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Representations of Relationships to Teachers, Parents, and Friends as Predictors of Academic Motivation and Self-Esteem

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In this study early adolescents' (N = 606) representations of relationships to teachers, parents, and friends are examined in relation to each other and to various measures of school adjustment, motivation and self-esteem. The relationship dimensions tapped included felt security, emotional and school utilization, and emulation with respect to each target figure. It was hypothesized that parent representations would predict those of both teachers and friends, whereas friend and teacher variables would not be significantly associated. It was predicted also that more positive representations of relationships to parents and teachers would each uniquely predict school functioning indices, whereas representations of friends would be largely unrelated to school-related outcomes. Representations of teachers, parents and friends all were expected to correlate with self-esteem relevant outcomes. These hypotheses were generally confirmed. The findings are discussed in terms of the significance of relatedness for motivation generally and the importance of the affective quality of adult-student relationships for educational outcomes in particular.

In virtually every domain of human endeavor, there is mounting evidence that a network of supportive relationships facilitates an individual's motivation, self-reliance, and relative achievement. As Bowlby (1973) once stated,

"Human beings of all ages are happiest and able to deploy their talents to best advantage" when they experience trusted others as "standing behind them" (p. 25). In fact, he theorized that the knowledge that there are others on whom one can rely conduces toward greater self-reliance versus dependence. Similarly, object relations theorists (e.g., Fairbairn, 1952; Winnicott, 1965) have argued that people function most cohesively and confidently in contexts in which they experience significant others as being both caring and autonomy-supportive (Behrends & Blatt, 1985). Finally, a number of motivation theorists have suggested that perceived autonomy, self-esteem, and motivation are fostered by the experience of relatedness to socializing others (Connell & Wellborn, 1990; Deci & Ryan, 1991; Goodenow, 1993; Ryan & Lynch, 1989). In all of these frameworks, there is a common assumption that the quality of a person's functioning in terms of autonomy, confidence, and self-reliance can be related directly to an experiential set one has regarding significant others.

Despite the seeming generality and intuitive appeal of this hypothesis, there is surprisingly little empirical work with regard to education that has investigated how students' relationship representations of significant figures are associated with school-related functioning and motivation. Thus, although there is much work on how specific inputs from teachers, parents, and peers affect school functioning (e.g., Baumrind, 1971; Grolnick & Ryan, 1989), more general questions regarding students' generalized models of affective ties and supports regarding such figures have been less fully researched. In particular, there has been virtually no work examining how representations of relationships with teachers may relate to those of relationships with parents and friends or how representations of teachers, parents, and friends may uniquely or collectively predict students' sense of worth, confidence, control, coping, and autonomy in the domain of school beyond the preschool years.

The purpose of the present examination was to make a bridge between work on representations of relationships with significant others and educational research by examining how representations of teachers, parents, and friends relate to each other and to the inner resources a student can dedicate to the enterprise of school. In order to present the rationale and need for such research, we review, in turn: (a) conceptualizations of relationship representations and internal working models; (b) conceptualizations of the inner resources relevant to self-reliance and motivation in school; and (c) hypotheses about how relationships might influence these inner resources.

Internal Representations of Relationships

The concepts of object representations (Behrends & Blatt, 1985) and working models (Bretherton, 1991) both represent accounts of how experiences in relationships with caregivers and important others become a property of the children themselves. In object relations theories, the concept of *representations* refers to organized schemata derived from interactions with significant others that can be applied actively in one's current interpersonal relationships both as anticipatory models and modes of adaptation (Ryan, Avery, & Grolnick, 1985). As a result of the dynamics of changing relationships, these schemata are continually updated, differentiated, and modified. Similarly, attachment theory defines *working models* as conscious or unconscious mental representations of others and self-with-others with the aid of which a person "perceives events, forecasts the future, and constructs his [or her] plans" (Bowlby, 1973, p. 203).

Representations differ from perceptions in that the concept of perception typically concerns one's experience of a specific situation or event, whereas representations are assumed to be more general and to serve an organizational function with respect to ongoing perceptions of interpersonal relationships. In this work, adolescents' ratings of global targets such as friends, teachers, and parents are used to access the subjects' generalized views of such relationships. The use of global targets minimizes the need for defensiveness with respect to specific figures and gives a reasonable snapshot of the adolescents' general feelings concerning various types of relationships. However, the use of self-report methodology limits the extent to which unconscious aspects of internalized models may be tapped. Nonetheless these ratings do capture phenomenological variables of considerable interest insofar as they reflect crucial dimensions of interpersonal experience during this developmental epoch.

In both the object relations and attachment approaches, there is a priority given to representations of the primary attachment figures, usually parents, insofar as they: (a) most strongly influence self-related perceptions during early development; and (b) represent the primary models from which representations of all subsequent relationships will be derived. Representations of parental relationships thus are expected to be generalizable to some extent to other figures in the extrafamilial world.

Although the influence of early caretakers on interpersonal schemata is thus considered paramount, internalized representations of others also are theorized to have importance across the life span (Cicchetti, Cummings, Greenberg, & Marvin, 1990). Although internalized representations in later developmental periods are presumed to be founded on early experiences with caregivers, it is assumed also that these later models reflect ongoing elaborations and reformulations that are stimulated by new interpersonal experiences. Empirical studies of representations of significant relationships in varied developmental periods and domains of life activity are just beginning to burgeon.

Relationship Representations in Adolescence

Early adolescence is a particularly intriguing period in which to examine internalized representations of others. In part, this intrigue is due to the existence of divergent theories about the role of attachments to and dependencies on parents and other adults in facilitating the individuation processes that resurge during this developmental epoch. There appears to be a growing consensus among researchers and theorists that individuation and personality development is optimized not through detachment or separation from significant caregivers but rather through the maintenance of relatedness to them (e.g., Blatt & Blass, 1990; Cooper, Grotevant, & Condon, 1983; Hill & Holmbeck, 1986; Ryan & Lynch, 1989). However, the nature of what characterizes optimal attachment at differing points of development and the outcomes related to individual differences in the experience of relatedness are just beginning to be researched avidly.

Recent studies exploring adolescents' representations of relationships have used a variety of assessment strategies and outcome foci. Greenberg, Siegel, and Leitch (1983) used an Inventory of Adolescent Attachments (IAA) to show that the perceived quality of relationships to parents and friends were related in adolescence. Furthermore, they provided evidence suggesting that emotional security and utilization of parents was more predictive of adolescents' self-reported general well-being than were emotional security and utilization with respect to friends. These findings thus supported the primacy of parental representations or working models. Kobak and Sceery (1988) used an established attachment interview with late adolescents and also found significant relations between models of parents and self-esteem and peer-rated adjustment. Ryan and Lynch (1989) examined parental representations in several diverse adolescent samples. They provided evidence that these representations were related to measures of family cohesion, perceived acceptance, attachment versus detachment to parents, and self-perceived lovability. Together such studies suggest that representations of parents are related to those of friends and self and that measures of the perceived quality of relatedness may be important predictors of adolescent functioning in a variety of domains. However, in none of these studies were *teacher* representations an empirical focus.

Representations of Relationships and School Functioning

In the current study, the intent was to examine how general representations of relationships with parents, teachers, and friends relate to one another and to aspects of extrafamilial functioning in adolescence. As suggested by both object relations (e.g., Blatt & Blass, 1990) and attachment (Bowlby, 1973, 1988) theories, internalized representations of significant others should have considerable influence on one's sense of confidence, integration, and ability to employ one's resources.

Representations of others characterized by felt security and a sense of connectedness should promote adolescents' general sense of self-worth and identity integration because the relationships conducing such representations provide the individual with a sense of a secure base from which to extend oneself into the world. It also may be associated with greater sense of competence, control, and positive coping in school, which is a primary domain of extrafamilial activity for adolescents. It is assumed here that relationships that tend to produce feelings of security and relatedness are ones that also have been providing the nutriments for self-development that would be reflected in such outcomes.

Similar predictions have emerged from theorists directly examining the growth and development of motivational processes. For example, Ryan and Stiller (1991) and Deci and Ryan (1991) have argued that quality of relatedness to others is a major influence on processes of internalization such that values and practices are more likely to be adopted as one's own and experienced as volitional or self-determined when conveyed by adults to whom one feels positively related. Additionally, perceived autonomy support is seen as a primary input to a child's feelings of relatedness to adults (Ryan, 1993) thus further suggesting that secure relatedness to adults should be associated with a greater degree of self-confidence and volition. Connell and Wellborn (1990) have similarly theorized that relatedness will facilitate engagement in domain-specific enterprises such that one will be more engaged or motivated in contexts where positive relatedness is experienced. Finally, Skinner and Wellborn (in press) have articulated a model suggesting that relatedness to parents and teachers conduces toward both greater perceived control and positive coping in the domain of schools. These motivational approaches point toward specific connections between school-related volition, perceived control, and positive coping and the quality of student's representations of interpersonal relationships with adults.

A few studies have directly examined the predictive value of representations of relationships with respect to school-related functioning. Ryan, Avery, and Grolnick (1985) examined object representations using a mutu-ality of autonomy measure from the Rorschach (Urist, 1977) and found that it predicted teacher-rated indices of classroom functioning including attention, social adjustment, and self-esteem in an elementary school age sample. There also were significant relations between this measure of object representations and teacher assigned grades but not standardized achievement test outcomes. A drawback of that study concerns the fact that the object representation measure used was not target specific but rather a generalized measure of interpersonal schemata. In a subsequent study, Avery and Ryan (1988) used a different projective measure, the Blatt Object Relations Scale (Blatt, Chevron, Quinlan, & Wein, 1981), to measure representations of mother and father in a middle-childhood sample. Although the quality of these parental representations was not related directly to achievement test outcomes, it was predictive of academic perceived competence and peer sociometric ratings. These two studies suggest that the quality of relatedness depicted in parental representations may influence the motivational and affective resources a child brings to the classroom as well as the quality of peer relationships.

An important feature of the current study was the examination of relationship representations of teachers. Object relations and attachment theories, in particular, as yet have not taken teachers as a focus and to date there has been little examination of how the perceived quality of relationships with teachers is associated with representations of parents and friends.

Because teachers are the primary adult figures in the academic domain and play important roles in adolescent socialization, the relation of teacher representations to school adaptation is likely to be robust. Previous studies have shown that students' experiences of the interpersonal climate of the classroom can be important predictors of school-related functioning. Ryan and Grolnick (1986), for example, found that students who experienced their teachers as autonomy supportive and warm were more likely to be intrinsically motivated, to feel more competent, and to have higher self-esteem than students with more negative views of their teachers. These investigators showed that there were considerable individual differences among children in the same classrooms in terms of how they experienced their teachers, suggesting the possibility that children may have prepotent schemata for such perceptions perhaps shaped by the home environment. Goodenow (1992) found that perceived teacher support was significantly associated with both perceived competence and intrinsic interest in early adolescent students. Harter (1989), in a review chapter, reported correlations between perceived teacher support and student self-worth. Finally, Midgley, Feldlaufer, and Eccles (1989) reported evidence that students who moved from classrooms where they experienced high teacher support to contexts where perceived

teacher support was lower showed associated decrements in interest and positive attitudes toward learning. Together such findings point to the importance of relationships with teachers in shaping school motivation, adjustment, and self-regard.

Specific Hypotheses

The central focus of this investigation was the predictive value of teacher, parent, and friend relationship representations with regard to school functioning and self-esteem. It was expected that perceived control over academic outcomes, autonomy, engagement, and positive coping all would be positively related to representations of teachers and parents but largely would be unrelated to friend ratings. It was reasoned that both parents and teachers represent socializing figures with respect to school and, accordingly, that internalization of school-related motivation and positive attitudes would be influenced by the extent to which the student feels connected to them. By contrast, it was suggested that, although friends[1] play an important role with regard to adolescent self-esteem and development, one's friends may be either supportive or obstructive with regard to school motivation and adjustment depending on the specific value system in one's friendship network. That is, some friends may facilitate school functioning through encouragement or aid, whereas others may serve a negative modeling or support function in this domain.

Additionally examined were how representations of teachers, parents, and friends relate to general self-esteem and to identity integration. It was expected that these aspects of self-esteem, because they reflect experiences in all domains including those at school, in peer social contexts, and at home, would be related to all three sets of representations.

Finally, students were asked to endorse the degree to which they use or rely on "no one" when facing school or emotional concerns. Rather than reflecting self-reliance, it was believed that this variable identifies students who are relationally isolated or detached from important sources of support. It was expected that these students would be particularly at risk for school maladjustment and low self-esteem and identity integration. This prediction reflects the thinking that nonreliance on others during adolescence is a risk factor, whereas the sense that one has others on whom one can rely conduces to both better adjustment and motivation (Ryan, 1993; Ryan & Lynch, 1989). Furthermore, it was predicted that the adolescents who report relying on no one are those who also feel less security and emulation with regard to their parents, reflecting that their nonreliance may stem from the poor quality of those relationships.

To explore the primary hypotheses, regression procedures were employed to assess the unique and shared contributions of teacher, parent, and friend representations to self-esteem and school-relevant outcomes. Zero-order correlations for each target in relation to outcome variables were examined.

Of additional interest in this study were relations between representations of parents, teachers, and friends. It was hypothesized that there would be significant relations between representations of parents and teachers. This hypothesis grows out of the formulations of both object relations and attachment approaches in which representational models of parents generalize to some extent to other relationship representations. The quality of relatedness to parents, that is, often sets the tone for the establishment and nature of other extrafamilial relationships. It was expected that the generalizability of parent representations to those of teachers would be particularly evident insofar as both represent socializing adult figures. On the other hand, teacher and friend representations were predicted to be unrelated to one another.

METHOD

Subjects

Subjects were 606 students from a public middle school (Grades 7 through 8) located in a second-ring suburb of Rochester, New York. The sample comprised 154 boys and 156 girls from the seventh grade and 164 boys and 132 girls from the eighth grade.

Procedure

Subjects were asked to complete a survey on student life during two consecutive regularly scheduled health classes. Before proceeding, the voluntary and confidential nature of the surveys was stressed both orally and in writing in accord with recommendations from the school's parent organization and administration. Only subjects who provided complete data on all variables were used in the present analyses. Two researchers administered all surveys, and teachers were not present. One researcher primarily gave directions while the other was available for individual questions. Upon completion of the second survey, participants were presented with a description of the study's purposes, hypotheses, and some of the current ideas and findings in related areas of research. They also were encouraged to ask additional questions alone or in the group setting.

Measures

Representations of Relationships

The Inventory of Adolescent Attachments (IAA) (Greenberg, 1982) is a self-report device consisting of two dimensions—felt security (affective quality) and emotional utilization. The felt-security dimension consists of four items assessing the affective component of attachment (e.g., "Although I trust my . . . , I still have my doubts"; "My . . . understand me"). Emotional utilization assesses the degree to which adolescents feel able to rely on the target figures in five emotionally salient situations (e.g., "When I'm feeling bad about myself or need a boost I go to my . . . "; "When I am feeling happy, or have good news, I go to my . . . "). Three targets—parents, teachers, and friends—were used in the present survey, and each was rated on a 5-point Likert-type scale ranging from *strongly disagree* through *strongly agree*, arrayed so that higher scores represent greater security or utilization. In addition, the target of *no one* was included for the emotional utilization subscale to assess the likelihood that students would turn to no one in an emotionally salient circumstance. Greenberg (1982) reports alphas ranging from .51 to .70, and 2-week test-retest reliability ranging from .70 to .89 for the factor scores. Greenberg et al. (1983) provided evidence that these dimensions predicted various indices of well-being within an adolescent population. Coefficient alphas in the current samples were, for utilization and felt security respectively, .81 and .57 (friends), .80 and .55 (teachers), and .82 and .64 (parents). The alpha for emotional utilization of no one was .77.

School utilization. Because the current research concerns how experiences of relatedness impact school functioning, an additional three items were included that were intended to parallel the Greenberg (1982) emotional utilization items but focused on the utilization of others with respect to school problems. These items were: (a) "If I had a problem with my school work I would share it with . . . ; (b) "If I were having trouble understanding a subject at school, I would talk it over with . . . "; and (c) "I can usually rely on . . . when I have problems at school." Alpha coefficients for these three items were .76, .66, .71, and .76, for the targets of parents, teachers, friends, and no one, respectively.

Emulation. Subjects were asked five questions concerning the degree to which they emulate or strongly identify with the target figures (e.g., "I try to model myself after my teachers"; "I would feel good if someone said I was

a lot like my parents," etc.). These items were rated on 4-point scales ranging from *not at all true* through *very true*. Internal consistency analyses showed that one item of the five was detrimental to reliability; thus only four items were used. The alpha coefficients for this 4-item composite were .86, .84, and .81 for parents, teachers, and friends, respectively.

School-Related Functioning

The Academic Coping Inventory (Tero & Connell, 1984) is a 19-item self-report inventory that assesses students' styles of responding to and coping with academic failure along four dimensions identified through factor analytic methods: positive coping (the student seeks to actively remedy the causes of poor performance); denial (minimization of the significance of failure); projection (blaming the teacher or others for the failure); and anxiety amplification (worry, self-denigration). For purposes of parsimony, only results from the positive coping subscale are reported in the current study, although all subscales were administered.[2] Students rate the items on a 4-point scale (1 = *not at all true* through 4 = *very true*). Tero and Connell report reliabilities for their subscales ranging from .70 to .85, and the scale has been used in several published studies to date (e.g., Connell & Ilardi, 1987; Ryan & Connell, 1989).

The Self-Regulation Questionnaire-Academic (SRQ-A) (Ryan & Connell, 1989) is an extensively validated 26-item measure of motivational orientations with regard to schoolwork that assesses four styles of being regulated with regard to academic tasks. External regulation represents doing school tasks because of external pressures; introjected regulation represents an orientation toward schoolwork to avoid guilt or anxiety; identified orientations concern doing school tasks because they are viewed as important and valuable; and intrinsic orientations are the doing of school tasks because they are inherently interesting and enjoyable. Subjects rate reasons for engaging in school tasks from each of these categories, and their scores on the four subscales are then used to make a weighted summary variable indicating the degree of relative autonomy experienced in school. Procedures for this weighting, based on the scale's simplex structure, are described in Ryan and Connell (1989). The SRQ-A has established additional construct validity in a number of studies in varied age groups and cultures (e.g., Deci & Ryan, 1985; Grolnick & Ryan, 1987, 1989; Hamilton, Blumenfeld, Akoh, & Miura, 1989).

Academic engagement versus disaffection (Wellborn & Connell, 1987) forms the 16-item engagement scale that assesses the degree to which

students feel positive affect toward school (e.g., "When I'm in class I feel happy") and the degree to which students actively involve themselves in school (e.g., "When I'm in class, I work as hard as I can"). Items are rated on a 4-point scale (1 = *very true* through 4 = *not at all true*). The scale has yielded a single-factor solution in construct validation studies (Wellborn & Connell, 1987). Cronbach's alpha for these items in this and in other comparable samples are consistently above .80. The scale has been used in other previously published research (e.g., Skinner, Wellborn, & Connell, 1990).

Perceived control (Skinner, Wellborn, & Connell, 1990) was assessed using a 40-item measure in which children answered items pertaining to three constructs using 4-point rating scales (from *not at all true* through *very true*). Strategy beliefs were measured using 20 items in which children endorse potential means or causes for success and failure in school: (a) effort (e.g., "The best way for me to get good grades is to work hard"); (b) ability (e.g., "If I'm not smart in a school subject, I won't do well at it"); (c) powerful others (e.g., "To do well in school, I just have to get the teacher to like me"); and (d) unknown factors (e.g., "When I don't do well in school, I usually can't understand why").

Capacity beliefs were measured using 15 items tapping the extent to which children believe they can enact three "known strategies: (a) effort (e.g., "I can't seem to try very hard in school"); (b) ability (e.g., "I think I'm pretty smart in school"); and (c) powerful others (e.g., "I can get the teacher to like me"). General control beliefs were assessed using five items in which children indicate the extent to which they are able to produce positive and prevent negative outcomes in the school domain (e.g., "I can do well in school if I want to"; "I can't get good grades no matter what I do"). The split-half reliabilities for the scales ranged from .75 to .85 (average = .79). For the purposes of this study, the summary variable labeled *perceived control* was employed that represents beliefs that optimize intentionality and sense of control through weighting the strategy, capacity, and general control subscales in accord with scale specifications (Skinner et al., 1990).

Self-Esteem

The Multidimensional Self-Esteem Inventory (MSEI) (O'Brien & Epstein, 1988) is a 116-item multidimensional scale that assesses both component aspects of self-evaluation and global self-esteem using a 5-point format. The discriminative and convergent validity of the MSEI has been extensively researched and reported (O'Brien & Epstein, 1988). For the purposes of the current study, only the subscales of global self-esteem and

identity integration were employed, each of which consists of 10 items. Global self-esteem measures general perceptions of self-worth, whereas identity integration measures the individual's sense of stability, cohesiveness, and purpose over time.

RESULTS

Preliminary Analyses

Four relationship representation variables were chosen because of their relevance to the current formulations, namely, felt security, emotional utilization, school utilization, and emulation. To examine the independence of these dimensions, principle component factor analyses with a varimax rotation were run on the items constituting these scales separately for each target of parents, teachers, and friends. These factor analyses revealed four factors for friends and teachers each consisting of the appropriate subscale items thus supporting the meaningfulness of the four dependent variables as separable dimensions. With regard to parents, school and emotional utilization items loaded together on a single utilization factor. To create comparability across targets, the four subscale scores were retained across all targets.

Effects for gender, grade, and their interaction were calculated on the variables assessing relationship representations to determine whether such effects represent potential confounding influences. MANOVAs were run using gender, grade, and Gender × Grade as independent variables and the representational variables related to each target (parent, teacher, friend, and no one) as dependent variables. There were thus four MANOVAs, one for each variable: parent, teacher, friend, and no one, respectively. Only one of the possible 14 interactions was significant, and it concerned the emotional utilization of friends, $F(1, 601) = 8.06, p < .01$. It revealed that not only were boys less likely to utilize friends for emotional issues but that seventh-grade boys were particularly low on this variable.

A number of main effects for gender were revealed by these analyses. Girls were higher than boys on felt security with teachers, $F(1, 601) = 9.98, p < .001$, emulation of teachers, $F(1, 601) = 8.71, p < .01$, and emulation of friends, $F(1, 601) = 35.04, p < .001$. Boys were lower in emotional, $F(1, 601) = 86.14, p < .001$, and school, $F(1, 601) = 25.59, p < .001$, utilization of friends. Boys also were significantly higher in reporting the likelihood of utilizing no one for emotional, $F(1, 601) = 24.16, p < .001$ and school, $F(1, 601) = 18.17, p < .001$, concerns.

Grade effects consisted of the following: Eighth graders were significantly higher than seventh graders on emotional, $F(1, 601) = 27.33$, $p < .001$, and school, $F(1, 601) = 27.97$, $p < .001$, utilization of friends; emotional, $F(1, 601) = 6.46$, $p < .05$, and school, $F(1, 601) = 17.73$, $p < .001$, utilization of teachers; and their emulation of friends, $F(1, 601) = 18.66$, $p < .001$, and teachers, $F(1, 601) = 5.12$, $p < .05$. Seventh graders exceeded eighth graders on school utilization of parents, $F(1, 601) = 4.38$, $p < .05$, and felt security with teachers, $F(1, 601) = 9.98$, $p < .01$. Table 1 reports means and standard deviations for the representation variables presented by grade and gender.

Table 2 presents the intercorrelations across all subjects of the representational variables. The table shows that parental representations are correlated most highly with those of teachers on the same dimensions and across dimensions. Parent and teacher variables were not correlated consistently with friend variables. School and emotional utilization of no one correlated negatively with all relationship variables, particularly with those concerning parents.

Primary Analyses[3]

The central questions of this research concerned the relative contributions of representations of parents, teachers, and friends to indices of school functioning and self-esteem. Table 3 presents standardized beta weights derived from simultaneous regressions of each of the outcome measures onto the parent, teacher, and friend representational dimensions, controlling for gender and grade. These regressions supported the general hypothesis that whereas representations both of parents and teachers predicted school functioning outcomes, representations of friends generally did not. The exception to this pattern was emulation of friends, which was somewhat negatively related to school adaptation as indexed by these variables. Of further note is the different predictive pattern observed with regard to self-esteem. Here parent and friend utilization and security variables were significantly associated with both higher general self-esteem and identity integration, whereas teacher relatedness variables did not uniquely contribute to these predictions. Also notable is the inverse relation between emulation of friends and self-esteem, whereas emulation of parents was positively related to this outcome.

Zero-order correlations of relatedness variables and the study's dependent variables are reported in Table 4 for the entire sample. As previously shown by the regressions, parent and teacher representations were those that most consistently related to school outcomes. However, felt security with friends was associated with greater self-esteem.

TABLE 1: Gender and Grade Means for Relationship Representation Variables

| Relationship Variable | Gender Effects | | | | | | | | Grade Effects | | | | | | | |
	Parents Males	Parents Females	Teachers Males	Teachers Females	Friends Males	Friends Females	No One Males	No One Females	Parents 7th	Parents 8th	Teachers 7th	Teachers 8th	Friends 7th	Friends 8th	No One 7th	No One 8th
Felt security	3.39 (.81)	3.38 (.87)	2.91 (.81)	3.12 (.75)	3.75 (.64)	3.80 (.70)			3.37 (.89)	3.39 (.80)	3.10 (.81)	2.90 (.75)	3.77 (.70)	3.77 (.64)		
Emulation	2.89 (.87)	2.97 (.77)	1.59 (.63)	1.73 (.66)	2.57 (.76)	2.90 (.65)			2.89 (.84)	2.96 (.81)	1.60 (.64)	1.71 (.66)	2.61 (.76)	2.84 (.67)		
Emotional utilization	3.93 (.89)	4.09 (.87)	1.97 (.86)	1.96 (.86)	3.79 (.91)	4.36 (.65)	2.25 (.97)	1.88 (.88)	4.00 (.93)	4.01 (.84)	1.88 (.85)	2.06 (.85)	3.91 (.91)	4.22 (.74)	2.04 (.93)	2.11 (.96)
School utilization	2.35 (.54)	2.39 (.51)	2.05 (.50)	2.03 (.49)	2.24 (.53)	2.43 (.46)	1.51 (.51)	1.34 (.45)	2.42 (.51)	2.32 (.54)	1.96 (.49)	2.13 (.48)	2.23 (.51)	2.44 (.49)	1.43 (.47)	1.44 (.50)

NOTE: $N = 606$. Standard deviations in parentheses.

TABLE 2: Correlations Between Variables Assessing Parent, Teacher, and Friend Representations and No One Representations

	Parents FS	Parents EU	Parents SU	Parents EM	Teachers FS	Teachers EU	Teachers SU	Teachers EM	Friends FS	Friends EU	Friends SU	Friends EM
Parents												
Felt security (FS)	—											
Emotional utilization (EU)	.49**	—										
School utilization (SU)	.40**	.62**	—									
Emulation (EM)	.43**	.58**	.43**	—								
Teachers												
Felt security	.40**	.22**	.20**	.16**	—							
Emotional utilization	.18**	.29**	.17**	.26**	.27**	—						
School utilization	.13*	.28**	.31**	.21**	.20**	.41**	—					
Emulation	.08	.20**	.16**	.37**	.25**	.53**	.31**	—				
Friends												
Felt security	.28**	.06	.05	.06	.19**	-.09	.04	.04	—			
Emotional utilization	-.04	.19**	.00	.13	-.03	.10	.07	.10	.25**	—		
School utilization	-.09	-.03	-.15**	.02	-.06	.05	.01	.01	.19**	.53**	—	
Emulation	-.07	.06	.00	.25**	-.12*	.09	.05	.19**	.04	.40**	.30**	—
No one												
Emotional utilization	-.21**	-.43**	-.27**	-.33**	-.15**	-.18**	-.17**	-.14**	-.16**	-.32**	-.17**	-.10
School utilization	-.15**	-.30**	-.29**	-.25**	-.15**	-.17**	-.25**	-.14**	-.15**	-.19**	-.21**	-.09

NOTE: N = 606.
*p < .01; **p < .001.

TABLE 3: Regressions of School Functioning and Self-Esteem Indices Onto Parent, Teacher, and Friend Representations Controlling for Gender × Grade Effects

Indices of School Functioning and Self-Esteem	Control Variables	
	Gender	Grade
Positive coping	.05	.12*
Relative autonomy index	-.01	.04
Perceived control	.08	.07
Engagement	-.07	.19**
General self-esteem	.01	-.10
Identity integration	.02	.02

	Parents	Teachers	Friends	Total R^2
Felt security (IAA)				
Positive coping	.29**	.14**	.03	.12
Relative autonomy index	.11*	.24**	-.05	.11
Perceived control	.26**	.13**	.04	.16
Engagement	.23**	.32**	.05	.21
General self-esteem	.25**	.00	.24**	.16
Identity integration	.23**	-.03	.13**	.10
Emotional utilization (IAA)				
Positive coping	.35**	.18*	.04	.20
Relative autonomy	.10	.23**	-.08	.08
Perceived control	.33**	.03	.06	.19
Engagement	.39**	.14**	-.05	.16
General self-esteem	.29**	.04	.13**	.11
Identity integration	.25**	-.06	.06	.07
School utilization				
Positive coping	.29**	.30**	.07	.24
Relative autonomy	.16**	.12*	-.02	.05
Perceived control	.24**	.14**	.08	.10
Engagement	.29**	.19**	-.01	.15
General self-esteem	.25**	.08	.15**	.10
Identity integration	.22**	.00	.08	.05
Emulation				
Positive coping	.29**	.15**	-.19**	.13
Relative autonomy	.14**	.20**	-.22**	.09
Perceived control	.26**	.13**	-.14**	.10
Engagement	.28**	.19**	-.17**	.15
General self-esteem	.25**	.00	-.15**	.08
Identity integration	.22**	-.07	-.14**	.05

NOTE: N = 606.
*p < .01; **p < .001.

TABLE 4: Correlations Between Parent, Teacher, and Friend Representations and Indices of School Functioning and Self-Esteem

Indices of School Functioning and Self-Esteem	Parents				Teachers				Friends			
	FS	EU	SU	EM	FS	EU	SU	EM	FS	EU	SU	EM
Positive coping	.31**	.42**	.38**	.32**	.25**	.29**	.40**	.25**	.13*	.16**	.05	-.01
Relative autonomy	.22**	.16**	.20**	.17**	.33**	.25**	.17**	.22**	.04	-.01	-.03	-.13
Perceived control	.34**	.36**	.27**	.29**	.29**	.14*	.23**	.22**	.14**	.14*	.07	-.02
Engagement	.34**	.39**	.35**	.32**	.43**	.23**	.26**	.28**	.08	.07	-.03	-.04
General self-esteem	.32**	.29**	.25**	.21**	.13*	.13*	.16**	.06	.30**	.12*	.08	-.10
Identity integration	.26**	.24**	.20**	.16**	.10	.02	.07	.00	.24**	.10	.05	-.08

NOTE: FS = Felt Security; EU = Emotional Utilization; SU = School Utilization; EM = Emulation. N = 606.
*p < .01; **p < .001.

TABLE 5: Emotional and School Utilization of No One Correlated With Indices of School Functioning and Self-Esteem

	Emotional Utilization	School Utilization
Positive coping	-.32*	-.39*
Relative autonomy	-.19*	-.26*
Perceived control	-.20*	-.21*
Engagement	-.27*	-.12*
General self-esteem	-.31*	-.28*
Identity integration	-.19*	-.22*

NOTE: N = 606.
*p < .001.

Table 5 presents the correlations between utilization of no one for emotional or school-related concerns and outcome indices. In general those students who reported a low probability that they would turn to others for help with school problems or in emotionally salient situations showed poorer school adaptation and motivation and lower self-esteem and identity integration. (Separate regressions controlling for grade and gender effects in these correlations revealed the same pattern of results.)

DISCUSSION

The purpose of this study was to explore the hypothesis, drawn from diverse theoretical frameworks, that representations of relationships with teachers, parents, and friends have direct significance for adaptive functioning in school and for self-esteem in early adolescence. More specifically, we predicted that parent and teacher representations would be significantly interrelated and would both uniquely predict school-relevant outcomes, whereas representations of friends were not generally expected to be predictive of school motivation or adjustment. However, friends and parents both were expected to be important predictors of self-esteem.

Generally speaking, these hypotheses were supported by the current results. Parent and teacher relatedness representations were correlated meaningfully, suggesting that there is some generalizability across these adult relationships.

Representations of friends, in contrast, were not related consistently to adult representations. Also, whereas relatedness to parents and teachers was predictive of school motivation and adjustment, relatedness to friends generally was unrelated to these outcomes.

These findings help to clarify the differential functional significance of students' relationships during early adolescence. It appears that the quality both of teacher and parent relationships uniquely contributes to school functioning such that students who feel more secure with, and more able to, utilize these adults also report more positive attitudes and motivation in school. These findings also show that there may be a significant degree of transference between teacher and parent representations, such that students who feel secure with and supported by parents may be more apt to experience better relationships with their teachers.

An additional and intriguing pattern of results emerged with regard to adolescents' self-reported emulation of others. Adolescents who reported emulating parents and teachers showed more positive school adjustment and motivation, whereas emulation of friends was related negatively to these school-relevant variables. Emulation of friends also was related negatively to self-esteem, whereas the inverse was true for parent emulation. Thus the functional significance of emulation in this age group appears to differ depending on its interpersonal focus. Perhaps adolescents who emulate friends do so out of conformity or lack of self-confidence (Steinberg & Silverberg, 1986), and they may be more peer versus school focused. By contrast, emulation of significant adults is related to both greater school engagement and positive feelings about oneself, suggesting that identification with adults also may be associated with internalization of the values they transmit (Ryan, Deci, & Grolnick, in press). Because friend versus adult emulation has not been previously studied, these ideas remain speculative.

This study is among the first to examine how representations of teachers fit into the network of other object representations, and thus we present some initial and important ideas about the role of teachers as attachment figures in socialization and development. It appears that for adolescents a sense of emotional security with teachers and utilization of teachers as emotional and school supports is associated with greater sense of control, autonomy, and engagement in school. In this sense, the study emphasizes how much schooling is an interpersonal as well as a cognitive enterprise (Ryan & Powelson, 1991) and, more specifically, the real-world importance of students' underlying beliefs that teachers represent sources of interpersonal support.

There are two viable interpretations of these results for teachers. One is that teachers play an important role in facilitating child outcomes when they provide supportive relationships. The second is that students who are already secure and well adjusted are more prone to view teachers in a positive manner and/or to draw out of them greater relational supports. The fact that teacher representations add variance to the outcome predictions even after controlling for parental inputs suggests that both interpretations may apply. How-

ever, the correlational nature of the findings precludes definitive conclusions regarding causality.

Adolescents who reported that they utilized no one when occupied with emotional and/or school concerns were likely to show poorer school adjustment, lower self-esteem, and lower identity integration. We suggest that adolescents who do not turn to others may be a particularly at-risk group of students because they may be interpersonally isolated and do not actively reach out for help. The findings presented in Table 5 support Bowlby (1973) and others' speculations that the perception that one can rely on others actually facilitates one's ability to be self-reliant and confident in one's endeavors. They also show that too much emotional independence or detachment can negatively affect individuation (Ryan, 1993; Ryan & Lynch, 1989) and thus support a growing body of findings and theories that point to the continued positive impact of interdependencies during adolescent development (Hill & Holmbeck, 1986; Leaper et al., 1989).

Gender and grade differences on relationship representation dimensions were not a primary focus of this investigation. Nonetheless, the pattern of these effects appeared to tell a meaningful story. In brief, boys in this sample were less likely than girls to report a willingness to utilize friends for either emotional or school concerns and were more likely to report that they turn to no one with such issues. It is possible that the socialization dynamics of males makes utilization of others (or admittance of it) less socially desirable. Similarly, males were less likely also to report emulating figures outside the home. In terms of grade effects, eighth graders were more likely than seventh graders to turn to teachers and friends with school and emotional concerns, suggesting increasing connection with extrafamilial figures during this period. Because these effects were not hypothesized, these post hoc interpretations should be treated with due caution.

Methodological limitations of this investigation are manifold but most saliently include the following concerns. First, the data presented are correlational, and thus causal underpinnings can merely be inferred. An appropriate interpretive set with regard to these findings is that they present a snapshot of the phenomenal world of adolescents in which the quality of one's interpersonal relationships, experienced school motivation, and self-esteem are interrelated. Although the study was formulated with the idea that relational supports facilitate increased motivation and adjustment, it is also quite possible that adolescents who are high in motivation also tend to perceive relationships in more positive ways. In all probability, the relation between relationship perceptions and student motivation/adjustment is a reciprocal one in which students who are well adjusted both perceive and elicit better relationships with adults, while supportive adults also aid in the

development of motivation and well-being in students. A second prominent limitation concerns the nonspecificity of the target groups. Subjects were asked generally about teachers, parents, and friends rather than specific salient persons in their lives. Research examining relationship representations in a more differentiated manner would help elaborate and/or temper these findings. Finally, the dimensions of relatedness examined are general and nonexhaustive. In fact, they were intended only to capture some significant aspects of one's quality of relatedness to others so as to gain a preliminary map of how relatedness may be associated with development in the sphere of education.

In summary, the current findings support the view that phenomenal representations of interpersonal relationships with teachers, parents, and friends in adolescence are associated in differentiated ways to school and self-related functioning. The findings argue for the relevance of studying relatedness with respect to educational processes and suggest that feelings of connection and security with others can play a crucial role in academic socialization and adjustment. They also point to the importance of the interpersonal experience between teachers and students in facilitating adaptation within the domain of education.

NOTES

1. It is important to note distinctions between terms like friends, peers, and classmates because each refers to different but typically overlapping target groups (Hartup, 1983). Our choice of *friends* as a target referent was based on our interest in assessing those peers to whom adolescents experienced an attachment but one not necessarily confined to or based in classroom settings. In addition, Greenberg (1982) used the target of friends in his original scale development.

2. Although all subscales of the Academic Coping Inventory were administered, only positive coping is reported in order to limit the dependent variables to a manageable number. However, all subscale scores were entered into analyses, and a reasonable and predictable pattern of results for projection, denial, and anxiety amplification subscales did emerge. These data are available upon request.

3. Because of the large number of variables employed, alpha levels were established at $p <$ .01 throughout all analyses.

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