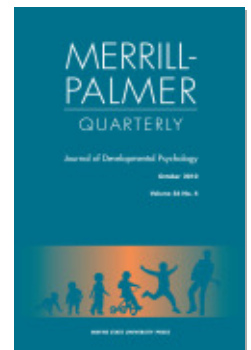# Project MUSE®

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# Predicting Interpersonal Competence and Self-Worth From Adolescent Relationships and Relationship Networks: Variable-Centered and Person-Centered Perspectives

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# Predicting Interpersonal Competence and Self-Worth From Adolescent Relationships and Relationship Networks: Variable-Centered and Person-Centered Perspectives

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A two-year longitudinal investigation examined adolescents' (*N* = 100 girls and 99 boys) perceptions of social support in relationships with mothers, close friends, and romantic partners from Grade 10 (ages 14–16) to Grade 12 (ages 16–18). Adolescents, mothers, and close friends also provided descriptions of the participants' global self-worth and interpersonal competence. Variable-centered and person-centered analyses revealed that perceived social support tends to be similar across relationships and stable over time. Variable-centered analyses indicated that social support in mother-adolescent relationships was uniquely related to adolescent global self-worth; that social support in close friendships was uniquely related to social acceptance, friendship competence, and romantic competence; and that social support in romantic relationships was uniquely related to romantic competence. Person-centered analyses indicated that adolescents who reported high social support in all three relationships had higher self-worth and greater interpersonal competence than those who did not have a romantic relationship and who reported low social support in relationships with mothers and close friends; and that scores for adolescents who had a romantic

relationship but who reported low social support in all three relationships fell in between these two groups. Taken together, variable-centered analyses suggest that different relationships influence different dimensions of competence, but person-centered analyses indicate that a sizable proportion of adolescents have relationships that act in concert with one another.

The development of interpersonal competence acquires new significance during the second decade of life. Friendships and romantic relationships become increasingly salient as closeness and interdependence successively shift from mothers to friends to romantic partners (Furman & Buhrmester, 1992; Laursen & Williams, 1997). Substantial evidence links supportive relationships with parents and friends to interpersonal competence and self-worth (Collins & Laursen, 2004; Rubin, Bukowski, & Parker, 2006), and findings suggest that supportive romantic relationships may play a similar role (Collins, 2003; Furman & Shaffer, 2003). Nevertheless, conclusions about influence mechanisms remain tentative because joint or shared relationship contributions have yet to be disentangled from contributions that are unique to particular relationships or relationship constellations (Collins & Steinberg, 2006). Research has primarily examined adolescent relationships in isolation; relatively few studies have examined peer and family relationships simultaneously. Studies addressing networks of adolescent relationships are conspicuously absent.

The present longitudinal investigation concerned adolescents' perceptions of social support in relationships with mothers, close friends, and romantic partners and their contributions to individual adolescent self-worth and interpersonal competence. Specifically, we examined (1) the degree of concordance in perceptions of social support in different relationships, (2) the stability of relationship social support from mid- to late adolescence, and (3) differences in adolescent self-worth, social acceptance, friendship competence, and romantic competence as a function of social support in relationships and in networks of relationships.

Numerous theorists have proposed that social interactions and affective experiences in relationships are internalized as relational schemas (for review see Hartup & Laursen, 1999). These cognitive schema help the individual orient to, evaluate, and address environmental demands, particularly those that concern participating in a group and getting along with others (Hinde, 1997). In the present study we examined one aspect of relational schemas: perceptions of social support. We focused on adolescents' perceptions of social support because the literature suggests that subjective views of adult close relationships are better predictors of self-worth than objective indices of behavior in relationships (Shrauger & Schoeneman, 1979). Because they are embedded within global representations of relationships,

perceptions of social support are expected to be stable over time and moderately consistent across different relationships. More importantly, perceptions of relationship social support should be related to self-worth and interpersonal competence (Cohen & Wills, 1985).

Our inquiry is unique in that it examines perceptions of social support with variable-centered and person-centered analytic strategies. These complementary strategies offer distinct conceptual and methodological perspectives on the study of human development (Bergman, Magnusson, & El-Khouri, 2003). The variable-centered approach concerns associations among variables, where the focus of interest is on processes that are assumed to be present to a similar degree in all members of a group. The person-centered approach concerns individual differences, where the focus of interest is on processes that are assumed to be specific to individuals who share particular attributes. Each strategy addresses different aspects of questions concerning the concordance of social support across relationships, the stability of social support over time, and the manner in which self-worth and interpersonal competence may be tied to differences in social support. Variable-centered strategies describe associations among reports of social support in different relationships and their links to adolescent self-worth and competence. To what extent are perceptions of social support similar across relationships with mothers, friends, and romantic partners? How stable are perceptions of social support in each relationship? Do perceptions of social support predict adolescent self-worth and interpersonal competence? Person-centered strategies describe individual differences in networks of relationship support and outcomes associated with each. What are the most (and least) common networks of social support? Do adolescents retain these networks of social support over time? Do adolescent self-worth and interpersonal competence differ as a function of networks of social support?

Variable-centered studies have dominated research concerning social support in adolescent relationships. With regard to concordance across perceptions of relationships, reports of social support in relationships with romantic partners, close friends, and parents tend to be modestly correlated (Connolly & Johnson, 1996; Furman, Simon, Shaffer, & Bouchey, 2002; Helsen, Vollebergh, & Meeus, 2000; Hoffman, Ushpiz, & Levy-Shiff, 1988). Person-centered analyses underscore the potential for individual differences in relationship concordance. A large proportion of adolescents perceive family and friend relationships to be similar in terms of social support, but there is also a sizable group that reports considerable divergence across relationships (Rosenfeld, Richman, & Bowen, 2000; Scholte, van Lieshout, & van Aken, 2001).

Correlational evidence suggests that adolescents' perceptions of relationships with parents and friends are relatively stable over time (Seiffge-Krenke, Shulman, & Klessinger, 2001; Way & Robinson, 2003). Reports of social support in romantic relationships are also correlated across mid-adolescence, despite the fact that most youth have different romantic partners at different time points (Connolly, Furman, & Konarski, 2000). Person-centered studies have identified individual and group differences in the degree to which features of low-quality and high-quality parent-child relationships are stable (Stattin & Klackenberg, 1992; Stattin & Magnusson, 1990). These findings indicate that harmonious families (characterized by low levels of discord) demonstrate the least amount of change in relationship quality across the adolescent years.

Less is known about links between social support and adolescent well-being. Variable-centered studies of associations between global self-worth and perceived social support indicate that support from parents typically accounts for more variance than support from friends (Barrera, Chassin, & Rogosch, 1993; Windle, 1992). Of course, global self-worth is but one measure of well-being: contemporary conceptualizations of self-esteem emphasize a distinctive array of perceived competencies in a variety of domains (Harter, 1999; Marsh & Shavelson, 1985). Adolescents queried about different domains of interpersonal competence indicated that support from parents is associated with global self-worth (van Aken & Asendorpf, 1997), that support from friends is associated with perceived friendship competence and social acceptance, and that support from romantic partners is associated with perceived romantic competence (Connolly & Konarski, 1994). As yet no study has simultaneously considered the contributions of parents, friends, and romantic partners to global self-worth and interpersonal competence, so the relative contributions of each remain unknown.

To the best of our knowledge, investigators have not applied person-centered techniques to examine the links from perceived support in parent-child, friend, and romantic relationships to adolescent self-worth and interpersonal competence. Related work suggests that systematic differences are likely, as adolescent adjustment has been found to vary as a function of patterns of perceived relationship social support. Adolescents whose networks comprised supportive relationships with family members and friends reported higher global self-worth and better peer relations than those with networks that consist of unsupportive relationships (Rosenfeld et al., 2000; Scholte et al., 2001; van Aken & Asendorpf, 1997). Adolescents without friends resembled those with supportive networks in terms of their self-worth, but they resembled those with unsupportive networks in terms of their peer group functioning.

To summarize, the empirical literature paints a relatively consistent picture regarding perceptions of social support and their links to adolescent well-being, although significant limitations exist. Most work has been variable-centered and cross-sectional. Perceptions of support in romantic relationships have not been considered in conjunction with perceptions of support in relationships with parents and friends. As a consequence, little is known about whether romantic relationships shape adolescent self-worth and interpersonal competence in a manner that is independent of other close relationships or in concert with them.

The present study concerned longitudinal reports of social support in mid- to late-adolescents' relationships with mothers, close friends, and romantic partners. Both variable-centered and person-centered analyses were conducted to examine the concordance and stability of social support and the links that self-worth and interpersonal competence have with social support in specific relationships and in relationship networks. Consistent with previous studies, we predicted modest concordance across relationships but substantial stability within relationships and relationship networks. We hypothesized that social support in relationships with mothers, close friends, and romantic partners would each be related to adolescent self-worth but that support from mothers would account for the largest proportion of unique variance. Support in close friendships was expected to be related to all aspects of interpersonal competence, whereas support in romantic relationships was expected to be related to romantic competence only. Finally, those with high levels of social support in relationships with mothers, close friends, and romantic partners were expected to compare favorably to those with low levels of support in these relationships on indices of self-worth and interpersonal competence.

# Method

## Participants

The participants were part of a longitudinal study investigating the role of close relationships in psychosocial adjustment across the adolescent and young adult years. A total of 200 (100 girls and 100 boys) 10th-grade adolescents (*M* age 15.3 years old, *range* = 14–16 years old) participated in the initial phase of data collection. Of this total, 199 (100 girls and 99 boys) adolescents remained in the study 2 years later when almost all were in Grade 12. Mothers (Grade 10 *n* = 193; Grade 12 *n* = 189) and close friends (Grade 10 *n* = 191; Grade 12 *n* = 160) also completed surveys describing the adolescent's psychosocial adjustment during each data-collection period.

Participants were recruited from diverse neighborhoods and schools in the Denver metropolitan area. The sample, designed to reflect the ethnic composition of the United States, included 23 (11.5%) African Americans, 2 (1%) Asian Americans, 8 (4%) biracial youth, 139 (69.5%) European Americans, 25 (12.5%) Hispanic Americans, and 3 (1.5%) Native Americans. At the outset of the study, 115 (57.5%) adolescents resided with two biological or adoptive parents, 23 (11.5%) resided with a biological or adoptive parent and a step-parent or partner, and 62 (31%) resided with a single-parent or relative. Approximately half of the mothers (55.4%) had a college degree.

## Instruments

Parallel instruments were completed at both data-collection periods. Adolescents described perceptions of social support in relationships with mothers, close friends, and romantic partners. Composite variables describing social acceptance, global self-worth, friendship competence, and romantic competence were derived from measures of each construct provided by participants, their mothers, and their close friends (for additional detail on these composite variables see Furman, Ho, & Low, in press, and Furman, Ho, & Low, under review).

*Network of Relationships Inventory: Behavioral Systems Version.* Participants completed a questionnaire that assessed provisions of close relationships (Furman, 2000). As part of the measure, participants described relationships with their primary mother figure, a close same-sex friend, and their most important romantic partner of at least 1 month's duration in the last year. In Grade 10 all but four boys and two girls reported on a close same-sex friend; during Grade 12 this figure rose to 17 (6 girls and 11 boys). During Grade 10, 57% (51 girls and 63 boys) of participants described a romantic relationship; this figure increased to 70% (75 girls and 66 boys) during Grade 12. All but two identified heterosexual romantic relationships. Five described the same romantic relationship in Grades 10 and 12, and 57 described the same close friend relationships at the two time points. Mother-adolescent relationship data were missing for one 10th-grade participant.

Five facets of social support related to attachment and affiliation were assessed for relationships with mothers, close friends, and romantic partners: (1) participant seeks safe haven; (2) participant provides safe haven; (3) participant seeks secure base; (4) participant provides secure base; and (5) companionship. Each facet consisted of 3 items rated on a 5-point scale

ranging from 1 (*little or none*) to 5 (*the most*). *Social support* represents the average of these five scales, calculated separately for each relationship (*M* α = .96). Principal axis analyses with oblique rotation revealed that at each wave, the five scales loaded on three factors that separately described relationships with mothers, close friends, and romantic partners. Supplementary analyses revealed that these social support composites were highly related ($r > .95$) to the support composites of the original Network of Relationships Inventory (Furman & Buhrmester, 1985), which included a different, but overlapping, set of social provisions.

*Self-Perception Profile for Adolescents.* Participants, close friends, and mothers each completed a 30-item questionnaire that assessed perceptions of interpersonal competence in 5 domains as well as global self-worth (Harter, 1988). The present study concerns global self-worth scale and three domains of interpersonal competence: (1) social acceptance; (2) friendship competence; and (3) romantic competence. Each scale included 5 items, rated on a 4-point structured alternative format scale. Confirmatory factor analyses of adolescent, mother, and close friend ratings revealed that for each scale, the three scores loaded highly on a single factor (see Furman et al., in press; Furman et al., under review). Accordingly, scores were standardized and averaged across reporters. *Global self-worth* (*M* α = .84) provides an assessment of overall self-esteem (e.g., "Some teenagers are disappointed with themselves BUT other teenagers are pretty pleased with themselves"). *Social acceptance* (*M* α = .84) provides an assessment of competence in the peer group (e.g., "Some teens are popular with others their age BUT other teens are not very popular"). *Friendship competence* (*M* α = .76) provides an assessment of capabilities in friendships (e.g., "Some teens are able to make really close friends BUT other teens find it hard to make really close friends"). *Romantic competence* (*M* α = .74) provides an assessment of capabilities in romantic relationships (e.g., "Some teens feel that people their age will be romantically attracted to them BUT other teens feel worry about whether people their age will be attracted to them").

## Plan of Analysis

Variable-centered and person-centered analyses addressed the concordance and stability of social support in mother-adolescent, close friend, and romantic relationships as well as the extent to which social support in relationships and in networks of relationships is associated with adolescent self-worth and interpersonal competence.

*Variable-centered analyses of concordance and stability.* Correlations between relationship scores described the degree to which adolescents per-

ceive similar social support in relationships with mothers, close friends, and romantic partners. Correlations between corresponding scores at the two time periods identified the stability of reports of mother-adolescent, close friend, and romantic partner relationships from Grade 10 to Grade 12.

*Person-centered analyses of concordance and stability.* Median splits on 10th-grade reports of social support in relationships with mothers divided participants into high and low social support groups. Similar median splits were performed on scores for relationships with close friends. For those with romantic relationships, median splits divided youth into high and low social support groups; those without romantic relationships were in a third group. These classifications were combined to categorize participants into one of twelve relationship networks (high/low mother support × high/low friend support × high romantic support/low romantic support/no romantic partner). Configural frequency analyses (CFA; von Eye, 1990) determined the relative frequency of each social support network to identify *types* (networks that occur at greater than chance levels in one-way $\chi^2$ tests) and *antitypes* (networks that occur at less than chance levels in one-way $\chi^2$ tests). Identical procedures identified types and antitypes in 12th-grade social support networks.

Two different forms of network stability were assessed (Bergman et al., 2003). Structural stability involves a separate determination of the types and antitypes that emerge during each age period. A high level of structural stability is indicated by similar patterns of types and antitypes at each age period. Individual stability describes the proportion of participants with network classifications that are consistent across age periods. Individual stability is assessed by hypergeometric tests contrasting the ratio of observed frequencies to expected frequencies in longitudinal streams that track network types over time.

*Concurrent, prospective, and antecedent variable-centered analyses.* Three sets of regression analyses were conducted, using a backward stepwise selection procedure to identify interaction terms. Regressions initially included all possible gender and social support interaction terms; subsequent regressions retained only those interactions that were statistically significant. We followed Aiken and West's (1991) recommendations for specifying interactions.

The first set of regressions concerned concurrent associations between social support and adolescent well-being. These analyses were designed to determine the extent to which social support in different relationships uniquely predicted global self-worth and interpersonal competence. Predictor variables included gender on the first step; 10th-grade reports of social support in mother-adolescent, close friend, and romantic partner

relationships on the second step; and interaction terms on the third step. Tenth-grade global self-worth, social acceptance, friendship competence, and romantic competence were the dependent variables. Identical regressions were conducted with 12th-grade social support and 12th-grade self-worth and interpersonal competence variables.

The second set of regressions concerned prospective associations between 10th-grade social support and 12th-grade adolescent well-being. These analyses were designed to determine the extent to which social support in different relationships uniquely predicted subsequent changes in global self-worth and interpersonal competence. Predictor variables included 10th-grade self-worth or interpersonal competence scores on the first step as control variables; gender on the second step; 10th-grade reports of social support in mother-adolescent, close friend, and romantic partner relationships on the third step; and interaction terms on the fourth step. Twelfth-grade global self-worth, social acceptance, friendship competence, and romantic competence were the dependent variables.

The third set of regressions concerned antecedent associations between 12th-grade social support and 10th-grade adolescent well-being. These analyses were designed to determine the extent to which social support in different relationships uniquely predicted prior changes in global self-worth and interpersonal competence. Predictor variables included 12th-grade self-worth or competence scores on the first step as control variables; gender on the second step; 12th-grade reports of social support in mother-adolescent, close friend, and romantic partner relationships on the third step; and interaction terms on the fourth step. Tenth-grade global self-worth, social acceptance, friendship competence, and romantic competence were the dependent variables.

*Concurrent, prospective, and antecedent person-centered analyses.* Two sets of repeated measures analyses of variance (ANOVAs) concerned differences in adolescent self-worth and interpersonal competence as a function of social support networks. These analyses focused on the types, which describe the most prevalent network configurations; low power precluded consideration of other network groups. The first set of analyses described concurrent differences and prospective changes in adolescent self-worth and interpersonal competence as a function of 10th-grade social support network types. The second set of analyses described antecedent changes and concurrent differences in adolescent self-worth and interpersonal competence as a function of 12th-grade social support network types. Each set consisted of four ANOVAs in which global self-worth, social acceptance, friendship competence, and romantic competence (each assessed in Grade 10 and in Grade 12) were the dependent variables and

time (i.e., Grade 10 and Grade 12 scores) was the repeated measure. Effect sizes for mean-level contrasts are given in terms of Cohen's *d,* an index of standard deviation units. LSD comparisons followed statistically significant main effects.

# Results

## Variable-Centered Analyses of Concordance and Stability

Table 1 describes correlations between the social support scores of mother-adolescent, close friend, and romantic relationships at each age period. Reports of social support in different relationships indicated modest to moderate concordance in both Grade 10 ($r = .20$ to .36) and Grade 12 ($r = .33$ to .48). Table 1 also describes correlations between Grade 10 and Grade 12 social support scores for each relationship. There was moderate to high stability from Grade 10 to Grade 12 in reports of social support in mother-adolescent, close friend, and romantic relationships ($r = .42$ to .62). Similar stability coefficients emerged in analyses excluding adolescents who described a relationship with the same friend or romantic partner at both age periods (friendship support $r = .60$, romantic relationship support $r = .43$).

## Person-Centered Analyses of Concordance and Stability

To examine concordance in reports of relationships during Grade 10, median splits classified adolescents as high ($n = 98$) or low ($n = 95$) on social support in mother-adolescent relationships; high ($n = 97$) or low ($n = 96$) on social support in close friendships; and high social support in romantic relationships ($n = 56$), low social support in romantic relationships ($n = 57$), or no romantic relationship ($n = 80$). Each participant was then categorized into one of twelve Grade 10 social support networks (see Table 2). CFAs identified three social support network types during Grade 10: (1) high mother, high friend, high romantic partner; (2) low mother, low friend, low romantic partner; and (3) low mother, low friend, no romantic partner. There were also two antitypes: (1) low mother, low friend, high romantic partner; and (2) low mother, high friend, no romantic partner. Separate $\chi^2$ analyses failed to reveal a greater-than-chance number of gender differences in the distribution of relationship networks.

To examine concordance in reports of relationships during Grade 12, median splits classified adolescents as high ($n = 97$) or low ($n = 86$) on social support in mother-adolescent relationships; high ($n = 96$) or low ($n = 87$) on social support in close friendships; and high social support in roman-

**Table 1.** Intercorrelations, Means, and Standard Deviations

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | M | (SD) | N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grade 10 | | | | | | | | | | | | | | | | |
| 1. Mother support | — | | | | | | | | | | | | | 3.16 | (0.9) | 194 |
| 2. Close friend support | .36** | — | | | | | | | | | | | | 3.40 | (1.0) | 194 |
| 3. Romantic support | .20* | .28* | — | | | | | | | | | | | 3.19 | (1.0) | 114 |
| 4. Global self-worth | .23** | .15* | .11 | — | | | | | | | | | | -0.01 | (0.8) | 200 |
| 5 Social acceptance | .01 | .35** | .18 | .53** | — | | | | | | | | | -0.01 | (0.8) | 200 |
| 6. Friendship competence | -.02 | .44** | .04 | .34** | .57** | — | | | | | | | | -0.02 | (0.8) | 200 |
| 7. Romantic competence | .12 | .11 | .35** | .42** | .60** | .26** | — | | | | | | | -0.03 | (0.8) | 200 |
| Grade 12 | | | | | | | | | | | | | | | | |
| 8. Mother support | .62** | .34** | .16 | .17* | .06 | .07 | .04 | — | | | | | | 2.94 | (1.0) | 191 |
| 9. Close friend support | .29** | .60** | .09 | .15* | .26** | .31** | .07 | .48** | — | | | | | 3.23 | (0.9) | 183 |
| 10. Romantic support | .10 | .30** | .42** | .15 | .22** | .19* | .19* | .34** | .33** | — | | | | 3.48 | (1.0) | 141 |
| 11. Global self-worth | .30** | .19* | .12 | .60** | .38** | .32** | .30** | .32** | .25** | .21* | — | | | -0.03 | (0.8) | 199 |
| 12. Social acceptance | .18* | .34** | .11 | .49** | .67** | .46** | .35** | .16* | .33** | .21* | .63** | — | | -0.03 | (0.8) | 199 |
| 13. Friendship competence | .13 | .36** | -.02 | .29** | .41** | .56** | .15* | .16* | .40** | .13 | .50** | .62** | — | -0.04 | (0.8) | 199 |
| 14. Romantic competence | .10 | .29** | .18 | .39** | .50** | .37** | .53** | .14 | .24** | .38** | .53** | .54** | .33** | -0.02 | (0.9) | 199 |

*Note.* Social support scores range from 1 (*little or none*) to 5 (*the most*). Global self-worth, social acceptance, friendship competence, and romantic competence variables represent standardized composite scores that range from −1.0 to 1.0. support = social support.

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

**Table 2.** Structural Stability of Social Support Networks from Grade 10 to Grade 12

| Relationship networks | Grade 10 | | Grade 12 | |
|---|---|---|---|---|
| | Observed | (Expected) | Observed | (Expected) |
| High mother, high friend, high romantic support | 28** | (14.29) | 36** | (19.46) |
| High mother, high friend, low romantic support | 14 | (14.55) | 17 | (18.35) |
| High mother, high friend, no romantic partner | 19 | (20.42) | 13 | (13.07) |
| High mother, low friend, high romantic support | 11 | (14.14) | 8** | (17.64) |
| High mother, low friend, low romantic support | 9 | (14.40) | 12 | (16.63) |
| High mother, low friend, no romantic partner | 17 | (20.21) | 11 | (11.84) |
| Low mother, high friend, high romantic support | 13 | (13.85) | 18 | (17.26) |
| Low mother, high friend, low romantic support | 11 | (14.10) | 8* | (16.27) |
| Low mother, high friend, no romantic partner | 12* | (19.79) | 4** | (11.59) |
| Low mother, low friend, high romantic support | 4** | (13.71) | 8* | (15.64) |
| Low mother, low friend, low romantic support | 23* | (13.96) | 29** | (14.75) |
| Low mother, low friend, no romantic partner | 32** | (19.59) | 19** | (10.50) |
| Total | 193 | | 183 | |

Notes. Asterisks denote statistically significant types (observed frequencies greater than expected frequencies) and antitypes (observed frequencies less than expected frequencies). support = social support.

*p < .05, **p < .01.

tic relationships ($n = 70$), low social support in romantic relationships ($n = 66$), or no romantic relationship ($n = 47$). Each participant was then categorized into one of twelve Grade 12 social support networks (see Table 2). CFAs identified three social support network types during Grade 12: (1) high mother, high friend, high romantic partner; (2) low mother, low friend, low romantic partner; and (3) low mother, low friend, no romantic partner. There were also 4 antitypes: (1) high mother, low friend, high romantic partner; (2) low mother, high friend, low romantic partner; (3) low mother, high friend, no romantic partner; and (4) low mother, low friend, high romantic partner. Separate $\chi^2$ analyses failed to reveal any statistically significant gender differences in the distribution of relationship networks.

There was a high degree of structural stability in social support networks across the 2-year period (see Table 2). The same three network types emerged in Grade 10 and in Grade 12. The two antitypes identified in Grade 10 were replicated in Grade 12, and two additional antitypes emerged.

Longitudinal streams indicating individual stability were statistically significant ($p < .01$) for each social support network type (see Figure 1). Across this 2-year period, adolescents were 2.0 to 3.9 times more likely than expected by chance to remain in the same network type. Stable members ($n = 12$) comprised 37.5% of 10th graders and 63.2% of 12th graders in the low mother, low close friend, no romantic partner group. Stable members ($n = 10$) encompassed 35.7% of 10th graders and 27.8% of 12th graders in the high mother, high close friend, high romantic partner group. Stable members ($n = 8$) comprised 34.8% of 10th graders and 27.6% of 12th graders in the low mother, low close friend, low romantic partner group. Three statistically significant ($p < .05$) longitudinal streams were noteworthy for their low probabilities: (1) no participants moved from the Grade 10 low mother, low close friend, low romantic partner group to the Grade 12 high mother, high close friend, high romantic partner group; (2) no participants moved from the Grade 10 high mother, high close friend, high romantic partner group to the Grade 12 low mother, low close friend, no romantic partner group; and (3) only 1 participant moved from the Grade 10 low mother, low close friend, no romantic partner group to the Grade 12 high mother, high close friend, high romantic partner group.

To summarize, there was a high degree of structural stability in social support networks, and many adolescents displayed considerable concordance across relationships. The same three network types emerged at both age periods encompassing about 45% of the total sample. Individual stability was moderate. Approximately 35% of adolescents who belonged to one of these three groups in Grade 10 remained in the same group in Grade 12.
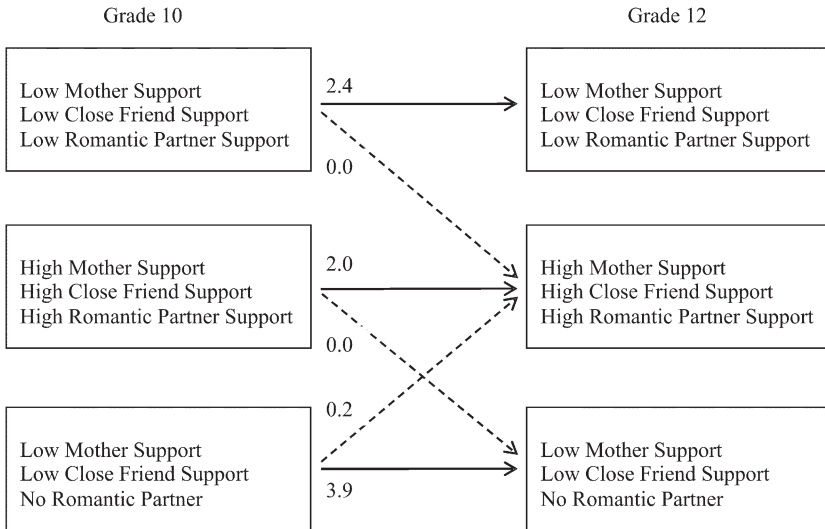
Grade 10                                                    Grade 12



**Figure 1**. Individual stability of social support network types from Grade 10 to Grade 12. *Notes.* Ratios of observed frequencies to expected frequencies are given for statistically significant (*p* < .05) longitudinal streams where 1.0 equals a chance distribution. Solid arrows depict streams in which observed frequencies are greater than expected frequencies. Dashed arrows depict streams in which observed frequencies are less than expected frequencies. support = social support.

## Concurrent, Prospective, and Antecedent Variable-Centered Analyses

Regression analyses explored concurrent associations between relationship social support and adolescent self-worth and interpersonal competence. Table 3 summarizes the results of the Grade 10 (*n* = 114) and Grade 12 (*n* = 135) concurrent regression analyses. Another set of regression analyses examined prospective associations between Grade 10 relationship social support and Grade 12 adolescent self-worth and interpersonal competence (*n* = 114). A final set of regression analyses examined antecedent associations between Grade 12 relationship social support and Grade 10 adolescent self-worth and interpersonal competence (*n* = 135). In each case, analyses were limited to adolescents who described relationships with mothers, close friends, and romantic partners.

**Table 3.** Summary of Hierarchical Regression Analyses Predicting Adolescent Self–Worth and Competence From Gender and Concurrent Reports of Relationship Social Support

| Grade/Step/Variable | Global self–worth | | Social acceptance | | Friendship competence | | Romantic competence | |
|---|---|---|---|---|---|---|---|---|
| | $\Delta R^2$ | β | $\Delta R^2$ | β | $\Delta R^2$ | β | $\Delta R^2$ | β |
| *Grade 10* | | | | | | | | |
| Step 1 | .03 | | .00 | | .01 | | .00 | |
| Gender | | –.18 | | .02 | | .09 | | .03 |
| Step 2 | .07 | | .11** | | .23** | | .16** | |
| Mother social support | | .24 | | –.17 | | –.27** | | .05 |
| Close friend social support | | –.05 | | .27** | | .49** | | –.22* |
| Romantic partner social support | | .10 | | .14 | | –.05 | | .40** |
| Step 3 | .04* | | — | | .04* | | — | |
| Mother social support by gender | | .72* | | — | | — | | — |
| Mother support by friend support | — | — | | | | .22* | — | — |
| *Grade 12* | | | | | | | | |
| Step 1 | .00 | | .02 | | .00 | | .00 | |
| Gender | | –.03 | | –.14 | | .05 | | .06 |
| Step 2 | .12** | | .11** | | .12** | | .12** | |
| Mother social support | | .28** | | –.05 | | –.04 | | –.04 |
| Close friend social support | | .05 | | .28** | | .38** | | –.04 |
| Romantic partner social support | | .11 | | .16 | | .02 | | .37** |

*Note.* Grade 10 $n = 114$, Grade 12 $n = 135$.

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

*Global self-worth.* Concurrent analyses of Grade 10 social support revealed an interaction between gender and social support in relationships with mothers. For girls there was a positive association between Grade 10 social support in mother-adolescent relationships and Grade 10 global self-worth, such that more support in relationships with mothers was linked to higher levels of global self-worth ($\beta = .36$, $p = .01$). For boys, Grade 10 social support in mother-adolescent relationships was unrelated to Grade 10 global self-worth ($\beta = -.18$, $p = 27$). Concurrent analyses of Grade 12 social support revealed a main effect for relationships with mothers. More Grade 12 social support in mother-adolescent relationships was linked to greater Grade 12 global self-worth.

Prospective analyses of Grade 10 social support failed to reveal any statistically significant effects on Grade 12 global self-worth beyond that of Grade 10 global self-worth ($\beta = .59$, $p < .01$). Antecedent analyses of Grade 12 social support did not indicate any statistically significant effects on Grade 10 global self-worth beyond that of gender ($\beta = -.23$, $p = .01$) and Grade 12 global self-worth ($\beta = .51$, $p < .01$). Grade 10 global self-worth was higher for boys ($M = .10$, $SD = 0.57$) than for girls ($M = -.10$, $SD = 0.86$) ($d = 0.27$).

In sum, support in mother-adolescent relationships was concurrently associated with global self-worth for girls in Grade 10 and for girls and boys in Grade 12.

*Social acceptance.* Concurrent analyses of Grade 10 social support revealed a main effect for relationships with close friends. Identical results emerged in analyses of Grade 12 social support. In each case, greater support in friendships was linked to greater concurrent social acceptance.

Prospective analyses of Grade 10 social support on Grade 12 social acceptance revealed a main effect for Grade 10 social acceptance ($\beta = .70$, $p < .01$). Antecedent analyses of Grade 12 social support did not indicate any statistically significant effects on Grade 10 social acceptance beyond that of Grade 12 social acceptance ($\beta = .58$, $p < .01$).

In sum, support in close friendships was concurrently associated with social acceptance in Grade 10 and in Grade 12.

*Friendship competence.* Concurrent analyses of Grade 10 social support revealed main effects for social support in relationships with mothers and close friends that were qualified by an interaction between these two terms. Follow-up analyses revealed positive associations between Grade 10 social support in close friendships and Grade 10 friendship competence for adolescents reporting low ($\beta = .44$ $p < .01$), average ($\beta = .52$, $p < .01$), and high ($\beta = .60$, $p < .01$) levels of Grade 10 social support in relationships with mother. Concurrent analyses of Grade 12 social support revealed a main effect for

relationships with close friends. More social support in Grade 12 close friendships was linked to greater Grade 12 friendship competence.

Prospective analyses of Grade 10 social support failed to reveal any statistically significant effects on Grade 12 friendship competence beyond that of Grade 10 friendship competence ($\beta = .55$, $p < .01$). Antecedent analyses of Grade 12 social support did not indicate any statistically significant effects on Grade 10 friendship competence beyond that of Grade 12 friendship competence ($\beta = .40$, $p < .01$).

In sum, friendship competence was concurrently associated with support in relationships with close friends in Grades 10 and 12 and with support in relationships with mothers in Grade 10.

*Romantic competence.* Concurrent analyses of Grade 10 social support revealed main effects for social support in close friendships and romantic relationships. More Grade 10 social support in relationships with close friends was linked to lower Grade 10 romantic competence. In contrast, more Grade 10 social support in romantic relationships was linked to higher Grade 10 romantic competence. Concurrent analyses of Grade 12 social support revealed a main effect of social support in romantic relationships. More Grade 12 social support in romantic relationships was linked to greater Grade 12 romantic competence.

Prospective analyses of Grade 10 social support failed to reveal any statistically significant effects on Grade 12 romantic competence beyond that of Grade 10 romantic competence ($\beta = .44$, $p < .01$). Antecedent analyses of Grade 12 social support indicated that Grade 10 romantic competence was predicted by Grade 12 romantic competence ($\beta = .40$, $p < .01$) and by an interaction between gender and Grade 12 social support in relationships with close friends ($\beta = -.60$, $p = .03$). For girls there was an inverse association between Grade 12 social support in close friendships and Grade 10 romantic competence, such that greater levels of support in relationships with close friends were linked to antecedent declines in romantic competence ($\beta = -.30$, $p = .01$). For boys, Grade 12 social support in close friendships was unrelated to Grade 10 romantic competence ($\beta = .17$, $p = .22$).

In sum, romantic competence was concurrently associated with social support in romantic relationships in Grade 10 and Grade 12 and was inversely associated with support in close friendships in Grade 10. High levels of social support in friendships in Grade 12 were preceded by declines in girls' romantic competence.

*Supplementary analyses.* A series of supplemental regression analyses were conducted to include participants without romantic relationships. In the first set of analyses, romantic relationship social support scores for ado-

lescents without romantic partners were coded as zero. In the second set of analyses, romantic relationship social support was categorized into three groups (no romantic relationship, low romantic relationship social support, high romantic relationship social support). The same pattern of statistically significant results for friends and mothers was found in the supplemental analyses and in the main analyses, with the following exceptions: Grade 10 support in mother-adolescent relationships was associated with Grade 10 global self-worth ($\beta = .23$, $p < .01$); Grade 12 support in friendships was associated with Grade 12 romantic competence ($\beta = .21$, $p = .01$); Grade 10 support in mother-adolescent relationships was associated with Grade 12 social acceptance ($\beta = .16$, $p = .05$); and Grade 10 support in friendships was associated with Grade 12 romantic competence ($\beta = .23$, $p = .01$). Finally, the two-way interaction between Grade 10 support in mother-adolescent and friend relationships on Grade 10 friendship competence did not reach statistical significance ($\beta = .08$, $p = .21$).

## *Concurrent, Prospective, and Antecedent Person-Centered Analyses*

Table 4 presents results from a series of 3 (social support network types) $\times$ 2 (gender) repeated measure ANOVAs. Identical analyses were conducted for Grade 10 and Grade 12 network types. There were no main effects or interactions involving time, indicating that changes from Grade 10 to Grade 12 in adolescent self-esteem and interpersonal competence failed to reach conventional levels of statistical significance. For purposes of presentation, scores for Grade 10 and Grade 12 dependent variables were collapsed in the text and in the table.

*Global self-worth.* There was a main effect for Grade 10 social support network types, $F(2, 777) = 6.86$, $p < .01$. In Grade 10 and Grade 12, global self-worth was higher for adolescents in the high mother, high close friend, high romantic partner Grade 10 network type and the low mother, low close friend, low romantic partner Grade 10 network type than for those in the low mother, low close friend, no romantic partner Grade 10 network type ($d = 0.88$ and .55, respectively).

There was also a main effect for Grade 12 social support network types, $F(2, 78) = 8.12$, $p < .01$. In Grade 10 and Grade 12, global self-worth was higher for adolescents in the high mother, high close friend, high romantic partner Grade 12 network type than for those in the low mother, low close friend, low romantic partner Grade 12 network type ($d = 0.63$) and for those in the low mother, low close friend, no romantic partner Grade 12 network type ($d = 0.90$).

**Table 4.** Adolescent Self-Worth and Interpersonal Competence as a Function of Social Support Network Types

| | Grade 10 social support network types | | | | | | Grade 12 social support network types | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | High mother, high close friend, high romantic | | Low mother, low close friend, low romantic | | Low mother, low close friend, no romantic | | High mother, high close friend, high romantic | | Low mother, low close friend, low romantic | | Low mother, low close friend, no romantic | |
| Dependent variable | M | (SD) | M | (SD) | M | (SD) | M | (SD) | M | (SD) | M | (SD) |
| Global self-worth | $.21_a$ | (0.6) | $.00_a$ | (0.7) | $-.41_b$ | (0.8) | $.26_a$ | (0.7) | $-.15_b$ | (0.6) | $-.37_b$ | (0.7) |
| Social acceptance | $.37_a$ | (0.7) | $-.02_a$ | (0.9) | $-.53_b$ | (0.9) | $.26_a$ | (0.8) | $-.03_a$ | (0.8) | $-.82_b$ | (1.0) |
| Friendship competence | $.31_a$ | (0.6) | $.02$ | (0.8) | $-.35_b$ | (0.9) | $.22_a$ | (0.7) | $-.15_b$ | (0.7) | $-.47_b$ | (0.9) |
| Romantic competence | $.34_a$ | (0.7) | $.10_a$ | (0.7) | $-.60_b$ | (0.8) | $.26_a$ | (0.7) | $.17_a$ | (0.7) | $-.85_b$ | (0.8) |

*Notes.* Grade 10 $n = 83$; Grade 12 $n = 84$. Within rows and grades, means with different subscripts differ significantly at $p < .05$ in LSD comparisons. Dependent variables represent standardized composite scores that range from –1.0 to 1.0. Repeated measures analyses indicated no effect for time, so scores in this table were averaged across Grade 10 and Grade 12.

*Social acceptance.* There was a main effect for Grade 10 social support network types, $F(2, 77) = 8.24$, $p < .01$. In Grade 10 and Grade 12, social acceptance was higher for adolescents in the high mother, high close friend, high romantic partner Grade 10 network type and in the low mother, low close friend, low romantic partner Grade 10 network type than for those in the low mother, low close friend, no romantic partner Grade 10 network type ($d = 1.12$ and .57, respectively).

There was also a main effect for Grade 12 social support network types, $F(2, 78) = 9.78$, $p < .01$. In Grade 10 and Grade 12, social acceptance was higher for those in the high mother, high close friend, high romantic partner Grade 12 network type and for those in the low mother, low close friend, low romantic partner Grade 12 network type than for those in the low mother, low close friend, no romantic partner Grade 12 network type ($d = 1.19$ and .87, respectively).

*Friendship competence.* There was a main effect for Grade 10 social support network types, $F(2, 77) = 4.98$, $p = .01$. In Grade 10 and Grade 12, friendship competence was higher for adolescents in the high mother, high close friend, high romantic partner Grade 10 network type than for those in the low mother, low close friend, no romantic partner Grade 10 network type ($d = 0.86$).

There was also a main effect for Grade 12 social support network types, $F(2, 78) = 4.92$, $p = .01$. In Grade 10 and Grade 12, friendship competence was higher for adolescents in the high mother, high close friend, high romantic partner Grade 12 network type than for those in the low mother, low close friend, low romantic partner Grade 12 network type ($d = 0.53$) and those in the low mother, low close friend, no romantic partner Grade 12 network type ($d = 0.86$).

*Romantic competence.* There was a main effect for Grade 10 social support network types, $F(2, 77) = 14.66$, $p < .01$. In Grade 10 and Grade 12, romantic competence for adolescents in the high mother, high close friend, high romantic partner Grade 10 network type and the low mother, low close friend, low romantic partner Grade 10 network type was higher than for those in the low mother, low close friend, no romantic partner Grade 10 network type ($d$s= 1.25 and .93, respectively).

Similar findings emerged for Grade 12 social support network types, $F(2, 78) = 17.84$, $p = .01$. In Grade 10 and Grade 12, romantic competence was higher for adolescents in the high mother, high close friend, high romantic partner Grade 10 network type and for those in the low mother, low close friend, low romantic partner Grade 10 network type than for those in the low mother, low close friend, no romantic partner Grade 12 network type ($d = 1.48$ and 1.37, respectively).

*Supplemental analyses.* These ANOVAs were repeated on adolescents with stable network types from Grade 10 to Grade 12 ($n = 30$). The same pattern of statistically significant differences emerged for social acceptance and romantic competence. In each case, adolescents in the stable low mother, low close friend, no romantic partner network type scored lower than those in the other two stable network types. The findings for global self-worth replicated those found for Grade 10 network types: adolescents in the stable low mother, low friend, no romantic partner network type scored lower than those in the stable high mother, high close friend, high romantic partner network type. The findings for friendship competence differed slightly from those found for Grade 10 and Grade 12 network types: Adolescents in the stable low mother, low close friend, no romantic partner network type scored lower than those in the other two stable network types.

## Discussion

This study examined three issues concerning adolescent relationships and relationship networks. We first examined the consistency of social support across relationships. Next we examined the stability of social support in relationships and relationship networks. Finally, we examined how self-worth and interpersonal competence were associated with social support in different relationships and networks of relationships. We examined these issues using both variable-centered and person-centered perspectives, which yield different but complementary conclusions.

Variable-oriented questions concerned associations among variables that were expected to be more or less constant across individuals. Correlations describing concordances across relationships were assumed to describe the entire sample, and no systematic differences were anticipated in the stability of social support or in associations between social support and adolescent self-worth or interpersonal competence. Person-oriented questions concerned the identification of subgroups characterized by distinct patterns of association among variables. Individuals were assumed to differ in the extent to which perceptions of relationship social support were shared and in the degree to which these perceptions were stable. Adolescent self-worth and interpersonal competence was expected to vary across groups defined by relationship social support. Findings from the variable-centered analyses suggest that certain broad principles may describe adolescent perceptions of close relationships, but the person-centered analyses indicate that conclusions should be tempered by an appreciation of individual differences in patterns of concordance and stability, and associations with measures of individual well-being.

*Concordance in Perceptions of Relationship Social Support*

To what extent are perceptions of social support similar across romantic relationships, friendships, and mother-adolescent relationships? Perceptions of social support were hypothesized to be moderately concordant because of a carryover in interpersonal skills and expectations from one relationship to another (Furman & Wehner, 1994). In addition, the behavior and personality characteristics of the adolescent may elicit similar responses from different partners, leading to similarities across relationships. Our findings were consistent with these propositions. As has been found in other studies (Connolly & Johnson, 1996; Furman et al., 2002; Helsen et al., 2000; Hoffman et al., 1988), social support scores were moderately correlated across relationships.

What are the most (and least) common networks of relationship social support? The person-centered analyses detail a convergence of social support (or lack thereof) that is typical of many adolescent relationships. Approximately 45% of 10th graders and 12th graders were categorized into one of three network types, each characterized by similar perceptions of social support in relationships with mothers, close friends, and romantic partners. Concordance was even greater when reports were limited to perceptions of relationships with friends and mothers: at each age period, more than 60% adolescents reported similar levels of social support in these two relationships. The findings corroborate cluster analyses of family and friend relationships, where the percentage of youth with concordant relationships exceeded 80% (Scholte et al., 2001). Thus, moderate correlations between relationship social support scores mask the fact that a large proportion of participants perceived consistently high or consistently low levels of relationship support.

*Stability of Perceptions of Relationship Social Support*

How stable are perceptions of social support in each relationship? Substantial stability was hypothesized for perceptions of social support in different relationships because patterns of interaction in a close relationship (and the relational schema they foster) endure over time and are resistant to change (Laursen & Bukowski, 1997). Variable-centered analyses of stability lend credence to this interpretation. The correlations over time for friends and romantic partners are particularly noteworthy, as most adolescents described different partners at each age period. We conclude that social support stability in the face of changes in the identity of friends and romantic partners is indicative of a process whereby relational experiences are replicated over time as well as across relationships.

Romantic relationships were the least stable sources of social support: *r-to-Z* comparisons confirmed that reports of social support in romantic relationships were less stable than reports of social support in relationships with friends and mothers. It appears that the formative and variable nature of adolescent romantic relationships may make them somewhat more susceptible to revisions.

Do adolescents retain the same networks of social support over time? Person-centered analyses indicated that a sizable minority of adolescents remained in the same network types across the 2-year period and that very few youth experienced dramatic shifts in network social support. Youth initially reporting high social support across relationships were two times more likely than chance to remain in the same relationship network 2 years later. Youth initially reporting low social support from mothers and close friends and either low social support from romantic partners or no romantic partner were two to four times more likely than chance to describe relationships in similar terms at the conclusion of the study. Movement between low social support and high social support types was rare. Only 1 of 55 adolescents in the low social support groups at the beginning of the study was in the high social support group at the end of the study, and only 4 of 28 adolescents in the high social support group at the beginning of the study were in the a low social support group at the end of the study.

## *Relationship Social Support and Adolescent Well-being*

Do perceptions of social support predict adolescent self-worth and interpersonal competence? Consistent with prior research (Barrera et al., 1993; Windle, 1992), mother-adolescent relationship support was the primary predictor of global self-worth. Similarly, links from friendship support to social acceptance and friendship competence, as well as links from romantic relationship support to romantic competence, were consistent with previous studies of adolescent peer relationships (Connolly & Konarski, 1994). Our variable-centered findings extend this research by simultaneously examining links with all three relationships and by identifying the unique variance associated with each.

Do adolescent self-worth and interpersonal competence differ as a function of relationship support networks? Better outcomes were found among those with networks of supportive relationships, extending similar person-centered findings concerning family members and friends (Rosenfeld et al., 2000; Scholte et al., 2001) to include relationships with romantic partners. Unique to the present study were distinctions between adolescents reporting unsupportive relationships with mothers and friends. Youth who

also had an unsupportive romantic relationship were higher in social acceptance, romantic competence, and (in Grade 10) global self-worth than those without a romantic relationship. These findings may be an indication of developmental status. Many adolescent romantic relationships are short-lived and primarily serve affiliative and sexual needs (Furman & Wehner, 1994). The quality of romantic relationships may be of some significance, but participation in a romantic relationship may be at least as important. Selection effects also cannot be discounted: youth with low self-esteem and poor social skills are undesirable dating partners, which may delay their entry into romantic relationships (Laursen & Jensen-Campbell, 1999).

Elsewhere (Laursen & Mooney, in press) we have argued that differences attributed to the quality of a particular relationship may be subsumed under differences attributed to high- and low-quality relationship networks. For adolescents with high levels of social support across relationships, one cannot attribute beneficial outcomes to a particular relationship (e.g., a friendship), because this relationship is an integral component of a network of supportive relationships. With a larger sample it may be possible to isolate effects by comparing adolescents who have consistently supportive relationships with those less typical adolescents who have some supportive and some unsupportive relationships. Yet this comparison would miss the important point that support from a particular relationship and support from the overall network are typically confounded for most adolescents. Research to disentangle these effects must necessarily be interpreted cautiously.

These findings demonstrate how variable-centered and person-centered approaches offer distinct insights into patterns of association, addressing different questions concerning the correlates of relationship support. As noted previously, the variable-centered analyses revealed that different relationships provided unique contributions in the prediction of the different indices of self-worth and interpersonal competence, whereas the person-centered analyses identified groups of adolescents with the best and worst outcomes. These complementary insights into processes and patterns associated with adolescent relationship support would not have been revealed if we had conducted only one type of analyses.

## Caveats and Conclusions

Our conclusions must be tempered by limitations in the measures. First, although self-perceptions of relationship quality have been found to be more strongly linked to outcomes than objective measures (Shrauger & Schoeneman, 1979), additional work with behavioral indices of social support is needed to validate these self-report findings. Second, our measures

of social acceptance and interpersonal competence incorporated reports from friends, mothers, and participants, building on previous studies that focused primarily on self-perceptions. These results must still be replicated, however, with standard measures of sociometric status and observational indices of social competence. Third, the social support measure focused exclusively on positive relationship attributes. Related research on adolescent friends suggests that negative attributes are distinct facets of relationships that make their own contributions to individual well-being (Burk & Laursen, 2005; Hussong, 2000).

Our conclusions must also be tempered by limitations in the sample and in the timing of the data collection. A larger sample would enhance power to detect interactions in regression analyses, thereby increasing the comparability of the variable-centered and person-centered analyses. By the same token, a larger sample would increase cell sizes to the point where types could be contrasted with antitypes and with other social support groups. We predicted, but did not find, that self-worth and interpersonal competence would improve for those with supportive relationships and would decline for those lacking supportive relationships. Lack of power clearly hampered our ability to detect longitudinal change attributable to relationship support and relationship networks; although means for every dependent variable increased or decreased in the anticipated direction, small cell sizes, the stability of the constructs, and modest effect sizes prevented most prospective and antecedent analyses from reaching conventional levels of statistical significance. Our inability to detect changes in well-being may also indicate that the assessment periods were too far apart or that connections between individual adjustment and relationship social support may have been established during earlier age periods. Efforts to determine causal pathways will require more frequent assessments that begin earlier in life.

Finally, our conclusions must be tempered by limitations in the analyses. Although our findings are consonant with those from other studies applying median splits to social support scores (Rosenfeld et al., 2000; van Aken & Asendorpf, 1997), the use of median splits to create network groups has drawbacks, especially in the absence of commensurate three-way interactions in regression analyses. Results may be biased by the arbitrary division of a continuous variable into a limited number of categories (MacCallum, Zhang, Preacher, & Rucker, 2002), although a clear conceptual framework to guide hypothesis testing may ameliorate some of these concerns (Bergman, Magnusson, & El-Khouri, 2003; von Eye, 1990). Moreover, some form of categorization is necessary when the research focus includes the identification of antitypes or atypical groups of individu-

als. That being said, replication of the major findings with cluster analyses would bolster confidence in our results.

To conclude, complementary results emerged from analyses of the concordance and stability of social support in adolescent relationships and relationship networks. Variable-centered findings of moderate concordance and stability were qualified by person-centered findings indicating that stability was greatest among youth who described all of their relationships in similar terms. Variable-centered findings revealed that support in different relationships uniquely contributed to the prediction of different indices of self-worth and interpersonal competence. Person-centered analyses suggested that differences in self-worth and interpersonal competence were most pronounced when contrasts focused on adolescents with networks of supportive and unsupportive relationships. Future scholars should note how synergies of support in adolescent relationships emerged from the combination of person-centered and variable-centered approaches adopted in this inquiry.

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