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Student–teacher relationships in elementary school: The unique role of shyness, anxiety, and emotional problems

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ABSTRACT

This study explored the unique contributions of students' self-reported internalizing behaviors (shyness, anxiety, and emotional problems) to teachers' perceptions of the quality of student–teacher relationships (closeness, conflict, and dependency). In total, 269 third-to-sixth grade students (50.9% girls) and 35 teachers (74.7% females) from 8 Dutch regular elementary schools participated in this study. Teachers filled out questionnaires about their background characteristics and the affective quality of their relationship with individual students, and students answered questions about their demographics and internalizing behaviors. Multilevel models revealed significant negative associations of student-perceived shyness with teacher-perceived closeness and conflict in the student–teacher relationship. Additionally, students' anxiety was positively associated with conflict and dependency in the relationship. Students' emotional problems, however, were not associated with student–teacher relationship quality. These findings suggest that different types of internalizing student behavior may play a differential role in the quality of the student–teacher relationship.

1. Introduction

There is no shortage of evidence supporting the view that the affective quality of the relationship between teachers and individual students may play a role in students' school adjustment (e.g., Hamre & Pianta, 2001; Roorda, Jak, Zee, Oort, & Koomen, 2017). Various empirical studies have indicated that student–teacher relationships marked by high levels of warmth and closeness are weakly to moderately associated with students' behavioral, emotional, and academic development (e.g., Hamre & Pianta, 2001; Roorda, Koomen, Spilt, & Oort, 2011; Spilt, Hughes, Wu, & Kwok, 2012). In contrast, relationships filled with conflict or excessive dependency have been evidenced to pose risks to students' adjustment, hampering their sense of well-being and engagement, and affecting their concurrent and future achievement in the classroom (Baker, 2006; Jerome, Hamre, & Pianta, 2009; Portilla, Ballard, Adler, Boyce, & Obradović, 2014; Roorda et al., 2011, 2017).

Although most students are likely to develop an emotionally close and conflict-free bond with their teacher, for others, such high-quality relationships may not come naturally (Hamre & Pianta, 2001). Among the students who may experience difficulties forming relationships with their teacher are those with internalizing behaviors. Such problems generally refer to a basic disturbance in intropunitive emotions and moods (Zahn-Waxler, Klimes-Dougan, & Slattery, 2000). To date, a broad spectrum of internalizing behaviors, including shyness, social withdrawal, anxiety, and depression, has been linked to the relationship between teachers and individual students (Birch & Ladd, 1998; Ladd & Burgess, 1999; Mejia & Hoglund, 2016; Rudasill, 2011; Rydell, Bohlin, & Thorell, 2005). Notably, though, in most research on student–teacher relationship quality, these types of internalizing behavior have typically been explored in isolation from one another (e.g., Rudasill, 2011), or have been combined to form a broadband factor of internalizing behavior (e.g., Murray & Murray, 2004). As such, relatively little is known about the *unique* role that various types of internalizing student behavior may play in the quality of student–teacher relationships.

In the present study, therefore, we sought to explore the unique contributions of different forms of internalizing student behavior (i.e., shyness, anxiety, and emotional problems) to aspects of the student–teacher relationship (i.e., closeness, conflict, and dependency). Empirical knowledge in this direction may advance understanding of the types of internalizing student behavior that are most likely to increase the risk of poor-quality student–teacher relationships and add to our ability to develop interventions to improve such relationships in class.

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1.1. Teachers' relationships with students who display internalizing behavior

Empirical studies on the role of internalizing student behavior in the quality of student–teacher relationships have been largely motivated by an extended attachment framework (Bowlby, 1969; Hamre & Pianta, 2001; Pianta, Hamre, & Stuhlman, 2003). This framework is based on the notion that warm and affectionate relationships between children and teachers may promote feelings of emotional security in the child. Specifically, teachers, like responsive parents, have been suggested to provide children with a secure base from which they can explore their classroom environment, and a secure haven that helps children maintain proximity to their teachers in times of stress or need (Birch & Ladd, 1998; Charalampous et al., 2016; Hamre & Pianta, 2001; Pianta, 1999). Conceivably, warm and emotionally secure student–teacher relationships may be particularly important for the usually hesitant and wary internalizing students, who may frequently seek proximity to teachers when faced with unfamiliar people or novel situations.

Previous studies based on an extended attachment framework suggest that the extent to which teachers provide emotional security to children may depend on the degree of closeness, conflict, and dependency in the relationship (Pianta, 1999; Wentzel, 2010). Generally, *close* relationships characterized by warmth, trust, and open communication are believed to provide students with a secure support system that enables them to explore the classroom environment and seek help when needed (Pianta, 1999). In conflictual or dependent relationships, in contrast, students may feel less emotionally secure and are less likely to have confidence in the availability and responsiveness of the teacher in times of stress or need. Such relationships are filled with negativity, tension, and hostility (*conflict*), or characterized by clinginess and an overreliance on the teacher (*dependency*; Verschueren & Koomen, 2012).

Unfortunately, students who enter the classroom environment with internalizing behavior have commonly been presumed to be at increased risk for developing relationships with their teachers that are marked by low levels of closeness and high levels of conflict and dependency (e.g., Hamre & Pianta, 2001; Pianta et al., 2003). Yet, empirical evidence regarding the role of these over-controlled and inwardly directed behaviors in student–teacher relationships seems to be inconsistent in both direction and magnitude. In some studies, for instance, students' internalizing symptoms, including shyness and emotional problems, were found to be modestly associated with kindergarten and elementary teachers' reports of closeness in the relationship, both positively (Roorda, Verschueren, Vancraeyveldt, Van Craeyevelt, & Colpin, 2014) and negatively (e.g., Arbeau, Coplan, & Weeks, 2010; Valiente, Swanson, & Lemery-Chalfant, 2012). In other longitudinal research on overall levels of parent-reported (Jerome et al., 2009) and teacher-reported (Mejia & Hoglund, 2016) internalizing behavior, such significant associations have, however, not been established.

Additionally, there seems to be considerable heterogeneity in the associations of internalizing behavior with negative relationship dimensions. Using overall measures of internalizing student behavior, some studies have shown that internalizing student behavior contributes to teachers' experiences of conflict and dependency in the relationship (Jerome et al., 2009; Murray & Murray, 2004; Roorda et al., 2014). Yet, studies that focused on specific types of mother-reported internalizing behavior revealed that behaviors such as shyness were associated with less conflict in the student-teacher relationship (Rudasill, 2011). To some extent, these discrepant findings in prior studies might be explained by methodological differences or specific sample characteristics. Whereas some studies were conducted among samples of regular students in the first grades of elementary school (Arbeau et al., 2010; Jerome et al., 2009; Valiente et al., 2012), other research focused specifically on preschool boys with externalizing behavior (Roorda et al., 2014), Chinese American immigrant children (Ly & Zhou, 2016), or children from high-need ethnically diverse schools (Mejia & Hoglund, 2016). Based on extended attachment theory,

however, these contradictory results may also raise questions about the extent to which children with various types of internalizing student behavior are able to seek proximity from their teachers and can use them as a secure base and haven. In the present study, we explore the unique contributions of different types of internalizing behavior (i.e., shyness, anxiety, and emotional problems) to teachers' perceptions of the quality of their relationship with individual students.

1.1.1. Shyness

Among the types of internalizing behavior that potentially affect student–teacher relationships, shyness has probably been given the most research attention. Shyness generally refers to students' trepidation and wariness in the face of novel situations (Rubin, Coplan, & Bowker, 2009). Shy students are likely to be hesitant and apprehensive toward unfamiliar people, events, and situations, and may feel self-conscious or even embarrassed when they feel they are being socially evaluated (Crozier, 2001). Following Asendorpf's (1990) work, such behavior is likely to arise from a so-called *approach-avoidance conflict*, within which students generally desire to interact with others, but tend to refrain from such interactions as a result of feelings of worry and fear. Due to this approach-avoidance conflict, shy students tend to initiate fewer interactions with their teacher, thereby increasing the risk of poor-quality student–teacher relationships (e.g., Coplan & Prakash, 2003; Rudasill, 2011).

Several empirical studies seem to support the supposition that shyness may be associated with the quality of student–teacher relationships. With respect to closeness, for instance, several primarily longitudinal studies conducted among relatively large samples of (pre) kindergarten and early elementary school children have indicated that teacher-reported (Justice, Cottone, Mashburn, & Rimm-Kaufman, 2008), parent-reported (Arbeau et al., 2010; Koles, O'Connor, & McCartney, 2009; Rudasill & Rimm-Kaufman, 2009), and observed (Rydell et al., 2005) shyness may be associated with less closeness in the student–teacher relationship. Moreover, this negative association between shyness and closeness has been confirmed in Nurmi's (2012) meta-analytical investigation.

The handful of studies on shyness and student–teacher dependency has generated relatively consistent findings as well (see Nurmi, 2012). Both longitudinal research conducted among young regular elementary children (Arbeau et al., 2010) as well as behaviorally at-risk samples (Ladd & Burgess, 1999) has indicated that students with shy behavior are, on average, more likely to be overly dependent on their teacher than their more exuberant peers. Only the evidence with regard to conflict seems to be less straightforward. In a Swedish sample of 112 preschoolers, for instance, Rydell et al. (2005) found that teachers experienced less conflict in their relationships with shy children, as observed by trained coders. Although this finding has been replicated in other longitudinal studies using parent-reports of internalizing behavior (e.g., Rudasill, 2011; Rudasill & Rimm-Kaufman, 2009), non-significant (cross-sectional) associations of parent- and peer-reported shyness with conflict have been found as well (Justice et al., 2008; Nurmi, 2012; Zee & Koomen, 2017). Accordingly, it seems likely that shy children, by virtue of their wary and apprehensive behavior, are likely to have relationships that are low in closeness and high in dependency. Whether shyness also contributes to the degree of conflict in the student–teacher relationship remains to be explored.

1.1.2. Anxiety

Despite burgeoning evidence for the predictive role of shyness, relatively little is known about relationships between teachers and anxious students. A possible reason might be that shyness and anxiety are sometimes considered as comorbid conditions. There are, however, important distinctions between these two internalizing symptoms. For instance, shy children's feelings of wariness may gradually subside as they become more familiar with their teachers, peers, and classroom context, whereas anxious students' negative emotions are likely to get

worse across time. Additionally, students who display signs of anxiety tend to over-analyze and relive past situations endlessly, which may translate into self-criticizing and serious distress about such common things as their competence in school, their relationships with peers, and their future (Barlow & Di Nardo, 1991; Brown, O'Leary, & Barlow, 2001). Accordingly, anxiety is generally more severe and difficult to control than shyness, and may therefore be more strongly associated with the quality of student–teacher relationships.

A limited number of empirical studies have indeed indicated that anxious behavior hampers the quality of the student–teacher relationship. For instance, Sette, Spinrad, and Baumgartner (2013) used a cross-sectional design to investigate relationships between teachers and anxious-withdrawn students in Italian kindergarten classrooms. Their results revealed that higher levels of teacher-reported anxiety and withdrawal were related to more dependency and less closeness in the relationship. No significant associations were noted, however, between these distressed behaviors and conflict.

Longitudinal studies among samples of young children also reveal a rather mixed pattern of associations. In a study of Henricsson and Rydell (2004), for example, regular first-graders with general frets and worries were found to develop more dependent and also more conflictual student–teacher relationships in grade 3 than untroubled students. To some extent, cross-lagged results from Zhang and Sun (2011) and Mejia and Hoglund (2016) substantiate these results. Specifically, these studies have disclosed modest positive associations of teacher-reported anxiety and sadness with conflict (Zhang & Sun) and dependency (Mejia & Hoglund), but not with closeness over time. Together, these cross-sectional and longitudinal findings suggest that teachers are likely to experience more dependency and conflict, but not less closeness in their relationships with anxious students.

1.1.3. Emotional problems

Students with emotional problems are those who enter the classroom with disturbances in their mood, which mainly involve feelings of depression, sadness, or fear, loss of interest in school activities, or physical complaints, such as headaches or stomach aches (Cicchetti & Toth, 1998). Based on stress-generation theory (cf. Hammen, 2006), it can be suggested that students suffering from emotional problems such as depression or fear may actively contribute to stressful environments, creating a vicious cycle in which these problems and a lack of social support reinforce one another. Following this assumption, students' negative mood states and low expression of emotions are likely to put them at risk of developing negative relationships with their teachers that are less close and more conflictual.

Empirical research on the association between students' emotional problems and the quality of student–teacher relationships is relatively scarce. Yet, there are some studies in which combined subscales for measuring emotional symptoms, depression, and somatic complaints have been used. The results of these primarily longitudinal studies are quite mixed, though. In the longitudinal study of Jerome et al. (2009), for instance, mothers' ratings of their young children's internalizing behavior, including somatic complaints, anxiety, and depression, predicted higher levels of teacher-perceived conflict, but not closeness over time. These findings are partly in line with research from Roorda et al. (2014), in which reciprocal associations among teacher-reported internalizing symptoms, including emotional and peer problems, and relationship quality were investigated in a sample of 175 preschool boys at risk for developing externalizing problems. Their findings indicated that emotional problems were not only associated with higher levels of conflict, but also with higher levels of both dependency and closeness across time. In contrast, Ly and Zhou (2016) found that parent-rated internalizing problems, including anxious/depressed symptoms, withdrawn/depressed symptoms, and somatic complaints, were related to less teacher-perceived closeness, and that teacher-perceived internalizing problems were longitudinally associated with less conflict.

Next to studies using combined scales to assess emotional problems, some recent research has focused on more specific emotional problems, including depression. Spilt, Leflot, and Colpin (2018), for instance, investigated bidirectional relationships between teacher involvement and depressive symptoms in a large sample of 570 second- and third-graders in Belgium. Their results indicated that teacher involvement may lead to less child depressive symptoms within grades 2 and 3. Within grade three 3 only, a negative cross-time association between depressive symptoms and teacher involvement was found as well, suggesting that teachers' involvement may decrease across time when they view a student as more depressed. In addition, results from another longitudinal study among upper elementary graders (Rudasill, Pössel, Winkeljohn Black, & Niehaus, 2014) indicated that student-perceived teacher support and teacher-perceived closeness and conflict predicted depressive symptoms in grade 6. Moreover, conflict in the student–teacher relationship was found to mediate the positive association between students' emotional reactivity and depressive symptoms. Hence, based on this mixed and generally limited body of evidence, firm hypotheses on the unique role of emotional problems on the quality of student–teacher relationships cannot be made.

1.2. Present study

Despite a modest but burgeoning body of evidence pointing to links between students' internalizing behavior and the quality of student–teacher relationships, there still are considerable inconsistencies in the apparent outcomes of these problematic student behaviors. Possibly, differences in the ways internalizing behavior has been conceptualized and measured in various studies may have contributed to these ambiguous findings. To disentangle the contribution of different types of internalizing behavior to the quality of student–teacher relationships, this study explored the unique associations of shyness, anxiety, and emotional problems with the degree of closeness, conflict, and dependency in the relationship between upper elementary school students and their teachers. To minimize common method variance (Roorda et al., 2011), we used self-reports to measure students' internalizing behaviors and teacher-reports to measure the quality of the student–teacher relationship.

Based on the current body of evidence, we expected shyness to be negatively associated with closeness and positively associated with dependency. We had no clear expectations with respect to student–teacher conflict. Additionally, we hypothesized that anxiety was positively associated with the negative relationship dimensions dependency and conflict, but not with closeness. Last, due to mixed results in previous studies, we did not have clear expectations about the unique role of emotional problems in the quality of student–teacher relationships.

2. Method

2.1. Participants

The present investigation involved 35 teachers and 269 third- to sixth-grade students from 8 regular elementary schools located in the Randstad area, the Netherlands. The schools from which the sample was drawn were recruited by master thesis students, through both their own networks and mailing lists containing a random selection of schools ($N = 200$). These schools were contacted via telephone and email, after this study was approved by the institutional Ethics Review Board (project no. 2016-CDE-7243). Upper elementary teachers from the participating schools received a letter about the study's purposes and an informed consent form. Information letters about the nature and purposes of the research project were also sent to students' parents.

After consent from teachers and students' parents was obtained, we randomly selected four boys and four girls from each participating teacher's classroom. The decision to randomly select eight students per

classroom was based on guidelines from Snijders and Bosker (1999), who have indicated that relatively high intra-class correlations may decrease the benefits of including whole classes in the sample. Moreover, including more students per class would make the data collection overly burdensome for teachers and would compromise their willingness to participate.

The total student sample comprised 132 boys (49.1%) and 137 girls (50.9%) from grade 3 ($n = 69$), grade 4 ($n = 70$), grade 5 ($n = 66$), and grade 6 ($n = 64$), respectively. These children ranged from eight to 13 years of age ($M = 9.93$, $SD = 1.29$). Based on students' self-reports, 74.7% appeared to have a native Dutch background, and 24.9% had another ethnic background (e.g., Turkish, Moroccan, Surinamese). Only one student failed to provide information regarding his or her ethnicity. This proportion of native Dutch students is slightly higher than the larger population of elementary school students in the Netherlands (66% Dutch origin; CBS Statline, 2018).

The teacher sample consisted of 26 females (75.1%) and 9 males (24.9%). Teachers had a mean age of 39.74 years ($SD = 11.27$ years, range = 26–64 years) and their professional teaching experience ranged from 1 to 43 years ($M = 13.71$, $SD = 11.19$ years). These demographic characteristics are comparable to those of the larger population of Dutch teachers, who generally have a mean age of 43.3 years (range = 19–67 years) and typically are female (84%; DUO, 2014). Information about teachers' ethnic background was not available.

2.2. Instruments

2.2.1. Student–teacher relationship quality

Teachers' perceptions of their relationship with each of the eight selected students were evaluated using the short form of the authorized translated Dutch version of the Student–Teacher Relationship Scale (STRS; Koomen, Verschueren, Van Schooten, Jak, & Pianta, 2012). This instrument estimates student–teacher relationship quality on the three dimensions of Closeness, Conflict, and Dependency, using a 5-point Likert-type scale (1 = *definitely does not apply*; 5 = *definitely applies*). The Closeness subscale (five items) evaluates the extent to which teachers perceive the student–teacher relationship to be warm, open, and secure, with items such as "I share an affectionate and warm relationship with this child". Conflict (five items) measures the degree to which teachers observe the relationship with students to be conflictual and negative, with items such as "This child and I always seem to be struggling". Dependency (five items) represents the extent to which teachers experience the child to show clingy and demanding behavior, for example "This child reacts strongly to separation from me". In previous studies, the psychometric properties of the short STRS have been found to be adequate (Zee & Koomen, 2017; Zee, Koomen, & van der Veen, 2013). A validation study of Koomen et al. (2012), for instance, provided evidence for the construct validity of the three dimensions of the STRS and for metric invariance across gender and age. Additionally, the moderate to strong correlations of the STRS subscales with teacher- and parent-reported problem and prosocial behaviors (SDQ) seemed to indicate sufficient concurrent validity as well. Specifically, Closeness correlated positively with children's prosocial behaviors and negatively with problem behaviors (i.e., emotional symptoms, peer problems, conduct problems, and hyperactivity-inattention). Furthermore, the correlations of both Conflict and Dependency with these problems and prosocial behaviors were in the opposite direction and even stronger than those found for Closeness. The three subscales have also been found to be reliable, with Cronbach's alphas ranging between 0.88 and 0.93 for Closeness, 0.88 and 0.91 for Conflict, and 0.77 and 0.82 for Dependency, respectively (e.g., Doumen, Koomen, Buyse, Wouters, & Verschueren, 2012; Zee & Koomen, 2017). In the present investigation, the alpha coefficients were satisfactory, with 0.86 for Closeness, 0.89 for Conflict, and 0.82 for Dependency.

2.2.2. Students' internalizing symptoms

Students' self-reports of their internalizing symptoms were evaluated using scales to measure their shyness, levels of anxiety, and emotional problems, respectively.

2.2.2.1. Shyness

Students' shyness was evaluated with seven items from the School Questionnaire (SVL; Smits & Vorst, 1982). This self-report measure taps into students' wariness in the face of events and situations in class, with items such as "When my teacher asks me something in the classroom, I feel shy" and "I really don't like it when I have to get in front of the classroom". All items were answered on a 5-point Likert scale, ranging from 1 (*not true*) to 5 (*certainly true*). Evidence for the construct validity, norms, and reliability of the SVL has been provided by Evers et al. (2013). The reliability of this measure in the present study was acceptable, $\alpha = 0.82$.

2.2.2.2. Anxiety

Students' self-reported anxiety was measured using the Generalized Anxiety subscale of the Screen for Child Anxiety Related Disorders (SCARED; Monga et al., 2000). This instrument involves nine items, rated on a 5-point scale (1 = *not true*; 5 = *certainly true*), that reflect students' distress about common things, including their competence in school, peer relationships, and their future. Example items are "I worry about other people liking me" and "I worry about what is going to happen in the future". Prior studies have provided evidence for the (test-retest) reliability and discriminant validity of this scale, both between anxiety disorders and depressive symptoms, and within anxiety disorders (Birmaher et al., 1997, 1999). In the present sample, Cronbach's alpha for this measure was 0.89.

2.2.2.3. Emotional problems

Students also completed the Emotional Symptoms subscale of the Dutch self-report version of the Strengths and Difficulties Questionnaire (SDQ; Van Widenfelt, Goedhart, Treffers, & Goodman, 2003). This brief questionnaire consists of five items that reflect various emotional difficulties, including feelings of sadness and physical complaints. Example items are "I am often unhappy, depressed or tearful" and "I get a lot of headaches, stomach-aches or sickness". Students responded to the five items on a 5-point Likert scale, ranging from 1 (*not true*) to 5 (*certainly true*). The internal consistency, validity, and mean inter-informant product-moment correlations were acceptable in prior empirical research (Muris, Meesters, Eijkelenboom, & Vincken, 2004; Van Widenfelt et al., 2003). Moreover, Muris, Meesters, and van den Berg (2003) investigated the concurrent validity of the Emotional Symptoms Scale through correlations with other self- and parent-report scales, including the Child Depression Inventory (CDI), Child Behavior Checklist (CBCL), and Youth Self-Report (YSR). Large, positive correlations of the Emotional Symptoms scale with both the CDI (parent report: $r = 0.67$; child report: $r = 0.64$) and the CBCL/YSR Anxious-Depressed Scale, with items reflecting depressed affect (parent report: $r = 0.70$; child report: $r = 0.72$), were found. In the current study, Cronbach's alpha was 0.67. However, methodologists (e.g., Bernardi, 1994) have suggested that scales with alpha levels < 0.70 still can be validly used in relatively homogeneous samples. This study comprised a relatively homogenous sample with respect to students' age, ethnicity, and gender, and teachers' age and gender.

2.2.2.4. Validity of students' internalizing symptoms

The psychometric properties of the SVL, SCARED, and Emotional Symptoms subscale have been demonstrated to be adequate in previous research (e.g., Birmaher et al., 1997, 1999; Evers et al., 2013). To evaluate whether these subscales also represented the proposed three-factor structure in the present study, we performed a confirmatory factor analysis (CFA), using maximum likelihood estimation with robust standard errors and a mean-adjusted chi-square test statistic (MLR; Muthén & Muthén, 1998–2012). The three-factor model yielded an acceptable fit according to established cutoff values of 0.08 for the root-mean-

square error of approximation (RMSEA) and standardized root-mean-square residual (SRMR; Browne & Cudeck, 1993; Hu & Bentler, 1999), and CFI values ≥0.90 (Kline, 2011): χ^2 (186) = 324.15, $p < .001$, RMSEA = 0.053 (90% CI [0.043, 0.062]), CFI = 0.911, SRMR = 0.062. Moreover, a one-factor alternative model appeared to reflect a far poorer fit of the data than the three-factor model, χ^2 (189) = 496.98, $p < .001$, RMSEA = 0.078 (90% CI [0.070, 0.086]), CFI = 0.802, SRMR = 0.076. All factor loadings in the three-factor solution were adequate, ranging from 0.51 to 0.78, except for one item representing Emotional Problems ($\lambda = 0.38$). These results support the discriminant validity of the three internalizing symptoms in this study.

2.3. Procedure

During a planned school visit in February–March 2017, all students in teachers' classrooms ($N = 789$) were asked to fill out questionnaires about their background characteristics and their level of anxiety (SCARED), shyness (SVL), and emotional problems (SDQ). The total survey took approximately 30 minutes to complete and teachers were asked to leave the classroom to facilitate free and honest answering. A test leader was present in the classroom to explain the procedure, answer students' questions, and control response acquiescence and inconsiderate answering. Completed student-reported questionnaires were available for 99% of the sample. Nonparticipation was mainly due to absence or illness at the time of data collection. In this study, only the answers of the selected students were included in the analyses.

To avoid common method variance, teachers were asked to complete several items about their relationship with each of the eight selected students (STRS) as well as some questions about their own background characteristics. These questionnaires were collected via a digital survey link that was emailed around the same time as the school visit. Teachers were asked to complete the digital questionnaire within two weeks. The total survey took approximately 40 minutes to complete. The total response rate was 99%.

2.4. Data analysis

Using M*plus* version 7.11 (Muthén & Muthén, 1998–2012), we fitted a multivariate hierarchical linear model to evaluate the unique contribution of students' internalizing symptoms to the quality of student–teacher relationships. This technique takes the clustering of students within the teacher into account by partitioning the variation in the student–teacher relationship quality between and within teachers (Snijders & Bosker, 1999). Thereby, it allows for the calculation of unbiased estimates of the standard errors associated with the regression coefficients and for the inclusion of both teacher and student factors in models with outcomes at the student level. Maximum likelihood estimation with robust standard errors and a scaled test statistic (MLR) was chosen as the estimation method and missing data (< 1.0%) were treated using full information maximum likelihood estimation (Muthén & Muthén, 1998–2012).

Based on guidelines from Raudenbusch and Bryk (2002), our analysis proceeded in three steps. First, we fitted an unconditional means model without predictors and covariates to the data. This model was estimated to partition the variance across the two levels. Second, we included students' gender, age, and ethnicity as covariates to the model, as well as their self-reported levels of shyness, anxiety, and emotional problems. In the last step, we added teachers' gender and teaching experience as between-teacher covariates to explain variance at the between-teacher level. These teacher characteristics have previously been found to affect teachers' perceptions of the student–teacher relationship (Zee & Koomen, 2017). For ease of interpretation, predictors were centered around the grand mean. To control for shared variance among the predictors, including the internalizing subtypes, all covariates and predictors at the student level, and all covariates at the teacher level were allowed to correlate.

3. Results

3.1. Descriptive statistics

Prior to main analysis, we examined the degree of skewness and kurtosis of the main variables in our study. Students' responses on Shyness, Anxiety, and Emotional Problems were approximately normally distributed. These constructs did not reach the skewness threshold of ± 1.00 (Shyness = 0.68; Anxiety = 0.90; Emotional Problems = 0.74) and kurtosis values were also adequate (Shyness = −0.21; Anxiety = 0.14; Emotional Problems = −0.07). In line with previous studies (e.g., Koomen et al., 2012), teacher-reports of their relationships with individual students were somewhat skewed (Closeness = −0.67; Conflict = 1.59; Dependency = 1.02), however, and, in case of the negative relationship dimensions, characterized by relatively high kurtosis (Closeness = −0.05; Conflict = 1.78; Dependency = 0.73). Therefore, we used robust maximum likelihood estimation (Muthén & Muthén, 1998–2012) to obtain parameter estimates. This estimator is robust to non-normality and enables the adjustment of standard errors.

Subsequently, means, standard deviations, and bivariate correlations (see Table 1) were inspected to determine whether the main constructs correlated in the expected directions. Overall, neither student-perceived Shyness nor their Emotional Problems appeared to be significantly associated with teachers' perceptions of the student–teacher relationship quality. Students' Anxiety was only significantly and positively associated with teacher-perceived Dependency. With regard to the study's covariates, experienced teachers were likely to report higher levels of Closeness and lower levels of Conflict and Dependency in their relationship with individual students. Additionally, both girls and female teachers generally experienced more Closeness than boys and male teachers. Girls and ethnic minority students were also likely to report higher levels of Anxiety, Emotional Problems, and in case of girls, Shyness. Last, it is interesting to note that the positive associations among Anxiety, Emotional Problems, and Shyness were moderate. These patterns of correlations provide further evidence for the convergent and discriminant validity of these three internalizing symptoms.

3.2. Hierarchical linear model of the quality of student–teacher relationships

3.2.1. Unconditional means model

We first evaluated the amount of variance for the student-level and teacher-level by fitting an unconditional means model to the data. Intraclass correlations revealed that 24% of the variance in Closeness, 16% in Conflict, and 21% in Dependency occurred between teachers. Accordingly, these substantial clustering effects illustrate the importance of considering variation at both the student- and teacher-level.

3.2.2. Random intercept model

Parameter estimates for the fixed effects of students' Gender, Age, Ethnicity, and the internalizing symptoms on the three relationship dimensions at the within-teacher level are depicted in Table 2 (Model 1). After these covariates and predictors at the student level were accounted for, we added teachers' Gender and Teaching Experience to the model to explain variance at the teacher level. Parameter estimates of this second model are displayed in Table 2 (Model 2).[1]

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[1] To ensure that students' externalizing behavior did not confound the findings in our study, we also tested a model in which student-reported Hyperactivity/Inattention and Conduct Problems scales (SDQ) were included. Compared to the models without externalizing behavior, the strength and direction of the coefficients in this model were quite similar. Additionally, we evaluated whether students' and teachers' background characteristics

Table 1
Means, standard deviations, and zero-order correlations.

	1	2	3	4	5	6	7	8	9	10	11
1. Teacher gender	1.00										
2. Teaching experience	0.06	1.00									
3. Student gender	0.00	−0.02	1.00								
4. Student age	−0.27**	0.04	0.02	1.00							
5. Student ethnicity	0.13*	−0.04	0.04	0.03	1.00						
6. Shyness	0.06	−0.11	0.27**	−0.08	−0.01	1.00					
7. Anxiety	−0.03	−0.07	0.14*	0.02	−0.20**	0.56**	1.00				
8. Emotional problems	−0.04	−0.05	0.19**	−0.03	−0.16**	0.47**	0.58**	1.00			
9. Closeness	0.18**	0.27**	0.24**	−0.02	0.07	−0.08	−0.09	−0.04	1.00		
10. Conflict	0.08	−0.15*	−0.21**	0.00	−0.11	−0.07	0.10	0.01	−0.35**	1.00	
11. Dependency	0.03	−0.17**	0.06	0.01	−0.04	0.12	0.23**	0.11	0.01	0.55**	1.00
Descriptive statistics											
Mean	–	13.71	–	9.93	–	2.22	2.05	2.10	3.96	1.67	1.90
Standard deviation	–	11.19	–	1.29	–	0.89	0.95	0.74	0.79	0.91	0.84

Note. Gender: 0 = boys/male teachers, 1 = girls/female teachers; Ethnicity: 0 = Non-Dutch, 1 = Dutch.

** $p < .01$.

* $p < .05$.

Table 2
Multilevel regression analysis for the prediction of the quality of student–teacher relationships.

	Closeness		Conflict		Dependency	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Fixed parameters						
Intercept	3.62(0.10)***	3.37 (0.11)***	1.97 (0.14)**	1.86 (0.16)***	1.90 (0.14)**	1.87 (0.21)***
Student–level variables						
Student age	0.07 (0.08)	0.06 (0.07)	−0.02 (0.11)	0.03 (0.12)	0.07 (0.08)	0.06 (0.10)
Student gender	0.31 (0.06)***	0.31 (0.06)***	−0.20 (0.06)**	−0.20 (0.07)**	0.04 (0.05)	0.05 (0.05)
Student ethnicity	0.11 (0.05)*	0.11 (0.05)*	−0.09 (0.08)	−0.15 (0.08)	−0.03 (0.09)	−0.07 (0.09)
Shyness	−0.12 (0.06)	−0.12 (0.06)*	−0.13 (0.07)	−0.17 (0.07)*	−0.03 (0.08)	−0.06 (0.08)
Anxiety	−0.05 (0.08)	−0.04 (0.08)	0.20 (0.08)*	0.19 (0.08)*	0.28(0.08)***	0.28(0.08)***
Emotional problems	0.02 (0.08)	0.02 (0.07)	−0.02 (0.06)	−0.02 (0.07)	−0.04 (0.07)	−0.04 (0.08)
Teacher–level variables						
Teacher gender		0.35 (0.15)*		0.30 (0.17)		0.12 (0.22)
Teacher experience		0.53 (0.12)***		−0.44 (0.17)**		−0.39 (0.17)*
Random parameters						
Teacher–level variance		0.59 (0.14)		0.72 (0.15)		0.84 (0.13)
Student–level variance	0.87 (0.04)	0.87 (0.04)	0.90 (0.04)	0.87 (0.04)	0.91 (0.05)	0.91 (0.05)
Intraclass correlation	0.26	0.21	0.17	0.22	0.22	0.26
R^2 statistics						
R^2_{within}	0.13	0.13	0.10	0.13	0.09	0.09
$R^2_{between}$		0.41		0.28		0.16

Note. Standardized coefficients and corresponding standard errors (between brackets) are reported. Gender: 0 = boys/male teachers, 1 = girls/female teachers; Ethnicity: 0 = Non-Dutch, 1 = Dutch.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

3.2.2.1. Student–teacher Closeness. In Model 1, teachers were found to report significantly higher levels of Closeness (β = 0.31, $p < .001$) in relation to girls than to boys. Additionally, a small, but statistically significant positive association was found between students' Ethnicity and Closeness (β = 0.11, $p < .05$), indicating that teachers were more likely to experience Closeness in relationships with Dutch students than with non-Dutch students. Notably, none of the three internalizing symptoms were significantly associated with Closeness. However, after accounting for teachers' Gender and Teaching Experience in Model 2, the modest negative association of Shyness with Closeness (β = −0.11, $p < .05$) became statistically significant. Finally, both

female teachers (β = 0.35, $p < .05$) and educators with more Teaching Experience were likely to report higher levels of Closeness (β = 0.53, $p < .001$) than males and teachers with less Teaching Experience. Overall, the predictors explained 12.6% of the variance in Closeness at the student level and 40.9% of the variance in Closeness at the teacher level.

3.2.2.2. Student–teacher Conflict. At the student level, teachers were found to report significantly lower levels of Conflict (β = −0.20, $p < .01$) in relation to girls than in relation to boys. With respect to students' internalizing symptoms, only Anxiety was uniquely and positively associated with Conflict, both in Model 1 (β = 0.20, $p < .05$) and in Model 2 (β = 0.19, $p < .05$). Moreover, after addition of teachers' Gender and Teaching Experience in Model 2, the negative association between Shyness and Conflict (β = −0.17, $p < .001$) reached the significance threshold. Furthermore, teachers

(footnote continued)

moderated the association between students' internalizing symptoms and student–teacher relationship quality. No statistically significant moderation effects were found.

with more years of Teaching Experience reported less Conflict than less experienced teachers (β = −0.44, *p* < .01). Overall, students' background characteristics and internalizing symptoms accounted for 12.8% of the variance in Conflict and 27.9% of the variance in Conflict was explained by teachers' personal characteristics.

3.2.2.3. Student–teacher Dependency. In the first model, none of students' background characteristics was significantly associated with the degree of Dependency in the student–teacher relationship. Regarding students' internalizing symptoms, however, Anxiety was uniquely and positively associated with Dependency (β = 0.28, *p* < .001), also after inclusion of the teacher-level covariates (Model 2). Finally, educators with more Teaching Experience were likely to report lower levels of Dependency (β = −0.39, *p* < .05). In total, 9.4% of the variance in Dependency was accounted for at the student-level and 16.3% of the variance at the teacher-level.

4. Discussion

Based on attachment theory (Bowlby, 1969), students' internalizing behavior has generally been assumed to play a role in the quality of the relationship with their teachers. However, associations between these inwardly directed behaviors and teachers' relationship experiences seem to be relatively inconsistent, both in strength and direction. In an attempt to shed further light on these ambiguous results, this study investigated the unique contributions of a variety of student-reported internalizing symptoms to teachers' perceptions of their relationship with these students. The results from this study may offer new insights into the specific forms of internalizing student behavior that are most likely to increase or decrease the risk of poor-quality relationships between teachers and children.

4.1. Teachers' relationships with students who display shy behavior

Our results generally indicated that students' self-reported levels of shyness may play a unique role in the quality of the student–teacher relationship. Largely congruent with expectations and prior research (e.g., Arbeau et al., 2010; Rudasill, 2011; Rydell et al., 2005), students who reported higher levels of shyness were less likely to have close relationships with their teachers than students with lower levels of shyness. From a motivational perspective (e.g., Asendorpf, 1990), it can be suggested that shy children may be motivated to be socially involved, but simply avoid contact with their teachers because they feel too apprehensive to approach them. Possibly, such an approach-avoidance conflict may lead to fewer student–teacher interactions that, in turn, could affect the extent to which teachers experience warmth and open communication in the relationship with shyer children. In large part, this supposition has been supported by previous studies (Rudasill, 2011; Rudasill & Rimm-Kaufman, 2009) in which the frequency of student–teacher interactions was found to explain part of the variance between shyness and student–teacher closeness.

Next to closeness, teachers also appeared to report lower levels of conflict in their relationships with shy students. Following Asendorpf's (1990) line of reasoning, it may be that shy students trapped in an approach-avoidance conflict are likely to resolve such a conflict by a compromise in which they display predominantly reticent behavior. As a result, students with higher levels of shyness may not only initiate fewer student–teacher interactions, but are at the same time less likely to attract (negative) attention from their teachers. Indeed, both theory and empirical research has suggested that shy students, by virtue of their quiet behaviors or parallel play, do usually not challenge their teachers' authority or evoke negative thoughts and reactive behaviors in them (e.g., Coplan & Prakash, 2003; Gresham & Kern, 2004; Kokkinos, Panayiotou, & Davazoglou, 2004). Thereby, teachers may feel relatively effective in dealing with shy students and experience less conflict and negativity in the student–teacher relationship (e.g., Rudasill, 2011; Zee,

de Jong, & Koomen, 2016).

It should be noted, however, that the generally modest associations of shyness with both closeness and conflict only reached the significance threshold after we accounted for teachers' background characteristics. This could imply that teachers' relationship experiences with shy children may partly be dependent on teachers' years of teaching experience and, to a lesser extent, their gender. Indeed, prior research has indicated that both female and experienced teachers are more sensitive to the needs of students with internalizing symptoms than males and novices (Kokkinos et al., 2004; Kokkinos & Kargiotidis, 2014). Moreover, there is evidence to suggest that both female teachers and educators with more years of teaching experience tend to report higher levels of student–teacher closeness than their male and less experienced colleagues (Spilt, Koomen, & Jak, 2012; Zee & Koomen, 2017). To some extent, the results of this study substantiate this body of evidence, suggesting that veteran teachers report more closeness and less conflict and dependency than teachers with less experience. Hence, when investigating the link between internalizing student behavior and the quality of student–teacher relationships, it seems important to consider teachers' personal characteristics as well.

Lastly, we found that teachers did not experience more or less dependency in relationships with students who perceive themselves as shy. This outcome was somewhat unexpected, given that previous empirical research has consistently found a small, positive link between shyness and dependency in the early elementary grades (Arbeau et al., 2010; Ladd & Burgess, 1999; Nurmi, 2012). One potential justification for these discrepant results is that we focused on teachers' relationship experiences with shy students in the upper elementary grades, rather than in the early grades. By the time students reach the upper elementary grades, they tend to become more aware of their own autonomy and gradually begin to replace their teachers for peers as primary sources of social support (cf. Ang, 2005). Hence, although students' levels of shyness may remain fairly stable across the elementary years (Rimm-Kaufman & Kagan, 2005), their overreliance on the teacher is likely to gradually decrease (Bosman, Roorda, van der Veen, & Koomen, 2018). This may explain why we did not find an association among students' shyness and teachers' perceptions of dependency in the relationship. More longitudinal studies are needed, however, to examine this hypothesis.

4.2. Teachers' relationships with students who display anxious symptoms

As expected (Mejia & Hoglund, 2016; Zhang & Sun, 2011), no links were found between students' anxiety and the degree of closeness in the student–teacher relationship. With regard to conflict and dependency, however, students' self-reported levels of anxiety, of all three internalizing symptoms, appeared to be most consistently associated with the quality of student–teacher relationships. In keeping with our hypothesis as well as previous literature (e.g., Henricsson & Rydell, 2004; Murray & Murray, 2004), teachers were likely to experience higher levels of both conflict and dependency in relationships with students who display anxious behavior in the classroom. These associations held even after taking other internalizing symptoms and students' and teachers' background characteristics into account.

There may be several reasons why students with symptoms of anxiety seem to be more prone to having relationships with teachers that are marked by conflict and dependency. First, it can be suggested that anxious students tend to behave in ways that primarily evoke negative feelings in their teachers. The continual worries of these children about school performance, social situations, and their future have, for instance, been argued to be frequently accompanied by mood swings, continuous self-doubts, and a high sensitivity to criticism (e.g., Wagner, 2001). Such negative thoughts and behaviors, as well as their constant need for reassurance about their worries, probably make anxious students overly reliant on the teacher. Accordingly, teachers' frustrations and concerns about anxious students' dependency on them are likely to

be aroused.

Second, anxious students may act in a less competent way during school activities, because their preoccupation with social and academic threats in the classroom may prevent them from focusing on the tasks at hand. This may be particularly true in the upper elementary grades, where students are increasingly subjected to greater emotional and cognitive demands (e.g., Goldstein, Boxer, & Rudolph, 2015). There is some theory and research to suggest that students with lower levels of competence in class are likely to receive more criticism and vigilance from their teachers than students with higher degrees of competence (e.g., Good & Brophy, 1972; Nurmi, Viljaranta, Tolvanen, & Aunola, 2012; Pianta et al., 2003). Possibly, such actions increase the likelihood of interpersonal conflicts and struggles that hamper the quality of the student–teacher relationship. As expected, no links were found between students' anxiety and the degree of closeness in the student–teacher relationship.

4.3. Teachers' relationships with students with emotional problems

After students' and teachers' background characteristics and their levels of shyness and anxiety were accounted for, students' emotional problems were not associated with any of the student–teacher relationship dimensions. Following previous empirical work on stress and coping, these relatively unexpected findings may be explained in terms of the specific coping strategies that students with emotional problems tend to use (e.g., Findlay, Coplan, & Bowker, 2009; Wright, Banerjee, Hoek, Rieffe, & Novin, 2010). Empirical studies suggest, for instance, that when children with such emotional problems as depression become over-aroused in (threatening) social situations, they are likely to use emotion-focused, rather than behavior-focused strategies to cope with such situations. These strategies, including self-blaming, catastrophizing, and rumination, tend to have a negative influence on students' social motivations and positivity, and may decrease the likelihood of children with emotional problems seeking contact with their teachers, either in a positive or negative way (e.g., Wright et al., 2010). In addition, based on the tripartite model of anxiety and depression (Clark & Watson, 1991), children with emotional problems have been suggested to experience lower levels of physiological arousal than anxious children and, hence, emotional problems may have less impact on the relationship quality than anxiety.

Although emotional problems, anxiety, and, to a less extent, shyness, share a common core of negative affect (Clark & Watson, 1991), it should be noted that shared variance among these symptoms does not seem to account for the lack of association between emotional problems and aspects of the student–teacher relationship. Specifically, our correlational analysis revealed only moderate associations among emotional problems, shyness, and anxiety. Moreover, correlations among emotional problems and teacher-perceived closeness, conflict, and dependency were very weak. This makes plausible the idea that the thoughts, feelings, behaviors, and actions of emotionally unstable students in the classroom may be less deleterious to the quality of the relationship with their teachers than symptoms of anxiety and, to a lesser extent, shyness. More research is needed to further explore this assumption.

4.4. Limitations

The results of the present study should be interpreted with several limitations in mind. First, the cross-sectional nature of this study precluded any speculation on the suggested direction of effects. Following both the developmental systems framework of Pianta et al. (2003) and previous empirical research (e.g., Jellesma, Zee, & Koomen, 2015; Mejia & Hoglund, 2016; Roorda et al., 2014), it may well be that the associations found in this study are reciprocal in nature. This may be especially true for students' levels of anxiety and the degree of conflict in the relationship, which may reinforce one another in the long run in

a reciprocal fashion. Accordingly, future longitudinal research is needed to advance our understanding of how different internalizing symptoms and student–teacher relationship dimensions influence one another in a reciprocal way. Additionally, it may also be relevant to take into account how long teachers and students have known each other, as this may also influence associations between internalizing symptoms and student–teacher relationship quality.

Additionally, it should be kept in mind that we relied on teachers' reports of the student–teacher relationship and students' perceptions of their internalizing symptoms. We had two specific reasons for doing so. First, given the subtle nature of internalizing symptoms, students are believed to be more reliable judges of their own social-emotional problems than teachers (e.g., Sointu, Savolainen, Lappalainen, & Epstein, 2012). Moreover, by letting students report on their internalizing behavior and teachers on the relationship quality we could avoid shared informant bias. Yet, gaining an accurate and deep understanding of internalizing students' relationship with teachers evidently requires the use of multiple informants for both internalizing student behavior and relationship quality (cf. Pianta et al., 2003). As such, it would be useful for future researchers to include student, teacher, and/or parent reports to elucidate the investigated links in this study.

Third, it should be noted that the reliability of our measure of emotional problems was only 0.67. Although methodologists (e.g., Bernardi, 1994) have previously suggested that scales with alpha levels < 0.70 still can be validly employed in relatively homogeneous samples, the relatively low reliability of this scale might explain, in part, the absence of links between emotional problems and the student–teacher relationship. Therefore, future studies that incorporate more reliable self-report scales which are developed with the explicit intention to measure children's emotional problems could provide a stronger basis from which to discuss the present study's findings.

Last, it is possible that the associations discovered in the present study may be explained by third factors. Empirical research (e.g., Zee et al., 2016), for instance, has shown positive correlations among internalizing and externalizing symptoms. Conceivably, the links between various internalizing symptoms and the quality of student–teacher relationships may be explained, in part, by the fact that students with internalizing behavior are likely to display more externalizing behavior as well (cf. Henricsson & Rydell, 2004; Jerome et al., 2009). In addition, empirical and meta-analytic studies seem to suggest that various factors in children's family environment, including insecure attachment with parents, maternal depression, and anxiety disorders, are risk factors for the development of both internalizing behavior and poor-quality student–teacher relationships (e.g., Groh, Fearon, IJzendoorn, Bakermans-Kranenburg, & Roisman, 2017; O'Connor, Collins, & Supplee, 2012; Reck, Nonnenmacher, & Zietlow, 2016). Given that such factors and processes might account for internalizing problems and poor student–teacher relationship quality, they seem to warrant further consideration in future (longitudinal) research.

5. Practical implications and conclusion

Despite these limitations, the results of our study may have several implications for educational researchers and practitioners alike. The results of this study provide a first indication that different types of internalizing behavior may play a differential role in the quality of student–teacher relationships. More specifically, our findings indicate that anxiety is associated with higher levels of conflict and dependency, whereas shyness is negatively associated with conflict in the student–teacher relationship. This seems to suggest that shyness and anxiety, though moderately related, may be differentially linked to student–teacher relationship quality. In this way, these findings confirm assumptions from self-representational models of anxiety (e.g., Schlenker & Leary, 1982) that feelings of nervousness and wariness in shy children may decrease over time and lead to less severe negative emotions than the over-analyzing and over-thinking of anxious children

and, hence, have a less negative impact on relationship quality. This negative association of anxiety with the quality of student–teacher relationships would be quite alarming, given that anxiety is among the most common psychological problems in children (e.g., Rapee, Schniering, & Hudson, 2009).

Teachers ought to be made aware that anxious students' physiological over-arousal in social situations may evoke negative feelings and emotions in these students and, hence, make them unintentionally behave in ways that evoke negative thoughts and emotions in teachers. This may lead to negative relationship patterns which, over time, may negatively influence these students' academic adjustment as well (cf. Roorda et al., 2011). Spilt, Koomen, Thijs, and van der Leij's (2012) reflection-focused intervention program may help teachers to reflect on their behaviors, intentions, and feelings in relation to anxious students. This program has been shown to be effective in increasing teachers' ability to interact with difficult students in a sensitive way, and could subsequently contribute to anxious students' capacity for using the teacher as a secure base and haven.

Additionally, teaching experience seems to be one of the factors that help teachers become more sensitive to the subtle signs in internalizing students' behaviors (Kokkinos et al., 2004). Instead of gaining this knowledge from on-the-job learning, however, teacher training and development programs can also play a role in increasing teachers' sensitivity toward internalizers, including shy and anxious children. For instance, the Incredible Years Program has been shown to reduce children's internalizing problems by training teachers to reinforce these children's positive coping, social, and academic skills in the classroom (Herman, Borden, Reinke, & Webster-Stratton, 2011). Another priority within such training programs should be to adapt the intent and frequency of teachers' interactions with shy students or students with emotional problems to these students' needs. Research from Roorda, Koomen, Spilt, Thijs, and Oort (2013) has suggested that less dominant teacher behavior may encourage withdrawn students to take more initiative during daily interactions with their teacher and help them express their feelings and emotions toward teachers. This may stimulate shy, anxious, or depressive students to come out of their shell and navigate the social world.

In conclusion, our preliminary findings seem to pinpoint the importance of further investigating the ways in which various internalizing symptoms may be associated with the quality of relationships between teachers and students. Evaluating these associations and their underlying mechanisms in a longitudinal design may be the first steps forward.

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