

Variable Effects of Children's Aggression, Social Withdrawal, and Prosocial Leadership as Functions of Teacher Beliefs and Behaviors

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Teachers' beliefs about aggressive and withdrawn behaviors in the classrooms and teachers' overall caring and support of students were hypothesized to influence the relations between these classroom behaviors and peer acceptance and self-perceived social competence. These hypotheses were tested in a sample of 82 middle school classes consisting of 4,650 students ages 13 to 16. The results suggest that teachers' aversion to aggression and empathy toward withdrawal enhanced the self-perceptions of both aggressive and withdrawn children and enforced peer rejection of aggression but not of social withdrawal. Teacher warmth had similar effects. Prosocial leadership had a positive social impact among students independent of teacher beliefs. These findings are discussed in an attempt to reconceptualize children's social behaviors and peer status.

Prosocial leadership, aggression, and social withdrawal are among the most widely investigated variables in the peer relations literature. These variables have usually been measured through peer nominations within classes and are studied in relation to peer acceptance, another peer nomination measure, and perceived social competence measured through self-reports. Among the three variables, prosocial leadership has yielded the most homogeneous findings. It is consistently positively related to peer acceptance and perceived social competence (e.g., Bagwell, Newcomb, & Bukowski, 1998), although the magnitude of this positive relation still varies in the literature (e.g., Miller-Johnson, Coie, Maumary-Gremaud, Bierman, & the Conduct Problems Prevention Research Group, 2002; Scholte, van-Aken, & van-Lieshout, 1997).

The findings on social withdrawal are less uniform. The predominant finding suggests a negative effect or peer rejection of withdrawn behaviors (e.g., Verschueren, Buyck, & Marcoen, 2001). However, a positive effect has also been reported with Chinese samples (Chen, Rubin, & Li, 1995; Chen, Rubin, & Sun, 1992). Other Chinese studies have reported

peer rejection of social withdrawal (Hart et al., 2000; Schwartz, Chang, & Farver, 2001). Although it is clear that withdrawn children tend to have a depressed perception of themselves (e.g., Rubin, Chen, & Hymel, 1993), the depression effect ranges from small (e.g., Rubin & Mills, 1988) to large (e.g., La Greca & Lopez, 1998).

The findings on aggression are more variable. Highly aggressive children are rejected by peers (e.g., Ladd & Burgess, 1999). This finding seems consistent when boys and girls are analyzed separately (e.g., La Greca, 1981; Rodkin, Farmer, Pearl, & Van-Acker, 2000). However, some studies also suggest that aggressive children are not rejected (Phillipsen, Bridges, McLemore, & Saponaro, 1999) or are well accepted by peers (Cairns, Cairns, Neckerman, Gest, & Gariépy, 1988; Salmivalli, Kaukiainen, & Lagerspetz, 2000). Studies on subtypes of aggression also yield mixed results. For example, proactive aggression has been positively (Poulin & Boivin, 2000; Price & Dodge, 1989) as well as negatively (Coie, Dodge, Terry, & Wright, 1991; David & Kistner, 2000) related to peer acceptance.

The correlation between aggression and self-perception of social competence is equally inconsistent. The positive association derived from a large number of studies (e.g., Hymel, Bowker, & Woody, 1993) leads to the conclusion that, unaware of the extent to which they are rejected, aggressive children tend to have an inflated self-perception (Boivin, Thomassin, & Alain, 1989; Cillessen, van Ijzendoorn, van Lieshout, & Hartup, 1992). Nonetheless, negative associations have also been reported (Crick &

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Grotepeter, 1995; Luthar, 1995; Moretti, Holland, & McKay, 2001; Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1999; Verschuere et al., 2001).

The previous discussion suggests certain basic patterns of relations in which there is little variation for some behaviors (e.g., prosocial leadership) but moderate to large variation with respect to other behaviors (e.g., withdrawal and aggression). The question is why the effects of this set of behaviors show variation in the literature. To answer this question, the present study took the perspective that the social context in which children interact modifies the meaning of different social behaviors resulting in different outcomes. To the extent that social contexts vary and exert influence on a behavior, that behavior is likely to carry different consequences across social situations. Because most of the previously reviewed studies have not examined social contexts, the variable results may reflect contextual differences, in addition to sampling fluctuation and measurement inconsistency.

Among the relevant social contexts in which children interact is the classroom, which, in most contemporary societies, provides the primary milieu for school children's social interaction. As a result, studies of peer relations normally employ class nomination as a major means to measure students' social behaviors. Not considering the classroom effects, individual differentiation obtained by peer nomination within classrooms may lose the intended meaning across classrooms. Within the social context of a classroom, the present study focused on teachers' beliefs and behaviors, which were expected to exert direct influence in setting expectations and defining the culture of the classroom context (Birch & Ladd, 1998). For example, teachers have different beliefs and perceptions regarding classroom management (Prawat & Nickerson, 1985) and prefer different types of behaviors (Brophy & Evertson, 1981; Wentzel, 1991, 2002). These teacher differences are often accurately perceived by the students (Marshall & Weinstein, 1984), who behave accordingly (Ladd, Birch, & Buhs, 1999). Social adaptation in the classroom requires that children not only negotiate with each other, but also attend to the expectations of the classroom teacher (Birch & Ladd, 1998). For example, a strict versus a more lenient teacher feeds children with consistently different information that shapes their adaptive strategies. Prosocial, antisocial, and asocial behaviors may thus have different meanings in different classrooms, reflecting differences in teacher beliefs and behaviors (e.g., Kedar-Voivodas, 1983).

In an initial effort to explore the classroom contextualizing of children's peer relations, the purpose of the present study was to examine teacher behavior and beliefs on children's social interaction within classes. Specifically, teachers' beliefs about aggressive and withdrawn behaviors and teachers' caring and support of students were hypothesized to influence students' perceptions of these behaviors. These hypotheses were tested in a sample of 82 Chinese secondary school classes consisting of 4,650 students.

Teachers' Attitudes Toward Aggression and Withdrawal

The effects of teachers' attitudes and beliefs on students' behaviors were first documented by Wickman (1928). This and later work on the issue (e.g., Brophy & Good, 1974) suggest that teachers, as socializing agents, influence students' behaviors through their interpretations of institutional values and expectations. Variation among teachers in their interpretation of social norms and in their tolerance of deviance contributes to cultural differences in the classroom (Kedar-Voivodas, 1983). As the only authority figure in the classroom, the teacher exerts direct influence on the degree to which different behaviors are enforced or inhibited. In terms of aggressive and withdrawn behaviors, teachers in general show greater resentment and intolerance toward the former, partly because aggression and disruption interfere with the instructional and socialization tasks of the teacher (Kedar-Voivodas, 1983). Teachers often resent and try to prevent aggression and bullying (Boulton, 1997; Coie & Koeppl, 1990) and sometimes empathize with and try to protect the victims (Craig, Henderson, & Murphy, 2000).

Variation in these teacher attitudes contributes to different classroom norms and references by which students assess each other's social attributes and likeability (Hughes, Cavell, & Willson, 2001). Students' peer status may form and change in accordance with teachers' liking and disliking of a behavior or a student and kinds of behaviors or students. Several investigations of young children indicate that peer popularity of a student reflects teacher preference more than peer liking (Ladd et al., 1999; White & Kistner, 1992; White, Sherman, & Jones, 1996). Teacher attitudes toward aggressive and withdrawn behaviors are also expected to affect students' self-perception in relation to these behaviors. Research on motivation suggests that teachers' attitudes and beliefs influence students' behavior through implicit changes in the students' self-

concepts and other self-systems (e.g., Marshall & Weinstein, 1984). Similar effects can be easily extended to the behavioral domain of the classroom, even though such effects have not been extensively investigated.

From the previous review, several scenarios about students' aggressive and withdrawn behaviors can be hypothesized. High control and low warmth characteristic of teachers' interaction with aggressive students (Coie & Koeppl, 1990) convey disliking of these students to the class, which may learn to reject aggression (Hughes, Cavell, & Jackson, 1999). Conversely, teachers who are tolerant of aggression communicate their lenience to the students who may also act more positively toward the aggressive peers. Whether teachers feel averse, indifferent, or empathetic toward shy and withdrawn children may also affect how these students are perceived by their peers. However, the direction of the teacher effect may be unclear. A positive opinion from the classroom teacher may help raise the social status of a shy and withdrawn child who may otherwise be neglected or rejected by peers. On the other hand, a positive or protective stance taken by an empathetic teacher may also reinforce the perception among students that the "protected" child is socially incompetent. Teachers' favorable opinion of a shy and sensitive student may also cause resentment among students who may consider the student undeserving of the teacher's attention.

In contrast, the effect of an empathetic attitude on the self-perception of the withdrawn students seems clear. A positive teacher opinion is expected to elevate the self-perception of withdrawn children. An indifferent or averse opinion from the teacher will worsen the already depressed self-perception of these students (Archibald & Cohen, 1971). Because withdrawn children are often victims of aggression, teachers' aversion to aggression that rectifies the feeling of injustice sets a moral tone in the class in favor of the withdrawn students. Thus, teachers' averse attitudes toward aggression are also expected to lessen the negative self-perception of withdrawn children. Finally, the effects of teacher attitudes on aggressive students' self-perception, however, may be limited. This is consistent with the literature that the self-perception of aggressive children is somewhat independent of others' opinion of them (Cillessen et al., 1992). In fact, negative teacher attitudes may even have a positive effect on aggressive students' self-perception because of the extra attention they receive from teachers intolerant of aggressive behaviors.

In the present study, teachers' averse attitudes toward aggression were hypothesized to predict a negative association between students' aggression and peer acceptance, attenuate the negative association between students' social withdrawal and perceived social competence, and affect the association between students' aggression and perceived social competence. Teachers' empathetic attitudes toward social withdrawal were expected to attenuate the negative association between students' social withdrawal and perceived social competence and to affect the association between students' social withdrawal and peer acceptance.

Teacher Warmth

Parental warmth has been shown to have an overarching positive effect, leading to a wide range of positive social and cognitive behaviors in children (e.g., see Cournoyer, 2000, for a review). Although less extensively studied, teacher warmth seems to have similar broad-based positive effects (Brody, Dorsey, Forehand, & Armistead, 2002; Skinner & Belmont, 1993) and represents a major dimension on which teachers' classroom behaviors differ (Babad, 1993; Wubbels, Mieke, & Hoymayers, 1991). According to Wubbels et al.'s study (1991), interpersonal teacher behaviors accounted for 70% of the variance in students' cognitive outcomes and 55% of affective outcomes. Among different types of interpersonal teacher behaviors, being warm, supportive, and personal had the strongest positive effects on students' overall perception about school. In other studies on adolescents, teacher warmth and support have been related to positive student adjustment such as prosocial behaviors (Wentzel, 1994), social self-concept (Harter, 1996), and academic motivation (Goodenow, 1993). Studies on younger children further demonstrate the association between teacher warmth and peer relations and social adjustment (Hughes, Cavell, & Willson, 2001; Kuperminc, Leadbeater, & Blatt, 2001; Skinner & Belmont, 1993). For example, in Skinner and Belmont's (1993) study, teacher involvement was predictive of student emotional engagement. Children whose teachers were more involved also perceived their teachers as more structured and supportive. Conversely, less involved teachers were perceived as more chaotic and coercive. Teacher warmth also affected students' school adjustment in two recent studies of secondary schools (Brody et al., 2002; Wentzel, 2002). Together, these findings suggest that, like parental warmth, teacher warmth can be

considered an umbrella variable that encompasses many positive effects of a supervising adult.

Although no study has examined the effect of teacher warmth on the associations among student variables, a similar overarching and positive effect can be expected. Through role modeling, warm, caring, and supportive behaviors of teachers should engender students' liking of and striving for similar social behaviors. Students in a classroom culture characteristic of caring and support should be warm and friendly toward peers, including aggressive and withdrawn students. Conversely, the perception of harsh and coercive teacher behaviors will foster similar behaviors among students, who may be mean to rejected students.

In the present study, teacher warmth was hypothesized to have a positive influence on students, especially in terms of peer acceptance of problematic social behaviors such as aggression and social withdrawal. Because the relations of self-perception to aggression and social withdrawal, respectively, were hypothesized to be moderated by teacher attitudes toward these behaviors, no additional teacher-related hypotheses were postulated. As mentioned earlier, findings involving prosocial leadership has shown little variation in the literature, indicating that the behavior is more consistently endorsed across contexts (Gillmore, Hawkins, Day, & Catalano, 1992; Stormshak et al., 1999). Thus, the effect of teacher warmth on the association involving prosocial leadership was believed to be limited. In summary, teacher warmth was hypothesized to attenuate the negative associations of peer acceptance of students' aggression and social withdrawal.

Method

Population, Sample, and Procedures

Junior high schools in China offer the first 3 years of secondary education, equivalent to American grades 7, 8, and 9. Senior high schools have the American equivalent of grades 10, 11, and 12 or the entire 6 years of secondary education. In secondary as well as primary schools in China, each class has one designated head teacher. Head teachers are usually major subject teachers (e.g., Chinese and mathematics). They teach fewer classes but are responsible for all student affairs of the designated class. Most school activities, including academic instruction, are conducted within a class as the organizing unit. Students in a class go to the head teacher for any problems they encounter, including those that occur outside school or in lessons taught

by other subject teachers. The head teachers also keep close contact with the parents, many of whom know the school only through the head teachers.

The sample was taken from a junior high school randomly selected from among the large-sized schools in a northeastern city of China. There were 84 classes in the school, of which 82 classes and their head teachers volunteered to participate in the study. Parental consent forms were distributed to the students in these classes. Close to 95% of the students consented to participate. The final sample consisted of 4,650 students from 82 classes. The average class size was 56.76 ($SD = 8.57$). Among the 82 classes, 52% were Grade 3 (equivalent to American Grade 9) and 24% were Grade 1 and Grade 2, respectively. The age of the students ($M = 15.08$; $SD = 6.31$) primarily ranged from 13 to 16 years with a few older students. Female students accounted for 51% of the sample. Of the participating head teachers, 93% were female with an average age of 34.76 ($SD = 6.31$) and an average of 12.90 years of teaching experience ($SD = 6.84$).

A team of researchers from another city came to the school to administer a series of questionnaires. A researcher came to each classroom in which no other school adults were present to explain the procedures for completing a set of peer nomination and self-response forms. The researcher stayed in the class until all students turned in their forms. Students were particularly told that nobody in their school would see their responses and that the researchers would not know who the students were and would not be interested in any individual responses. At the end of the session, which was one class period, the students were again briefed about the purpose of the research and the absolute anonymity of their identity. The 82 head teachers each filled out a questionnaire regarding their attitudes and classroom styles. The same explanation given to the students was given to the teachers about confidentiality and anonymity. The teachers were modestly compensated for their help.

Measures

Peer nominations were used to measure most of the students' variables used in the study. The items were derived from the literature (e.g., Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1998) and have been used previously on Chinese children with satisfactory reliability (Schwartz et al., 2001). The six prosocial leadership items were, in abbreviated forms, "kids who are leaders, are helpful, are

listened to when speaking up, get along with everyone, lead others, and stand up for themselves without hitting, fighting, or getting angry." The six aggression items were, in abbreviated forms, "kids who start fights, hit or push, bully, say mean things to, pick on, and exclude others." The six social withdrawal items were, in abbreviated forms, "kids who are often alone, are shy, are quiet, are submissive, would rather be alone, and do not join others." For each item, students were asked to nominate three names in the class. The internal consistency reliability based on within-class standardized scores was .94 for prosocial leadership, .87 for aggression, and .88 for social withdrawal.

Peer acceptance was measured by unlimited nominations of friends, which were also standardized within classes.

Perceived social competence was measured using the Social Competence subscale of the Perceived Competence Scale for Children (Harter, 1982). The subscale has seven items presented on a 4-point scale using the scale's original design to reduce response set. Satisfactory psychometric properties have been previously reported about the scale when used with Chinese children (Stigler, Smith, & Mao, 1985). The obtained internal consistency reliability based on the present sample was .83.

Teacher measures were derived from several Chinese studies (Jiang, 2001; Kwok, 1997; Xin, Lin, & Yu, 2000; Yeung, 1997). These studies constructed their measures in part based on similar instruments used in the West (Fisher, Kent, & Fraser, 1998; Martin, Yin, & Baldwin, 1998; Willower, Eidell, & Hoy, 1973; Wubbels & Levy, 1993). Additional reliability and, to a lesser degree, validity evidence have been obtained from a sample 238 middle school teachers in China (Lei, Zhao, & Chang, in press). The three subscales presented later were included in the study. All items were measured on a 5-point scale ranging from 0 (*never*) to 4 (*always*). Means of the items formed the subscales.

Teacher warmth consisted of 10 items. They were, in abbreviated forms, "I care about, listen to, like my students, respect their opinions; I am happy with, am considerate of my students; my students and I respect, understand, have a good relationship with each other." Internal consistency reliability was .87.

Teachers' averse attitudes toward aggression consisted of six items, which were, in abbreviated forms, "I would not tolerate aggression; I hate those who bully others; I would not allow aggression in my class; I would not let bullies and trouble makers get their way; aggression is normal (reverse coded); I

have no mercy for bullies." Internal consistency reliability was .68.

Teachers' empathetic attitudes toward social withdrawal also consisted of six items. They were, in abbreviated forms, "I am sympathetic with those who are left out; I am protective of the victims; I am especially supportive of shy students; I am more patient with those who dare not to speak up; shy and social isolates deserve what they get (reverse); I take extra care of them." Internal consistency reliability was .63.

Results

Table 1 presents the correlation coefficients of the within-class standardized student variables. The correlations among the three teacher variables were $-.21$ between teachers' attitudes toward aggression ($M = 3.09$, $SD = .47$) and withdrawal ($M = 4.43$, $SD = .66$) and $-.37$ and $.29$, respectively, between these two attitude variables and teacher warmth ($M = 4.47$, $SD = .42$). The student-level correlations reported in Table 1 did not take into consideration the covariations of these variables across classes or head teachers. To account for the class-level or teacher-level variations, I used hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992) to conduct the two-level HLM analyses reported next.

Student-Level Analyses

Random effect regression using HLM was first conducted on students without using teacher variables. Table 2 presents the results of the two sets of random effect regression analyses using peer acceptance and perceived social competence, respectively, as the outcome variables. For each set, the predictor variables were prosocial leadership, social withdrawal, and aggression, as well as students' gender and age. These are the same regression analyses as normally reported in the literature, while allowing the otherwise fixed regression coefficients to vary across classes. Prosocial leadership was a positive predictor of both peer acceptance ($\beta = .3328$) and perceived social competence ($\beta = .1736$). Social withdrawal was a negative predictor of peer acceptance ($\beta = -.2307$) and perceived social competence ($\beta = -.2678$). These effects were significant ($p < .001$). Aggression was negatively associated with peer acceptance ($\beta = -.1045$) and positively associated with perceived social competence ($\beta = .0222$). The latter effect was not significant. These results were obtained after controlling for student gender

Table 1
Correlation Coefficients of Student Variables

Variable	1	2	3	4	5	6
1 Peer acceptance						
2 Perceived social competence	.24					
3 Prosocial leadership	.29	.18				
4 Aggression	.05	.03	.04			
5 Withdrawal	-.19	-.25	-.02	-.03		
6 Age	-.07	-.03	-.05	-.02	-.04	
7 Gender	.08	.01	.03	.28	-.06	.03

Table 2
Random Effect Regression Results

Variable	Regression coefficients and statistical tests			Variance components and statistical tests	
	Coefficient	SE	<i>t</i> test	Variance component	Chi square
Peer acceptance (PA) as outcome					
Aggression-PA slope	-0.1045	0.0218	-4.78***	0.0160	151.98***
Withdrawal-PA slope	-0.2307	0.0171	-13.45***	0.0095	138.36***
Leadership-PA slope	0.3328	0.0181	18.35***	0.0132	160.04***
Perceived social competence (PSC) as outcome					
Aggression-PSC slope	0.0222	0.0194	1.14	0.0056	115.94***
Withdrawal-PSC slope	-0.2678	0.0214	-12.50***	0.0513	156.73***
Leadership-PSC slope	0.1736	0.0148	11.72***	0.0014	74.76

*** $p < .001$.

and age. For each of the two outcome variables, the gender effect was statistically significant, but age, measured in years, was not. The latter variable was not significant probably because, within classes, age had little variation.

The HLM regression reported in Table 2 also provides information regarding class variation of each of the regression effects. With peer acceptance as the outcome variable, the regression slopes of prosocial leadership, aggression, and social withdrawal, respectively, were different across classes. The chi-square test in Table 2 reports the statistical test for classroom variation in these regression coefficients. For example, although the overall effect of aggression on peer acceptance across all classes was -0.1045 (see Table 2), its specific effect within a class could differ either in magnitude or in direction. This is shown by the significant chi-square test associated with the variance component of the regression coefficient, aggression (0.0160 in Table 2). The effects of aggression and social withdrawal, respectively, on perceived social competence were significantly different across classes, whereas the effect of prosocial leadership was not. The latter

result suggests that the same or a highly similar positive effect of prosocial leadership on perceived social competence existed in all classes. That is, independent of the classroom culture, children who were prosocial and leaders consistently had positive self-perceptions. Similarly, the effects of the two control variables, age and gender, did not vary across classes.

Class-Level Analyses

The regression coefficients that had significant chi-square tests, as presented in Table 2, were predicted, at the class level, by the hypothesized teacher variables to account for the significant variance across classes. The full HLM results including the class-level predictors are reported in Table 3. These HLM analyses are directly related to the hypotheses of the present study. Because, as mentioned earlier, the effect of prosocial leadership on perceived social competence did not show significant class variation, this effect was not modeled by teacher predictors.

Table 3
Effects of Teacher Variables on Student-Level Regression Coefficients

Variable	Coefficient	SE	t test
<i>Peer acceptance (PA) as outcome</i>			
Students' aggression-PA slope	-0.1045		
Teacher warmth	0.0595	0.0245	2.43*
Teacher aggression attitude	-0.0850	0.0246	-3.45**
Students' withdrawal-PA slope	-0.2307		
Teacher warmth	0.0389	0.0174	2.23*
Teacher withdrawal attitude	-0.0016	0.0138	-0.12
Students' leadership-PA slope	0.3328		
Teacher warmth	-0.0194	0.0179	-1.08
<i>Perceived social competence (PSC) as outcome</i>			
Students' aggression-PSC slope	0.0222		
Teacher withdrawal attitude	0.0334	0.0193	1.73
Teacher aggression attitude	0.0391	0.0183	2.14*
Students' withdrawal-PSC slope	-0.2678		
Teacher withdrawal attitude	0.0405	0.0192	2.10*
Teacher aggression attitude	0.0398	0.0210	1.90*
Students' leadership-PSC slope			
Not predicted because there was no class variation			

* $p < .05$. ** $p < .01$.

To test the stated hypotheses, I conducted two sets of HLM analyses. The first set involved only the hypothesized teacher variables. The second set also included class-level control variables. These were teachers' gender, years of teaching experience, class size, and student gender distribution in class, which was measured by the proportion of female students. These control variables turned out to be nonsignificant predictors. HLM results either including or not including these control variables were highly similar. Reported here and in Table 3 are the results excluding these control variables.

Rules of Thumb About HLM Results

HLM is like "regression of regression." In the present study, the student-level (Level 1) regression reported earlier resulted in random coefficients that were regressed on the teacher-level (Level 2) predictors. A simple rule of thumb for interpreting the two-level HLM results is as follows. When a Level 2 (teacher level in the present study) coefficient is of the same sign as the Level 1 coefficient (student level in the present study), the Level 2 predictor strengthens the Level 1 association in the same direction as indicated by the Level 1 coefficient. When the two levels are of opposite signs, a significant Level 2 predictor weakens or affects the

Level 1 association in the direction opposite to that indicated by the Level 1 coefficient. This rule of thumb is used to interpret the hypothesis testing results discussed next. Another technical characteristic of HLM results is that HLM estimates of coefficients and variance components, especially at Level 2, can take small numerical values that, nonetheless, carry practical meaningfulness. The small (or large) values are in part the results of different measurement units used across the two levels. Small values of Level 2 coefficients represent per Level 2 unit changes in Level 1 regression slopes, which can already be small in numerical magnitude. In the present study, the Level 1 measurements were standardized with a mean of zero and standard deviation of unity. The Level 2 or teacher variables kept their original measurement units, which were substantially larger than the standardized Level 1 units. Consequently, the Level 2 coefficients and variance components were of small magnitudes, independent of their practical significance. In the present study, the Level 2 sample size was 82, which is small enough not to render results that are statistically significant but practically negligible. Because of this technical characteristic of HLM, 4 decimal points are reported in this study. Three or 4 decimals are commonly retained in HLM reports.

Hypothesized Effects

All the hypotheses regarding teachers' attitudes toward aggression and social withdrawal were supported. As shown in Table 3, aversive attitudes toward aggression ($\beta = -.085, p < .01$) strengthened the negative association between students' aggression and peer acceptance ($\beta = -.1045, p < .01$). That is, in classes in which teachers were more aversive to aggression, aggressive students received lower peer acceptance. Teachers' empathetic attitudes toward social withdrawal, however, were not predictive ($\beta = -.0016$) of the negative association ($\beta = -.2307, p < .01$) between withdrawal and peer acceptance. As discussed in the later sections, this null result could be due to the neutralization of the two competing effects that were hypothesized. Finally, as hypothesized, the effect of teacher warmth seemed to be consistently positive. It significantly attenuated peer rejection of both aggressive and withdrawn behaviors ($\beta = .0595, p < .05$ and $\beta = .0389, p < .05$, respectively).

In relation to self-perception, teachers' aversive attitudes toward aggression positively predicted ($\beta = .0391, p < .05$) the nonsignificant positive association ($\beta = .0222, ns$) between aggression and perceived social competence. It seems that teachers' negative opinions made aggressive students feel more positive about themselves. Teachers' empathetic attitudes toward withdrawn behaviors, which could be a target of aggression, had a similar effect on the association between aggression and self-perception, although the effect was not significant ($\beta = .0334, t = 1.73$). However, both sets of teacher attitudes significantly attenuated ($\beta = .0405$ for withdrawn attitudes and $\beta = .0398$ for aggression attitudes) the negative association ($\beta = -.2678$) between withdrawn behaviors and perceived social competence. Withdrawn students of classes in which

teachers were empathetic with withdrawal or aversive to aggression tended to feel more positive about themselves in social interactions.

Prosocial leadership behavior did not register any teacher effects, consistent with expectations. First, its association with peer acceptance did not show class variation; it was consistently positive in all classes. This finding of no variance ruled out further investigation of any teacher effects. The equally positive and significant association between prosocial leadership and perceived social competence showed significant variance across classes. However, as anticipated, teacher warmth did not affect ($\beta = -.0194, ns$) this positive association.

Altogether, the teacher effects reported in Table 3 accounted for a large amount of the variance in the student-level associations. Table 4 presents the proportion of variance accounted for by different teacher variables. For example, 25% of the class variation in the association between aggression and perceived social competence was explained by the hypothesized teacher variables, namely, attitudes toward aggression and social withdrawal. Almost 30% of the between-class variation in the effect of aggression on peer acceptance was explained by teacher warmth and attitudes toward aggression.

Discussion*Teacher Influence*

This is the first study to examine teacher influences on the self- and peer-perceived impact of students' social behaviors. The latter has received extensive investigation in the literature with varying results. Consistent with the literature, the positive effect of prosocial leadership was more uniform across classes, whereas associations invol-

Table 4
Variance Components and Proportion of Variance Explained by the Teacher Predictors

Variable	Original variance	Residual variance	Proportion of variance explained
<i>Peer acceptance (PA)</i>			
Aggression-PA slope	0.0159	0.0112	29.55%
Withdrawal-PA slope	0.0095	0.0085	10.52%
Leadership-PA slope	0.0132	0.0130	1.51%
<i>Perceived social competence (PSC)</i>			
Aggression-PSC slope	0.0056	0.0042	25.17%
Withdrawal-PSC slope	0.0152	0.0127	16.58%
Leadership-PSC slope	—	—	—

ving aggression and withdrawal showed large variations. Between 10% and 30% of the class variation in these associations could be explained by teacher beliefs and behaviors. As hypothesized, teacher warmth had an overarching positive effect in enhancing peer acceptance of withdrawn and aggressive students. Also as hypothesized, aggression and withdrawal were evaluated by both the self and peers in light of teachers' attitudes toward these behaviors. Given these results, researchers should take into consideration potential teacher influences in interpreting the existing literature of varying findings. Future research should also expand beyond teacher beliefs and behaviors into other classroom-related contextualizing factors that are likely to moderate self and peer perceptions of various students' social behaviors. Future studies that focus on teacher-related contextualizing may also use more objective methods to obtain teacher variables. The self-response method employed by the present study in obtaining teacher measures potentially confounds the results with social desirability biases. The lack of cross-cultural validity work on the teacher questionnaires also potentially limits the generalizability of the findings. These and other data limitations should be taken into consideration when interpreting the present findings, which are discussed in more detail next.

Aggressive behaviors, among the variables investigated in the present study, were most susceptible to teacher influence. Although, overall, aggressive behaviors were rejected by peers, peer rejection varied across classes as a function of teachers' attitudes toward aggression and teachers' being warm and supportive of students overall. Aggression received greater peer rejection in classes whose teachers showed high aversion to such behaviors. On the other hand, teacher warmth tended to soften peer rejection of aggressive behaviors. Both findings suggest that students take cues from teachers' attitudes and behaviors in forming their assessment of peers. Teachers who resented aggression led to students' rejection of aggressive peers, whereas teachers who were less negative or were somewhat tolerant of aggression might communicate a different message to the students who seemed to act accordingly. Teachers' warmth, love, and caring also seemed to transcend to the students, who became more forgiving and tolerant of aggressive behaviors. These conclusions about teachers' influence seem to align with those from the existing studies on dyadic teacher-student relationships (Birch & Ladd, 1998; Hughes et al., 1999; Hughes, Cavell, & Willson, 2001). These existing studies,

which have been based on kindergarten children, suggest that teachers' liking of and conflict with a student influence peer liking of the student. The present study further suggests that teachers' attitudes toward and endorsement of certain kinds of behavior (e.g., aggression) affect students' assessment of and preference for that behavior. This finding provides one possible clue to the puzzling controversy that aggressive children have sometimes been rejected but other times not rejected or even well liked by peers (Bierman, 1986; Coie, Belding, & Underwood, 1988; Dubow, 1988).

Another puzzle about aggression concerns aggressive children's self-perceptions. Aggressive children, especially boys, have been found predominantly to have an inflated self-concept (e.g., Boivin et al., 1989). Their positive self-perception also seems to be in discordance with others' assessment of them. However, there are also studies suggesting that aggressive children are realistically negative about their lack of social competence (e.g., Crick & Grotpeter, 1995). The present study shows that teachers' negative attitudes toward aggression were, in fact, positively related to the positive association between aggression and self-perception. That is, aggressive children felt positive about their social skills in classes in which they drew negative attention from the classroom teachers. This finding suggests the possibility that aggressive students' self-concept derives primarily from the perceived success of their antisocial and antiauthority behaviors. Negative opinions from the classroom teacher probably effectively enforce the self-efficacy of the aggressive students regarding their antiauthority capacities. An alternative explanation is that aggressive students, through a defensive exclusion mechanism, filter out negative feedback from supervising adults to protect their self-concepts (Hughes, Cavell, & Grossman, 1997; Hughes, Cavell, & Prasad-Gaur, 2001). Future studies may include additional domain-specific self-concepts and related teacher behaviors. Juxtaposition of different domain-specific teacher effects may shed light on the process by which teacher or adult behaviors moderate aggressive children's self-conceptualizing.

Social withdrawal, to a lesser degree, also registered teacher influence. As hypothesized, teachers' empathetic attitudes toward such behaviors helped to deflate the negative association between social withdrawal and self-perception. Teachers' negative attitudes toward aggression had a similar effect. That is, withdrawn students felt more positive about their social competence in classes in which teachers were more empathetic toward them, resent-

ful of aggressors, or both. This finding is consistent with existing research (Birch & Ladd, 1996). For example, emotional support from another person (e.g., best friend) seems to buffer withdrawn children from developing internalizing symptoms (Hodges, Boivin, Vitaro, & Bukowski, 1999; Parker & Asher, 1993).

Less clear, however, was the finding that teachers' empathetic attitudes toward withdrawal had no effect on the negative association between social withdrawal and peer acceptance. Two competing effects had been anticipated. First, teachers' empathetic and protective attitudes toward social withdrawal might have the demoralizing effect of reinforcing peers' negative opinion of withdrawn students. This hypothesis was, in part, derived from evidence that kindergarten children who are shy and withdrawn tend to seek refuge in an overly dependent teacher-child relationship that does not help them "move toward" peers (Birch & Ladd, 1998). The competing hypothesis predicted a positive teacher effect on the negative association between withdrawal and peer acceptance, partly because a good child-teacher relationship enhances the child's social adjustment in schools (Connell & Wellborn, 1991). The finding of no effect, however, could suggest a neutralizing outcome because of the presence of the two competing effects. A teacher's moral support may help raise withdrawn children's status to a certain degree beyond which the protective attitudes of the teacher may become demoralizing to other peers.

The null result could also be due to other factors not included in the present study. Not differentiating subtypes of withdrawal would also limit conclusions regarding the complex behavior of social withdrawal, which can differ in etiology and functionality. For example, to the extent that empathetic and protective attitudes of teachers exist, they are most likely directed at students with the anxious-submissive subtype of withdrawal (Coplan, Rubin, Fox, Calkins, & Stewart, 1994; Rubin & Mills, 1988). The students, on the other hand, should find most subtypes of withdrawal equally unattractive friendship choices, because, either due to lack of motivation (e.g., playing alone), social skills (e.g., acting alone), or a balanced approach-avoidance proclivity (e.g., being alone), the behavior outcome of different subtypes is social isolation (Coplan et al., 1994). An interesting direction for future research is to differentiate subtypes of withdrawal and then obtain both teachers' attitudes and students' preferences, to examine more specific correspondences or interactions between these two sources of conceptualization

of social withdrawal. Future research may also use a similar approach to study subtypes of aggression.

Prosocial leadership did not register teacher influence. It was positively related to both peer acceptance and perceived social competence. Its association with perceived social competence did not vary across classes. Although it varied among classes, its association with peer acceptance was not related to teacher variables. As anticipated, these nonsignificant findings were supportive of the literature showing relatively homogeneous findings on the positive effect of prosocial leadership. The positive peer endorsement of prosocial behaviors could be seen as students' desire to conform to the perceived social norm. This is especially true for the highly conforming adolescent population (Steinberg, 1996). By adhering to the social norm, prosocial behavior is also accompanied by a positive self-perception. To the extent that prosocial behaviors remain the classroom social norm (Stormshak et al., 1999), their positive effects are expected to be invariant or less variable than those involving more deviant behaviors.

Reconceptualizing Students' Behaviors and Peer Status

Overall, the findings of the present study and the methodological approach from which the present findings were derived point to the importance of reconceptualizing students' social behaviors. First, an ecological distinction can be drawn between prosocial behaviors, on the one hand, and asocial and antisocial behaviors, on the other. The former, representing more commonly endorsed social norms, do not vary across social contexts as much as the latter behaviors that have been found to be more susceptible to other social influences, including teacher beliefs and behaviors. Incidentally, this distinction also confirms the observation that, across cultures, teachers spend most of their noninstructional time dealing with the latter behaviors, especially aggression (Brophy & Evertson, 1981). The greater ecological effects registered by asocial and antisocial behaviors can be seen as idiosyncratic results of the efforts of different institutions—for example, classroom teachers, schools (Stormshak et al., 1999), and summer camps (Wright, Giammarino, & Parad, 1986)—to socialize society's young to a common set of social norms. Second, the functional outcome of withdrawn and aggressive behaviors should be viewed within their social contexts. The traditional view of an overall negative or positive effect seems simplistic in light of the present study and an emerging interest in studying social contexts

(e.g., Brody et al., 2002; Stormshak et al., 1999; Wentzel, 2002). The extent and direction to which these behaviors are interrelated with other social functions and outcomes also represent the actual as well as the perceived contextual cultures within which children interact. Finally, both of these two conceptions are based on construing children's social relations as resulting from both individuals' behaviors and the contextualizing influences shaping individual behaviors. In light of the present findings on teacher effects, children's social status reflects not only peers' but also teachers' liking and disliking of certain kinds of behaviors. The last point is elaborated next.

Peer nomination registers peers' liking of a child partly through their direct experience with the child and partly through the child's social reputation (Hymel, 1986). As social referents in the classroom context, teachers' attitudes and behaviors help define a child's social reputation. As shown by the present study, teachers' beliefs and behaviors facilitate peer evaluation in the classroom context by feeding consistent information regarding the rules and expectations governing the collectivity. These teacher effects, as investigated in the present study, are indirect. They provide social references by which students evaluate each other and themselves. What the present study did not consider is the more direct effect of individual teacher-child relationships. A useful direction for future conceptualization of students' social status is to conceive it both in terms of peer liking and in terms of teacher liking. The vertical teacher liking and the horizontal peer liking (Hartup, 1989) may complement as well as reinforce each other in determining a child's social status in the class. Coie, Dodge, and Coppotelli (1982) have designed ways that are based on peer nominations to gauge different impacts of peer status roles (e.g., social impact vs. social preference). By including teacher liking in calculating students' social status, researchers can enrich their understanding of the impact and functions of the statuses of different peer relations. For example, the concordance (e.g., someone endorsed by both teacher and peer) versus discordance (e.g., teacher's pet or students' hero) of the two likings provide additional peer relations information. In relation to this additional dimension of social status, the study of children's social behaviors can yield further insights. For example, are the relations involving social behaviors and the discordant liking more variable across classes than those associated with the concordant liking?

The previous conceptualizations are based on the assumption that students' social status and behav-

iors are studied within classes. This analytical approach presents the foundation on which the present study was conducted and it raises earlier questions regarding the variable results found in the literature. As mentioned earlier, many of the social behavior variables were normatively derived from class nominations. This normative approach suggests that it is the relative but not the absolute position of the concerning behavior that carries the intended social meaning. For example, even though the absolute levels of, say, two class-nominated aggressive children are the same, they could be rank ordered differently within their respective classes and, thus, assigned different social meanings. These different social meanings are meaningful only within the social contexts in which they are normatively derived. When these two cases are analyzed independent of their class membership, as has routinely been done in the literature, the rank order of their class-derived aggression will be misleading. It is thus important to conceptualize and study the effect of student social behaviors within classes and to separate within-class from between-class variations, as was done in the present study. In this regard, HLM (Bryk & Raudenbush, 1992) provides a useful analytical tool. However, the tradition (but not a statistical requirement) of having a sufficient Level 2 sample size greatly limits its use in peer relations research. Future studies could be innovative in applying HLM even to a small number of Level 2 units, for example, 10 to 20 classes (Bryk & Raudenbush, 1992, ch. 9). In this case, researchers could either relax the Type I error rate or not conduct hypothesis testing but only estimate and decompose variance components. (Also see Raudenbush, 1993; Raudenbush & Liu, 2000, about sample size and HLM analysis strategies.)

Finally, in the study of children's peer relations, the immediate cultural context is the classroom including teacher beliefs and behaviors. This cultural context, as shown in the present study, has immediate effects on children's social behaviors. Chinese children's peer relations are defined within classrooms, which provide the primary milieu for children's social interaction. The present study operationally defined specific aspects of the classroom context (e.g., teacher beliefs about aggression) and examined their contextualizing processes in influencing peer social behaviors. The study did not identify ethnological factors that may be operating within the classroom context. For example, a Chinese teacher's belief about classroom aggression may, in part, represent the extent to which the teacher is exposed to the local culture and meme,

formal schooling that inculcates both Western and Chinese values, and various traditional and modern ideologies permeating contemporary Chinese society. To consider these and other potential cultural differences, however, similar efforts should be made to define and operationalize specific aspects of the classroom context that are expected differentially to affect behaviors across ethnological and societal settings.

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