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Intimacy of Friendship, Interpersonal Competence, and Adjustment during Preadolescence and Adolescence

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BUHRMESTER, DUANE. *Intimacy of Friendship, Interpersonal Competence, and Adjustment during Preadolescence and Adolescence*. CHILD DEVELOPMENT, 1990, 61, 1101–1111. This study examined the hypotheses that (a) intimacy of friendship is more integral to socioemotional adjustment during adolescence than preadolescence, and (b) that competence in close relationship skills is more important during adolescence than preadolescence. Subjects were 102 10–13-year-old preadolescents and 70 13–16-year-old adolescents. Self- and friend ratings of friendship intimacy were gathered using a 2-step procedure ensuring that students rated only reciprocated friendships. Self- and friend ratings of close relationship competence were gathered using the newly developed Adolescent Interpersonal Competence Questionnaire. Intimacy of friendship was consistently and moderately correlated with adjustment and competence among adolescents but less consistently related among preadolescents. Significant age differences in coefficients were predominantly found for correlates of self-reported rather than friend-reported intimacy. Overall, the findings support the view that the ability to establish close, intimate friendships becomes increasingly important during early adolescence.

Several authors have argued that there are important developmental changes in the nature and significance of friendship during early adolescence (Berndt, 1982; Buhrmester & Furman, 1986; Gottman & Mettetal, 1987; Sullivan, 1953). Friendships among preschool and elementary school-aged children revolve primarily around playmate activities and group acceptance, whereas adolescent friendships become more intimate in nature. Although the increased intimacy of adolescent friendship is generally thought to have important implications for both short- and long-term socioemotional functioning (Buhrmester & Furman, 1986; Sullivan, 1953), few studies have empirically examined these implications. The present study investigated whether there are age differences between preadolescence and adolescence in how important intimacy of friendship is to adjustment and growth of interpersonal competencies.

The construct of intimacy has been used both to describe types of *interactions* and types of *relationships*. As a feature of interac-

tions, intimacy has most often been equated with the depth and breadth of self-disclosure (Jourard, 1979), although Sullivan (1953), and more recently Reis and Shaver (1988), indicated that the core process of intimate interactions is not disclosure, per se, but rather the experiences of feeling understood, validated, and cared for that accompany self-disclosure. As a feature of relationships, intimacy usually describes a somewhat broader array of qualities. For example, Sullivan believed that truly intimate exchanges required a type of relationship he described as a "collaboration." Although exactly what features comprise intimate collaborative friendships is open to debate, at a minimum they involve engaging in mutual activities, self-disclosure, and reciprocal feelings of satisfaction with the relationship (Furman & Robins, 1985; Manarino, 1976; Sullivan, 1953). The current study is primarily concerned with intimacy as a feature of relationships.

Consistent with early accounts (Douvan & Adelson, 1966; Sullivan, 1953), recent stud-

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ies have documented that, during early adolescence, children's friendships become more intimate as indicated by more frequent companionate exchanges, personal disclosure, and provision of emotional support (Buhrmester & Furman, 1987; Gottman & Mettetal, 1987; Youniss & Smollar, 1985; see Steinberg, 1989, for review). There are several theoretical reasons for believing that accompanying the increase in the level of friendship intimacy there is also an increase in the *importance* of friendship intimacy to socioemotional functioning. First, not having intimate friends may be a significant source of stress. Sullivan argued that the need for intimacy intensifies during early adolescence, and if left unsatisfied through friendship, leads to heightened feelings of loneliness, alienation, and depression. Second, adolescents appear to have an increased desire for self-disclosure and self-exploration rooted in a need for "consensual validation" of personal worth (Parker & Gottman, 1989; Sullivan, 1953). Youths who do not have intimate friendships may miss out on important validating interactions, which can leave them feeling less secure, more anxious, and less worthy. Finally, youths who lack intimate friendships may be deprived of important sources of social support and coping assistance. The support of intimate friends may be particularly important during adolescence as the young person confronts a variety of uniquely adolescent stressors (e.g., bodily changes, sexuality, dating, and strained family relationships), many of which cannot comfortably be discussed with parents (Buhrmester & Furman, 1987). Thus, whereas relationship intimacy should be associated with several aspects of adjustment during both middle childhood and early adolescence, several theoretical considerations suggest that the association should be stronger during early adolescence.

Relatively few studies have examined developmental changes in the association between friendship intimacy and adjustment. A handful have focused on the links between self-esteem and friendship intimacy. Self-reported closeness of friendship has been found to be positively related to self-esteem among preadolescents (Bukowski & Hosa, 1989; Cauce, 1986; Mannarino, 1978), and similar findings have been reported in some studies of adolescents (O'Donnell, 1976). Other studies, however, have revealed weak correlations between friendship intimacy and self-esteem (Berndt, 1987; Blyth & Traeger, 1987; Jourard, 1979). Almost no one, however, has directly compared preadolescent

(roughly 8 to 12 years) and adolescent (older than about 13 years) samples to determine whether there is an increase with age in the strength of the association between friendship intimacy and psychosocial adjustment more broadly defined (e.g., anxiety, depression, hostility, sociability, and self-esteem). One purpose of the current study was to redress this situation.

A second general implication of the increased friendship intimacy across the transition to adolescence concerns changes in the types of social competencies that are important in friendship relations. The demands of the interpersonal task faced by adolescents appear to be quite different from those faced by younger children. Because childhood friendships center around play activities and group acceptance, being a competent friend involves knowing how to enter ongoing games, being a fun and "nice" play partner (i.e., sharing and helping), and refraining from insulting or aggressing against one's friends (Asher, 1983). In contrast, adolescent friendship demands greater facility in a number of *close relationship* competencies (here referred to as "interpersonal competencies"). To a greater extent than is true of younger children, then, adolescents must be capable of initiating conversations and relationships outside of the classroom context. They must also be skilled in appropriately disclosing personal information and tactfully providing emotional support to friends (Youniss & Smollar, 1985). In addition, adolescents are expected to express honestly their opinions and dissatisfactions with each other while at the same time effectively managing conflicts (Bigelow & LaGaipa, 1980; Shantz, 1987). These interpersonal competencies are similar to the skills called for in mature adult romantic relationships and only partially overlap with the playmate skills demanded in early childhood.

According to this reasoning, adolescents who lack these specific relationship competencies are more likely to have difficulty achieving intimacy in their friendships. They are likely to have fewer friendships that are more superficial in nature, and thus these youths are also likely to be at greater risk for adjustment problems. At the same time, because they are unable to establish intimate friendships, they probably miss out on experiences that could further promote the growth of these competencies (Hartup & Sancilio, 1986). That is, many of the subtleties concerning when and what to self-disclose and how to provide emotional support are probably

learned and refined through hours of interactions with close friends. Moreover, one would expect the association between interpersonal competence and intimacy in friendship to be stronger during adolescence than preadolescence because it is during adolescence that the interactional processes that demand and foster close relationship competencies become central in friendship relations.

No studies have attempted to investigate this developmental change directly. Manarino (1976, 1979) and McGuire and Weisz (1982) found that children who scored high on measures of altruism and affective perspective taking (which are constructs related to interpersonal competence) were more likely to be involved in stable close friendships than children who scored low on these measures. These investigators, however, studied only a narrow age range of children (10–12 years) and consequently did not attempt to evaluate whether there were developmental changes in the importance of these competencies. Furthermore, they did not assess altruism and perspective taking as it was manifested specifically in the context of intimate friendship (see Price & Ladd, 1986). This is problematic because we know that children behave differently toward friends and nonfriends (Hartup, 1983).

One general obstacle to research on adolescent social competence has been the unavailability of adequate measures. Although methods have been developed to assess the skills needed by younger children to gain peer-group acceptance (Asher, 1983; Dodge, Pettit, McClaskey, & Brown, 1986; Putallaz & Gottman, 1981), little work has been done to develop measures that specifically assess the interpersonal competencies called for in intimate relationships (Ford, 1982). Recently, however, Buhrmester, Furman, Wittenberg, and Reis (1988) developed a measure for college-aged adolescents that specifically assesses the competencies assumed to be important in both close friendships and romantic relationships. This measure was modified slightly in the present study to investigate these issues.

In the cross-sectional study reported here, groups of preadolescents and adolescents were administered several questionnaires to investigate age differences in the strengths of associations among friendship intimacy, socioemotional adjustment, and interpersonal competence. In addition to the two central substantive issues discussed previously, the data also addressed two secondary

issues concerning: (a) the extent of convergence among self- and friend's ratings of friendship quality and interpersonal competence, and (b) the validity of the Interpersonal Competence Questionnaire (Buhrmester et al., 1988) for use with preadolescents and adolescents.

Method

Subjects

The initial preadolescent sample consisted of 133 fifth and sixth graders (68 girls), ages 10–13 years ($M = 11.3$), whereas the initial adolescent group consisted of 100 eighth and ninth graders (44 girls), ages 13–16 years ($M = 14.4$), from ethnically and racially diverse metropolitan Los Angeles schools. The preadolescents represented 85% of the children from seven mixed-aged classrooms in two elementary schools, whereas the adolescents constituted 44% of the youths from nine classrooms in one junior high school. The lower percentage of adolescents taking part in the study was due to a lower rate of return of parental consent forms. After the friendship pairing procedure (explained below), the sample consisted of 102 preadolescents and 70 adolescents.

Assessment Design

A two-step procedure was used to assess friendship intimacy. Initially, nomination procedures were used to identify relationships in which pairs of students reciprocally reported that they were friends. Students then rated the intimacy of their relationships with reciprocal friends. This method of assessment is similar to that employed by Berndt (1981), and differs in important ways (which will be discussed later) from the more common practice of having students rate their self-proclaimed "best friends." Students also rated their own adjustment and competence, as well as providing ratings of their preceptions of their friends' interpersonal competence.

Procedures

Data were gathered in two testing sessions. During the first session, participants were given rosters of names listing all same-sex schoolmates participating in the study and instructed to indicate which peers they considered close friends. Children were told that "close friends are kids you know very well, spend a lot of time with in and out of school, and who you talk to about things that happen in your life." A tally of nominations revealed that preadolescents nominated about twice as many peers as close friends ($M = 4.1$) than did adolescents ($M = 1.9$), $t(231) = 7.62$, $p <$

.001. This age difference is attributable to at least two factors: (a) Past studies have found that adolescents report having significantly fewer close friends than preadolescents (Berndt & Hoyle, 1985; Epstein, 1986), and (b) a lower percentage of the adolescent sample's grademates took part in the study (roughly 18% of the eighth/ninth graders attending the school vs. 85% of the fifth/sixth graders' grademates), and thus it was relatively less likely that all of an adolescent's close friends took part in the study. Children also indicated which peers they considered "fairly good friends" (defined as "kids you know and like, but who you don't feel quite as close to as close friends").

Children's responses were examined to identify instances of reciprocal friendship. A relationship was considered to be a close reciprocal friendship if both children nominated each other as close friends. If a student had two or more close friendships, then one of the peers was randomly selected with the constraint that the selection did not interfere with another peer being paired with a close friend. It was possible to pair 76% of the preadolescents and 70% of the adolescents with reciprocal close friends. In cases where reciprocated friendships could not be found, schoolmates whom subjects had nominated as friends (but who had not reciprocated the nomination) were identified so every child had two peers to rate on questionnaires (see below). These nonreciprocated friendships were not included in the analyses. Instances of reciprocal fairly good friends were also identified, and students rated one fairly good friend on the friendship and competence measures. The findings for fairly good friends are not reported here, however, because of space limitations and because there were very few significant associations with these ratings.

Measures

Friendship Intimacy (FI).—This questionnaire consisted of the items from the Companionship, Intimate Disclosure, and Satisfaction scales from the Network of Relationships Inventory (Furman & Buhrmester, 1985). An illustrative intimate disclosure item reads: "How often do you share secrets and private feelings with this person?" Subjects rated the qualities of their relationships with identified friends using a 5-point Likert-type scale (e.g., "1 = Never or hardly ever" to "5 = VERY often or EXTREMELY much").

Friendship intimacy scores were created by averaging the nine items. Alpha coefficients scores were satisfactory for both preadolescents (.93) and adolescents (.93).

Adolescent Interpersonal Competence Questionnaire (AICQ).—This newly developed 40-item questionnaire assessed the following five domains of competence that are important in close relationships (sample items in parentheses): self-disclosure ("How good is this person at opening up and letting friends get to know everything about him/herself?"), providing emotional support to friends ("How good is this person at making friends feel better when they are unhappy or sad?"), management of conflicts ("How good is this person at knowing how to disagree with friends without getting into big arguments?"), negative assertion ("How good is this person at telling friends that they have been neglectful or inconsiderate?"), and initiation of friendships ("How good is this person at phoning friends to set up a time to do things together?").

The AICQ was developed by modifying the Interpersonal Competence Questionnaire (ICQ), a measure that was originally developed to assess college students' interpersonal competence in close friendships and romantic relationships (Buhrmester et al., 1988). Studies of the college ICQ demonstrate that its five scales are adequately reliable, they conform to the predicted five-factor simple structure, and they correlate in predictable and discriminant ways with theoretically related variables. In rewording the ICQ items, an effort was made to make the vocabulary appropriate for young adolescents without changing the substantive content of questions.¹

Following each item were blank lines on which to rate the competence of the identified close friend (and the fairly close friend) and to rate the respondent's self-perceptions of competence. The names of friends being rated appeared at the top of the page. Respondents were instructed to use Levenson and Gottman's (1978) 5-point rating scale to indicate the level of competence and comfort that each target child would have in handling each type of situation (e.g., "1 = Poor at this; would be so uncomfortable and unable to handle this situation that it would be avoided if possible" to "5 = EXTREMELY good at this; would feel very comfortable and could handle this situation very well"). Scores were created by averaging all 40 AICQ items.² Cronbach

¹ Copies of this and all measures used in the study can be obtained from the author.

² Owing to space limitations, data for the five individual AICQ scales are not presented in this report. Information about the AICQ factor structure, scale reliabilities, and other descriptive data are available from the author.

TABLE 1

MEANS AND STANDARD DEVIATIONS OF FRIENDSHIP INTIMACY AND COMPETENCE SCORES

	PREADOLESCENTS		ADOLESCENTS	
	Males	Females	Males	Females
Self-rated intimacy	3.48 (.89)	3.74 (.72)	3.43 (.87)	3.58 (1.13)
Self-rated AICQ	3.87 (.58)	3.95 (.54)	3.53 (.58)	3.62 (.57)
Friend-rated AICQ	3.53 (.69)	3.79 (.57)	3.44 (.55)	3.63 (.70)

NOTE.—The numbers in parentheses are standard deviations. AICQ = Adolescent Interpersonal Competence Questionnaire.

alpha coefficients were computed separately for the two age groups and were high: preadolescents (.93) and adolescents (.92).

Self-Esteem Scale.—Rosenberg's (1965) 10-item scale was used to obtain global self-evaluations. Respondents rated their level of agreement ("1 = Strongly agree" to "5 = Strongly disagree") with statements such as "I feel I have a number of good qualities." The scale was satisfactorily reliable for preadolescents (.82) and adolescents (.82).

Socioemotional Adjustment (SA).—A 40-item self-report questionnaire was developed for this study as a relatively brief yet broad measure of several spheres of self-perceptions of socioemotional adjustment. It was necessary to develop this measure because existing measures of child adjustment were either too narrow in scope (i.e., assessing only one sphere of adjustment) or took more time to administer than was allotted by school personnel. Items similar to those found on the Child Behavior Check List, the Child Manifest Anxiety Scale, the Child Depression Inventory, and the Hopkins Symptoms Checklist were employed because of their established validity. Students responded on a 5-point Likert-type scale (e.g., "1 = Never or not at all" to "5 = Very often or very much").

Factor analyses revealed three orthogonal dimensions labeled Sociability, Hostility, and Anxiety/Depression (see Buhrmester, 1989, for details). Scale scores were computed by averaging items that assess each dimension. Example items included: "How well do you work with other people?" (Sociability; 10 items), "How often do you lose your temper?" (Hostility; 10 items), and "How often do you feel unhappy or down?" (Anxiety/Depression; 20 items).

Cronbach alpha coefficients computed for the current samples were adequate, ranging from .80 to .87 for preadolescents and .72 to .82 for adolescents. The intercorrelations among the three SA scores were: Sociability-

Hostility, $r = -.06$ and $-.37$ (among preadolescents and adolescents, respectively); Sociability-Anxiety/Depression, $r = -.15$ and $-.27$; Hostility-Anxiety/Depression, $r = .62$ and $.50$. Self-esteem was also moderately correlated with Sociability, $r = .43$ and $.47$, Anxiety/Depression, $r = -.59$ and $-.53$, and Hostility, $r = -.34$ and $-.26$, for the two age groups, respectively. These associations are similar to those reported for other measures of youths' adjustment (Achenbach, 1985) and indicate that the scales do not assess orthogonal dimensions of adjustment, although the modest to moderate size of the associations suggests that the scales nonetheless assess distinguishable aspects of adjustment. Whereas information about the validity of these scales is limited, the available data indicate that scale scores are correlated in theoretically predictable ways with other measures of social functioning (Buhrmester, 1989).

Results

Preliminary Analyses

Effects of sex, age, and rater.—Table 1 contains the means and standard deviations for the AICQ and FI scores for each age group and sex. Consistent with findings from past studies, a two-way analysis (ANOVA) of FI scores revealed a significant main effect of sex, $F(1,168) = 4.02, p < .05$, with girls ($M = 3.22$) rating their friendships as more intimate than boys ($M = 3.06$). Counter to expectations, adolescents did not rate their close friendships as more intimate than preadolescents. This finding is surprising because past studies examining similar age groups using similar questionnaires have found significant age differences (e.g., Buhrmester & Furman, 1987).

Next, an ANOVA was conducted on AICQ scores to determine whether perceptions of subjects' interpersonal competence varied according to sex, age, and the type of rater (self vs. close friend). There was a significant effect of type of rater, $F(1,167) =$

TABLE 2

CORRELATIONS BETWEEN FRIENDSHIP INTIMACY AND ADJUSTMENT

	SELF-RATED INTIMACY		FRIEND-RATED INTIMACY	
	Preadolescent	Adolescent	Preadolescent	Adolescent
Adjustment:				
Sociability .....	.20* ^b	.56***	.31**	.53**
Hostility .....	.04 ^b	-.30***	-.07	-.24*
Anxiety/depression .....	.00 ^b	-.32***	-.24*	-.30**
Self-esteem	-.01 ^b	.34***	.27**	.29**

NOTE.—Coefficients differ significantly for the two age groups if their superscripts differ.

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

12.53, $p < .001$. Follow-up comparisons using the Newman-Kuels procedure and a .05 alpha level indicated that self-ratings ($M = 3.82$) were higher than ratings by close friends ($M = 3.62$). These differences are similar to those found for college students' ICQ ratings of self, and friends (Buhrmester et al., 1988). There was also a significant effect of grade, $F(1,167) = 16.25$, $p < .01$, with adolescents ($M = 3.57$) rated as less competent than preadolescents ($M = 3.85$). This age difference may be attributable to a developmental trend observed in several studies where, as children get older, they lower their estimates of their own competence (Stipek & MacIver, 1989).³ There were no other significant main effects or interactions.

Finally, a MANOVA was conducted on the four adjustment scores. There were no significant main effects or interactions of sex or age.

Associations among Friendship Intimacy, Adjustment, and Competence

Table 2 provides clear evidence that friendship intimacy is related to adjustment for adolescents. All four dimensions of self-reported adjustment were significantly and moderately ($r = -.24$ to $.56$) correlated with both self- and friend ratings of friendship intimacy. For these and all other correlational analyses reported here, separate analyses were also conducted to determine whether correlations differed for boys and girls within each age group. No significant sex differences in coefficients were found, and therefore all results are reported for the combined samples of boys and girls.

The results in Table 2 also provide some support for the view that friendship intimacy

is more important to adjustment during adolescence than preadolescence, although there were discrepancies between the results for the self-report and friend-report measures of friendship intimacy. Fischer's procedure (with alpha set at .05) revealed that self-reported friendship intimacy was more strongly associated with adjustment for adolescents than preadolescents, with significant age differences found for all four dimensions of adjustment. Significant age differences were not found, however, for the correlations between friend-rated intimacy and adjustment, seemingly because of the relatively stronger correlations for the preadolescent sample.

The correlations contained in Table 3 support the contention that interpersonal competence is related to friendship intimacy during adolescence. Both self- and friend-rated competence scores were moderately to strongly related ($r = .45$ to $.68$) to self- and friend-rated friendship intimacy scores for the adolescent sample. It is noteworthy that self-ratings of competence were related just as strongly to friend ratings of friendship intimacy as to self-ratings of friendship intimacy, revealing that the associations held up across (as well as within) independent sources of ratings.

There was mixed support for the hypothesis that interpersonal competence is more important for friendship intimacy during adolescence than preadolescence. There were marked age differences in the correlations between self-rated friendship intimacy and self- and friend-rated AICQ scores, with competence more strongly related to intimacy for adolescents than preadolescents. No significant age differences were found; however, for

³ An informal comparison between the AICQ means and the ICQ means for college students reported by Buhrmester et al. (1988) revealed that the means for the eighth and ninth graders were quite similar to college students' means (difference $\pm .15$ scale points) for all scales except emotional support competence (where college students scored about .30 scale points higher).

TABLE 3

CORRELATIONS OF INTERPERSONAL COMPETENCE WITH ADJUSTMENT AND FRIENDSHIP INTIMACY

	SELF-RATED AICQ		FRIEND-RATED AICQ	
	Preadolescent	Adolescent	Preadolescent	Adolescent
Friendship intimacy:				
Self-rated .....	.12 ^b	.45 ^{***}	-.03 ^b	.63 ^{***}
Friend-rated .....	.29 ^{**}	.46 ^{**}	.56 ^{**}	.68 ^{**}
Adjustment:				
Sociability .....	.55 ^{**}	.63 ^{**}	.32 ^{**b}	.57 ^{***}
Hostility .....	.00 ^b	-.26 ^{***}	-.05	.14
Anxiety/depression .....	.07 ^b	-.30 ^{***}	-.06	-.26 [*]
Self-esteem .....	.27 ^{**}	.36 ^{**}	.22 [*]	.39 ^{**}

NOTE.—AICQ = Adolescent Interpersonal Competence Questionnaire. Coefficients differ significantly for the two age groups if their superscripts differ.

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

friend ratings of friendship intimacy, although small differences in the expected direction were evident.

Table 3 reveals that adjustment was fairly consistently related to self- and friend ratings of interpersonal competence for adolescents, with seven of the eight relevant coefficients achieving statistical significance and ranging in size from $r = -.26$ to $.63$. Adjustment was also related to AICQ ratings for preadolescents, but only four of the eight coefficients achieved significance. Only three of the eight comparisons between coefficients for the two age groups were significant, although all the differences were in the predicted direction.

Secondary Analyses

Correspondence between self- and friend ratings.—The extent of agreement between self- and friend ratings is of interest for both conceptual and methodological reasons. Intraclass correlations were computed between self-report and friend-reported FI scores. There were high levels of agreement among adolescents' ratings, $r = .81$, and moderate levels among preadolescents' ratings, $r = .38$. These coefficients significantly differed from each other ($p < .01$).

Correlations were also computed between self-rated AICQ and close-friend AICQ ratings of subjects' competence. Significant levels of convergence were observed for both preadolescents, $r = .48$, and adolescents, $r = .57$, providing support for the convergent validity of AICQ ratings. These coefficients did not differ significantly.

Berndt and Das (1987) have argued that the quality of children's friendships influences their perceptions of their friends' personalities. If this is true, then friends' judg-

ments of subjects' interpersonal competence (a feature of personality) may merely reflect the closeness of their friendships. If this were the case, then the correlations between self- and friend AICQ ratings may not actually reflect convergence of perceptions of competence per se but rather may be a side effect of the high convergence in perceptions of friendship intimacy. To examine this possibility, regression analyses were conducted in which close friend-rated AICQ scores were entered as predictors of self-rated AICQ scores after the effects of close friends' FI scores had been entered in the equation. The results revealed that friend-rated AICQ scores significantly increased predictions for both age groups: from $R^2 = .04$ to $R^2 = .24$ for preadolescents (R^2 change, $F[1,101] = 12.46$, $p < .01$) and from $R^2 = .19$ to $R^2 = .34$ for adolescents (R^2 change, $F[1,69] = 7.08$, $p < .03$). Thus, although AICQ scores shared some variance with close friends' FI scores, a substantial proportion of a friend's appraisal of a subject's competence was independent of the perceived intimacy of the friendship. These analyses indicate that friends' ratings of competence and friendship are not redundant with each other; they do not completely rule out the possibility, however, that friendship quality in some way biases students' perceptions of their friends' personalities.

Discussion

The findings provide consistent evidence that the intimacy of friendship is integrally related to adjustment and interpersonal competence during adolescence. Adolescents whose friendships were rated (by both self and friend reports) as companionate, disclosing, and satisfying reported that they are more competent, more sociable, less hostile, less

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anxious/depressed, and have higher self-esteem compared to peers involved in less intimate friendships. These findings are consistent with the claim that the processes that create intimacy in adolescent friendships are important determinants of mental health and the growth of competence.

Of course, the reverse direction of cause is also possible. Individual adjustment may be an especially important determinant of friendship formation during adolescence because the disclosure-support exchanges that become more common during adolescence are likely to expose personal adjustment problems. Adolescents with many problems may overburden friends with unpleasant disclosures or may be less able to decenter and provide support effectively to friends. Similarly, youths lacking in interpersonal competence may have greater difficulty establishing and maintaining intimate friendships. Although the correlational nature of the results make it impossible to draw conclusions about the direction of causation, it seems likely that a transactional process is at work in which experiences in intimate friendships foster individual adjustment and the refinement of interpersonal competence and, in turn, adjustment and competence determine how successful adolescents will be in forming intimate friendships.

Mixed support was obtained for the claim that friendship intimacy is more important during adolescence than preadolescence. On the one hand, self-reported friendship intimacy is more strongly related to adjustment and interpersonal competence during adolescence than preadolescence. These findings support the view that preadolescent friendships typically do not demand the interpersonal competencies called for in more mature forms of close relationships. These findings are also consistent with the view that, during preadolescence, parents play a relatively greater role than peers in fulfilling children's social needs and shaping their adjustment (Buhmester & Furman, 1987). On the other hand, there were no significant age differences in the correlates of friend-reported friendship intimacy, but merely modest differences in the expected direction. For preadolescents, friend reports of intimacy were moderately correlated with adjustment and competence. The discrepancies in findings across self- and friend reports cannot easily be explained. Further work is needed to replicate or explain these findings.

The methods used to assess friendship and friendship intimacy have implications for

how the results are interpreted. Subjects did not rate their self-identified "best" friends (which has been the most common practice in past studies) but rather rated "close" friends who had reciprocally nominated themselves as close friends. This procedure may in part account for the failure to find the expected developmental increase in mean ratings of friendship intimacy. As best friend relationships are known to be more intimate than those with the wider circle of close friends (Berndt, 1987), it may be that the developmental increase in intimacy observed in past studies is restricted to adolescents' best friendships and does not extend to all close friends. In the future it would be useful to assess both "best" and "close" friendships in order to investigate this possibility.

The lack of age differences in intimacy may have also been related to that fact that a lower proportion of adolescents' friends participated in the study (owing to the lower proportion of the total school population participating), thereby reducing the likelihood that adolescents were paired (by chance) with their "best" friend. This aspect of sample selection (which in large part was a result of the inherently different institutional and socioecological structures of elementary and junior high schools) may have worked against finding greater intimacy among adolescents' friendships. Although these factors may have affected the mean level of ratings, it seems doubtful that they bear on the major findings of the study concerning the correlates of intimacy.

Although these were not necessarily subjects' very best friendships, they appear to have represented relationships from small circles of close friendships among these youths. We know this because: (a) most children nominated only a handful of peers as close friends (i.e., about four for preadolescents and two for adolescents), and (b) children's ratings of the intimacy of these relationships were only slightly lower than the ratings of self-identified best friendships that have been reported in past studies (Buhmester & Furman, 1987). Whereas it is unclear whether the major theories of friendships (e.g., Sullivan, 1953) are intended to account for best friendships or for close friendships, we can be reasonably confident that the processes that are thought to mediate the associations between friendship and socioemotional adaptation (e.g., disclosure-validation, provision of support, and the exercise of interpersonal competence) are applicable to close as well as best friendships. Only further research will reveal

whether the findings reported here also hold true for best friendships more narrowly defined. However, because children spend a great deal of time interacting with peers who fall in the "close friend" category, the results reported here describe a significant arena of children's social lives.

The procedure of having children rate only reciprocally nominated friends has the clear advantage of eliminating ratings of lopsided unilateral "friendships" in which one child has unreciprocated (and often unrealistic) feelings of closeness toward a peer. This is important because, in theory, unilateral friendships are not expected to be positively related to social adaptation. In fact, the correlations between intimacy ratings and other variables reported here are, on average, somewhat stronger than those reported by investigators gathering self-identified best friend ratings (e.g., Berndt, 1987; Blyth & Traeger, 1987). These stronger findings may indicate that, by excluding ratings of unilateral friendships, the assessment procedure reduced a significant source of "noise" in the data that may have acted to attenuate the correlations found in previous studies.

The secondary analyses revealed several interesting findings. Despite not finding the expected age-related increase in level of friendship intimacy, we did find an age-related increment in the concordance among pairs of friends' perceptions of their friendships, with stronger correlations between self- and friend ratings of friendship intimacy found for adolescents than preadolescents. This age difference suggests that there is greater reciprocity in perceptions and feelings of closeness in friendship among adolescents than preadolescents. The surprising strength of the correlations between self- and friend ratings among adolescents suggests that adolescents are very aware of how close or distant their friendships are. The tight correspondence in perceptions might arise because both youths in the pair adopt a similar "objective" evaluation of the qualities of their interactions. It may also reflect a more dynamic relational process in which adolescents regulate their own feelings and behavior toward friends so as to try to match what they perceive as their friend's level of investment in the relationship.

Taken together, the results show that there is an initial basis for confidence in the reliability and validity of the AICQ as a measure of perceptions of interpersonal competence, particularly for adolescents. Scores

meet standard criteria for internal consistency reliability and are correlated in meaningful ways with theoretically related variables. The moderately strong agreement between self-ratings and ratings by close friends further suggests that the AICQ assesses meaningful and visible dimensions of social behavior.

It is important to note that many of the usual cautions concerning the interpretations of self-report questionnaires apply to the findings from the AICQ and the other measures. These questionnaires assess children's *perceptions* of their friendships, competencies, and adjustment, and accordingly the findings might have differed if behavioral methods were used. Even if children's perceptions differ substantially from observed behavior, however, children's perceptions are important to investigate in their own right (Olson, 1977). There is substantial evidence indicating that subjective appraisals are significant determinants of behavior (Bandura, 1986). One strength of the present study was that by gathering both self- and peer ratings, I was able to determine the degree to which children hold common perceptions of their friendships and levels of competence. The results show that, at least among adolescents, there is reasonably strong consensus among these perceptions. Not only was there agreement between sources of ratings, but similar patterns of correlations were observed across and between self- and close-friend ratings. These convergent findings suggest that these perceptions are anchored in a shared social reality.

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