intimacy, whereas negative features include conflict, jealousy, and betrayal. These are independent domains, not opposite ends of a continuum. Within relationship correlations indicate that adolescents consider these positive and negative attributes to be orthogonal (Barrera, Chassin, & Rogosch, 1993). Furthermore, positive and negative features of parent-child and friend relationships independently predict adolescent externalizing problems, internalizing problems, and academic achievement (Adams & Laursen, 2007). Little is known, however, about individual differences in patterns of relationship positivity and negativity and their influence on adolescent adjustment.

Two models that posit direct relationship influences are at the center of this inquiry (Cohen & Wills, 1985; Wolchik, Beals, & Sandler, 1985). Both start from the premise that high quality, supportive relationships facilitate adaptive outcomes. *Additive models* assume that well-being reflects the sum of support in all close relationships. High quality relationships are an adaptive resource, so outcomes should improve with each supportive affiliation. *Threshold models* assume that well-being hinges on support from one close relationship. Relationships are redundant resources, so a single high quality relationship should buffer against adverse consequences associated with suboptimal support from other relationships.

Adolescents embedded in a network of relationships that are uniformly high in support are better adjusted than adolescents embedded in a network of relationships that are low in support (Laursen, Furman, & Mooney, 2006). Unfortunately, prior studies have not settled the debate about models of influence because the findings do not paint a clear picture of youth with mixed levels of support. There are studies attesting to additive effects (Rosenfeld, Richman, & Bowen, 2000) and studies claiming threshold effects (Gauze, Bukowski, Aquan-Assee, & Sippola, 1996). There are studies that appear to substantiate both models (van Aken & Asendorpf, 1997) and studies consistent with neither (Scholte, van Lieshout, & van Aken, 2001). These studies are predicated on the assumption that adolescent adjustment is a function of the specific constellation of relationships in a network; no studies have examined the possibility that outcomes depend on the number of high quality relationships, irrespective of the particular relationships perceived to be supportive.

Variable-centered strategies have dominated research on adolescent close relationships. These techniques describe the unique associations between a particular relationship attribute and a specific adolescent outcome, where the focus of interest is on processes that are assumed to be present to a similar degree in all members of the sample. Our inquiry is different in that it concerns individual differences in outcomes associated with constellations of relationship support. As such, it is best suited for person-centered analyses, where the focus of interest is on processes that are assumed to be specific to individuals who share particular attributes.

Two questions will be addressed. Do adolescent social and academic outcomes differ according to the number of relationships with parents and best friends that are perceived to be high on positive features? Do adolescent social and academic outcomes differ according to the number of relationships with parents and best friends that are perceived to be high on negative features? Both additive and threshold models assume that youth with one positive relationship fare better than those with none. Additive models also predict that adolescents with several positive relationships have better outcomes than those with only one positive relationship, whereas threshold models predict few differences among adolescents with one or more positive relationships. Little is known about whether these models apply to negative relationship features. One might reasonably expect adverse outcomes to increase as negative relationships accumulate, but it is not clear that a single relationship lacking negative features should buffer against the adverse consequences of an otherwise unfavorable network of relationships.

Method

Participants

Participants in this study were 406 adolescents (203 females and 203 males) attending public schools in the Miami-Fort Lauderdale metropolitan area. Of this total, 33.7% (72 females and 65 males) were early adolescents in the 6th grade ($M = 11.58$ years, $SD = 0.6$); 34.5% (65 females and 75 males) were mid-adolescents in the 9th grade ($M = 14.69$ years, $SD = 0.6$); and 31.8% (66 females and 63 males) late adolescents in the 12th grade ($M = 17.53$ years, $SD = 0.6$).

All participants were born in the United States and were fluent in English. Participation was restricted to the three largest ethnic groups in the metropolitan area: (a) non-Hispanic Anglo Americans ($n = 143$); (b) non-Hispanic and non-Caribbean African Americans ($n = 127$); and (c) Hispanic Americans of Cuban ancestry ($n = 136$). Each gender and ethnic group contained 18 to 26 adolescents in the 6th, 9th, and 12th grades.

Parent reports indicated that 55.9% ($n = 227$) of participants resided in two-biological-parent households (biological mother and biological father), 18.7% ($n = 76$) resided in blended households (68 with biological mother and step-father or boyfriend, 8 with biological father and step-mother or girlfriend), and 25.4% ($n = 103$) resided in single-parent households (88 with biological mother and 15 with biological father). Chi-square analyses failed to reveal statistically significant differences in household structure as a function of gender, grade, or ethnicity, with one exception: More daughters ($n = 55$) than sons ($n = 33$) lived in single-mother households, $\chi^2(1, N = 88) = 5.50, p < .05$.

Socioeconomic status (SES) was assessed with the Hollingshead (1975) four-factor index in which the potential range of scores is 8 to 66. SES scores in the present study ranged from 21 to 56 ($M = 38.44, SD = 8.46$). A 2 (gender) \times 3 (grade) \times 3 (ethnicity) ANOVA revealed a main effect of ethnicity on SES, $F(2, 388) = 8.05, p < .001$. Follow-up LSD contrasts indicated that mean SES was higher for Anglo Americans ($M = 40.64, SD = 8.0$) than for African Americans ($M = 36.93, SD = 7.5$) and Cuban Americans ($M = 38.44, SD = 8.5$). SES differences should be interpreted with caution given that the four-factor index was not normed on minority families. There were no gender, grade, or household structure differences on SES.

Instruments

Perceptions of close relationships—The Network of Relationships Inventory (NRI; Furman & Buhrmester, 1985) is a 33-item questionnaire that assesses the quality of relationships with mothers, fathers, and same-sex best friends. Items were rated on a scale ranging from 1 (*little or none*) to 5 (*the most*). The instrument yields three factors (Burk & Laursen, 2005; Furman, 1996). *Negative features* included conflict and punishment (e.g., How much do you and this person disagree and quarrel?). *Positive features* included reliable alliance, admiration, affection, companionship, instrumental aid, intimacy, nurturance, and satisfaction (e.g., How much do you play around and have fun with this person?). Relative power is a separate factor and is not considered in the present study. Item scores were averaged for each subscale.

School grades—School officials provided the grade point average for each participant. *School grades* represent the mean of all grades received during the semester in which the data were collected. The potential range of school grades is from F (0.0) to A (4.0).

Adjustment problems—The Youth Self-Report (YSR; Achenbach, 1991) is an 86-item measure of adjustment problems on eight narrowband indices. All items were rated on a 3-

point scale ranging from *never* (0) to *often* (2). Scores were summed to create an index of total *adjustment problems*. Raw scores were used in all analyses; tables present results in terms of *T* scores.

Self-concept—The Self-Perception Profile for Adolescents (SPPA; Harter, 1988) is a 45-item instrument that measures self-worth on nine dimensions. The present study focuses on the subscales most relevant to school grades and behavior problems. *Perceived scholastic competence* describes self-perceptions of academic abilities (e.g., “Some kids do very well at their classwork but other kids don’t do well at their classwork”). *Perceived behavioral conduct* describes self-perceptions of comportment (e.g., “Some kids often do not like the way they behave but other kids usually like the way they behave”). All items were rated on a 4-point scale that ranged from the *most unfavorable perceptions* (1) to the *most favorable perceptions* (4). Item scores for each variable were averaged.

Procedure

Participants were recruited from classes selected by school personnel as representative of the entire school population. Parents consented to their child’s participation and returned a demographic survey attached to the letter of invitation. Participation rates mirror those of previous studies (e.g., Silk, Steinberg, & Morris, 2003), ranging from approximately 45% to 75% across schools. Participants completed the surveys in small groups during 1-hr sessions in school. Research assistants (at least one of whom belonged to the same ethnic group as the participants) read the instructions aloud and supervised the completion of the surveys. Adolescents in blended and single parent households were instructed to describe relationships with their closest parents, regardless of residential status.

Relationship Networks

On the basis of median splits, adolescents were classified as high ($n = 206$) or low ($n = 200$) on positive features of relationships with mothers, high ($n = 205$) or low ($n = 201$) on positive features of relationships with fathers, and high ($n = 204$) or low ($n = 202$) on positive features of relationships with best friends. Adolescents were then categorized into one of four *positive relationship networks* on the basis of the number relationships identified as high in positive features: (a) 3 positive relationships ($n = 88$); (b) 2 positive relationships ($n = 120$); (c) 1 positive relationship ($n = 111$); and (d) 0 positive relationships ($n = 87$).

Median splits also classified adolescents as high ($n = 225$) or low ($n = 181$) on negative features of relationships with mothers, high ($n = 215$) or low ($n = 191$) on negative features of relationships with fathers, and high ($n = 218$) or low ($n = 188$) on negative features of relationships with best friends. Each participant was then classified into one of four *negative relationship networks* on the basis of the number of relationships identified as high in negative features: (a) 3 negative relationships ($n = 124$); (b) 2 negative relationships ($n = 100$); (c) 1 negative relationship ($n = 86$); and (d) 0 negative relationships ($n = 96$).

A 2 (gender) \times 4 (relationship network) chi-square revealed gender differences in positive relationship networks, $\chi^2(3, N = 406) = 12.45, p < .01$. Follow-up one-way chi-squares ($p < .05$) revealed more females ($n = 73$) than males ($n = 47$) with 2 positive relationships and more males ($n = 53$) than females ($n = 34$) with 0 positive relationships. There were no statistically significant gender differences in negative relationship networks nor were there any ethnicity, household structure, or age group differences in positive or negative relationship networks.

Plan of Analysis

Analyses of variance (ANOVAs) were conducted to identify relationship network differences in adolescent school grades, perceived academic competence, adjustment problems, and

perceived behavioral conduct. Effect sizes for follow-up LSD comparisons are given in terms of Cohen's *d*. The additive model predicts that adolescents with 3 good quality (i.e., 3 high positive or 0 high negative) relationships should have better outcomes than adolescents with 2 good quality (i.e., 2 high positive or 1 high negative) relationships who, in turn, should have better outcomes than adolescents with 1 good quality (i.e., 1 high positive or 2 high negative) relationship who, in turn, should have better outcomes than adolescents with 0 good quality (i.e., 0 high positive or 3 high negative) relationships. In contrast, the threshold model predicts that adolescents with 1 or more good quality relationships should have better outcomes than adolescents with 0 good quality relationships, but that there should be no differences in the outcomes of adolescents with 1, 2, or 3 good quality relationships.

Preliminary ANOVAs were conducted with relationship networks and all combinations of gender, ethnicity, household structure, and age group as independent variables. Main effects emerged to indicate that females ($M = 2.86, SD = 0.8$) received higher school grades than males ($M = 2.49, SD = 0.9$) and that Anglo Americans ($M = 3.07, SD = 0.8$) received high school grades than African Americans ($M = 2.33, SD = 0.8$) and Hispanic Americans ($M = 2.67, SD = 0.8$). The latter finding was attenuated when SES was entered as a covariate in an analysis of covariance. There were no statistically significant interactions between relationship networks and demographic variables. Additional preliminary ANOVAs that included both positive relationship networks and negative relationship networks as independent variables revealed no statistically significant interactions between relationship networks on any adjustment variable, so one-way ANOVAs are presented that describe positive and negative relationship networks separately.

To determine whether a specific relationship was responsible for differences involving networks with 2 positive relationships, follow-up *t* tests contrasted the three different network constellations (i.e., mother high, father high, friend low vs. mother high, father low, friend high vs. mother low, father high, friend high). Similar *t* tests were conducted to determine whether a specific relationship was responsible for differences involving networks with 1 positive relationship (i.e., mother high, father low, friend low vs. mother low, father high, friend low vs. mother low, father low, friend high). Identical analyses were conducted on networks with 2 negative relationships and 1 negative relationship. No statistically significant relationship differences emerged, indicating that adolescent outcomes were similar regardless of the relationship classified as high positive or high negative.

Results

Intercorrelations

Table 1 describes correlations between variables. School grades correlated with positive features of father-child relationships and negative features of mother-child and friend relationships. Adjustment problems correlated with positive features of parent-child relationships and negative features of all relationships. Perceived scholastic competence and perceived behavioral conduct were linked to negative and positive features of all relationships.

Adolescent Outcomes as a Function of Negative Relationship Networks

School grades—Results for school grades revealed a main effect for relationship network, $F(3, 402) = 3.19, p < .05$. Table 2 indicates that adolescents with 0 negative relationships received better school grades than adolescents with 2 negative relationships ($d = .30$) and adolescents with 3 negative relationships ($d = .38$).

Perceived scholastic competence—Results for perceived scholastic competence revealed a main effect for relationship networks, $F(3, 402) = 4.89, p < .01$. Table 2 indicates

that adolescents with 3 negative relationships reported lower perceived scholastic competence than adolescents with 1 negative relationship ($d = .32$) and adolescents with 0 negative relationships ($d = .50$).

Adjustment problems—Results for adjustment problems revealed a main effect for relationship networks, $F(3, 402) = 10.12, p < .01$. Table 2 indicates that adolescents with 0 negative relationships reported fewer adjustment problems than adolescents with 1 negative relationship ($d = .54$), 2 negative relationships ($d = .73$), and 3 negative relationships ($d = .69$).

Perceived behavioral conduct—Results for perceived behavioral conduct revealed a main effect for relationship networks, $F(3, 402) = 11.90, p < .01$. Table 2 indicates that adolescents with 0 negative relationships reported higher levels of perceived behavioral conduct than adolescents with 1 negative relationship ($d = .37$), 2 negative relationships ($d = .66$), and 3 negative relationships ($d = .77$). Adolescents with 1 negative relationship reported higher levels of perceived behavioral conduct than adolescents with 2 negative relationships ($d = .32$), and adolescents with 3 negative relationships ($d = .40$).

Summary—Adolescents with 0 negative relationships had better school grades, fewer adjustment problems, and higher perceived scholastic competence and behavioral conduct than adolescence with 3 negative relationships. Adolescents with 1 negative relationship had higher perceived scholastic competence and behavioral conduct than those with 3 negative relationships, but more adjustment problems than those with 0 negative relationships. Adolescents with 2 negative relationships had poorer school grades, more adjustment problems, and lower perceived behavioral conduct than those with 0 negative relationships.

Adolescent Outcomes as a Function of Positive Relationship Networks

School grades—Mean level differences between relationship networks emerged as anticipated, but the findings failed to reach conventional levels of statistical significance.

Perceived scholastic competence—Results for perceived scholastic competence revealed a main effect for relationship networks, $F(3, 402) = 6.59, p < .01$. Table 2 indicates that adolescents with 3 positive relationships reported greater perceived scholastic competence than adolescents with 2 positive relationships ($d = .47$), 1 positive relationship ($d = .48$), and 0 positive relationships ($d = .69$).

Adjustment problems—Results for adjustment problems revealed a main effect for relationship networks, $F(3, 402) = 7.26, p < .01$. Table 2 indicates that adolescents with 0 positive relationships reported more adjustment problems than adolescents with 1 positive relationship ($d = .28$), 2 positive relationships ($d = .37$), and 3 positive relationships ($d = .68$). Adolescents with 1 positive relationship ($d = .43$) and adolescents with 2 positive relationships ($d = .33$) reported more adjustment problems than adolescents with 3 positive relationships.

Perceived behavioral conduct—Results for perceived behavioral conduct revealed a main effect for relationship networks, $F(3, 402) = 8.31, p < .01$. Table 2 indicates that adolescents with 3 positive relationships reported higher levels of perceived behavioral conduct than adolescents with 2 positive relationships ($d = .37$), 1 positive relationship ($d = .58$), and 0 positive relationships ($d = .69$).

Summary—Adolescents with 3 positive relationships had fewer adjustment problems and higher perceived scholastic competence and behavioral conduct than those with 0 positive relationships. Adolescents with 2 positive relationships and adolescents with 1 positive relationship had lower perceived scholastic competence and behavioral conduct than those

with 3 positive relationships. Adolescents with 2 positive relationships and adolescents with 1 positive relationship also had more adjustment problems than those with 3 positive relationships, but fewer adjustment problems than those with 0 positive relationships.

Discussion

Implications for Theory

School grades, adjustment problems, scholastic competence, and behavioral conduct differed as a function of adolescent relationship networks. The findings have important implications for theoretical models that address the influence of adolescent relationships on individual adjustment. Two models of relationship influence are considered. Threshold models predict that a single good quality relationship is sufficient for optimal outcomes whereas additive models argue that outcomes ought to improve with each additional good quality relationship. There was little support for the threshold model: Adolescents with 1 positive relationship did not fare better than those with 0 positive relationships (except on adjustment problems) and adolescents with 2 negative relationships could not be distinguished from those with 3 negative relationships. Power to detect other group differences was adequate, so these null findings should not be attributed to an insufficient sample size. The results suggest that design differences may be responsible for discrepancies between previous reports of relationship influence. Prior studies purporting to demonstrate compensation and buffering have treated parent-child or peer relationships as a single unit (Gauze et al., 1996; van Aken & Asendorpf, 1997), lumping youth with conflicting views of mothers and fathers or of friends and classmates together with those holding similar views. This practice blurs distinctions between different relationship quality networks, potentially conflating threshold effects with additive effects.

A conceptual framework cannot be proven, but many of the findings were consistent with the additive model. The best outcomes were found among youth reporting the most positive and the fewest negative relationships; the worst outcomes were found among youth reporting the least positive and the most negative relationships. The evidence was not unequivocal, however. Youth with 1 or 2 positive or negative relationships generally fell in the middle range of outcomes as predicted by the additive model, but statistically significant differences did not emerge such that adjustment improved as a linear function of the number of supportive relationships in a network.

Self-organization models suggest that adolescence is a particularly critical period in the establishment of the self-system (Spencer, 1995). Negative feedback about the self, particularly when proffered in close relationships, may be a risk factor for poor outcomes, especially among youth who face other environmental challenges to the development of a positive self-system. Low income, minority youth may be particularly vulnerable to negative appraisals from others. This suggests that there may be merit in interpreting the findings as a function of the deleterious impact of poor quality relationships. Additive and threshold models may be applied to risk factors associated with poor quality relationships just as they were applied to protective factors associated with good quality relationships. Additive models of risk predict worse outcomes as a function of the number of high negative or low positive relationships, whereas threshold models of risk predict similarly disadvantaged outcomes for those with 1 or more high negative or low positive relationships. The findings from the present study indicate that a single poor quality relationship is disadvantageous, as predicted by both models: Levels of maladjustment were greater among those with 1 suboptimal relationship than among those with no such relationships. Consistent with the additive model of risk, more poor quality relationships were associated with greater maladjustment, although differences between those with 1 poor relationship and those with 2 or 3 poor relationships did not always reach statistical significance. This could be interpreted as equivocal support for the additive model of risk or

it could be interpreted as evidence of modest effects. In either case, the findings do not support a threshold model of risk.

Implications for Research

The findings also have important implications for research on the patterns and processes of adolescent relationship influence. The correlational findings were consistent with a host of variable-centered studies indicating that positive and negative features of parent-child and friend relationships are moderately associated with adolescent well-being (Collins & Steinberg, 2006). The present inquiry extends these results by describing individual differences in patterns of relationship support and the outcomes associated with each. Person-centered analyses indicated that adolescent adjustment is linked to patterns of relationships perceived to be positive or negative, raising the possibility that influence processes vary according to the number of support providers.

Of particular interest are findings indicating that within groups reporting uneven levels of relationship support (i.e., those with 1 or 2 high positive or high negative relationships), outcomes did not differ according to the relationships perceived to be high or low. This suggests that the source of support may be less important than the fact that support is available. In advancing this argument, we are not suggesting that relationships are interchangeable. Parents and peers play distinct roles in adolescent socialization (Collins & Laursen, 2000) and the clearly superior outcomes found among those with high levels of support from mothers, fathers, and friends attests to their complementary influence. Nor do we mean to suggest that supportive relationships are equally meritorious or influential. Deviant peers and unskilled parents have a demonstrably debilitating effect on adjustment (Connell, Dishion, & Deater-Decker, 2006). What we do mean to suggest is that prior research designs have limited our understanding of relationship influences: We cannot determine whether the receipt of support from different relationships is important by comparing the magnitude of associations between relationship support and individual adjustment (as is commonly done in regression based approaches) because influence processes may well differ across relationship networks.

Limitations

This inquiry is not without limitations. First, perceptions of relationships and reports of self-worth and adjustment problems were collected from the same individuals. Statistically significant findings for school grades, which were obtained from academic records, suggest that shared reporter variance was not the only source of variation. Nevertheless, replication with parent, teacher, and peer reports of adjustment is a necessary next step. Second, median split procedures increase error and reduce statistical power (MacCallum, Zhang, Preacher, & Rucker, 2002). Confidence in the present findings is bolstered by similar results from a longitudinal study in which identical methods were applied to positive features of adolescent relationships with mothers, friends, and romantic partners (Laursen et al., 2006). Nevertheless, caution is warranted in generalizing from these results until cluster analytic techniques can be applied to data from multiple informants. Third, relationships with romantic partners and other sex friends were not considered. Other sex peers become increasingly important sources of support during middle and late adolescence (Laursen & Williams, 1997), suggesting that additive and threshold effects were less than fully examined among older participants.

Conclusion

A close relationship is an adjustment asset, but the benefits associated with participation in a single high quality relationship ought not be overstated. Our take-home message is simple: One favorable relationship is not equivalent to a network of favorable relationships. Interventions designed to boost relationship support may do well to focus on an array of support providers rather than building on existing relationship strengths.

Acknowledgments

Support for this investigation was provided by the US National Institute of Child Health and Human Development (HD 33006) and the US National Institute of Mental Health (MH 58116). Special thanks to Ryan Adams, Margaret Ferreira, and Vickie Williams for their data collection efforts and to Erika Hoff for comments on a previous version of the paper. The cooperation of students, parents, teachers, and administrators in the Broward and Miami-Dade County Public Schools is greatly appreciated.

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Table 1
Intercorrelations, Means, Standard Deviations, and Internal Reliability

Variable	1	2	3	4	5	6	7	8	9	10	M	(SD)	α
1. Mother positive	—										4.02	(0.7)	0.90
2. Father positive	.44**	—									3.53	(0.9)	0.93
3. Friend positive	.28**	.11*	—								3.64	(0.7)	0.92
4. Mother negative	-.04	.00	.02	—							2.71	(0.9)	0.64
5. Father negative	.04	.20**	-.01	.54**	—						2.45	(0.9)	0.64
6. Friend negative	.03	.08	.01	.44**	.48**	—					1.82	(0.7)	0.66
7. School grades	.08	.15**	.03	-.13**	-.09**	-.21**	—				2.68	(0.8)	—
8. Adjustment problems	-.26**	-.18**	-.02	.27**	.22**	.27**	-.14**	—			51.05	(11.0)	0.87
9. Perceived scholastic competence	.13*	.17**	.16**	-.15**	-.16**	-.24**	.33**	-.29**	—		3.00	(0.6)	0.62
10. Perceived behavioral conduct	.25**	.23**	.15**	-.27**	-.23**	-.25**	.27**	-.27**	.46**	—	2.93	(0.7)	0.66

Note. $N = 406$. Scores for positive features and negative features range from 1 (little or none) to 5 (the most). School grades range from 0.0 (F) to 4.0 (A). Adjustment problem T-scores range from 25 to 100 (raw scores were used in analyses). Perceived scholastic competence scores and perceived behavioral conduct scores range from 1.0 (unfavorable perceptions) to 4.0 (favorable perceptions).

* $p < .05$.

** $p < .01$.

Table 2
Adolescent Adjustment as a Function of Negative and Positive Relationship Networks

Relationship networks adjustment variable	3 Negative		2 Negative		1 Negative		0 Negative	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
School grades	2.54 _b	(0.8)	2.61 _b	(0.8)	2.76	(0.8)	2.86 _a	(0.8)
Perceived scholastic competence	2.86 _b	(0.6)	3.00	(0.6)	3.05 _a	(0.6)	3.16 _a	(0.6)
Adjustment problems	44.90 _a	(25.1)	44.98 _a	(23.3)	40.69 _a	(21.7)	29.95 _b	(17.5)
Perceived behavioral conduct	2.76 _c	(0.6)	2.79 _c	(0.7)	3.00 _b	(0.6)	3.22 _a	(0.6)
	3 Positive		2 Positive		1 Positive		0 Positive	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
School grades	2.72	(0.8)	2.72	(0.8)	2.66	(0.8)	2.58	(0.9)
Perceived scholastic competence	3.23 _a	(0.5)	2.97 _b	(0.6)	2.99 _b	(0.5)	2.85 _b	(0.6)
Adjustment problems	32.74 _c	(19.1)	39.47 _b	(22.1)	41.50 _b	(21.9)	48.46 _a	(26.7)
Perceived behavioral conduct	3.19 _a	(0.6)	2.95 _b	(0.7)	2.84 _b	(0.6)	2.74 _b	(0.7)

Note. $N = 406$. School grades range from 0.0 (F) to 4.0 (A). Adjustment problem T -scores range from 25 to 100 (raw scores were used in analyses). Perceived scholastic competence scores and perceived behavioral conduct scores range from 1.0 (unfavorable perceptions) to 4.0 (favorable perceptions). Within rows, means with different subscripts differ significantly at $p < .05$ in post-hoc LSD tests.