# TEACHER CHARACTERISTICS AS PREDICTORS OF TEACHER-STUDENT RELATIONSHIPS: STRESS, NEGATIVE AFFECT, AND SELF-EFFICACY

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Students' misbehavior has been consistently linked to teachers' reports of stress. The purpose of this study was to investigate whether or not teacher stress, negative affect, and self-efficacy predict the quality of student-teacher relationships. Participants included 113 elementary (K-5th) teachers in a metropolitan area in the United States. A survey method was used to measure teacher perceptions in working with difficult students and their relationships with students. Negative teacher-student relationships were predicted by teacher stress. Significant correlations were found among negative affect, teacher stress and negative relationships. Implications for teacher support and continuing education issues are discussed.

With increasing empirical attention in the literature, the teacher-student relationship has been identified as a significant influence on overall school and behavioral adjustment (Baker, Terry, Bridger, & Winsor, 1997). Pianta, Steinberg and Rollins (1995) found that positive teacher-student relationships, defined as "warm, close, communicative," are linked to behavioral competence and better school adjustment. Other researchers found that conflict and dependency in teacher-student relationships are related to unfavorable outcomes such as a negative school attitude, school avoidance (Birch & Ladd, 1997) and hostile aggression (Howes, Hamilton, & Matheson, 1994). Resilience literature further indicates that when there is no emotional connection to a caregiver at home, supportive school experiences play a critical role in students' adaptations. More specifically, teachers who "provide emotional support, reward competence, and promote self-esteem" (p. 110) are considered to be one of the factors that decrease the vulnerability of high-risk students in response to stressful life events (Werner, 1990).

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Given that teacher-student relationships have a significant influence on various outcomes, investigations into how the relationships are shaped and what determines the quality of those relationships are of great importance for intervention efforts to foster nurturing, warm relationships between teachers and students. So far, a number of student characteristics have been linked to teacher-student relationships. For example, students' social skills and low internalizing scores are positively related to warm, open relationships with kindergarten teachers (Pianta & Steinberg, 1992). Students' problem behaviors such as inattention, internalizing, and conduct problems are negatively correlated with the quality of teacher-student relationships (Pianta & Nimetz, 1991). Furthermore, disruptive, aggressive, resistant students are especially challenging to many teachers. They are frequently noted as a significant source of teacher stress (Boyle, Borg, Falzon, & Baglioni, 1995). Teacher interactions with these students tend to be critical and punishing in nature (Coie & Koeppl, 1990), and are often characterized by high conflict and low warmth (Itskowitz, Navon, & Strauss, 1988). Although the punishment following a student's problem behavior may be needed to reduce the likelihood of future bad behavior, the student's repeated exposure to punishment, especially in the absence of positive attention from teachers, is more likely to perpetuate a sense of alienation from teachers and school, which may in turn lead to intensified anger and defiance (Baker, 1999; Van Acker, Grant, & Henry, 1996).

Investigative efforts specific to teacher characteristics that may affect the quality of teacher-student relationships are scarce in the current literature. A few studies document the fact that teachers' attachment histories with their primary caregiver (Kesner, 2000) and teacher responsivity and involvement (Howes & Segal, 1993) predicted the quality of teacher-student relationships. It is not surprising that teachers who are emotionally responsive to students have better relationships with them. Based on this premise, the present study explored teacher characteristics as possible predictors of teacher-student relationships.

Teachers' levels of stress can be conceptualized as a construct that may affect teacher interactions with students in a variety of settings. Potential influences of teacher stress on their relationships with students can be found in the parenting literature. High levels of parenting stress are associated with children who present a pattern of oppositional, disruptive behaviors (Eyberg, Boggs, & Rodriquez, 1992; Ross, Blanc, McNeil, Eybert, & Hembree-Kigin, 1998). Parenting stress is also associated with a negative mood, which in turn may lead to parents' negative attributions of children's behavior and to low tolerance of children's misbehaviors (Schaughency & Lahey, 1985).

A similar pattern of negative exchanges is also found when teachers interact with behaviorally difficult students. Teachers' stress is associated with interactional problems with these students (Makinen & Kinnunen, 1986). Teachers are

more likely to express personal feelings of anger toward disruptive students (Durivage, 1989). Furthermore, these students do not receive predictable feedback (i.e., praise) from teachers following desirable behaviors, whereas they consistently receive reprimands after undesired classroom behaviors (Van Acker et al., 1996). These negative patterns of interaction between teachers and students may contribute to increased conflicts and lack of understanding, thus leading to unsatisfactory relationships. Thus, teacher stress and negative affect were hypothesized in the current study to predict the quality of teacher-student relationships.

The present study also examined teachers' perceptions of their own ability to handle challenging behaviors and to establish positive relationships as a possible influence on the quality of teacher-student relationships. High teacher self-efficacy in general has been linked to a variety of positive outcomes. For example, teachers with high efficacy are more positive and responsive to students (Gibson & Dembo, 1984), experience less stress (Greenwood, Olejnik, & Parkay, 1990) and show less anger about negative student behavior (Glenn, 1993). This pattern of teacher characteristics is associated with achievement (for a review, see Tracz & Gibson, 1986). More importantly, these findings certainly describe teachers who are more likely to promote positive classroom environments, which would result in better relationships with students.

Given this existing literature, the purpose of the current study was to identify teacher characteristics that are predictive of the quality of teacher-student relationships. It was expected that overall teacher perception of stress, negative affect, and self-efficacy in behavioral management and relationship building would significantly predict the quality of the teacher-student relationships.

#### **METHOD**

#### **PARTICIPANTS**

Participants in this study were 113 elementary (K-5th) teachers in a metropolitan area in the United States. A questionnaire was distributed to 370 teachers in two school districts and 125 teachers (34%) returned the survey. Twelve teachers were dropped from further analyses due to missing information. Ninety-five percent of the participants were female and 88% were Caucasian. Years of teaching experience ranged from one year to thirty-seven years (mean=12 years). The survey was distributed to teachers in May so that teachers' reports on their relationships with students were based on their experience during the entire school year.

### MEASURES

A demographics questionnaire which included gender, race/ethnicity, educa-

tional level, and years of teaching experience was administered. Based on their teaching experiences, teachers responded to items regarding stress, negative affect, and self-efficacy in managing behaviors and establishing relationships with students. For the present study the following scales were created.

Teacher stress For self-perceived levels of stress, specifically related to dealing with behaviorally difficult students, teachers rated how stressful they found handling behaviorally challenging students, using a 5-point scale ranging from 1 (not at all stressed) to 5 (extremely stressed). In addition, teachers rated the 2 following statements on a 7-point scale ranging from 1 (not true at all) to 7 (very true): "Having to deal with behavioral problems in class, I have considered leaving this profession"; and "I am very satisfied with my teaching career." Teacher responses on each item were standardized and averaged for an index of overall teacher stress. Cronbach's alpha for the 3-item scale was .69. Because the Cronbach's alpha is a function of the number of items included in the scale, the Spearman-Brown was calculated. The Spearman-Brown with additional 17 items with equal quality to the original three items was projected to be .94.

Self-efficacy in relationship building and behavioral management Six items were included in the questionnaire to measure teachers' levels of self-efficacy in establishing a positive relationship with a behaviorally challenging student and in managing disruptive and oppositional behaviors. Using a seven-point scale ranging from 1 (not true at all) to 7 (very true), participants responded to statements such as "I can build a good relationship with even the most difficult student," "I have positive characteristics that are very helpful when there is a problem with a student," "I can successfully handle the situation when one of my students gets disruptive and oppositional," and "I feel competent to handle a disruptive student in my classroom." Cronbach's alpha for the 6-item Self Efficacy Scale was .83 and Spearman-Brown, an internal consistency projected for the total number of items of 20, was .94.

**Negative affect** The following three items were used to measure teachers' negative affect: "I have difficulty controlling my emotions in front of students when there is conflict with students," "I feel angry when a student repeatedly does not follow direction," and "My students hurt my feelings by intentionally not following my directions." Cronbach's alpha for this scale was .61 and Spearman-Brown was .91.

Student-teacher relationships Teachers were asked to report the percentages of students in their class in each level of relationships, ranging from "a very good relationship with them" to "a very negative relationship with them." For the purpose of this study, percentages of "very good relationships" and "good relationships" were combined to yield a percentage of "good relationships," and percentages of "very negative relationships" and "negative relationships" were combined to make a percentage of "negative relationships." To address the

problems of the percentage estimate associated with the different class sizes across the classrooms, an average class size was computed first and the percentages of students were multiplied by the average class size. These equated scores for "good relationships" and "negative relationships" were used for further analyses.

#### **RESULTS**

The primary purpose of the present study was to examine whether or not teachers' reports of stress, negative affect, and self-efficacy predicted the quality of relationships between teachers and students. Two separate hierarchical regression analyses were performed to examine the relative contributions of these three teacher characteristics to equated scores of "good relationships" and equated scores of "negative relationships." It was expected that teachers' reports of stress, negative affect, and self-efficacy would predict the number of students with whom these teachers have "good relationships" and "negative relationships." Table 1 presents the means and standard deviations for the variables used in the analyses. Pearson correlations among the variables are reported in Table 2. Teacher stress was significantly correlated with negative affect, self-efficacy, and negative relationships. Negative affect was also significantly related to lower self-efficacy and negative relationships.

TABLE 1
MEANS AND STANDARD DEVIATION OF DEPENDENT AND PREDICTOR VARIABLES

Variables	М	SD	
Teacher stress	1.88	.78	
Negative affect	2.66	1.05	
Self-efficacy	5.88	.77	
Good relationships	19.13	3.81	
Negative relationships	.47	1.18	

TABLE 2
CORRELATIONS AMONG VARIABLES

Variables	1	2	3	4	5
Teacher stress	1.00				
2. Negative affect	.48**	1.00			
3. Self-efficacy	45**	50**	1.00		
4. Good relationships	14	02	.02	1.00	
5. Negative relationships	.31**	.21*	11	57**	1.00

<sup>\*</sup>p<.05; \*\*p<.01

TABLE 3
HIERARCHICAL REGRESSION ANALYSES WITH "GOOD RELATIONSHIPS" AS DEPENDENT VARIABLE
(N=113)

Predictors	R	$R^2$	$\Delta R^2$	F	Sig.
Teacher stress	.138	.019	.019	2.153	.145
Negative affect	.147	.022	.003	.297	.587
Self-Efficacy	.150	.023	.001	.098	.755

TABLE 4 HIERARCHICAL REGRESSION ANALYSES WITH "NEGATIVE RELATIONSHIPS" AS DEPENDENT VARIABLE (N=113)

Predictors	R	$R^2$	$\Delta R^2$	F	Sig.
Teacher stress	.311	0.97	.097	11.870	.001
Negative affect	.317	.101	.004	.493	.484
Self-Efficacy	.323	.104	.004	.435	.511

In the first hierarchical regression analysis, teacher stress was entered first, followed by negative affect and self-efficacy. The results (see Table 3) revealed that none of the teacher variables predicted the number of students with whom teachers had good relationships. Teacher stress, negative affect, and self-efficacy explained only 2% of the variance, with teacher stress accounting for most of the explained variance. A similar hierarchical regression analysis was run with "negative relationship" as a dependant variable (see Table 4). The results indicated that the predictive power of these teacher characteristics was statistically significant, explaining 10% of the variance. However, *R* Square changes suggested that teacher stress predicted the number of students with whom teachers had negative relationships and that negative affect and self-efficacy did not additionally contribute to the prediction beyond what was explained by teacher stress.

### DISCUSSION

The purpose of the present study was to investigate the influences of teacher characteristics on relationships between teachers and students. Teachers' reports of stress were hypothesized to predict the quality of teachers' relationships with students. In addition to teacher stress, both negative affect and self-efficacy were examined to see whether or not they made unique contributions to the prediction. The results indicated that teachers' stress levels did predict the number of students with whom they had negative relationships, but not the number of students with whom they had good relationships.

The predictive value of teacher stress on negative relationships between teachers and students has important implications. Not only does teacher stress affect teachers' general attitude toward teaching, but also it is likely to influence the quality of their relationships with students. Moderate correlations among negative affect, teacher stress, and negative relationships further demonstrate the fact that teacher stress may increase an inappropriate display of negative affect, which may become a general tone of interactions with students and is most likely to be perceived as adversarial by students. For example, teachers who experience high levels of stress in the classroom may exhibit anger and hostility in their interactions with students, and thus experience negative relationships with them, which may exacerbate teachers' stress levels. However, it is important to note that although significant, the regression model explained only 10% of the variance. This certainly suggests that there may be other teacher characteristics much more predictive of the quality of teacher-student relationships. The small association is also consistent with the notion that relationship quality results from characteristics of both parties.

Contrary to the hypothesis, teacher stress did not predict the number of students with whom teachers have good relationships. It may be that other teacher and student characteristics are more critical in forming and maintaining positive relationships, regardless of teacher stress. Teachers' empathy with students, specific interaction styles, and communication styles may be better predictors of their positive relationships with students.

Since the current investigation was designed to better understand teacher influences on teacher-student relationships, the interactive nature of teacher and student characteristics within a classroom context was not examined. Future research should examine how teacher stress and negative affect interact with student characteristics when dealing with an individual student, and how this interaction influences teacher-student relationships. This may best be accomplished using a direct observation method. In light of the present findings, a research design that allows one to examine subtle attitude and perceptions of teachers in verbal and nonverbal exchanges with students will provide a better understanding of teacher influences on their relationships with students.

This study is not without limitations and the results await replications. The study used a self-report of teachers for both predictor variables and dependent variables. Teachers' reports of their relationships with students may have been influenced by their perceptions of stress. Students' reports of negative affect expressed by teachers (i.e., intensity, frequency, context) and perceptions of their relationships with teachers may extend the current understanding of teacher influences and validate the findings. Despite this limitation, it is argued that the current findings still provide an important direction in the study of teacher-student relationships, because teachers' perceptions, regardless of their accuracy,

determine their attitude, and thus influence their interactions with students.

Taken together, the findings suggest that teacher stress is an important dimension to consider when seeking to understand teacher-student relationships, especially teachers' negative relationships with students. Given mounting evidence that teacher-student relationships play an important role in students' overall school adjustment, continuing investigative efforts are needed in order to identify factors particularly important to the quality of teacher-student relationships and to better understand effective ways to facilitate positive relationships in the classroom. Most importantly, the current study provides a strong rationale for initiating systematic efforts within our educational system that address teacher stress. This offers an important direction for both professional development and intervention. That is, support systems for teachers should include not only behavioral strategies to address student behaviors, but also strategies for coping with stress. For instance, within the consultation context, a school psychologist should explore the level of stress and negative affect experienced by teachers. Specific behavioral strategies, if effectively used, may also reduce teacher stress. However, increasing teachers' awareness of their stress and helping teachers identify its effects on their relationships with target students appear to be important areas to be addressed.

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