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## Peer Acceptance and Friendship as Predictors of Early Adolescents' Adjustment Across the Middle School Transition

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This study examines several aspects of adolescents' pretransition peer relationships as predictors of their adjustment to middle school. Participants were 365 students (175 boys; 99% Caucasian) involved in the Time 1 (the spring of fifth grade) and Time 2 (the fall of sixth grade) assessments. Adolescents completed measures that assessed peer acceptance, number of friends, the quality of a specific mutual friendship, loneliness, depression, self-esteem, and involvement in school. Academic achievement and absentee data were obtained from student files. Regression analyses indicated that the pretransition peer variables predicted post-transition loneliness, self-esteem, school involvement, and academic achievement. The patterns of prediction varied slightly for each adjustment variable, with the most robust relationship being between peer acceptance and achievement. Results of repeated-measures MANOVAs indicated no differential changes in adjustment across time by gender. Implications for including a peer component in programs that prepare students for the middle school transition are discussed.

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Adolescence is a developmental period characterized by numerous biological, cognitive, and social transitions (Hill, 1980; Steinberg, 2008). In addition to coping with these changes, early adolescents typically transition from the elementary school to middle school environment. This transition usually involves moving from a small elementary school with self-contained classrooms and close relationships with teachers to a larger, more impersonal environment that can include ability grouping or tracking, more stringent grading, and fewer decision-making opportunities in the classroom (Eccles, Lord, & Midgley, 1991; Simmons & Blyth, 1987). Transitioning students also face novel daily challenges such as meeting new peers, using locker and hall passes, changing for gym class, and adjusting to a schedule that does not include recess. According to the stage-environment fit theory, individuals are likely to experience adjustment difficulties when a particular environment does not meet their psychological needs (Eccles, Lord, & Buchanan, 1996). The changes that young adolescents encounter upon entering middle school are often inconsistent with their developmental characteristics, which include a need for autonomy, heightened self-consciousness, advancing cognitive abilities, and close relationships with peers (Eccles et al., 1996).

Based on this theorized mismatch between adolescents' needs and the characteristics of the middle school environment, one might expect students to experience adjustment difficulties across the middle school transition. However, empirical findings on this topic have varied. The results of some studies indicate that this transition coincides with declines in academic achievement, self-esteem, interest in school, and level of motivation (e.g., Alspaugh, 1998; Fenzel, 2000; McDougall & Hymel, 1998; Simmons & Blyth, 1987), and increases in psychological distress (Chung, Elias, & Schneider, 1998; Hirsch & Rapkin, 1987). In contrast, others have reported that adolescents' self-esteem either increases or remains stable across this transition (Fenzel & Blyth, 1986; Hirsh & Rapkin, 1987; Proctor & Choi, 1994).

Results regarding gender differences in adjustment across the transition have also been inconsistent. Some studies have reported that girls' psychological adjustment and self-esteem are more negatively affected relative to boys' (e.g., Chung et al., 1998; Hirsch & Rapkin, 1987; Proctor & Choi, 1994; Wigfield, Eccles, Mac Iver, Reuman, & Midgley, 1991), whereas other studies have found similar adjustment patterns for boys and girls (e.g., Berndt & Mekos, 1995; McDougall & Hymel, 1998). Given that girls enter puberty several years earlier than boys (Steinberg, 2008), they are more likely to experience the transition while also facing the biological

changes of puberty. Furthermore, girls develop close friendships earlier during adolescence than boys, tend to rely more on friends for emotional support and preservation of their self-esteem, and experience higher levels of stress (e.g., conflict, jealousy) in their relationships with peers (Ladd, 2005; Steinberg, 2008). Although the higher levels of intimacy in girls' friendships can serve as a protective factor, this characteristic may lead to greater vulnerability for girls when their peer relationships are disrupted. Indeed, girls respond to stress in their interpersonal relationships with greater anxiety and depression than do boys (Rudolph, 2002). To the extent that girls experience disruptions in their relationships with peers during the middle school transition, this might place them at a higher risk for psychological distress. Additional research is needed to clarify whether this transition has a differential impact on the social, psychological, or academic adjustment of boys and girls.

Given the equivocal findings, researchers have sought to identify factors that influence adolescents' adjustment across this transition, such as the timing and number of secondary school transitions (Crockett, Petersen, Graber, Schulenberg, & Ebata, 1989; Simmons & Blyth, 1987), changes in achievement goals (Anderman & Midgley, 1997), and students' perceptions of the stressfulness of the transition (Berndt & Mekos, 1995; McDougall & Hymel, 1998). Based on the variety of provisions offered by peer relationships, including companionship, affection, intimacy, instrumental aid, and enhancement of worth (Furman & Robbins, 1985), as well as the rising importance of peers during the adolescent years (Steinberg, 2008), it seems quite likely that peer relationships play a critical role in helping youth negotiate the challenges of transitioning to the middle school environment. However, relatively few studies have examined the role of peers in predicting adjustment to middle school, with the majority of these studies focusing on peer support and the stability of peer relationships (e.g., Aikins, Bierman, & Parker, 2005; Berndt, Hawkins, & Jiao, 1999; Hardy, Bukowski, & Sippola, 2002). Surprisingly few studies have investigated the contribution of other aspects of early adolescents' peer experiences, such as peer acceptance, number of mutual friends, and friendship quality, to adjustment across the middle school transition, which is the focus of the present study.

The developmental psychopathology perspective provides a theoretical rationale for examining the role of peers across the transition to middle school. This approach emphasizes the importance of examining both normal and atypical patterns of development. Emphasis is placed on longitudinal research and transactional patterns (i.e., dynamic, reciprocal interactions)

between children and various developmental contexts, including the family and peers. Adaptations to one's environment are heavily influenced by these interpersonal relationships (Sroufe, 1997). Developmental psychopathologists also focus on individuals' adaptation to essential developmental tasks, including normative transitions, because they "offer a window through which to view developmental processes and also an opportunity to guide individuals toward one set of paths rather than another, with long term consequences" (Masten & Braswell, 1991, p. 41). From this perspective, the nature of children's experiences with peers prior to the middle school transition could serve as either a vulnerability or a protective factor. Adolescents who do not have a strong social network (e.g., fewer friends, lower-quality friendships) in late elementary school may not have a secure base to rely upon when navigating the transition. By offering provisions such as emotional support, instrumental aid, and a sense of belonging at school (Wentzel, 2009), peer relationships promote resilience for coping with developmental challenges. Based on these principles, not only would we expect pretransition peer experiences to be associated with posttransition adjustment, but involvement with peers would also likely lead to change in adjustment across time. Just as they are spending more time with peers, youth are at risk for a wide range of behavior problems and psychopathology during the adolescent years (e.g., delinquency, drug and alcohol use, anxiety, depression, suicidal behavior; Steinberg, 2008). Therefore, a closer examination of the role of peers across this transition may also have important implications for intervening prior to the transition to place at-risk youth on more adaptive developmental pathways.

Researchers such as Bukowski and Hoza (1989) have asserted that specific types of relationships are encompassed by the broad concept of *peer relations* and it is critical to assess each of these aspects of children's peer experience. *Popularity* (i.e., a particular child's level of acceptance by the members of his or her peer group), *friendship* (i.e., involvement in a mutual, dyadic relationship), and *friendship quality* (i.e., the extent to which a friendship affords certain provisions such as validation and companionship) are conceptually distinct, yet related, peer constructs that make unique contributions to children's adjustment. Substantial evidence links these peer variables (i.e., low levels of peer acceptance, few mutual friends, low-quality friendships) to internalizing difficulties, including loneliness and depression (e.g., Asher & Wheeler, 1985; Nangle, Erdley, Newman, Mason, & Carpenter, 2003; Panak & Garber, 1992; Parker & Asher, 1993; Schwartz, Gorman, Duong, & Nakamoto, 2008). Clear links have been established between the peer variables and adjustment, even extending to

relationships and mental health in adulthood (e.g., Bagwell, Newcomb, & Bukowski, 1998).

In terms of differential contributions to adjustment, friendship experiences typically provide intimacy, affection, and a sense of reliable alliance (Furman & Robbins, 1985) and are strongly tied to self-esteem (e.g., Berndt & Keefe, 1996; Bishop & Inderbitzen, 1995; Buhrmester, 1990). Peer acceptance, which affords a sense of inclusion, nurturance, and companionship (Furman & Robbins, 1985), is more robustly related to absenteeism, academic achievement, and early school dropout (e.g., Buhs & Ladd, 2001; DeRosier, Kupersmidt, & Patterson, 1994; Parker & Asher, 1987). However, there is overlap in terms of the importance of each of these peer variables to school adjustment, with involvement in school and academic achievement also being influenced by the friendship variables (e.g., Berndt & Keefe, 1995; Wentzel & Caldwell, 1997; Wentzel, Barry, & Caldwell, 2004). According to Wentzel (2009), there are several mechanisms that link peer relationships with academic functioning. In addition to direct assistance with academic tasks, peers provide emotional support that promotes engagement in the classroom. Wentzel also emphasizes that prosocial behavior (e.g., cooperating, sharing) serves as an important link between peer relationships and achievement because “socially competent behavior provides a necessary foundation for learning” (p. 538). Alternatively, children who do not have supportive peer relationships are at a greater risk for experiencing emotional distress, which can lead to decreased levels of motivation and engagement in the classroom that in turn can contribute to lower academic achievement.

The relation of these peer variables to adjustment has been examined extensively across *early* school transitions. These studies indicate that children’s experiences with peers (e.g., the presence of a familiar peer, level of peer acceptance, friendship, friendship quality) play an important role in their successful negotiation of the transition from preschool to kindergarten (e.g., Ladd, 1990; Ladd, Kochenderfer, & Coleman, 1996). Research with middle school-aged or junior high school-aged samples demonstrates that peers have a substantial influence on adolescents’ academic performance, achievement motivation, emotional adjustment, attitudes toward school, and likelihood of advancing to the next grade level (e.g., Berndt & Keefe, 1995; Wentzel et al., 2004; Wentzel & Caldwell, 1997). For example, Wentzel and colleagues (2004) found that sixth graders who were not involved in any reciprocal friendships had lower academic achievement, higher levels of depression, and lower self-worth than did students who were involved in mutual friendships. Furthermore, involvement in friendship during sixth grade predicted emotional distress 2 years later, when

students were in eighth grade. Notably, most of these studies focus on students who have already entered junior high or middle school. However, Ladd's research with kindergarten samples demonstrates that it is crucial to examine the role of peer acceptance and friendship across normative school transitions.

There has been limited investigation into the role of pretransition peer acceptance and friendship on posttransition adjustment to middle school. Among the few studies on this topic, two have focused on peer support and the stability of peer relationships. Berndt et al. (1999) gathered information about the quality and stability of sixth graders' best friendships, self-esteem, social behavior, behavior problems, and report card grades ( $N = 101$ ). The sociability and leadership of students who had high-quality sixth-grade friendships that were stable across the transition increased following the transition to junior high school. Behavior problems increased in students who had less stable friendships with students who had behavioral difficulties at school. Berndt et al. concluded that friendship quality and stability may relate to the extent to which friends influence one another across this transition. Hardy and colleagues (2002) assessed peer rejection, acceptance, and reciprocated friendships among 134 students across six waves of data collection (i.e., during the spring of sixth grade and several times following the transition to seventh grade). Relevant to the present study, the average number of friendships declined across time. Although girls and boys had similar numbers of reciprocated friendships at each assessment, girls experienced greater instability in reciprocated friendships across the transition. Hardy and colleagues point to the importance of further research examining links between peer relationships and measures of psychosocial adjustment for boys and girls transitioning to middle school, an area that is addressed in the present study.

A small number of subsequent investigations have examined further how peer experiences relate to adjustment across the middle school transition. Aikins et al. (2005) assessed the friendship quality, social skills, *possible selves* (i.e., the kind of person they expected to be in junior high), and transition expectations of 123 adolescents during the spring of sixth grade. Friendship maintenance, friendship quality, participants' feelings of self-worth and loneliness, and school adjustment were assessed after the transition (i.e., the spring of seventh grade). Results indicated that pretransition friendship quality predicted stronger friendship maintenance. In turn, friendship maintenance was associated with more positive posttransition school adjustment but not emotional distress. Participants' negative expectations about themselves and the transition predicted higher levels of emotional distress and poorer school adjustment. Limitations of this study

include a relatively small sample size, and a somewhat narrow assessment of adolescents' pretransition peer experience (friendship quality) and post-transition adjustment. Aikins and colleagues suggest that future studies move beyond an assessment of friendship quality to include additional measures of social adjustment, such as sociometric status.

In a subsequent study, Kingery and Erdley (2007) examined peer acceptance, number of mutual friends, and friendship quality during elementary school (i.e., the spring of fifth grade) as predictors of self-reported loneliness and school involvement in middle school (i.e., the fall of sixth grade). Peer acceptance ratings and friendship nominations, as well as self-reported friendship quality, loneliness, and participation in school-related activities, were gathered from 146 participants. Pretransition peer variables significantly predicted posttransition loneliness and school involvement, with peer acceptance emerging as a unique predictor. The average number of friends decreased significantly across the transition, but peer acceptance and friendship quality remained relatively stable. The peer variables predicted adjustment similarly for boys and girls, and there were not differential changes in adjustment by gender across the transition. Limitations of the Kingery and Erdley study include a small sample size, exclusive reliance on self-report measures of adjustment, and a focus on only two post-transition adjustment variables. Additional research is needed to replicate and expand upon this study by examining how the peer variables predict adjustment, including a broader range of adjustment variables, and exploring mean changes in the peer and adjustment variables across time.

The present investigation addresses the limitations of previous studies in several ways. First, this study simultaneously examines the role of three aspects of adolescents' pretransition peer experience (i.e., peer acceptance, number of friends, friendship quality) in predicting posttransition adjustment across the transition from elementary to middle school. This study also includes a more comprehensive assessment of posttransition adjustment, including psychological (i.e., loneliness, depression, self-esteem) and school (i.e., school involvement, academic achievement, school avoidance) adjustment variables. Although much of this information is gathered via self-report, information from school records supplements the self-report data. Finally, with a relatively large sample size, the present study explores potential differences in adjustment by gender.

In keeping with the developmental psychopathology perspective, the present study further elucidates associations between adolescents' involvement with peers and their adaptation across this normative transition. Given that the nature of peer relationships prior to the transition can serve as either a vulnerability or a protective factor, the goals of the present study are

as follows: (1) to examine associations between pretransition peer experiences and various aspects of posttransition adjustment, and (2) to evaluate the extent to which pretransition peer experiences predict change in adjustment across time. Based on prior research, it is expected that all of the pretransition peer variables (i.e., acceptance, number of friends, friendship quality) will contribute significantly to the prediction of posttransition loneliness, depression, and school involvement. Specifically, it is predicted that higher peer acceptance, a greater number of friends, and higher-quality friendships will be associated with lower levels of loneliness and depression and with greater involvement in school. It is also hypothesized that greater peer acceptance will predict higher academic achievement and lower levels of school avoidance, whereas a greater number of friends and higher-quality friendships will be positively and more robustly associated with self-esteem across time. Furthermore, it is expected that the peer variables will predict *change* in adjustment across time (i.e., lower loneliness, depression, and school avoidance; higher school involvement, self-esteem, and academic achievement) after controlling for pretransition levels of adjustment. Finally, given the mixed findings from prior research on gender differences, changes in adjustment across the transition for boys versus girls are explored.

## Method

### *Participants*

Elementary and middle schools from six public school districts located in lower- to middle-income rural and suburban communities in northern New England were recruited for this study. Participating schools included nine kindergarten through fifth-grade elementary schools, one third-grade through fifth-grade elementary school, and six sixth-grade through eighth-grade middle schools. Three of the middle schools received students from only one elementary school (57% of the sample,  $n = 207$ ), two of the middle schools each received students from two elementary schools (32% of the sample,  $n = 118$ ), and one middle school received students from three elementary schools (11% of the sample,  $n = 40$ ).

Children were initially recruited in the spring of fifth grade (Time 1), and their peer experiences and adjustment were followed into the fall of their sixth-grade year (Time 2). At Time 1, 62% ( $n = 397$ ) of the fifth-grade student population from the six school districts had permission from their parent or guardian and gave their own assent to participate. This level of participation is consistent with several previous middle school transition

studies using active consent procedures, with participation rates ranging from 50% to 70% (e.g., Aikins et al., 2005; Berndt et al., 1999; Berndt & Mekos, 1995; Hardy et al., 2002; Kuperminc, Leadbeater, & Blatt, 2001). There was an attrition rate of 8% (32 participants) between Times 1 and 2, primarily representing students who had relocated. A one-way analysis of variance (ANOVA) was conducted to examine potential differences in the Time 1 peer and adjustment variables between students who were retained for both assessments and students who participated only in the Time 1 assessment. Results revealed a significant difference between these two groups in academic achievement,  $F(1, 330) = 6.93, p < .01$ , and in school avoidance,  $F(1, 329) = 5.35, p < .05$ . Those who participated only at Time 1 had lower academic achievement ( $M = 2.75, SD = .67$ ) in comparison to study completers ( $M = 3.16, SD = .64$ ). Those who did not complete the study ( $M = .07, SD = .08$ ) also had a higher proportion of school absences than did study completers ( $M = .04, SD = .04$ ). These two groups were virtually equivalent on all of the other Time 1 variables, including age and gender (i.e., proportion of boys and girls).

The final sample included 365 students (175 boys, 190 girls; 99% Caucasian) who participated in both the Time 1 and Time 2 assessments. The mean age of participants was 11 years, 2 months, at the elementary school assessment and 11 years, 8 months, at the middle school assessment.

### *Peer Measures*

*Peer acceptance.* Students were given a roster (listing only those students who had permission to participate) and asked to rate each of their peers on a 1 (*I don't like to*) to 5 (*I like to a lot*) Likert scale. Children responded to the question "How much do you like to *spend time* with this person at school?" At Time 1, children rated all of the participating students in their grade. At Time 2, students rated either their grademates (68% of the sample) or only those students on their particular sixth-grade team (32% of the sample), depending on the size and structure of the participating middle schools. A child's peer acceptance score was the mean rating received from all participants in the classroom who rated him or her. This measure had adequate test-retest reliability from Time 1 to Time 2 ( $r = .58, p < .01$ ).

*Friendship nomination.* Children circled the names of their best friends via an *unlimited* nomination procedure (i.e., no restriction was placed on the number of names that they could circle). They were also asked to indicate their very best friend. Similar to the peer acceptance ratings, friendship nominations were completed by grade level at Time 1 and either by grade

level or team at Time 2. A child's nomination score was the total number of mutual friendships in which he or she was involved. Test-retest reliability for the friendship nomination measure was moderate ( $r = .43, p < .01$ ).

*Friendship quality.* Children rated their perceptions of one mutual friendship by using the Friendship Quality Questionnaire–Revised (FQQ-R; Parker & Asher, 1993). This questionnaire consists of 40 primary items and 1 practice item. For each item, children indicate on a 1 (*not at all true*) to 5 (*really true*) scale the extent to which a particular quality was characteristic of their relationship with a specific child (e.g., “\_\_\_\_\_ makes me feel good about my ideas”). Each participant completed a customized FQQ-R questionnaire, with a specific friend's name inserted into each item. Although the FQQ-R is comprised of six subscales (e.g., validation and caring, conflict resolution, companionship and recreation, intimate exchange), an average friendship quality score was used. The FQQ-R had high internal consistency at both Time 1 ( $\alpha = .96$ ) and Time 2 ( $\alpha = .95$ ) and test-retest reliability of .38 ( $p < .01$ ).

### *Adjustment Measures*

*Loneliness.* Using the Asher and Wheeler (1985) Loneliness and Social Dissatisfaction Questionnaire, children rated themselves on a scale of 1 (*That's not true at all about me*) to 5 (*That's always true about me*) across 24 items: 16 assess feelings of loneliness and social dissatisfaction at school (e.g., “There are no other kids I can go to when I need help at school”) and 8 are filler items. This measure has high internal consistency, with alpha coefficients of .90 and above across several studies (Asher, Parkhurst, Hymel, & Williams, 1990). For the present study, there was adequate test-retest reliability across the transition ( $r = .65, p < .01$ ) and high internal consistency ( $\alpha = .92$  at Time 1,  $\alpha = .93$  at Time 2).

*Depression.* Children completed the Children's Depression Inventory (CDI; Kovacs, 1985), a 27-item self-report questionnaire that assesses symptoms of depression. For each item, children selected one of three responses (e.g., “I am sad once in a while,” “I am sad many times,” or “I am sad all the time”), which are scored on a 3-point scale ranging from 0 (symptom is absent) to 2 (symptom is present most of the time). The one item regarding suicidal ideation was excluded at the request of school personnel, so the total score ranged from 0 to 52. Adequate psychometric properties for this measure have been reported across several previous studies (Kovacs, 1985; Smucker, Craighead, Craighead, & Green, 1986). In the present study, test-retest reliability was .58 ( $p < .01$ ), and alpha levels were .90 at Time 1 and .93 at Time 2.

*Involvement in school.* The nature and extent of children's involvement in school were assessed using the 12 school involvement items from the Attitudes Toward School self-report questionnaire (Berndt & Miller, 1990). For this measure, children rated their participation in school-related activities on a 1 (*never*) to 5 (*very often*) scale. The 12 items assess involvement in classroom and school-related activities (e.g., "How often do you take part in class discussions or activities?", "How often do you put a lot of energy into what you do in school?", "How often do you really pay attention to what the teacher is saying?"). Higher scores reflect greater involvement in school. Internal consistency for the school involvement items ranged from .77 to .83 (Berndt & Miller, 1990; McDougall & Hymel, 1998). In the present study, internal consistency was .81 at Time 1 and .83 at Time 2, and test-retest reliability was .66 ( $p < .01$ ).

*Self-concept.* Children completed the 36-item Self-Perception Profile for Children (SPPC; Harter, 1985), which assesses self-perceptions across multiple domains (e.g., academic, social, athletic, global self-worth). Children are first asked to choose one statement from a pair of statements (e.g., "Some kids are happy with themselves as a person BUT Other kids are often not happy with themselves," "Some kids like the kind of person they are BUT Other kids often wish they were someone else") and then indicate whether the statement is "sort of true" or "really true" for them. Each item is scored from 1 (low perceived competence) to 4 (high perceived competence). The SPPC has firmly established psychometric properties (Hymel, LeMare, Ditner, & Woody, 1999). Only the general self-worth domain was used in the present study. This domain had a 6-month test-retest reliability of .54 ( $p < .01$ ) and internal consistency of .82 at Time 1 and .84 at Time 2.

*Academic achievement.* Participants' grades in four different subject areas (i.e., English, science, social studies, and mathematics) were obtained from student files. These grades were quantified (A = 4, B = 3, C = 2, D = 1, F = 0) and averaged to determine an academic achievement score. At Time 1, end-of-year report card grades for fifth grade were used, whereas at Time 2, report card grades for only the first half of the sixth-grade school year were used. Test-retest reliability for academic achievement was .67 ( $p < .01$ ) from Time 1 to Time 2.

*School avoidance.* Absentee data were obtained from student files. Absences were calculated by dividing each participant's number of days absent in fifth grade by the total number of days in the fifth-grade school year (for Time 1) and number of days absent in the first half of sixth grade by the total number of days in the first half of the sixth-grade school year (for Time 2). School absences at Time 1 and Time 2 were significantly correlated ( $r = .38, p < .01$ ).

### *Procedure*

The data were collected across four 45-minute testing sessions. Sessions 1 and 2 (Time 1) occurred during the spring of the participants' fifth-grade year, whereas Sessions 3 and 4 (Time 2) took place 6 months later, approximately 6–8 weeks after the participants entered middle school. The measures were group administered in the children's classrooms. In Session 1, children completed the peer acceptance ratings, nominated their best friends, identified a very best friend, and completed measures of loneliness, depression, and involvement in school. Prior to Session 2, we identified mutual best friendship dyads for each participant (i.e., instance in which each member of a dyad nominated the other as one of his or her best friends).

During Session 2, children completed the self-concept questionnaire and the friendship quality questionnaire regarding one of their previously identified friendships. To select one friendship for each child to rate, the following decision rules were used: (1) if a child had a mutual friendship with someone that he or she had chosen as a *very best* friend, we selected that friendship for the child's friendship quality rating; (2) if a child did not choose a very best friend or if an identified very best friendship was not reciprocated, we randomly selected one *mutual* friendship for the child to rate; (3) children who did not have a mutual friendship completed a friendship quality questionnaire regarding a child they nominated as a best friend; and (4) if a particular child chose not to nominate any best friends, that child completed a friendship quality questionnaire with respect to a child that he or she rated highly on the peer acceptance measure. Friendship quality data for the nonreciprocated friendships (i.e., dyads selected based on Criterion 3 or 4) were not considered in the data analyses. Overall, 4.7% of the sample at Time 1 ( $n = 17$ ) and 3.8% of the sample at Time 2 ( $n = 14$ ) did not have a mutual friendship. Approximately 6–8 weeks after entering middle school, children completed the same questionnaires in two classroom visits.

## **Results**

### *Overview*

First, correlations among the Time 1 peer variables and the adjustment variables at Times 1 and 2 are presented. Next, simultaneous regression analyses assess the relative contributions of the Time 1 peer variables to the Time 2 adjustment variables. Repeated-measures multivariate analysis

of variance (repeated-measures MANOVA) is used to examine differential changes in adjustment across time by gender.

### *Correlations*

The peer variables correlated positively at both assessment points. The strongest correlations were between peer acceptance and number of friends ( $r = .52, p < .01$ , at Time 1;  $r = .34, p < .01$ , at Time 2). The correlations between peer acceptance and friendship quality were lower but also significant ( $r = .17, p < .01$ , at Time 1;  $r = .12, p < .05$ , at Time 2). The correlations between number of friends and friendship quality were also significant but modest ( $r = .16, p < .01$ , at Time 1;  $r = .17, p < .01$ , at Time 2).

The correlations between the Time 1 peer variables and adjustment at both Time 1 and Time 2 were significant (see Table 1). Of the three peer variables, the correlations between peer acceptance and the adjustment variables were the most robust. The highest correlations were between peer acceptance and the adjustment variables of loneliness and academic achievement. Number of friends correlated significantly with loneliness, self-esteem, school involvement, and academic achievement at both assessment points. Friendship quality correlated significantly with loneliness and school involvement at Times 1 and 2 but with self-esteem and academic achievement at Time 2 only.

### *Regression analyses*

Simultaneous regression analyses assessed the contributions of the Time 1 peer variables to early adolescents' adjustment at Time 2 (see Tables 2 and 3). The regression models predicting loneliness, self-esteem, school involvement, and academic achievement were significant. For loneliness, peer acceptance ( $\beta = -.20, p < .01$ ), number of friends ( $\beta = -.18, p < .01$ ), and friendship quality ( $\beta = -.11, p < .05$ ) were unique predictors. Friendship quality was a unique predictor of self-esteem ( $\beta = .14, p < .05$ ), whereas peer acceptance predicted school involvement ( $\beta = .13, p < .05$ ) and academic achievement ( $\beta = .35, p < .001$ ). Gender also predicted school involvement across the transition ( $\beta = .14, p < .05$ ). Specifically, being a girl at Time 1 predicted higher school involvement at Time 2. The peer variables accounted for more of the variance in academic achievement ( $R^2 = .15$ ) and loneliness ( $R^2 = .11$ ) than in the other adjustment variables (see Tables 2 and 3).

Hierarchical regression analyses were also conducted for each Time 2 adjustment variable. For each of these regressions, the relevant Time 1 adjustment variable was entered on the first step and the peer variables were

**Table 1.** Correlations Among Time 1 Peer Variables and Time 1 and Time 2 Adjustment Variables

Variables	4	5	6	7	8	9	10	11	12	13	14	15
Peer Variables												
1. Acceptance	-.42**	-.28**	-.20**	-.14**	.20**	.17**	.26**	.15**	.30**	.41**	-.06	-.10
2. Number of friends	-.41**	-.30**	-.14**	-.09	.11*	.11*	.16**	.13*	.21**	.27**	.01	-.13*
3. Friendship quality	-.14**	-.18**	-.13*	-.09	.17**	.12*	.09	.15**	.07	.14**	-.03	-.07
Adjustment Variables												
4. Loneliness T1	.65**	.57**	.36**	-.29**	-.29**	-.19**	-.43**	-.32**	-.17**	-.25**	.02	.15**
5. Loneliness T2	.47**	.58**	-.30**	-.30**	-.30**	-.30**	-.36**	-.42**	-.10	-.24**	.02	.16**
6. Depression T1	.58**	.54**	-.54**	-.54**	-.54**	-.58**	-.58**	-.47**	-.18**	-.23**	-.01	.13*
7. Depression T2	-.44**	-.44**	-.44**	-.44**	-.44**	-.58**	-.40**	-.57**	-.16**	-.26**	.02	.15**
8. School involvement T1	.66**	.42**	.33**	.28**	.28**	.42**	.42**	.33**	.26**	.31**	-.05	-.10
9. School involvement T2	.37**	.37**	.37**	.37**	.37**	.37**	.37**	.37**	.18**	.32**	.04	-.13*
10. Self-esteem T1	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.19**	.24**	-.05	-.13*
11. Self-esteem T2	.20**	.20**	.20**	.20**	.20**	.20**	.20**	.20**	.20**	.20**	-.13*	-.18**
12. GPA T1	.67**	.67**	.67**	.67**	.67**	.67**	.67**	.67**	.67**	.67**	-.24**	-.16**
13. GPA T2	-.15**	-.15**	-.15**	-.15**	-.15**	-.15**	-.15**	-.15**	-.15**	-.15**	.38**	
14. Absenteeism T1												
15. Absenteeism T2												
Mean	1.79	1.69	7.11	5.97	3.42	3.37	3.38	3.45	3.16	3.15	.04	.04
SD	.65	.59	7.01	6.64	.67	.70	.63	.56	.64	.67	.04	.04

Note. T1 = measurements at Time 1; T2 = measurements at Time 2; GPA = grade point average.

Acceptance at Time 1:  $M = 2.81$  ( $SD = .71$ ) and at Time 2:  $M = 2.65$  ( $SD = .68$ ); number of friends at Time 1:  $M = 3.79$  ( $SD = 2.10$ ) and at Time 2:  $M = 4.17$  ( $SD = 2.72$ ); friendship quality at Time 1:  $M = 3.65$  ( $SD = .79$ ) and at Time 2:  $M = 3.68$  ( $SD = .74$ ).

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

**Table 2.** Simultaneous Regression Analyses for the Peer Variables Predicting the Psychological Adjustment Variables

Predictor variables	Loneliness			Depression			Self-esteem		
	<i>B</i>	SEB	$\beta$	<i>B</i>	SEB	$\beta$	<i>B</i>	SEB	$\beta$
Gender <sup>a</sup>	-.06	.06	-.05	-.61	.73	-.05	.00	.06	.00
Acceptance	-.12	.05	-.20**	-.90	.59	-.09	.08	.05	.09
Number of friends	-.05	.02	-.18**	.02	.20	.01	.01	.02	.03
Friendship quality	-.08	.04	-.11*	-.56	.48	-.07	.10	.04	.14*
<i>R</i> <sup>2</sup>		.11			.02			.04	

Note. <sup>a</sup>1 = female; 0 = male.

*n* = 339 for loneliness and depression; *n* = 331 for self-esteem.

\**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

entered on the second step. Only the regression model predicting academic achievement was significant ( $R^2 = .46, p < .001$ ). Peer acceptance at Time 1 was a unique predictor ( $\beta = .20, p < .001$ ) and accounted for an additional 3% of the variance in Time 2 academic achievement ( $\Delta R^2 = .04, p < .001$ ).

### Gender by Time MANOVAs

Repeated-measures MANOVAs were also conducted to examine mean changes in the peer and adjustment variables over time. In each of these

**Table 3.** Simultaneous Regression Analyses for the Peer Variables Predicting the School Adjustment Variables

Predictor variables	School involvement			Achievement			School avoidance		
	<i>B</i>	SEB	$\beta$	<i>B</i>	SEB	$\beta$	<i>B</i>	SEB	$\beta$
Gender <sup>a</sup>	.19	.08	.14*	.11	.07	.09	.00	.01	-.01
Acceptance	.14	.06	.13*	.32	.05	.35***	.00	.00	-.07
Number of friends	.00	.02	.00	.01	.02	.02	.00	.00	-.11
Friendship quality	.07	.05	.07	.05	.04	.06	.00	.00	-.04
<i>R</i> <sup>2</sup>		.05			.15			.03	

Note. <sup>a</sup>1 = female; 0 = male.

*n* = 339 for school involvement; *n* = 334 for achievement; *n* = 336 for school avoidance.

\**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

analyses, gender was the between-subject factor and time was the within-subject factor. In the first MANOVA, the peer variables were entered as dependent variables. Results revealed significant effects for time and gender (see Table 4). Follow-up univariate analyses indicated that peer acceptance declined significantly across the transition for both boys and girls,  $F(1, 324) = 25.70, p < .001, \eta^2 = .073$ . Conversely, the average number of mutual friendships increased significantly across the transition for boys and girls,  $F(1, 324) = 5.76, p < .01, \eta^2 = .017$ . The friendship quality variable remained stable across time. Girls had significantly higher friendship quality than did boys at both Time 1 and Time 2,  $F(1, 324) = 30.61, p < .001, \eta^2 = .073$ .

In the second gender-by-time MANOVA, the psychological adjustment variables were entered as dependent variables. Results revealed a significant effect for time (see Table 4). More specifically, loneliness,  $F(1, 338) = 8.72, p < .01, \eta^2 = .02$ , and depression,  $F(1, 338) = 9.58, p < .01, \eta^2 = .028$ , decreased for both boys and girls, whereas self-esteem increased from Time 1 to Time 2,  $F(1, 338) = 3.94, p < .05, \eta^2 = .012$ . The third MANOVA examined changes in the school adjustment variables by gender and across time. This analysis revealed a significant time effect (see Table 4). Follow-up univariate analyses indicated that academic achievement declined across the transition for both boys and girls,  $F(1, 298) = 4.60, p < .05, \eta^2 = .015$ , whereas school avoidance (i.e., proportion of days absent from school) decreased,  $F(1, 298) = 7.85, p < .01, \eta^2 = .026$ . School involvement did not change significantly across the transition.

## Discussion

The present study examined the relative contributions of early adolescents' pretransition peer experiences to their adjustment to middle school, and explored possible differences in posttransition adjustment by gender. Guided by the developmental psychopathology perspective with its emphasis on transactional patterns between youth and their social contexts (Sroufe, 1997), we expected adaptive peer relationships to serve as a protective factor by helping adolescents cope with the challenges associated with this transition. Results indicated that the pretransition peer variables contributed significantly to the prediction of posttransition adjustment, with the patterns of prediction varying slightly for each adjustment variable. The relationship between peer acceptance and academic achievement was the most robust, indicating that adolescents' pretransition social interactions play a key role in their academic success following the transition. There were no

**Table 4.** MANOVA Results for the Peer and Adjustment Variables by Time and Gender

Variable	Means						F Values		
	Time 1		Time 2		Time	Gender	Interaction	Gender	Interaction
	Boys	Girls	Boys	Girls					
Peer Variables					14.68***	10.57***	1.96		
Acceptance	2.87	2.91	2.71	2.72					
Number of friends	3.99	4.06	4.09	4.64					
Friendship quality	3.54	3.85	3.49	3.91					
Psychological Adjustment Variables					4.57**	2.07	1.22		
Loneliness	1.82	1.72	1.77	1.61					
Depression	7.10	6.67	6.49	5.22					
Self-esteem	3.42	3.37	3.43	3.48					
School Adjustment Variables					5.70**	2.53	1.70		
School involvement	3.31	3.48	3.22	3.45					
Academic achievement	3.17	3.21	3.07	3.19					
School avoidance	.040	.044	.037	.033					

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

differential changes in adjustment across time by gender. Specific findings and their implications are discussed in the following sections.

*Predicting School Adjustment: Achievement, School Involvement, and School Avoidance*

The most robust relationships in the present study were between the peer variables and academic achievement, with the peer variables accounting for 15% of the variance in academic achievement and with peer acceptance emerging as a unique predictor. In addition, Time 1 peer acceptance added significantly to the prediction of Time 2 academic achievement after controlling for achievement at Time 1. These results are consistent with those reported in the empirical literature on the correlates and consequences of children's peer relationships, which has found that peer rejection is associated with school-related difficulties such as poor academic achievement (e.g., Buhs & Ladd, 2001; DeRosier et al., 1994). Several possible mechanisms could account for the ability of pretransition peer acceptance to predict posttransition achievement. Students who are accepted by their peers receive emotional support that facilitates engagement in the classroom, experience a greater sense of belonging at school, and have many opportunities to practice social skills (e.g., cooperation) necessary for success in the classroom (Wentzel, 2009). Furthermore, those with higher peer acceptance have more opportunities to make friends and are involved in higher-quality friendships (Parker & Asher, 1993). They can rely on these friends as a resource for advice and assistance when completing academic tasks (e.g., help with homework). Overall, youth with high pretransition peer acceptance develop a solid foundation of social and emotional resources that they can rely on to maintain existing social relationships and build new relationships that can assist them in navigating academic challenges during the transition. In contrast, students with low pretransition acceptance have fewer peers to rely on for support and are more likely to experience social and emotional difficulties (e.g., peer victimization, anxiety, depression). These difficulties may negatively impact their level of motivation and ability to focus on academics (Wentzel, 2009), and provide them with fewer resources to adjust successfully across the transition.

Results of the present study parallel those reported by Akos and Galassi (2004) in which students' concerns prior to the middle school transition grouped into three areas: academic (e.g., having more homework, more difficult classes), procedural (e.g., finding their way around the school), and social (e.g., making new friends, getting along with peers, fitting in). Akos and Galassi state that "adjusting to the social aspects of a school transition

may be equally as important as adjusting to its academic demands. In addition, these two aspects may well be intertwined” (p. 220). The links between peer acceptance and academic achievement in the present study also have practical implications, particularly when considered in light of recent standards-based reform efforts (e.g., No Child Left Behind) focused on improving students’ achievement scores. Rather than focusing solely on academic instruction and reducing time for social interaction (e.g., shortened lunch periods), results of this study suggest that implementing interventions that target the social aspects of the transition could positively influence students’ academic achievement.

Given that previous research (e.g., Berndt & Keefe, 1995) has revealed associations between friendship and academic achievement, it is somewhat surprising that in this study the number of mutual friendships and friendship quality variables did not uniquely predict academic achievement. In their study, Berndt and Keefe found that various features of friendship (e.g., intimate disclosure, conflict) predicted changes in school involvement and academic achievement during a year of junior high school. Notably, several of the correlations between the friendship and adjustment variables in the present study were significant, indicating that these variables are associated with school adjustment even though they did not emerge as unique predictors in the regression equations.

Examining additional aspects of friendship would lead to a more in-depth understanding of how friendship influences academic achievement across the middle school transition. Research on the kindergarten transition indicates that the formation of *new* friendships after the transition is associated with higher levels of academic achievement, perhaps because making new friends broadens children’s friendship network, providing a wider circle of individuals who can offer assistance with school-related tasks (Ladd, 1990). Furthermore, it may be important to examine particular friendship features. For example, Ladd and colleagues (1996) found that perceived exclusivity in friendship is related to lower levels of achievement across early school transitions. Gathering information about the school attitudes and academic achievement of an adolescent’s friends may also be important for understanding an adolescent’s own level of academic achievement (Berndt & Keefe, 1995; Wentzel et al., 2004).

As hypothesized, the regressions of school involvement on the dimensions of early adolescents’ peer relationships were significant, with peer acceptance emerging as a unique predictor across the transition. These results are analogous to the findings of research on early school transitions, which indicate that higher levels of peer acceptance and lower levels of peer victimization are related to high levels of school liking (Ladd, Kochenderfer,

& Coleman, 1997). In addition, peer rejection predicts more negative attitudes toward school and lower levels of participation in the classroom (Ladd, 1990; Ladd, Birch, & Buhs, 1999). In the present study, gender was a significant predictor of school involvement such that being a girl at Time 1 was associated with higher levels of involvement at Time 2. One previous study assessing general attitudes toward school found that, compared to boys, girls reported experiencing higher levels of satisfaction with school (Hirsch & Rapkin, 1987). Similarly, with a sample of seventh graders, Berndt and Miller (1990) reported that, compared to girls, boys placed less importance on academic success. Additional research on the role of gender differences in school attitudes, values, and involvement across the middle school transition is needed because these factors play an important role in academic success during middle school and beyond.

Overall, a small proportion of variance was accounted for in school involvement by the peer variables, particularly in predicting school involvement across the transition. The extent of a student's involvement in school is likely to be influenced by several contextual factors (e.g., classroom size, school size, relationships between students and teachers) that were not assessed in the current study. Future studies should include these variables and also gather information from teachers (e.g., about students' attitudes and behavior in the classroom) and parents (e.g., about time and effort spent on homework, involvement in sports and extracurricular activities) to gain a more comprehensive understanding of students' involvement in school-related activities.

Inconsistent with the hypotheses, the regression model predicting school avoidance across the transition was not significant. In several studies, researchers have found that children who are rejected by their peers tend to experience higher rates of absenteeism (e.g., DeRosier et al., 1994; Parker & Asher, 1987). Whereas the research cited earlier used the construct of peer rejection (i.e., active disliking by peers), the current study focused on peer acceptance (i.e., rating of the extent to which peers enjoy spending time with a particular child). The active exclusion typically associated with rejected peer status might have more negative implications for school avoidance than do low levels of peer acceptance, in which peers prefer not to spend time with a child but do not necessarily exhibit active dislike. Given that only peer acceptance was assessed in the present study, the relative contribution of acceptance versus rejection could not be examined. Research on early school transitions has found that peer victimization is associated with school avoidance (Ladd et al., 1997) and that peer victimization and classroom participation mediate the relationship between

peer rejection and adjustment outcomes such as school avoidance and loneliness (Buhs & Ladd, 2001). To better understand the relationship between peer experiences and school avoidance across the middle school transition, future studies should include measures of peer rejection and victimization by peers.

*Predicting Psychological Adjustment: Loneliness, Depression, and Self-Esteem*

Consistent with previous research (e.g., Parker & Asher, 1987, 1993), loneliness was negatively correlated with peer acceptance, friendship, and friendship quality in the present study. In addition, the regression model using the peer variables to predict loneliness across the transition was significant, with peer acceptance, number of friends, and friendship quality emerging as unique predictors. The present results regarding loneliness differ slightly from those of a prior middle school transition study with 146 students, indicating that pretransition peer acceptance (but not friendship) was a unique predictor of posttransition loneliness (Kingery & Erdley, 2007). The larger sample size of the present study may have provided greater statistical power to detect the friendship variables as significant predictors. Previous research suggests that peer acceptance and friendship likely interact to influence loneliness across the transition. Nangle and colleagues (2003) found that, through its associations with friendship quantity and quality, peer acceptance exerted an indirect influence on loneliness, suggesting that it is the higher number and quality of the friendships of better-accepted children that protect them from feelings of loneliness.

The correlations between the peer variables and loneliness were generally stronger than the correlations between the peer variables and depression. In addition, contrary to original predictions, the regression model using the pretransition peer variables to predict posttransition symptoms of depression was not significant. Previous research has reported significant results when using these peer variables in regression models to predict depression (e.g., Boivin, Hymel, & Bukowski, 1995; Panak & Garber, 1992). The results regarding the prediction of depression in the present study may be related to symptoms of depression being less evident when children experience novelty and excitement during the first several weeks of a new school year. It may also be that the relationships between the peer variables and depression are indirect, a premise supported by Nangle and colleagues' (2003) findings that the effects of peer variables on children's depression are mediated through loneliness.

As hypothesized, the prediction of posttransition self-esteem was significant and friendship quality emerged as a unique predictor. These results are consistent with those from prior research on the relationship between qualitative aspects of friendship and adolescents' self-esteem. For example, Buhrmester (1990) found that involvement in friendships characterized by higher levels of intimacy was moderately correlated with lower levels of anxiety and depression and with higher self-esteem. Involvement in friendship supplies children and adolescents with certain provisions (e.g., intimate self-disclosure, validation, emotional support; Furman & Robbins, 1985). When faced with novel experiences such as school transitions, high-quality friendships may provide children with reassurance and a sense of security during the exploration of a new environment, leading to higher levels of self-esteem after the transition.

### *Comparisons by Gender*

Results of the present study did not find differential changes by gender in the peer or adjustment variables across the transition. For both boys and girls, peer acceptance declined significantly, the average number of mutual friendships increased, and the friendship quality variable did not change across time. Merging multiple elementary schools into a single middle school may afford students an opportunity to meet new peers and expand their friendship network. However, peer acceptance might have declined after the transition because students might not have known each other well during the first few months of middle school. Given that the present study is one of the first to examine simultaneously these specific peer variables across the middle school transition, it will be important for future studies to include follow-up assessments that extend beyond the early months of middle school.

Consistent with prior research on gender differences in friendship quality (e.g., Buhrmester, 1990; Zabatany, McDougall, & Hymel, 2000), girls reported significantly higher friendship quality than did boys at both assessment points. For both boys and girls, loneliness and depression decreased and self-esteem increased across the transition. These results are consistent with those from prior middle school transition studies reporting similar patterns of adjustment for boys and girls across time (e.g., Berndt & Mekos, 1995; McDougall & Hymel, 1998). The significant declines in academic achievement for both boys and girls in the present study replicate prior research (e.g., Alspaugh, 1998) and could be related to a shift in focus from task-related to performance-related achievement goals (Anderman & Midgley, 1997).

*Limitations and Directions for Future Research*

Study limitations include the 62% participation rate and the attrition rate of 8% from Time 1 to Time 2. In addition, the fact that the majority of the sample was Caucasian and from low to middle socioeconomic backgrounds may limit the generalizability of these findings to students of diverse racial or ethnic backgrounds. Given that the schools involved in this study were located in relatively small rural and suburban communities, the results of this study may not generalize to youth in other geographic areas (e.g., urban school districts). In smaller communities, neighborhoods and extended families may serve as key settings in which friendships are fostered, a possibility that has been suggested by the results of cross-cultural research on friendship (Attili, Vermigli, & Schneider, 1997). Students in smaller communities may enter middle school with many familiar peers from only one or two elementary schools, making the peer aspect of the transition less stressful. Despite these differences, there is evidence indicating that predictive factors for rural and urban youth are similar (e.g., peer and family risk factors for aggression; see Swaim, Henry, & Kelly, 2006). Additional research is needed to examine how the transition to middle school may function differently in smaller communities.

Our friendship assessment was limited, given that students could select as their friends only those students who had permission to participate in the study. Consequently, some children may have appeared friendless only because their friend's name was not included on the friendship nomination roster. Furthermore, given that the friendship nominations were completed by team rather than grade level at two of the middle schools, some students might have had a friend on a different team but did not have the option of selecting that child. Notably, these teams functioned as "schools within schools" (e.g., in separate wings of the building, students participated in all classes and other daily activities together), which would have increased the likelihood of being involved in friendships with other students on their team. However, students might have had one or more close friends on a different team, which would have led to an underestimation of their number of mutual friends. Overall, children who appeared friendless based on our assessment but actually had a friend (i.e., on different middle school team or in same grade but not involved in the study) likely had more positive emotional and academic adjustment than those participants who truly did not have a mutual friend. By underestimating the number of friends, correlations between the friendship and adjustment variables may have been attenuated.

Another limitation of the friendship assessment was that the qualitative aspects of only *one* mutual friendship were obtained. Perhaps the quality of

one friendship is not representative of the quality that children experience across several different friendships. Furthermore, if a child's closest friend was not included on the nomination roster, that child may have rated the quality of a friendship that was not actually with his or her closest friend. As mentioned previously, the present study also included a relatively narrow assessment of friendship (i.e., number, quality) and did not assess constructs such as friendship maintenance, the formation of new friendships after the transition, the characteristics of adolescents' friends (e.g., school attitudes, prosocial behavior, academic achievement), or the experience of being victimized by peers. With respect to the adjustment variables, the depression and loneliness scores were somewhat positively skewed, with a greater number of participants reporting low levels of depression and loneliness, and a smaller number with high scores on these variables. Although scores on these measures are similar to those reported in prior research on children's peer relationships with normative samples (e.g., Nangle et al., 2003), we recognize this as a limitation of the present study.

Future directions for this research include using a larger sample size, including additional assessment measures (e.g., friends' characteristics, perceptions of the stressfulness of the transition), and investigating how the role of peer variables across the transition may vary depending on contextual variables (e.g., large versus small middle school size, one versus many feeder elementary schools). Future studies should also include multiple informants (e.g., parents, teachers), additional follow-up assessments beyond the initial 6 weeks of middle school, and an examination of the subscales of the friendship quality and self-esteem measures. With respect to the friendship variables, future studies with higher participation rates and assessments of the quality of more than one mutual friendship could clarify the role of these variables in predicting adjustment across the transition to middle school. Research examining specific processes that link peer acceptance with academic achievement across this transition is also needed.

Overall, peer acceptance, number of friendships, and friendship quality are related dimensions of early adolescents' peer experience that make unique contributions to psychological and school adjustment, both concurrently and across the middle school transition. Consistent with the developmental psychopathology perspective, some students show patterns of improving adjustment during the middle school years, and therefore it has been suggested that this period be viewed as a developmental opportunity when schools can intervene to help youth who are struggling academically, socially, or behaviorally (Estell et al., 2007). To prepare students for the transition to middle school, it may be particularly important to focus intervention efforts on those children with low peer acceptance to increase

their social support network. The strong links between peer acceptance and school adjustment suggest that school officials may positively impact students' school attitudes and achievement by introducing programs focused on improving peer relationships. The development of interventions specifically tailored to improving children's friendship experiences (e.g., enhancing their friendship quality, extending their friendship network) may also be needed (Furman & Robbins, 1985). Indeed, prior research indicates middle school students feel that their "primary method of adjusting to their new school" is by spending time with their friends (Akos & Galassi, 2004, p. 220). Overall, middle school transition intervention programs that include a peer component would likely lead not only to improved psychological adjustment but also to more positive school adjustment across this transition.

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