Classroom Emotional Climate, Teacher Affiliation, and Student Conduct

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ABSTRACT

Using a multi-method, multi-level approach, this study examined the link between classroom emotional climate and student conduct, including as a mediator the role of teacher affiliation, i.e., students' perceptions of their relationships with their teachers. Data were collected from 90 fifth- and sixth-grade classrooms (n = 2,000 students) and included classroom observations, student ratings of teacher affiliation, and conduct grades on report cards. As predicted, when controlling for teacher characteristics and the organizational and instructional aspects of the classroom, there was a direct, positive relationship between classroom emotional climate and conduct that also was mediated by teacher affiliation. Effects were robust across grade level and student gender. We highlight the role of emotionally supportive classroom environments in promoting teacher affiliation and better conduct among students.

INTRODUCTION

Student misbehavior is one of the most significant stressors and causes of burnout among teachers (Boyle, Borg, Falzon, & Baglioni, 1995; Byrne, 1994; Evertson & Weinstein, 2006; Friedman, 2006; Travers & Cooper, 1996). When students misbehave, they are disruptive to their classmates and teacher, less engaged in lessons, and consequently perform worse in school (Finn, Pannozzo, & Voelkl, 1995; Freiberg, Huzinec, & Templeton, 2009). One factor that influences student behavior is the classroom climate, which is often delineated as the: (a) classroom emotional climate (CEC), the extent to which teachers promote positive emotions and make students feel comfortable; (b) classroom instructional climate (CIC), the extent to which teachers implement lessons that promote higher-order thinking; and (c) classroom organizational climate (COC), the extent to which

teachers structure students' time effectively (Pianta, La Paro, & Hamre, 2008).

The present study is grounded in evidence showing that a civil classroom emotional climate that meets students' basic needs such as belongingness is linked to greater engagement in learning and fewer disruptive behaviors (Battistich, Solomon, Kim, Watson, & Schaps, 1995; Ryan & Patrick, 2001). Specifically, it examines the link between CEC and student conduct. This work is important because explanations for why "non-instructional" aspects of the classroom may result in less misconduct have not been well established.

CLASSROOM EMOTIONAL CLIMATE

The academic objectives of schools cannot be met unless teachers provide students with a socially and emotionally healthy classroom environment (Noddings, 1992). This claim is supported by evidence that emotionally supportive classrooms are related to greater student motivation, interest, enjoyment, and engagement (Curby et al., 2009; Marks, 2000; Woolley, Kol, & Bowen, 2009), better student coping strategies (Ruus et al., 2007), less violent behavior (Sprott, 2004), and greater school adjustment and academic achievement (Luo, Huang, & Najjar, 2007; Pianta, Belsky, Vandergrift, Houts, & Morrison, 2008; Rudasill, Gallagher, & White, 2010; Ruus et al., 2007).

The quality of social and emotional interactions in a classroom—between and among students and teachers—creates the CEC (Pianta et al., 2008). CEC encompasses various objective characteristics of the classroom as detected and rated by observers trained in assessing classroom climate. According to the Teaching Through Interactions Framework (Hamre & Pianta, 2007), these characteristics include: (a) teacher sensitivity to student needs, (b) warm, friendly, respectful, and nurturing teacher-student relationships, (c) regard for students' perspectives and encouragement of active participation, and (d) the absence of abrasive disciplinary

practices and cynicism. In contrast, classrooms rated low in CEC tend to have teachers who are unresponsive to students' needs, an absence of emotional bonds between teachers and students, and an atmosphere of mistrust and disrespect.

Why would CEC be instrumental to student conduct? Theories from multiple disciplines converge on possible reasons. Self-determination theory, for example, posits that students are more likely to be engaged and well behaved in school when their needs for relatedness, competence, and autonomy are met (Connell & Wellborn, 1991). Another possible explanation can be found in research on teacher credibility, defined as the teacher's competence, trustworthiness, and caring, which relates these teacher characteristics with various student outcomes, including conduct (Finn et al., 2009). The theory of emotional intelligence (Mayer & Salovey, 1997; Salovey & Mayer, 1990) also can explain why CEC might be associated with student conduct. Teachers who are both sensitive and responsive to their students' needs and refrain from using harsh discipline practices likely are employing the skills of emotional intelligence. In order to be sensitive to students' needs, it is necessary for teachers to perceive students' emotional states accurately. For example, correctly identifying a student's escalating anger and acting quickly on that information may prevent the student from engaging in disruptive behavior. Another skill of emotional intelligence, the ability to regulate emotions, likely influences teacher-student interactions and student conduct. For example, teachers who are limited in their ability to regulate emotions—both their own and their students'—tend to have students who experience and express more negative emotions in class, often reflected in disruptive behavior (Sutton & Harper, 2009).

TEACHER AFFILIATION

Students' relationships with supportive teachers are expected to promote a sense of connectedness in the classroom, which should result in less problematic behavior and enhanced prosocial behavior (Jennings & Greenberg, 2009). Student reports of teacher affiliation have been positively linked to engagement in the learning process (Furrer & Skinner, 2003; Klem & Connell, 2004; Murray & Greenberg, 2001; Osterman, 2000; Wentzel, 1998) and to time on task (Hamre & Pianta, 2001). Student reports of teacher affiliation also have been linked to fewer problems (Crosnoe, Johnson, & Elder, 2004) and risk-taking behaviors, resulting in greater school attendance and academic achievement (Centers for Disease Control and Prevention, 2009). In contrast, students who report experiencing inadequate relationships with their teachers may feel disconnected or alienated, and students who feel alienated from school are more likely to engage in antisocial and delinquent behaviors and to fail academically (U.S. Department of Education, 1998). Including student perceptions rather than observers' or teachers' reports of affiliation is important because previous research has demonstrated weak or nonsignificant correlations between adolescents' subjective reports of caring and observers' reports (Feldman, Wentzel, & Gehring, 1989).

THE PRESENT STUDY

The literature suggests that teachers who create a healthy CEC are more likely to foster students' feelings of connectedness or positive student-teacher relationships and, in turn, better classroom behavior. This study tests this idea by (a) employing multi-method assessments to reduce common-method variance among the predictor (observed ratings of CEC), mediator (student ratings of affiliation), and outcome variables (conduct grades on report cards), and (b) employing a multilevel mediational approach (Krull & MacKinnon, 1999; MacKinnon, 2008) to examine whether student reports of teacher affiliation mediates the relationship between CEC and year-end conduct grades.

Following the steps in mediation analysis (Baron & Kenny, 1986; MacKinnon, 2008), we tested the following hypotheses: (a) classrooms with higher observed CEC ratings have students with higher year-end conduct grades (direct link between predictor-outcome); (b) classrooms with higher CEC ratings have students with higher ratings of teacher affiliation (predictor-mediator); (c) ratings of affiliation predict student behavior grades; and (d) the relationship between CEC and conduct grades is no longer a significant predictor when student-rated affiliation is introduced into the model. In addition, we hypothesized that all these relationships would remain statistically significant when teacher characteristics and both classroom organizational and instructional climates were held constant.

METHOD

Participants

Participants were 63 teachers and 2,000 students from 90 fifth- and sixth-grade English language arts (ELA) classrooms in 44 schools from a diverse, urban school district in the northeastern United States. These schools' student populations, on average, were 12% non-native speakers of English, 28% recipients of free or reduced lunch, and 31% low reading achievement. They were 50% female and racially/ethnically diverse with approximately 33% Black/African American, 29% Hispanic, 25% White/Caucasian, 12% Asian/Pacific Islander, and < 2% multiracial or Native/Aboriginal. The average student-to-teacher ratio in these schools was 25:1. Teachers were 89% female, 83% White/Caucasian, 9% Hispanic, and 8% Black/African American

and had been teaching for a mean of 15 years with a mean of over nine years of experience at their current school. Approximately 41% of the teachers had earned master's degrees and 36% had earned bachelor's degrees. About 14% were working toward master's degrees and 3% had earned degrees higher than a master's.

Procedure

Observational data were collected using digital camcorders and mini-DV tapes. Consenting teachers received video equipment (camera, tapes, and a tripod) and brief instructions to record their entire ELA class on three separate days during a two-week period. They positioned the cameras at an angle where at least their profiles and most of their students' profiles were visible. Students with no parental consent were seated so as to not be visible on the camera. Teachers returned their tapes directly to the researchers using pre-addressed, prepaid mailers.

Ten members of the research team attended a two-day training to become certified coders on the Classroom Assessment Scoring System (CLASS), used to code the videos (see technical manual for more information; Pianta et al., 2008). Each video included approximately 30 minutes of footage from the class sessions. Because the CLASS is designed to code 10- to 20- minute segments, we converted the mini-DV footage into digital video for storage on a DVD providing assurance that all coders would start and end coding at exactly the same point. Footage was divided into two segments of equal length (M = 14.8 minutes, SD = 1.39). As a rule, segments lasting less than 10 minutes were discarded, as were those tapes in which students were not visible throughout the segment or the audio quality was poor. For each classroom, we acquired up to six segments (two segments for each of the three sessions).

The team of certified coders participated in weekly reliability checks with one or more of three master coders. Reliability testing consisted of coding five videotaped classroom segments with at least 80% of the codes assigned within one point of the master code. Coders were required to maintain this reliability level in order to continue coding. As another means of ensuring reliability, we quadruple-coded a randomly selected 40% of the segments. The coding protocol yielded an average of 13 sets of CLASS scores per classroom with a range of three to 16 sets of scores with each classroom segment being coded between one and four times by a unique rater. Coders were not aware of which segment or day they were observing.

Student ratings of teacher affiliation were drawn from surveys administered by research assistants who collected data during the regular school day. Research assistants read the items and response options aloud; students responded to each item by coloring a bubble that corresponded to their response choice. ELA teachers were not present during data collection. Year-end ELA conduct grades were obtained from report cards.

Measures

Classroom climate. The CLASS assesses three domains of classroom climate: Classroom Emotional Climate (CEC), Classroom Organizational Climate (COC), and Classroom Instructional Climate (CIC; Pianta et al., 2008). Each domain is a composite of three or four dimensions scored on a seven-point scale (1-2 = low, 3-5 = mid, 6-7 = high) based on the presence or absence, frequency, and quality of specific observable indicators.

CEC consists of the dimensions of positive climate (degree of warmth and connection observed in the classroom), negative climate (degree of negativity observed in the classroom; reverse-coded), teacher sensitivity (teacher's awareness of and responsiveness to students' academic and social needs), and regard for student perspectives (degree to which the classroom is focused on students' interests and motivations). COC consists of the dimensions of behavior management (teachers' efficient and effective use of behavior management techniques), productivity (teachers' management of time to maximize learning opportunities), and instructional learning formats (teachers' use of methods to maximize students' engagement). CIC consists of the dimensions of concept development (teachers' promotion of higher-order thinking in the classroom), quality of feedback (degree to which teachers' feedback promotes further understanding and participation), and language modeling (degree to which teachers support students' language development).

Coders assigned dimension scores for each segment based on the observed indicators. We then calculated a composite domain score for each segment in a classroom by averaging the dimension scores that comprise each domain. Domain (and dimension) scores were further averaged across all segments of a given classroom to obtain a total classroom climate score. Inter-rater reliability was established by calculating intra-class correlation values, which indicated adequate to high levels of inter-rater agreement: .83, .83, and .78, for CEC, COC, and CIC, respectively.

Teacher Affiliation. The eight-item Affiliation with Teacher Survey (Cook, Greenberg, & Kusche, 1995) assessed students' perceptions of their relationship with their teacher. Students rated, on a five-point Likert scale ($1 = disagree\ a\ lot$, $5 = agree\ a\ lot$), the extent to which they agreed with items such as "My ELA teacher understands me" and "I like my ELA teacher this year." Cronbach's α for this sample was .92.

Conduct. Student conduct in ELA was obtained from

TABLE 1

Intercorrelations among Variables in Two-Level Model with Students Nested Within Classrooms

Level 1 – students ($N = 2,000$)							
	1	2	3	4	5	6	
1. Black/AA	1.00						
2. Hispanic	44***	1.00					
3. Other race/ethnic	28***	25***	1.00				
4. Boy	03	.02	.02	1.00			
5. Teacher Affiliation	10***	05*	.12***	08***	1.00		
6. Student Conduct	20***	.06**	.09***	22***	.24***	1.00	
M					3.69	3.94	
SD					1.08	0.91	

Level 2 – classrooms	(N=90)	ე)
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		1	2	3	4
1. Grade (1=6 th)		1.00			
2. CEC		22*	1.00		
3. COC		24*	.60***	1.00	
4. CIC		12	.68***	.57***	1.00
	M		4.93	5.55	3.09
	SD		0.56	0.59	0.67

Note. Correlations are based on one of the multiply imputed datasets. Results did not vary across different datasets.

Student race/ethnicity was dummy coded where reference variable = White/Caucasian.

report cards. ELA teachers rated students' behavior using a descriptive scale ranging from unsatisfactory to excellent. The scale was converted into a five-point Likert scale (1 = unsatisfactory, 2 = needs improvement, 3 = satisfactory, 4 = good, and 5 = excellent).

Covariates. Student-level covariates included gender and three dummy variables for race/ethnicity (White/Caucasian, Black/African American, Hispanic, other race or

ethnicity). Classroom-level covariates included grade level and CLASS scores on COC and CIC. Exploratory analyses indicated that no other teacher characteristics were associated with outcomes.

Analytic Strategy

Due to the nested design of the study, we analyzed all data using hierarchical linear modeling (HLM) with full-information maximum-likelihood estimation. Students

FIGURE 1

Mediation Analyses: Association Between Emotional Climate and Conduct Through Teacher Affiliation

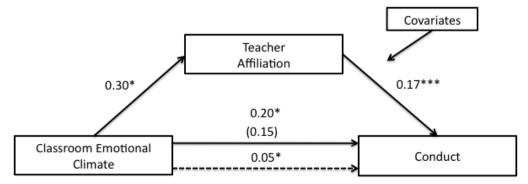


Figure 1. Mediation model: Unstandardized parameter estimates. *p < .05; **p < .01; *** p < .001

(Level 1) were nested within classrooms (Level 2). To test for multilevel mediation, we followed established procedures (MacKinnon, 2008) that are similar to those in simple mediation (Baron & Kenny, 1986), but are interpreted in a multilevel fashion (Krull & MacKinnon, 1999; Preacher & Hayes, 2008). Dummy-coded variables were uncentered. All other variables were grand-mean centered. Alpha was set at p < .05. Missing data were estimated (15% for conduct and 7% for teacher affiliation) using multiple imputation procedures in NORM (Shafer, 2000).

RESULTS

Table 1 presents correlations and descriptive statistics. Among the primary Level 1 variables of interest, higher ratings of teacher affiliation were associated with higher ratings of student conduct, as predicted. Among Level 2 variables, the significant negative correlation between grade level (dummy coded, 1 = sixth grade) and CEC and COC indicates that sixth-grade classrooms had lower scores on scales than fifth-grade classrooms. There were moderate to strong positive correlations among CEC, COC, and CIC.

To test the primary hypothesis that student ratings of teacher affiliation mediate the relationship between observed CEC and student conduct, we ran a multilevel mediation model (MacKinnon, 2008) using HLM (Raudenbush & Bryk, 2002). We set the significance level at p < .05. First, we established that the independent variable, CEC, was associated with the primary outcome, student conduct. As shown in Table 2 (Step 1), higher levels of observed CEC were associated with higher student conduct (t = 2.18, p = .032, ES = .22). We then established associations between CEC and the mediator, teacher affiliation. As shown in Table 2 (Step 2), higher levels of observed CEC were related to higher student ratings of teacher affiliation (t = 2.31, t = .02, t = .02). The third step was to establish the effect of

the mediator on the primary outcome of interest when controlling for the independent variable. As shown in Table 2 (final column), higher ratings of teacher affiliation were associated with higher ratings of student conduct (t = 7.71, p < .001, ES = .18) when CEC was controlled. Finally, to test the last step in mediation, we examined the association between CEC (the predictor) and student conduct (the outcome) to ensure this association would become nonsignificant or of a significantly lesser magnitude when taking the mediator, teacher affiliation, into account. As shown in Table 2 (final column), the association between CEC and student conduct became nonsignificant (t = 1.72, t = 0.9, t = 0.9).

To further establish the significance of this mediation (i.e., the indirect effect of CEC on student conduct through teacher affiliation is significant, path ab), we conducted a Sobel's test, which was statistically significant (Sobel's z = 2.22, p = .030), supporting the mediation model. Figure 1 illustrates the mediation process. As shown in Table 2, the final step had a significantly better fit than the first step as specified by the significantly increased the Level 1 R^2 from $\sigma^2 = 7.66$ to 11.22, as well. These findings suggest that CEC is associated with student conduct through teacher affiliation.

Of note was one additional finding. COC was associated negatively with student conduct (t = -2.18, p = .030, ES = .20). This may have been the result of suppression in the statistical model, given the nonsignificant association between COC and student conduct in the absence of CEC ($\gamma = -0.04$, SE = 0.07, p = .56). Variables were constrained to be equal across classrooms. No teacher characteristics were associated with or moderated by the variables of interest.

DISCUSSION

This study tested whether students' perceptions of their

 TABLE 2

 Mediation Analyses: Association Between Emotional Climate and Conduct Through Teacher Affiliation

	Step 1 ^a		Step 2 ^b		Steps 3 & 4 ^c	
	$(ICC\% = 16.36)$ $\underline{Conduct}^{d}$		(ICC% = 24.24) <u>Teacher Affiliation</u> ^e		Conduct	
	γ	SE	γ	SE	γ	SE
Intercept	4.36***	0.07	4.05***	0.07	4.30***	0.07
<u>Level 1</u>						
Black/AA	-0.32***	0.07	-0.18*	0.08	-0.29***	0.06
Hispanic	-0.10	0.06	-0.07	0.08	-0.09	0.06
Other race	0.07	0.07	0.09	0.07	0.05	0.07
Boy	-0.42***	0.04	-0.16**	0.05	-0.39***	0.04
Teacher Affiliation					0.17***	0.02
Level 2						
Grade 6	-0.17*	0.08	-0.37**	0.10	-0.11	0.08
CEC	0.20*	0.09	0.30*	0.13	0.15	0.09
COC	-0.19*	0.09	- 0.14	0.11	-0.16*	0.08
CIC	0.06	0.08	0.00	0.11	0.05	0.08
Fit Statistics						
$R^2 \% (au_{00})$	28.37		28.93		28.62	
$R^2 \% (\sigma^2)$	7.66		1.07		11.22	
AIC	4,889.09		5,539.80		4,844.29	
$\Delta \chi^2(df)$					46.80 (1)***	

Note. AIC = Akaike Information Criterion. Change in χ^2 compares the direct effects model (Step 1) and the mediated effects model (Steps 3 & 4). CEC = Classroom Emotional Climate; COC = Classroom Organization Climate; and CIC = Classroom Instructional Climate. * p < .05, ** p < .01, *** p < .001

relationships with their teachers, referred to as teacher affiliation, mediated the association between observed CEC and student conduct. Observations, student ratings, and report card grades collected from fifth- and sixth-grade classrooms showed a positive relationship between CEC and student conduct that was mediated by teacher affiliation, even when controlling for teacher and classroom characteristics, including the other CLASS dimensions. As hypothesized, CEC,

as rated by outside observers, predicted teacher ratings of student conduct in the classroom, and student-rated teacher affiliation mediated the association between CEC and student conduct. That is, classroom environments rated with objective indicators to be emotionally supportive had a positive impact on student conduct, suggesting that in these emotionally supportive classrooms, students liked and respected their teachers more and, in turn, behaved better. These

^a Residual variance estimates

^b Residual variance estimates

^c Residual variance estimates

^d Null model variance estimates

^e Null model variance estimates

findings align with a growing body of research evidencing the influence of emotional aspects of the classroom in student motivation, engagement, performance, and conduct in school (e.g., Battistich, Schaps, & Wilson, 2004; Brock et al., 2008; Curby et al., 2009; NICHD, 2005; Pianta et al., 2008) as well as the effect of students' subjective experience of student-teacher relations on student outcomes (Kosir, Socan, & Pecjak, 2007).

Understanding factors associated with student conduct is important, not only for enhancing classroom management and student productivity within the classroom, but also for individual student outcomes over time. For example, in two national samples representing the school experiences of over 3,000 students, both misbehavior and low academic achievement contributed to increased cigarette use over time (Bryant, Schulenberg, Bachman, O'Malley, & Johnston, 2000). Similarly, student misbehavior in kindergarten has been shown to predict behavior problems in elementary school and middle school (Hamre & Pianta, 2001). Even when controlling for family and socioeconomic variables and IQ, disruptive behavior as early as kindergarten is related to school problems such as lower grades, placement in special classrooms, and school dropout (Jimerson, Carlson, Rotert, Egeland, & Sroufe, 1997; Parker & Asher, 1987). Although dropout rates have decreased over the last 30 years, 8.7% of students in the U.S. drop out of school (Planty et al., 2009), and the rates are even higher among minority students and those from lowincome families (Chapman, Laird, & KewalRamani, 2010). When they feel disconnected or alienated, failing students are more likely to drop out (Finn, 1989), emphasizing the need for the potential protective factor of supportive teacherstudent relationships (Crosnoe et al., 2004).

Insight into the links among classroom climate, teacher-student relationships, and the impact of climate and teacher affiliation on student behavior also has important implications for teachers. Teacher stress, burnout, and well-being have been linked consistently to student conduct (Blase, 1982; Byrne, 1994; Friedman, 1995; Hastings & Bham, 2003). When students misbehave, teachers' stress and burnout levels increase, thereby hampering their ability to manage their classrooms effectively (Brouwers & Tomic, 2000). This progression of events can have a cascade effect on classroom quality with classroom management and student behavior spiraling downward. When teachers are aware that the emotional support and relationships they offer to students can affect students' behavior, they may invest more energy into the emotional and social aspects of learning.

Accordingly, results from the current study have implications for school-based interventions. Interventions that target classroom emotional climate by increasing teacher affiliation may be most effective in improving student behavior (Brackett et al., 2009; Brackett, Rivers, Reyes, &

Salovey, in press). Although educators and researchers have suspected for years that emotions play a fundamental role in teaching and learning (Ginott, 1971; Sutton & Wheatley, 2003), few systematic efforts have been made to train educators on emotion-related skills (Brackett et al., 2009; Elbertson, Brackett, & Weissberg, 2010), and relatively few teacher preparation programs or professional development opportunities for teachers already in the profession include emotions in their content (Fleming & Bay, 2004). However, in the last decade, educators, parents, and the public have acknowledged the need for broadening the nation's educational agenda to include improving schools' social and emotional climates (Metlife, 2004-5; Public Agenda, 1994, 2002; Rose & Gallup, 2000), and social and emotional learning programs have been designed to address this gap in education (Zins, Weissberg, Wang, & Walberg, 2004). The current study offers support for the importance of these types of programs.

LIMITATIONS AND FUTURE DIRECTIONS

The strength of this study resides in its multi-method, hierarchical mediational approach, but it also has some limitations to consider. Student behavior was assessed through students' report card grades in the category of conduct. The conduct score was selected intentionally because (a) it was a rating with which teachers were already familiar and which could be gathered from all teachers across schools and (b) it would be provided by the same teacher whose classroom climate was being assessed. To determine the relationship between the emotional climate a teacher creates and the conduct of the students within that same emotional climate, the measure of student conduct had to be specific to the particular classroom which was observed and rated. However, we do not know the factors that teachers use to assign a conduct score to each student. For instance, an unsatisfactory score could refer to passiveness or aggression; an excellent score could simply indicate compliant behavior, or it could mean the student participates eagerly. Further, teacher evaluations of student performance often are based on expectations the teacher holds for students (Jussim & Eccles, 1992). It is possible that the teachers' ratings of students' behavior could be biased according to expectations that teacher holds related to the emotional climate of the classroom. For instance, a teacher who channels more of her efforts into enhancing the emotional climate of the classroom may have higher expectations for her students in terms of their behavior in the classroom. Although this is possible, research in schools has shown that teacher expectations predict student outcomes because those expectations accurately reflect the student's potential or likelihood to excel or fail in that area (Brophy, 1983; Jussim & Eccles, 1995). Future studies could enhance the assessment of student conduct by including multiple assessments of a range of behaviors by more than one rater, possibly including a third-party observer, or qualitative data such as interviews with key informants.

The analyses yielded one unexpected finding: COC and student conduct were associated negatively. COC refers to the teacher's use of behavior management techniques, time, and instructional formats in order to optimize learning. A negative relationship between COC and student conduct is counterintuitive because the degree to which a teacher devotes behavioral strategies, time, and instruction effectively to learning seems likely to have positive effects on student conduct. One possible explanation for the negative relationship between COC and conduct is that it resulted from suppression in the statistical model, as COC and student conduct were unrelated in the absence of CEC. However, another plausible explanation is that teachers devote more effort to the organizational aspects of the classroom when student conduct is poor in order to better control student behavior. Future research examining the relationship between COC and classroom conduct could shed light on the dynamic interplay of student behavior and teachers' approaches to managing the organizational climate of the classroom.

Although the results of this study suggest that CEC should be targeted in teacher preparation, this study does not address the question of whether CEC or other dimensions of classroom climate can be developed in teachers through formal training, or whether shifts in CEC or other dimensions of classroom climate as a result of such training increase teacher affiliation or enhance student behavior. These questions are currently being tested in our laboratory. Initial find-

ings suggest that the infusion of such trainings can in fact shift scores on CEC by about 12% after just eight months (Brackett, Rivers, Reyes, & Salovey, 2010). The extent to which shifts in CEC scores are associated with greater affiliation and better student conduct has yet to be tested.

CONCLUSION

A growing body of research, including the current study's findings, emphasizes the need for a shift in the focus of education and, especially, teacher training. For over a decade, during a crucial period of social and emotional development, schools and classrooms are the child's environment for supporting and enriching these developmental needs. However, after centuries of neglecting this reality of schooling, the term "emotion" is not even mentioned in most writing advocating educational reform (Hargreaves, 1998) or in national legislation aimed at improving education (e.g., NCLB, 2001). Nevertheless, it is apparent to both researchers and educators alike that emotions are paramount to learning and to student outcomes within the classroom and beyond. The focus of training and professional development for teachers as well as of academic interventions should shift to include the social and emotional aspects of learning (Brackett et al., 2009; Jennings & Greenberg, 2009; Zins et al., 2004). When teachers can create a warm and open classroom environment that supports the emotions of students, students feel more connected, behave better, and are more apt to succeed in school and grow into successful adolescents and adult citizens.

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