



Presented at the National Association
for School Psychologists 2012 Annual Convention
Philadelphia, USA, Feb. 2012

ABSTRACT

A growing body of research has demonstrated the importance of school bonding, but little is known about the processes that contribute to it. This study examined the degree to which teacher support and teacher social emotional self-efficacy predicted student ratings of school bonding. Results from multi-level modeling revealed significant variability in ratings of school bonding across classes. Teacher support was predictive of school bonding for both boys and girls, and teacher self-efficacy predicted school bonding for girls.

RATIONALE

School Bonding is the attachment and commitment that a student has with school, its personnel and the academic ideals that it espouses (Libbey, 2004; Maddox & Prinz, 2003). School bonding is positively correlated with academic performance (Marchant, Paulson & Rothlisberg, 2001) and has been associated with lowered risk of student substance abuse, truancy and delinquency (Hawkins, Catalano, & Miller, 1992). According to Social Development theorists, strong bonds with school develop through opportunities for peer interaction and the development of positive social skills that allow them to form and maintain friendships (Maddox & Prinz, 2003). Classroom teachers play an important role in student school bonding, not only by providing these necessary opportunities, but also by establishing positive interpersonal relationships with students (Hawkins & Weis, 1985).

Having a supportive and nurturing classroom teacher may influence the strength of students' bonds with the school. One of the primary goals of *Social and Emotional Learning* is to create and maintain a safe, happy, and caring learning environment for students within schools (CASEL, 2012). However, the degree of teachers' engagement in and effective delivery of social-emotional education may be linked to their perceived self-efficacy in nurturing their students. Bandura (1993) described self-efficacy as the belief in one's capacity to act in ways that control events and posed that such a belief provides individuals with the incentive to act. As well, some evidence suggests that teacher beliefs about students' social emotional development influences teacher-student relationships (Ryan et al., 1998).

In the present study, we explored the influence of individual and classroom level variables on school bonding. We hypothesized that student-perceived teacher support, and teacher self-efficacy regarding their ability to nurture their students' social and emotional learning, would be positively related to the student's self-reports of school bonding.

Figure 1. Teacher Self-efficacy

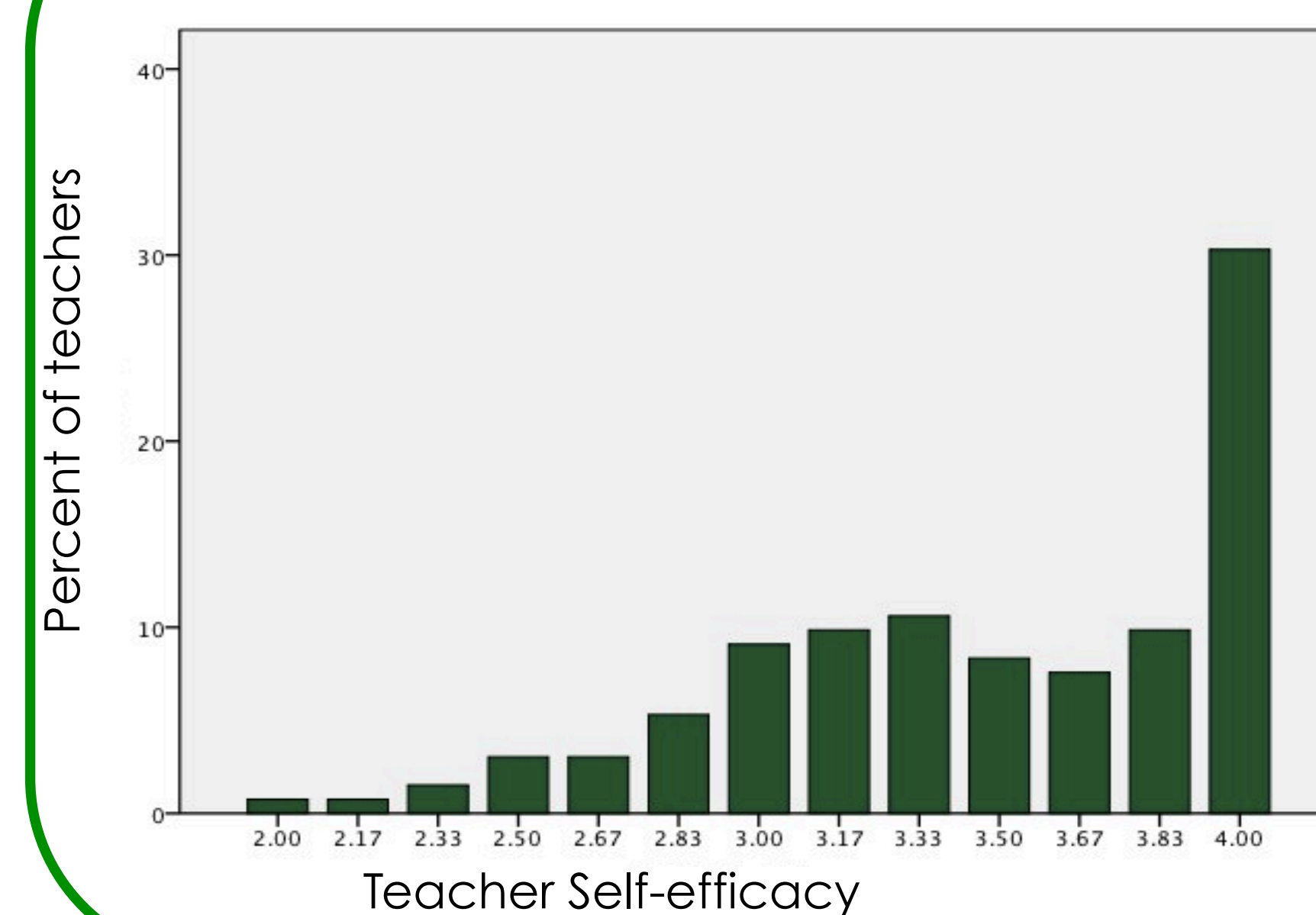


Figure 2. Relationship between School Bonding and Teacher Support

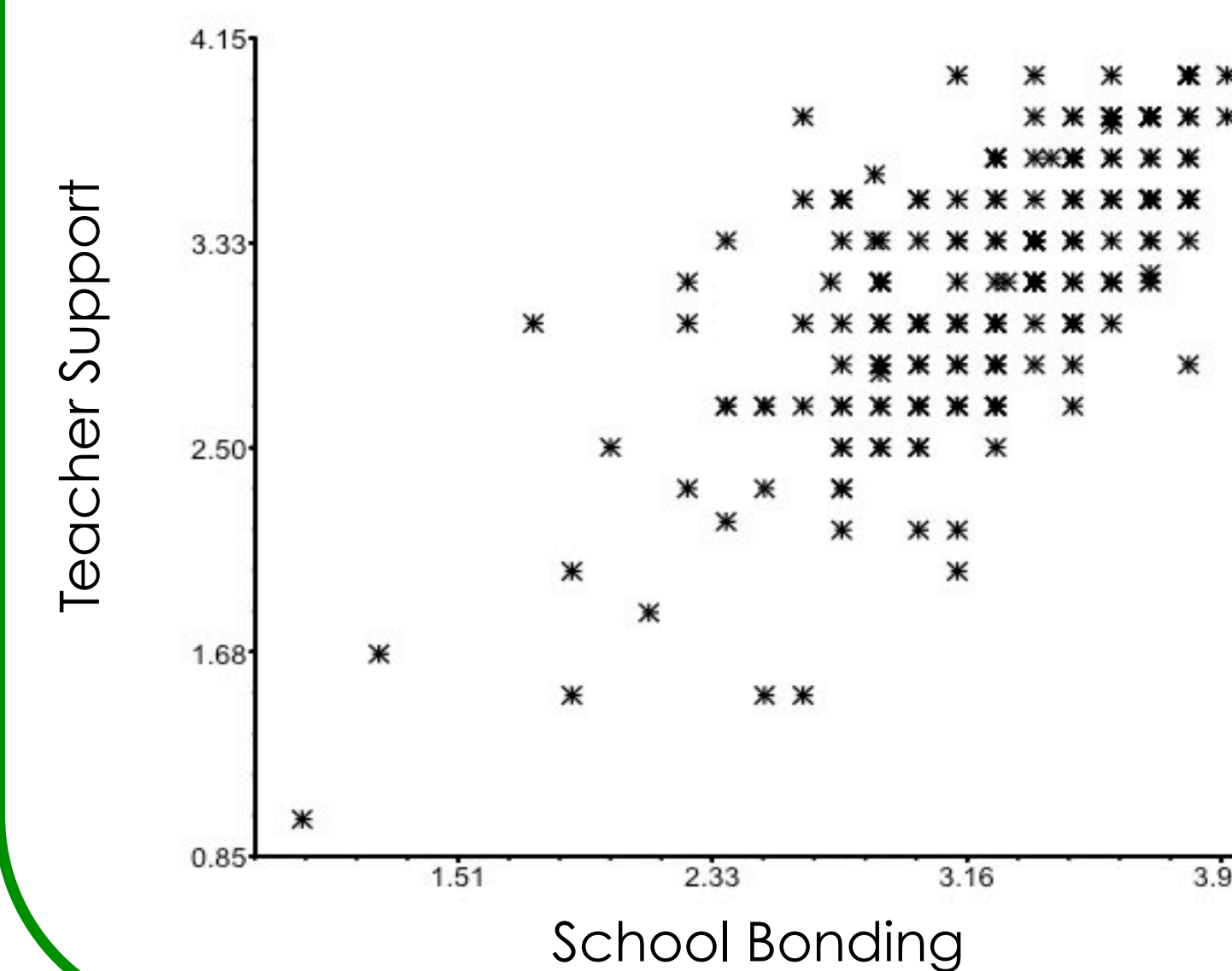


Table 1. Multilevel Estimates for School Bonding

Parameter	Model 1: Null Model	Model 2: Level I & II Predictors
Whole Sample (n = 2, 314)		
Fixed effects		
Intercept	3.31** (0.02)	3.31** (0.02)
Teacher Support		0.45** (0.02)
Random effects		
Level 1 variance	0.18 (0.42)	0.11 (0.34)
Level 2 (Intercept) variance	0.02** (0.15)	0.03** (0.16)
Slope Variance		0.02** (0.14)
Intraclass Correlation	.11	
Goodness-of-fit (Deviance)	2696.73 ^a	1726.23 ^b
Boys (n = 1,120)		
Fixed Effects		
Intercept	3.24** (0.02)	3.24** (0.02)
Teacher Support		0.45** (0.02)
Random Effects		
Level 1 variance	0.20 (0.45)	0.13 (0.36)
Level 2 (Intercept) variance	0.02** (0.16)	0.03** (0.18)
Slope Variance		0.01** (0.12)
Intraclass correlation	.11	
Goodness-of-fit (Deviance)	1458.80	993.99
Girls (n = 1,194)		
Fixed Effects		
Intercept	3.38** (0.02)	3.38** (0.02)
Teacher Support		0.40** (0.02)
Teacher Social Emotional Self-Efficacy		0.07* (0.03)
Random Effects		
Level 1 variance	0.15 (0.38)	0.10 (0.32)
Level 2 (Intercept) variance	0.02** (0.15)	0.03 (0.16)
Slope Variance		0.02** (0.15)
Intraclass correlation	.13	
Goodness-of-fit (Deviance)	1174.77	789.61

Note. Values in parentheses denote standard deviation or standard errors. * p < .05, ** p < .001. Values with different superscript denote significant differences, p < .01.

PARTICIPANTS & METHOD

Participants were 2,314 students (1,194 girls; grade 4 = 23%, grade 5 = 26%, grade 6 = 27%, grade 7 = 24%) and 129 teachers (100 female) from 18 elementary schools in 5 districts in southern British Columbia. Each student completed the *Inventory of School Climate – Student* (Brand, Felner, Shim, Seitsinger & Dumas, 2003), a psychometrically validated measure of school climate indices. Student-perceived teacher support was assessed using a 6-item *Teacher Support* subscale ($\alpha = .80$). Student-perceived School Bonding was assessed using an 8-item scale ($\alpha = .77$) developed by Murray and Greenberg (2001). Critically, there was no content overlap between items of *Teacher Support* and that of *School Bonding*. Students responded using a 4-point, Likert scale (*strongly agree, agree, disagree, or strongly disagree*). Teachers' SEL self-efficacy was assessed using a 6-item scale ($\alpha = .89$). Teachers responded using a 5-point, Likert scale (*strongly agree, agree, neither agree or disagree, disagree, or strongly disagree*).

RESULTS

Overall, teachers reported high ratings of social emotional self-efficacy, with approximately 30% ascribing themselves the highest possible total (Figure 1). Figure 2 displays a scatterplot of 10% of the associations between perceived teacher support and school bonding. The intraclass correlation derived from Model 1 indicated that 11% of the variance in students' ratings of School Bonding was attributable to between-classroom differences.

The inclusion of teacher support and SE significantly improved the model for the overall sample, $\chi^2(3) = 970.50$, $p < .01$. There was a significant main effect for teacher support on school bonding, but Teacher Social Emotional Self-Efficacy was not significantly related to School Bonding in the overall sample.

As previous studies have shown sex differences in school bonding (Oelsner, Lippold, & Greenberg, 2010), we conducted a separate set of analyses for boys and girls. Teacher support was a significant predictors for both boys and girls, and the relationship between these two variables differed significantly between classrooms. The Level 2 predictor, Teacher Social Emotional Self-Efficacy, was related to school bonding among girls only. This indicates that girls with high ratings of School Bonding were more likely to have a classroom teacher who had high ratings of Social Emotional Self-Efficacy.

DISCUSSION & IMPLICATIONS

The results of the present study highlight a potential link between perceived teacher support, teacher self-efficacy, and student school bonding. As indicated in Figure 1, teachers in our sample generally considered themselves to be able to meet their students' social emotional needs. Despite this, differences in SE self-efficacy did predict of school bonding for girls, but not boys, possibly because girls may more sensitive than boys to subtle differences in teacher behaviour that relate to greater Social Emotional Self-efficacy.

Due to its potential susceptibility to influence, school bonding has proven to be a promising area for intervention researchers. These data confirm and extend research on the importance of school bonding but underscore the need to provide teachers with the skills necessary for effective SEL, enhancing their own perceptions of their abilities to foster positive social and emotional growth among their students.

ACKNOWLEDGEMENTS

We gratefully acknowledge the support of the Social Sciences Research and Humanities Council, the Canadian Prevention Science Cluster, and the Edith Lando Foundation for providing funding support for this project. We would also like to thank the students, teachers and administrators for their participation.