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# Are Effective Teachers Like Good Parents? Teaching Styles and Student Adjustment in Early Adolescence

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This study examined the utility of parent socialization models for understanding teachers' influence on student adjustment in middle school. Teachers were assessed with respect to their modeling of motivation and to Baumrind's parenting dimensions of control, maturity demands, democratic communication, and nurturance. Student adjustment was defined in terms of their social and academic goals and interest in class, classroom behavior, and academic performance. Based on information from 452 sixth graders from two suburban middle schools, results of multiple regressions indicated that the five teaching dimensions explained significant amounts of variance in student motivation, social behavior, and achievement. High expectations (maturity demands) was a consistent positive predictor of students' goals and interests, and negative feedback (lack of nurturance) was the most consistent negative predictor of academic performance and social behavior. The role of motivation in mediating relations between teaching dimensions and social behavior and academic achievement also was examined; evidence for mediation was not found. Relations of teaching dimensions to student outcomes were the same for African American and European American students, and for boys and girls. The implications of parent socialization models for understanding effective teaching are discussed.

## INTRODUCTION

Adolescents' social interactions and relationships with parents have been related consistently to various aspects of school adjustment, including academic accomplishments (e.g., Dishion, 1990; Feldman & Wentzel, 1990; Steinberg, Lamborn, Dornbusch, & Darling, 1992), motivation and interest (Ginsberg & Bronstein, 1993; Hokoda & Fincham, 1995; Rathunde, 1996; Wentzel & Feldman, 1993), and social behavior at school (Dishion, 1990; Feldman & Wentzel, 1990; Steinberg, Lamborn, Dornbusch, & Darling, 1992). In these studies, parenting that was the most supportive of adolescent adjustment was characterized by the consistent enforcement of fair standards for behavior, encouragement of bidirectional communication and valuing of adolescents' opinions, expectations for self-reliant and mature behavior, and concern for emotional and physical well-being (see Baumrind, 1991). Recent studies also have documented significant associations between aspects of teacher–student relationships and children's social and academic adjustment at school (Birch & Ladd, 1996; Pianta, 1992). In contrast to the work on family–school connections, however, few studies of teachers and students have been guided by models of socialization or have examined specific dimensions of teaching that might create optimal developmental contexts for young adolescents.

In response to this relative lack of theoretical bases for studies of teacher influence during early adolescence, the present study examined the relevance of parent socialization models for understanding relations between teacher practices and adolescents' school adjustment. Of specific interest were relations between students' perceptions of their teachers along dimensions of effective caregiving and their school adjustment as defined by motivation, social behavior, and academic performance. Although a central goal of socialization is for children to adopt and internalize adult goals and values that will, in turn, motivate socially acceptable forms of behavior (Grusec & Goodnow, 1994; Maccoby, 1992), a pathway of influence whereby effective parenting styles are related to behavioral and performance outcomes by way of goals and values has not been studied frequently. Therefore, the possibility that motivational processes mediate links between teachers' socialization practices and students' social and academic outcomes also was examined.

### Models of Socialization

Two general mechanisms whereby parental influence might occur are common to socialization models of development. First, parents actively teach children about themselves and what they need to do to become accepted and competent members of their social worlds. As a result, children adopt sets of values, standards for behavior, and goals that adults would like them to achieve (see Grusec & Goodnow, 1994). Even when explicit communication of expectations does not occur, children learn and adopt many of

these beliefs and goals through observational learning (Bandura, 1986; Grusec & Goodnow, 1994). Second, the qualities of children's social relationships are likely to have motivational significance. When their relationships with parents are nurturant and supportive, children are more likely to adopt and internalize the expectations and goals that are valued by their parents than if their relationships are harsh and critical (see Grusec & Goodnow, 1994). Therefore, parents and other socialization agents hold the potential to create optimal contexts within which learning of goals and values is likely to take place. Of interest in the present research was the possibility that if these socialization processes are robust and generalizable, they also might describe ways in which teachers influence their students' school-related adjustment.

It is reasonable to expect that teacher modeling and use of specific caregiving strategies might partly explain why students are motivated to achieve positive social and academic outcomes at school. For instance, research has documented that teachers communicate valued goals and expectations to their students (Hargreaves, Hester, & Mellor, 1975; LeCompte, 1978a, 1978b; Trenholm & Rose, 1981), and create contexts conducive to the learning and adoption of these goals (Ames & Ames, 1984; Solomon, Schaps, Watson, & Battistich, 1992). In studies of elementary school-age children, teacher provisions of structure, guidance, and autonomy have been related to a range of positive motivational outcomes (e.g., Grolnick & Ryan, 1987; Skinner & Belmont, 1993). Birch and Ladd (1996) reported that young children's adjustment to school was related to teacher–student relationships characterized by warmth, the absence of conflict, and open communication (see also Pianta, 1992). Although studies involving modeling of teacher motivation have been infrequent, children do adopt standards for performance and display academic skills modeled by their classmates (see Schunk, 1987). It is likely that students learn by observing their teachers' behavior as well.

The current study extended this work in three ways. First, student motivation was studied in relation to characteristics of teachers that reflect effective caregiving. Based on the parent socialization literature, classroom-related caregiving was defined in terms of Baumrind's (1971, 1991) dimensions of effective parenting. Control reflects consistent enforcement of rules and provision of structure to children's activities; maturity demands reflect expectations to perform up to one's potential, and demands for self-reliance and self-control; democratic communication reflects the extent to which adults solicit children's opinions and feelings; and nurturance reflects parental expressions of warmth and approval, as well as conscientious protection of children's physical and emotional well-being. There is widespread recognition that these dimensions describe socialization processes central to the development of childhood and adolescent social and cognitive competence (Grusec & Goodnow, 1994; Maccoby & Martin, 1983). These dimensions also have been related to various aspects of children's academic motivation, including intrinsic interest, beliefs about ability and control, and goal orientations toward learning (Ginsberg & Bronstein, 1993; Grolnick, Ryan, & Deci, 1991; Grolnick & Slowiaczek, 1994; Hokoda & Fincham, 1995; Rathunde, 1996; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). Second, the relation between students' motivation to achieve and teachers' modeling of interest in subject matter was examined. Although modeling is not mentioned frequently as a characteristic of caregiving, its potentially powerful socializing effects have been well documented (Bandura, 1986).

Finally, adolescents were the focus of this study. Teachers are rarely mentioned by adolescents as having a significant or important influence in their lives (Galbo, 1984; Reid, Landesman, Treder, & Jaccard, 1989). Adolescents often rate teachers as providing aid and advice (Lempers & Clark-Lempers, 1992; Reid et al., 1989), but only as secondary sources relative to parents and peers (Furman & Buhrmester, 1992). Eccles and colleagues (Feldlaufer, Midgley, & Eccles, 1988; Midgley, Feldlaufer, & Eccles, 1989), however, found that young adolescents report declines in the nurturant qualities of teacher–student relationships after the transition to middle school; these declines correspond to declines in academic motivation and achievement. Similarly, young adolescents' perceptions that teachers care about them have been related positively to their pursuit of social and academic goals, mastery orientations toward learning, and academic interest (Wentzel, 1997). Of particular importance for the current study is that middle-school students have characterized caring and supportive teachers as those who promote democratic and respectful interactions, set expectations for performance based on individual differences, and provide constructive, nurturing feedback—characteristics that reflect Baumrind's (1971, 1991) parenting dimensions (Wentzel, 1996, 1998). These teacher characteristics, however, have not been studied in relation to student motivation or other aspects of school adjustment.

## School Adjustment

There is increasing recognition among scholars that children's overall adjustment and success at school

requires a willingness as well as ability to meet both social and academic challenges (Hinshaw, 1992; Ladd, 1989; Wentzel, 1991b, 1999). The goals for education held by teachers, school administrators, and society at large also reflect desires for children to develop social and moral competencies as well as intellectual skills (Wentzel, 1991b). In light of these broad-based educational objectives, the present study examined young adolescents' (1) goals to be prosocial and socially responsible, (2) mastery goal orientations for academic tasks, and (3) interest in schoolwork as important motivational outcomes for school. Outcomes corresponding to these motivational processes—that is, prosocial behavior, socially responsible behavior, and classroom grades—also were studied. In the classroom, prosocial behavior reflects actions indicative of helping, sharing, and cooperating with others; socially responsible behavior takes the form of adherence to rules and norms for behavior.

Social goals reflect desired social interactions or outcomes in a specific situation (Ford, 1992; Wentzel, 1993a), and were assessed in terms of self-reported efforts to behave in prosocial and socially responsible ways. Student reports of their pursuit of prosocial and social responsibility goals have been related to perceived social support from classroom teachers (Wentzel, 1997, 1998), as well as to prosocial and compliant forms of classroom behavior (Wentzel, 1991a, 1993b, 1994). Mastery goal orientations represent desires to achieve outcomes derived from the actual process of learning, such as feelings of satisfaction and competence or actual intellectual development (Ames, 1992; Dweck & Leggett, 1988; Nicholls, 1984). Although rarely linked directly to academic achievement, mastery goal orientations have been related to adaptive levels of persistence and strategy use when difficulties in problem solving arise (see Dweck & Leggett, 1988; Meece, Blumenfeld, & Hoyle, 1988; Nicholls, 1984; Stipek & Gralinski, 1996). Finally, interest has been identified as a powerful motivational construct related to the formation and regulation of goal-directed efforts to learn (Renninger, Hidi, & Krapp, 1992). Of particular relevance for the present research is Deci's (1992) suggestion that interpersonal relationships that provide students with a sense of belongingness can be powerful motivators of children's school-related interests.

Beliefs about personal control were included in the current study as control variables that have the potential to explain links between dimensions of teaching and students' goals and interest. As conceptualized by Connell and colleagues (Connell, 1985; Skinner & Connell, 1986), perceived control is a belief about why events occur, with unknown reasons, internal attributes, and powerful others being the primary sources of control. Control beliefs have been related significantly to perceived support and caring from teachers, as well as to pursuit of social goals, even when taking into account perceptions of teacher support (Wentzel, 1997). Control beliefs also have been related to general levels of engagement in classroom activities and academic performance of school-age children (Connell & Wellborn, 1991; Skinner & Belmont, 1993; Wentzel, 1997).

### Summary

The present study was designed to explore several issues concerning socialization practices and school-related adjustment. I hypothesized that models of effective parenting would be generalizable to contexts outside the home and could be used to identify dimensions of effective teaching. Specifically, I hypothesized that students would perceive the extent to which teachers model interest in subject matter (Bandura, 1986) and communicate aspects of control, maturity demands, democratic communication, and nurturance (Baumrind, 1971), and that these perceptions would be related to motivational and behavioral aspects of adjustment to school. A second issue explored in this study was whether student motivation could explain significant relations between teaching dimensions and objective indices of school adjustment. Finally, the role of students' gender and race in moderating the effects of teaching dimensions on motivation and adjustment was examined. Adolescent girls report more frequent pursuit of prosocial and social responsibility goals, and express greater interest in school than do boys (e.g., Wentzel, 1991a, 1997). In addition, adolescents' perceptions of parenting styles as defined by Baumrind (1971, 1991) appear to be significant predictors of academic performance for European American but not for African American adolescents (Steinberg, Dornbusch, & Brown, 1992). It is not known, however, if these latter findings are robust for teaching styles in the classroom or for other school-related outcomes.

Three specific questions were addressed: (1) To what extent do teachers differ along dimensions of high expectations, rule setting, nurturance, fairness, and modeling of motivation; and do these dimensions relate to students' school adjustment as defined by motivation, social behavior, and classroom performance? (2) To what extent do students' goals and interest mediate links between teaching dimensions and students' social behavior and achievement? and (3) Do sex and race moderate relations between teaching dimensions and student adjustment outcomes?

## METHODS

### Participants

The sixth-grade students and teachers who participated in this study came from two suburban sixth- through eighth-grade middle schools in a mid-Atlantic state. In both schools, students were members of instructional teams, each comprised of four homerooms. Students remained with their homeroom class for all of their academic subjects.

*School A.* In the first school ($n = 230$), 87% of the students were European American, 6% were African American, and 7% were other ethnic status; 49% were male; 9% of the students received free or reduced price lunch; and 7.4% received special education services. In the year this study was conducted, sixth graders scored at the 59th and 63rd national percentiles on the California Test of Basic Skills (CTBS) for reading and mathematics, respectively. The participants from this school represented 52% of the entire sixth grade. Students came from nine classrooms chosen by the principal based on scheduling considerations, and exclusion of special education or inclusion classes and gifted and talented classes. Eight teachers participated (one teacher taught two of the classes). All of the teachers were European American; four were female; and one taught mathematics, one taught English, three taught science, and three taught social studies. Teaching experience ranged from 1 to 25 years ($M = 12.33$ years). All of the teachers had been with their class for the entire academic year.

*School B.* In the second school ($n = 222$), 92% of the students were African American, 6% were European American, and 2% were other ethnic status; 52% were male; 34% of the students received free or reduced price lunch; and 15% received special education services. In the year this study was conducted, sixth graders scored at the 32nd and 29th national percentiles on the CTBS for reading and mathematics, respectively. Ninety-two percent of the sixth-grade class participated; special education students were excluded from the study. Ten teachers participated, 9 of whom were female and European American, one was male and African American; and two taught mathematics, two taught science, two taught social studies, and two taught multiple subjects. Teaching experience ranged from 6 months to 14 years ($M = 3.45$ years). Two of the teachers had been with their class for only part of the academic year.

### Procedure

Data were gathered by the principle investigator during regular 45-min class sessions. The entire set of questionnaires was administered at one time. The research study was explained to the students as being a survey of sixth graders' opinions about their classroom experiences in middle school. Students were told that all of their answers would be confidential and that they did not have to answer any of the questions if they did not want to. None of the students declined to participate. Teachers remained in their classrooms to complete rating scales while students filled out the questionnaires. The study was conducted during the last half of the spring semester of the academic year. All students participated unless parent permission was denied ($n = 4$).

### Measures

Self-report measures were used to assess student motivation and teaching dimensions. Factor analyses yielded three factors for the motivation variables: mastery orientations, interest in class, and social goals. When considered separately, the two social goals—prosocial behavior and social responsibility—also formed separate factors. Five factors emerged when the teaching dimension items were analyzed: high expectations, fairness, negative feedback, rule setting, and teacher motivation. Means, standard deviations, and internal consistency of scales (Cronbach's $\alpha$) for the present sample are reported. Peer nominations and teacher ratings were obtained to assess classroom behavior.

*Background information.* Students were asked to fill out a general information sheet at the beginning of the session indicating their gender and ethnicity ("White," "African American," "Hispanic," "Asian," and "Other").

*Social goal pursuit.* Social goals were defined as what students see themselves as trying to accomplish. In contrast to other measures of classroom goals that assess in part why children try to achieve, the scales used in this study to assess social goal pursuit asked students how often they tried to achieve prosocial and responsible outcomes (see Wentzel, 1993a). Toward this end, each item began with the phrase "How often do you try to . . ."; responses were made on a 6-point Likert-type scale (1 = rarely, 6 = almost always). In this study, students were instructed to respond with reference to their pursuit of goals in the particular class they were in. Prosocial goals were assessed with a 3-item scale that asked about efforts to share and help peers with academic problems. A sample item is "How often do you try to share what you've learned with your classmates?" The mean for this scale was 7.04 ($SD = 1.64$); Cronbach's $\alpha = .74$. Responsibility goal pursuit was assessed with a 3-item scale that asked how often students tried to follow

classroom rules, for example, "How often do you try to do what your teacher asks you to do?" The mean for this scale was 7.88 ($SD = 1.42$); Cronbach's $\alpha = .81$.

Prosocial goal pursuit differed as a function of students' gender and race, with boys and African American students reporting pursuit of goals less frequently than girls and European American students, $F = 8.02$, $p < .01$ and $F = 20.25$, $p < .001$, for gender and race, respectively; $M$ (SD) = 6.76 (1.71) and 7.32 (1.53) for boys and girls, respectively, and 6.63 (1.69) and 7.43 (1.46) for African American and European American students, respectively. Responsibility goal pursuit also differed as a function of students' gender and race, with boys and African American students reporting pursuit of goals less frequently than girls and European American students, $F = 6.78$, $p < .01$ and $F = 14.68$, $p < .001$ for gender and race, respectively; $M$ ($SD$) = 7.55 (1.56) and 8.22 (1.17) for boys and girls, respectively, and 7.49 (1.52) and 8.27 (1.17) for African American and European American students, respectively.

*Interest in class.* Students' general interest in classroom activities was assessed with the 10-item School Motivation Scale (Ford & Tisak, 1982). Sample items include: "I usually enjoy being in this class"; "For the most part, this class is a waste of time" (reverse coded); and "I have discovered some new interests in this class this year." Responses were made on 5-point scales (1 = false, 5 = true). The mean for this scale was 36.65 ($SD = 8.60$); internal consistency (Cronbach's $\alpha$) was .84. Interest in class did not differ significantly as a function of students' gender and race, $M$ ($SD$) = 35.79 (8.67) and 37.52 (8.46) for boys and girls, respectively, 36.80 (8.57) and 36.89 (8.50) for African American and European American students, respectively.

Mastery goal orientation was assessed with a 6-item scale developed by Nicholls (e.g., Nicholls, Cobb, Yackel, Wood, & Wheatley, 1990) that contains statements such as: "I feel really pleased when something I learn makes me want to find out more." Responses were made on 5-point scales (1 = yes, 5 = no, midway response = "?"). Cronbach's $\alpha$ for this scale was .82; and the $M$ ($SD$) was 1.92 (.75). Mastery orientations differed as a function of students' gender and race, with girls and European American students reporting stronger orientations than boys and African American students, $F = 8.64$, $p < .01$ and $F = 24.00$, $p < .001$ for gender and race, respectively; $M$ ($SD$) = 2.01 (.85) and 1.82 (.62) for boys and girls, respectively, and 1.73 (.63) and 2.11 (.81) for African American and European American students, respectively. For subsequent analyses, items were reverse coded so that higher scores indicated a stronger orientation.

*Control beliefs.* Self-reports were obtained using the cognitive subscales of Connell's (1985) Multidimensional Measure of Children's Perceptions of Control. These subscales assess three aspects of perceived control: unknown (e.g., "When I get a good grade in school I usually don't know why I did so well"; four items), powerful others (e.g., "When I do well in school, it's because the teacher likes me"; four items), and internal (e.g., "If I want to do well in school, it's up to me to do it"; four items). Responses are made on 4-point scales (1 = not at all true, 4 = always true).

Internal consistency (Cronbach's $\alpha$) in the present sample was .65, .64, and .66 for the unknown, powerful others, and internal subscales, respectively. The $M$ ($SD$) was 2.09 (.71) for unknown control, 1.79 (.65) for powerful others control, and 3.33 (.64) for internal control. Unknown control differed as a function of students' race, with African American students reporting stronger unknown control beliefs than European American students, $F = 9.06$, $p < .01$; $M$ ($SD$) = 2.13 (.72) and 2.03 (.69) for boys and girls, respectively, and 2.22 (.74) and 1.97 (.65) for African American and European American students, respectively. Powerful others beliefs differed as a function of students' gender, with boys reporting stronger beliefs than girls, $F = 5.41$, $p < .05$; $M$ ($SD$) = 1.87 (.68) and 1.70 (.62) for boys and girls, respectively, and 1.84 (.70) and 1.73 (.61) for African American and European American students, respectively. Finally, internal control beliefs did not differ significantly as a function of students' gender and race, $M$ ($SD$) = 3.36 (.61) and 3.31 (.68) for boys and girls, respectively, and 3.31 (.68) and 3.37 (.61) for African American and European American students, respectively.

*Classroom behavior.* Peer nominations and teacher ratings were used to assess prosocial and irresponsible behavior. Prosocial behavior scores were obtained by asking students: "Who shares and cooperates?" and "Who helps other kids when they have a problem?" For each behavior, every student was given a list of their homeroom classmates. Students were asked to cross out their own name and then place a check mark in front of the names of those classmates they thought cooperated and shared (or helped other kids) most of the time. They were instructed to check as many or as few names as they liked. For each behavioral characteristic, the percentage of nominations each child received was computed by dividing the number of nominations received by the total number of children in the class. The two scores were related significantly, $r = .85$, $p < .001$, and, therefore, combined to form an averaged prosocial behavior score.

Prosocial behavior differed as a function of students' gender and race, with boys and African Amer-

ican students being nominated less frequently as being prosocial than girls and European American students, $F = 58.65$, $p < .001$ and $F = 42.99$, $p < .001$, for gender and race, respectively; $M$ ($SD$) = 8.21 (4.54) and 11.97 (5.41) for boys and girls, respectively, and 8.33 (4.75) and 11.56 (5.26) for African American and European American students, respectively.

Irresponsible behavior scores were obtained by asking teachers to rate each of their students on two characteristics: "How often does this student break classroom rules?" and "How often is this student disruptive in class (e.g., starts fights, provokes classmates, acts out)?" Ratings were made on 5-point scales (1 = never, 5 = always). The means were 1.95 ($SD = 1.02$) and 1.74 ($SD = 1.02$) for rule breaking and disruption, respectively. The two scores were related significantly, $r = .80$, $p < .001$, and, therefore, averaged to form an irresponsible behavior score. Irresponsible behavior differed as a function of students' gender and race, with boys and African American students being rated as more irresponsible than girls and European American students, $F = 29.43$, $p < .001$ and $F = 10.96$, $p < .001$ for gender and race, respectively; $M$ ($SD$) = 2.09 (1.05) and 1.59 (.82) for boys and girls, respectively, and 2.00 (1.06) and 1.70 (.97) for African American and European American students, respectively.

*Academic performance.* Of interest for the present study were grades for the subject taught by the teacher that students assessed with respect to the teaching dimensions (i.e., if students responded to the teaching dimension questions with reference to the mathematics teacher, the mathematics grade was the outcome of interest). Students' end-of-year grades were obtained from student files, $M$ ($SD$) = 2.51 (.92). Classroom differed as a function of students' gender and race, with boys and African American students earning lower grades than girls and European American students, $F = 31.31$, $p < .001$ and $F = 8.52$, $p < .01$ for gender and race, respectively; $M$ ($SD$) = 2.27 (.87) and 2.76 (.91) for boys and girls, respectively, and 2.38 (.94) and 2.64 (.89) for African American and European American students, respectively.

*Teaching dimensions.* Baumrind's (1971) dimensions of parenting were used to define dimensions of teaching. In the present study, dimensions were labeled rule setting (control), high expectations (maturity demands), negative feedback (lack of nurturance), and fairness (democratic communication). In addition, teachers' modeling of motivation toward schoolwork was labeled teacher motivation. For all of the teacher-related items, students were told to respond by thinking about the teacher of the class they were in at the time.

Rule setting was assessed with the 4-item rule clarity subscale of the Short Form of the Classroom Environment Scale (Moos & Moos, 1981). Sample items include "There is a clear set of rules for students to follow," and "The teacher explains what will happen if a student breaks a rule." Students marked items as True or False. The mean for this subscale was 1.15 ($SD = .22$) Cronbach's $\alpha$ was .66. Rule setting did not differ significantly as a function of students' gender and race, $M$ ($SD$) = 1.16 (.23) and 1.14 (.22) for boys and girls, respectively, and 1.14 (.23) and 1.16 (.22) for African American and European American students, respectively.

High expectations and nurturance were assessed with items from Weinstein and Marshall's (1984) Teacher Treatment Inventory (TTI). Six items from the high expectations, opportunity, and choice subscale were used to tap high expectations: 4 items from the Short Form of the TTI and 2 additional items from the full scale that reflect high expectations. Sample items include "The teacher calls on me to answer questions" and "The teacher trusts me." Nurturance was assessed in terms of negative feedback and lack of encouragement. Four items from the negative feedback and teacher direction subscale of the TTI were used: two items from the Short Form of the TTI and two additional items that reflect negative feedback. Sample items include "The teacher scolds me for not trying" and "The teacher makes me feel bad when I don't have the right answer." Responses were made in a format consistent with Weinstein and Marshall's Own Treatment Form in that students responded with respect to perceptions of their teacher's treatment of themselves. Responses were made on 4-point scales (1 = always, 4 = never). The means for these two scales were 2.35 ($SD = .63$) and 1.62 ($SD = .65$); Cronbach's $\alpha$s were .78 and .70, for high expectations and nurturance, respectively.

High expectations differed significantly as a function of students' gender, $F = 5.90$, $p < .01$; $M$ ($SD$) = 2.25 (.61) and 2.45 (.63) for boys and girls, respectively, and 2.33 (.61) and 2.38 (.64) for African American and European American students, respectively. Nurturance did not differ as a function of students' gender and race, $M$ ($SD$) = 1.66 (.66) and 1.59 (.64) for boys and girls, respectively, and 1.67 (.69) and 1.59 (.60) for African American and European American students, respectively.

Feldlaufer et al.'s (1988) Teacher Classroom Environment Measure was adapted to assess teacher fairness and modeling of teacher motivation. Fairness was measured with three items from the Teacher-Unfair/Unfriendly scale: "The teacher treats boys and girls differently" (reverse coded), "The teacher grades our work fairly," and "The teacher treats some kids better than others" (reverse coded). Teacher mo-

tivation, as reflected in students' perceptions of their teachers' interest in the subjects they teach, was assessed with three items adapted from the "Teacher-Valuing of Math" scale: "The teacher tries to make this class interesting," "The teacher likes the subject," and "The teacher tells us why the subject is important." Responses were made on 4-point scales (1 = not very often, 4 = very often). The means for these two scales were 3.27 ($SD$ = .73) and 3.22 ($SD$ = .71); Cronbach's αs were .60 and .68, for fairness and teacher motivation, respectively.

Fairness did not differ as a function of students' gender and race, $M$ ($SD$) = 3.24 (.74) and 3.30 (.72) for boys and girls, respectively, and 3.20 (.77) and 3.32 (.70) for African American and European American students, respectively. Teacher motivation also did not differ as a function of students' gender and race, $M$ ($SD$) = 3.25 (.73) and 3.19 (.69) for boys and girls, respectively, and 3.22 (.77) and 3.23 (.66) for African American and European American students, respectively.

## RESULTS

### Descriptive Results

School and classroom effects were examined with respect to each teaching dimension and student outcome. As shown in Table 1, school effects were nonsignificant for all teaching dimensions and significant for five of the seven student outcomes. Specifically, students from School A reported more frequent pursuit of social goals and stronger interest in class, and nominated classmates as being prosocial more often than did students in School B; School B teachers rated their students' as being more irresponsible than did teachers in School A. Classroom effects were significant for each teaching dimension and all student outcomes; effect sizes were quite large for each variable (see Cohen, 1992). These significant classroom effects indicated that student perceptions of teachers were fairly consistent within classrooms. Only one teacher in School 2 was African American; therefore, statistical comparisons as a function of teacher race could not be conducted. Examination of the African American teacher's teaching dimension scores, however, indicated that they were very close to the average scores of the European American teachers.

Correlations among variables are shown in Table 2. The four motivation outcomes were significantly and positively related to teacher motivation, fairness, rule setting, and high expectations; and negatively related to negative feedback. Control beliefs also were related significantly to teaching dimensions, although not as consistently: unknown control was related positively to rule setting and negative feedback and negatively to fairness; powerful others control was related negatively to fairness, teacher motivation, rule setting, and high expectations and positively to negative feedback; and internal control was related posi-

**Table 1 Teaching Dimensions and Student Outcomes as a Function of School and Teacher: Results of Analyses of Variance**

| | School | | | | Teacher | | |
|---|---|---|---|---|---|---|---|
| | A $M$ ($SD$) | B $M$ ($SD$) | $F$(1, 334) | $d$ | 1–18[a] | $F$(17, 314) | $d$[b] |
| Teaching dimensions | | | | | | | |
| High expectations | 2.39 (.61) | 2.35 (.65) | .28 | .07 | 2.06–2.79 | 2.22** | 1.20 |
| Fairness | 3.31 (.71) | 3.22 (.75) | 1.23 | .12 | 2.47–3.71 | 3.63*** | 1.80 |
| Teacher motivation | 3.24 (.65) | 3.23 (.76) | .03 | .01 | 2.75–3.69 | 1.82* | 1.36 |
| Rule setting | 1.13 (.21) | 1.15 (.23) | .72 | .09 | 1.03–1.26 | 1.84* | 1.05 |
| Negative feedback | 1.60 (.62) | 1.69 (.68) | 1.57 | .14 | 1.33–2.50 | 1.93** | 1.89 |
| Student outcomes | | | | | | | |
| Prosocial goals | 3.55 (.85) | 3.07 (.99) | 25.76*** | .53 | 2.77–3.83 | 2.38*** | 1.15 |
| Responsibility goals | 4.09 (.76) | 3.68 (.94) | 21.47*** | .48 | 3.44–4.41 | 2.01** | 1.14 |
| Interest in class | 36.95 (8.33) | 36.29 (8.9) | .52 | .08 | 29.45–43.15 | 4.09*** | 1.68 |
| Mastery orientation | 1.70 (.60) | 2.14 (.83) | 39.12*** | .86 | 1.45–2.62 | 3.95*** | 1.67 |
| Prosocial behavior | 11.90 (5.28) | 8.39 (4.75) | 51.83*** | .70 | 7.95–15.65 | 8.14*** | 1.66 |
| Irresponsible behavior | 1.68 (.83) | 2.01 (1.07) | 12.90*** | .35 | 1.09–3.09 | 6.21*** | 2.30 |
| Classroom grades | 2.59 (.89) | 2.48 (.95) | 1.47 | .12 | 1.88–3.09 | 3.73*** | 1.39 |

[a] Ranges of mean scores for the 18 teachers.
[b] Effect size; according to Cohen (1992), small, medium, and large effect sizes are .20, .50, and .80, respectively.
* $p < .05$; ** $p < .01$; *** $p < .001$.

**Table 2 Intercorrelations among Variables**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Motivation outcomes | | | | | | | | | | | | | | |
| 1. Prosocial goal pursuit | | | | | | | | | | | | | | |
| 2. Responsibility goal pursuit | .50*** | | | | | | | | | | | | | |
| 3. Interest in class | .30*** | .37*** | | | | | | | | | | | | |
| 4. Mastery orientation | .47*** | .42*** | .35*** | | | | | | | | | | | |
| Control beliefs | | | | | | | | | | | | | | |
| 5. Unknown | −.05 | −.13** | −.19*** | −.11** | | | | | | | | | | |
| 6. Powerful others | −.13** | −.18*** | −.23*** | −.17*** | .36*** | | | | | | | | | |
| 7. Internal | .10* | .17*** | .15*** | .14*** | .03 | −.06 | | | | | | | | |
| Teaching dimensions | | | | | | | | | | | | | | |
| 8. Fairness | .15*** | .22*** | .43*** | .26*** | −.21*** | −.27*** | .19*** | | | | | | | |
| 9. Teacher motivation | .15*** | .19*** | .45*** | .22*** | .01 | −.12** | .27*** | .42*** | | | | | | |
| 10. Rule setting | .14*** | .19*** | .33*** | .15*** | .15*** | −.17*** | .25*** | .41*** | .24*** | | | | | |
| 11. Negative feedback | −.18*** | −.30*** | −.30*** | −.20*** | .20*** | .24*** | −.12** | −.43*** | −.23*** | −.27*** | | | | |
| 12. High expectations | .32*** | .36*** | .49*** | .31*** | −.07 | −.18*** | .04 | .30*** | .32*** | .16*** | −.22*** | | | |
| Behavior and performance | | | | | | | | | | | | | | |
| 13. Prosocial behavior | .25*** | .20*** | .17*** | −.14** | −.11** | −.11** | .01 | .02 | .00 | −.07 | −.18*** | .14** | | |
| 14. Irresponsible behavior | −.09* | −.28*** | −.18*** | .05 | .09* | .18*** | −.03 | −.22*** | −.05 | .18*** | .27*** | −.21*** | −.49** | |
| 15. Classroom grades | .18*** | .23*** | .10* | −.06 | −.14** | −.13** | .03 | .09* | −.01 | −.08 | −.21*** | .23*** | .57*** | −.43*** |

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

tively to fairness, teacher motivation, and rule setting and negatively to negative feedback.

Teaching dimensions also were related significantly to student adjustment outcomes. Specifically, prosocial behavior was related significantly to teaching dimensions of fairness, negative feedback, and high expectations; irresponsible behavior was related significantly to all of the teaching dimensions except teacher motivation; and academic achievement was related significantly to the dimensions of fairness, negative feedback, and high expectations. Of interest for the question of mediation were significant relations between teaching dimensions and adjustment outcomes, and between motivation variables and adjustment outcomes. Prosocial goal pursuit was related positively to prosocial behavior and responsibility goal pursuit was related negatively to irresponsible behavior. Interest in schoolwork was related significantly and positively to academic performance, whereas mastery goal orientations were not related significantly to performance.

## Teaching Dimensions as Predictors of Student Goals and Interest

Preliminary analyses of covariance were conducted to test for teacher and school effects on the motivation, behavioral, and performance outcomes, when controlling for the teaching dimension and control belief variables. Teacher and school effects were nonsignificant in each case and, therefore, were not included in the final analyses.

Hierarchical multiple regression analyses were conducted to predict prosocial goal pursuit, responsibility goal pursuit, mastery goal orientations, and interest in class. Demographic variables (race and gender) were entered first, control beliefs second, teaching dimensions third, and Race × Teaching dimension and Gender × Teaching dimension interaction terms last. As shown in Table 3, teaching dimensions predicted a significant amount of variance in goals and interest, $\Delta R^2$s ranged from .10 to .33, after accounting for demographic variables and control beliefs. High expectations was a positive, independent predictor of each outcome. In addition, negative feedback was a significant negative predictor of responsibility goal pursuit; fairness and teacher motivation were significant positive predictors, and rule setting a negative predictor of interest in class; and fairness was a significant positive predictor of mastery goal orientation. Interaction terms did not add significant variance in the last step.

## Motivation as a Mediator of Teaching Dimensions and School Adjustment

Two additional sets of regressions were conducted to test for mediation. As prescribed by Baron and Kenny (1986), three sets of regressions are necessary to test for mediation: the dependent variables (proso-

**Table 3 Predictors of Student Motivation: Results of Multiple Regressions**

| | Prosocial Goal Pursuit | | Responsibility Goal Pursuit | | Interest in Class | | Mastery Orientation | |
|---|---|---|---|---|---|---|---|---|
| Predictors | β | $\Delta R^2$ | β | $\Delta R^2$ | β | $\Delta R^2$ | β | $\Delta R^2$ |
| Step 1: Demographics | | .03*** | | .05*** | | .04** | | .06*** |
| Race | .14** | | .14** | | .01 | | .18*** | |
| Gender | .07 | | .12* | | .15** | | .09 | |
| Step 2: Control beliefs | | .03*** | | .05*** | | .07*** | | .05*** |
| Unknown | −.01 | | −.07 | | −.10* | | −.10 | |
| Powerful others | −.03 | | −.01 | | −.02 | | .01 | |
| Internal | .09 | | .09 | | −.04 | | .08 | |
| Step 3: Teaching dimensions | | .10*** | | .15*** | | .33*** | | .12*** |
| Fairness | .07 | | .03 | | .13* | | .16** | |
| Teacher motivation | −.03 | | −.02 | | .27*** | | .06 | |
| Rule setting | −.10 | | −.07 | | −.10* | | −.03 | |
| Negative feedback | −.05 | | −.16** | | −.04 | | −.02 | |
| High expectations | .26*** | | .31*** | | .34*** | | .23*** | |

*Note:* Standardized β weights are shown. $\Delta R^2$ represents the increment to $R^2$ associated with each block of variables when they are entered into the equation. Race was coded such that 1 = African American, 2 = European American; gender was coded such that 0 = male, 1 = female. The effect size indexes ($f^2$) for teaching dimensions were .11, .18, .49, and .14 for prosocial goal pursuit, responsibility goal pursuit, interest, and mastery orientations, respectively.

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

cial behavior, irresponsible behavior, academic performance) are regressed on the independent variables (teaching dimensions; referred to as Model 1 regressions); the mediator (motivation variables) is regressed on the independent variables (teaching dimensions; results of these analyses, referred to as Model 2 regressions, are shown in Table 3); and the dependent variables are regressed on the independent and mediating variables (referred to as Model 3 regressions). Evidence for mediation is found if independent variables are significant predictors in Model 1 and Model 2 regressions but not in Model 3 regressions.

Tests of Model 1 and Model 3 regressions were conducted simultaneously in a series of hierarchical analyses in which the teaching dimensions (independent variables) were entered at Step 2 after controlling for demographic variables, and the motivation variables (mediators) were entered at Step 3. Interest in school, and pursuit of prosocial and responsibility goals were examined as potential mediators. Race × Teaching dimension and Gender × Teaching dimension interaction terms were entered last. Regressions that included mastery goal orientations were not conducted, given that mastery goal orientations were not related significantly to student grades (see Table 2).

As shown in Table 4, teaching dimensions accounted for significant variance of classroom behavior and grades, $\Delta R^2$s ranged from .04 to .11, with negative feedback being a significant predictor in each case. High expectations also was a positive predictor of classroom grades. No evidence for mediation was found. Social goals, however, did provide pathways of influence in that high expectations predicted prosocial goal pursuit (see Table 3), which, in turn, predicted prosocial behavior (see Table 4); negative feedback and high expectations predicted pursuit of responsibility goals, which, in turn, predicted irresponsible behavior.

## DISCUSSION

The present study examined the utility of parent socialization models for understanding the effects of teachers on student motivation in middle school. Three specific questions were addressed: (1) To what extent do teachers differ along dimensions of high expectations, rule setting, nurturance, fairness, and modeling of motivation; and do these dimensions relate to students' school adjustment? (2) To what extent does student motivation mediate links between teaching dimensions and students' social behavior and achievement? and (3) Do race and gender moderate relations between teaching dimensions and student outcomes? With respect to the first question, students' reports yielded clear distinctions among teachers along the five teaching dimensions: significant classroom differences were found with respect to expectations, fairness, rule setting, negative feedback, and teacher interest in subject matter. Therefore, as with parents and their children, teachers can be characterized in terms of the socialization contexts they establish for their students. In addition, the five teaching dimensions accounted for significant amounts of variance in motivational, behavioral, and academic performance

**Table 4 Predictors of Behavior and Performance: Tests for Mediation**

| | Prosocial Behavior | | | Irresponsible Behavior | | | Classroom Grades | | |
|---|---|---|---|---|---|---|---|---|---|
| Predictors | Model 1 β | Model 3 β | $\Delta R^2$ | Model 1 β | Model 3 β | $\Delta R^2$ | Model 1 | Model 3 | $\Delta R^2$ |
| Step 1: Demographics | | | .16*** | | | .09*** | | | .07*** |
| Race | .10* | .06 | | −.08 | −.04 | | .05 | .06 | |
| Gender | .37*** | .36*** | | −.26*** | −.23*** | | .19*** | .20*** | |
| Step 2: Teaching dimensions | | | .04** | | | .11*** | | | .10*** |
| Fairness | .02 | .01 | | −.10 | −.09 | | −.08 | −.08 | |
| Teacher motivation | −.03 | −.03 | | −.10 | −.10 | | .12* | .11 | |
| Rule setting | −.01 | .01 | | .09 | .07 | | −.05 | −.06 | |
| Negative feedback | −.19*** | −.18*** | | .24*** | .19** | | −.21*** | −.22** | |
| High expectations | .02 | −.05 | | −.06 | −.01 | | .23*** | .26*** | |
| Step 3: Motivation variable | | .27*** | .06*** | | −.20*** | .03*** | −.07 | .01 | |

*Note:* Standardized β weights are shown. $\Delta R^2$ represents the increment to $R^2$ associated with each block of variables when they are entered into the equation. Race was coded such that 1 = African American, 2 = European American; gender was coded such that 0 = male, 1 = female. The motivation variables were prosocial goal pursuit, responsibility goal pursuit, interest in class for prosocial behavior, irresponsible behavior, and classroom grades, respectively. The effect size indexes ($f^2$) for teaching dimensions were .04, .12, and .11, for prosocial behavior, responsible behavior, and grades, respectively.

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

outcomes, even after controlling for demographic variables and students' beliefs about control.

Finally, perceptions of teachers as a function of students' race and gender did not moderate relations between teaching dimensions and student outcomes. This latter finding is particularly interesting given that approximately half the subjects in this study were African American students describing European American teachers. Therefore, at least for these young adolescents, race did not appear to act as a lens through which students interpreted the type of teacher behavior assessed in this study. Research on African American students' perceptions of African American teachers along these same dimensions are critical for drawing conclusions about the effects of teacher race on student motivation and behavioral adjustment to school, however. These findings also are intriguing given Steinberg, Dornbusch, and Brown's (1992) conclusion that Baumrind's (1971, 1991) parenting styles are not relevant for understanding academic achievement of African American high school students. The present study, however, differs from their work on family–school connections in several ways. First, the current focus was on dimensions of classroom teaching rather than dimensions of parenting. Therefore, the findings of the present study might simply reflect the likelihood that context effects most proximal to the outcomes of interest have a more powerful and consistent influence on those outcomes than do more distal effects. In other words, it is likely that teachers can have a much greater influence on students' motivation and behavior displayed in their classrooms than can parents.

Second, unlike the Steinberg, Dornbusch, and Brown (1992) study, the current research focused on specific socialization processes rather than the parenting typologies typically used to represent Baumrind's work (e.g., authoritative, authoritarian, permissive parenting styles; Baumrind, 1971). It is possible that this greater specification and delineation of constructs increases the likelihood that the processes they represent will be relevant for understanding school motivation, social behavior, and achievement of adolescents regardless of race or gender. Finally, in contrast to Steinberg, Dornbusch, and Brown's (1992) work, the present study focused on middle school rather than high school students. Developmental factors, including the possibility that peers become more influential as students progress through adolescence (Berndt, 1979), especially for African American students (Steinberg, Dornbusch, & Brown, 1992), might explain discrepant findings. Taken together, these differences across studies raise interesting and theoretically important questions for future research in this area; studies that examine the relative contributions of parenting, teaching, and peer contexts to student motivation as adolescents progress through middle school and into high school are necessary to understand the developmental implications of these findings.

The overall significance of teaching dimensions in relation to student adjustment provides initial evidence that models of parent socialization are generalizable to nonfamilial contexts. Conclusions concerning causality, however, are premature. For instance, it could be argued that the present findings reflect that good teachers simply reinforce the work already accomplished at home, or that students who have adopted the same goals and interests as teachers in turn motivate teachers to treat them in ways that characterize nurturant and effective parents. When compared with perceived support from parents and peers, however, perceived support from teachers has been found to be unique in predicting young adolescents' interest in class and pursuit of goals to be socially responsible (Wentzel, 1998). Students' perceptions of general levels of support from teachers also predict changes in prosocial goal pursuit and academic effort across the middle school years (Wentzel, 1997). Finally, when elementary school teachers are trained to provide students with warmth and support, clear expectations for behavior, and developmentally appropriate autonomy, their students develop a stronger sense of community, increase displays of socially competent behavior, and show academic gains (Schaps, Battistich, & Solomon, 1997; Watson, Solomon, Battistich, Schaps, & Solomon, 1989). Therefore, a growing body of evidence supports the utility of further investigations of classroom teachers' unique contribution to adolescents' social and academic adjustment to school.

Explanations of socialization influences as a function of caregiving styles also require recognition of an important distinction between the provisions of interpersonal contexts and those of interpersonal relationships. To illustrate, the interpersonal contexts created by teachers can be relatively impersonal and still promote positive individual outcomes. In the middle school classroom, this is reflected in the fact that few students describe teachers as their friends or as the source of a close personal relationship (e.g., Lempers & Clark-Lempers, 1992). Yet, most middle school students recognize that teachers behave in ways that communicate caring and personal support (Wentzel, 1997) and, in turn, these positive beliefs about teachers are related to students' engagement and interest in classroom activities (Wentzel, 1997, 1998). The findings of the current study most likely reflect this perspective. In contrast, the close interpersonal relation-

ships that adolescents have with parents have the potential to influence more general levels of psychological and emotional well-being. For instance, adolescents who enjoy emotionally close, positive relationships with parents are less likely to experience emotional distress at school than children who do not have cohesive family relationships (e.g., Wentzel, 1998). In turn, students' emotional well-being can influence their interest in classroom activities and academic performance (Wentzel, 1998; Wentzel, Weinberger, Ford, & Feldman, 1990). The relative contribution of interpersonal contexts and relationships to adolescents' school adjustment are not well understood. It is likely, however, that multiple models of influence are necessary to explain how social contexts and relationships can influence adolescents' lives at school.

Longitudinal research designed to tease apart the relative contribution of parenting and teaching styles to children's school adjustment is needed to address issues of home versus school effects. Additional research on the motivational effects of caregiving also might benefit from examination of other influences and opportunities provided by parents and teachers. For instance, Darling and Steinberg (1993) suggest that the specific goals that parents communicate to their children (e.g., do well in school) combined with specific opportunities for achieving these goals (e.g., providing learning resources and supports) might explain why some children who experience effective parenting styles are successful in school, whereas other children are not (see Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987). The significance of these additional variables is underscored by findings that parental goals for children's schooling are related to student performance (Okagaki & Sternberg, 1993), and that educational resources in the home are linked to children's academic competencies (see Ryan, Adams, Gullotta, Weissberg, & Hampton, 1995). With respect to teachers, therefore, the strength of their motivational influence might lie in the combination of classroom goals and instructional practices they provide within the context of their particular caregiving styles.

Although teaching dimensions as a whole explain significant variance in motivational outcomes, high expectations for students was the one teaching dimension that emerged as a significant predictor of each motivational outcome. These findings support a conclusion that students are motivated both socially and academically by expectations to perform to their full potential. They also provide additional support for previous work suggesting that developmentally appropriate levels of challenge can be highly motivating (Csikszentmihalyi & Rathunde, 1993), whereas teacher expectations for low performance can be particularly debilitating to student achievement (Weinstein, 1989). In contrast, negative feedback was the most consistent predictor of students' social behavior and academic performance, underscoring the potentially pervasive influence of teachers' negative and highly critical feedback on students' classroom functioning. Research on the role of negative affect and anxiety as additional motivational processes that mediate relations between negative feedback and student outcomes might provide additional insight in this regard (see Eccles, Wigfield, & Schiefele, 1998). Specifically, with regard to learning, it also is likely that by creating a context free of harsh criticism and one in which students are expected to do their best, teachers might be better able to convey information clearly and efficiently, encourage student engagement, and focus students' attention on academic tasks.

The role of parenting styles in supporting the adoption and internalization of specific goals rarely has been the target of empirical investigations, despite the centrality of this process in models of socialization. Rather, caregiving styles have been related directly to behavioral and performance outcomes. Therefore, a second objective of the present study was to examine whether students' motivation mediated relations between teaching dimensions and more objective aspects of school adjustment. Evidence for mediation was not found, although specific teaching dimensions such as high expectations and negative feedback were related to social behavioral outcomes by way of their relation to social goal pursuit (see Table 3). Therefore, student motivation does appear to play a role in linking teaching styles to students' social behavior. Additional work, however, is needed to identify the processes that explain the direct links between teaching dimensions—especially negative feedback—and students' social behavior and performance.

An unexpected finding was the nonsignificant relation between student interest and academic performance. One explanation is that by middle school, a student's ability in an academic subject area reflects years of classroom experiences rather than specific interest engendered by their current teacher. It also is possible that interest in a class does not always motivate a student's desire to perform well academically. Indeed, previous work has documented the relatively powerful role of students' goals to be socially responsible (i.e., to do what is expected of them) in predicting classroom performance (Wentzel, 1991b, 1993a). This possibility was explored in post hoc analyses by examining social responsibility goal pursuit as a motivational predictor of classroom grades instead of interest in class. Social responsibility goal pursuit was found to be a significant positive predictor of class-

room grades, $\Delta R^2 = .01$, $p < .001$; $\beta = .12^{***}$, after first entering demographic and teaching dimension variables (gender, negative feedback, and high expectations remained significant predictors of grades). Given that teachers' negative feedback predicted low levels of social responsibility goal pursuit and high expectations predicted high levels (see Table 3), this finding is intriguing in its implication that teachers might influence academic performance most strongly by way of students' social rather than academic motivation.

As in previous research on socialization experiences and academic outcomes (e.g., Feldlaufer et al., 1988; Grolnick & Ryan, 1987), students' perceptions of their teachers were the focus of interest in this study rather than more objective indices of teacher behavior. This methodological strategy is based on the assumption that individuals construct beliefs about themselves and their social worlds as they experience and interact with others (see Harter, 1990), and that these beliefs are the most proximal predictors of subsequent behavior. Moreover, the use of student reports is justifiable given that in contrast to classroom observers, students have the opportunity to observe and interact with their teachers for an entire year. Of methodological interest for future research, however, is the extent to which teachers' beliefs about their own classroom behavior also predict students' motivation, social behavior, and academic performance.

In conclusion, dimensions of teaching that correspond to dimensions of effective parenting appear to have a complex relation to young adolescents' adjustment to school. High expectations for students was the most consistent positive predictor of students' goals and interest, and negative feedback was the most consistent negative predictor of academic performance and social behavior. Moreover, in contrast to research on parenting, teaching styles appear to explain school-related outcomes for African American as well as European American students. The apparent utility of parent socialization models for explaining teacher influences on students' adjustment to school also supports a conclusion that school-based interventions to promote social competence and academic excellence might profit from insights gained from work with families and parent intervention programs (Ryan et al., 1995).

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