

## Positive teacher–student relationships go beyond the classroom, problematic ones stay inside

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### ABSTRACT

The authors voice teachers' perceptions of their interpersonal experiences with students in both positive and problematic relationships. Interview data from 28 teachers were examined by coding utterances on teacher and student interactions. Results indicate that teachers defined the quality of the relationship mostly by the level of communion (friendly vs. hostile), instead of by the level of agency (in control vs. powerless). Analyses of mentioned teacher and student behavior show a friendly interactional pattern for positive relationships and a hostile pattern for problematic ones. In teachers' perceptions, positive and problematic relationships also differed in context where encounters take place and topic of talk. Contrary to interactions in problematic relationships, encounters in positive relationships were mostly situated outside the classroom context and conversations during these encounters covered a wide range of topics. Implications for teacher education programs are discussed.

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Positive relationships with students, in which high levels of affiliation prevail, are mentioned to be one of the primary reasons for teachers to stay in the profession (e.g., O'Connor, 2008; Veldman, van Tartwijk, Brekelmans, & Wubbels, 2013) and one of the most important sources of enjoyment of, and motivation for, teaching (Hargreaves, 2000). On the other hand, problematic teacher–student relationships, which are characterized by conflict and low levels of affiliation, are mentioned by teachers to be sources of stress and negative emotions (Yoon, 2002). Overall, there is consensus among researchers that the most common sources of teacher work stress stem from relationships with individual students (Friedman, 2006).

The previous studies show that teachers acquire intrinsic rewards from positive relationships and experience negative affect in problematic ones. However, more information on this process is needed and to get a better understanding of the impact of teacher–student relationships on teachers' professional and personal lives, Spilt, Koomen, and Thijs (2011) called for more in-depth measures using teachers' self-reports to understand teachers' perceptions of interactions with students, especially beyond early or elementary education. The present study addresses this call, focusing on high school teachers' perceptions of their self-proclaimed positive and problematic relationships with individual students. Teachers' perceptions are of importance because of both their influence on the development of these relationships and because of their influence on teacher wellbeing.

### *Teachers' generalized view of relationships and perceptions of moment-to-moment interactions*

Following the approach of Wubbels et al. (2014) we define the teacher–student relationship “as the generalized interpersonal meaning students and teachers attach to their interactions with each other” (p. 364). These generalized meanings originate in perceptions of day-to-day interactions between a teacher and his or her student. Moment-to-moment interactions between teacher and student are thus the building blocks for their relationship. Relational schema theory (Baldwin, 1992) adheres to the notion that moment-to-moment experiences result in the more generalized view of the relationship, in that theory called a relational schema. This relational schema consists of cognitive structures representing patterns of interpersonal relatedness and originates in repeated interpersonal experiences with a particular person. The connection between these repeated interpersonal experiences or perceptions of moment-to-moment interactions and the more generalized view of the relationship is reciprocal by nature: relationships are based on repeated interactions, but at the same time they constrain these interactions (Wubbels et al., 2014). Thus, hostile relationships are formed due to repeated unfriendly interactions and once a hostile relationship has been formed, one will be less inclined to show friendly behavior on a subsequent encounter. As a cognitive structure, relational schemas can also influence perceptions of the other's behavior in a subsequent encounter (Baldwin, 1992). For example, even friendly behavior shown by the other

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may be interpreted as unfriendly or devious when the mental image of the relationship is hostile. This way perceptions not only originate in interpersonal encounters, they also influence them, thus influencing further development of the relationship.

Studies on teachers' perceptions of teacher–student moment-to-moment interactions show a connection between these perceptions and teacher wellbeing. Positive moment-to-moment interactions with students (e.g., students sharing their problems and their positive experiences with the teacher) can be a driving force behind (preservice) teachers' commitment to the teaching profession (Newman, 2000). Conversely, teachers' perceptions of problematic teacher–student interactions, in particular in disorderly classrooms, may correlate with feelings of stress and burn out (e.g., Brouwers & Tomic, 2000; Evers, Tomic, & Brouwers, 2004) and teachers who were confronted with student disruptive behavior reported feeling emotionally exhausted and had more negative attitudes toward their students (Byrne, 1994).

Spilt et al. (2011) explored the connection between the more generalized view of the relationship and the perception of moment-to-moment teacher–student interactions (in this case concerning students' [disruptive] behavior). They conclude that the perceived quality of the teacher–student relationship can mediate the effect of disruptive student behavior on teacher wellbeing. The finding that different teachers can report substantially different levels of stress in relation to the same disruptive student (Abidin & Robinson, 2002) supports this assumption and highlights the highly individualized nature of (teachers' perceptions of) dyadic teacher–student relationships.

Given this intricate relationship between the generalized view of the relationship and the perceptions of moment-to-moment interactions, Hamre and Pianta (2001) have called for the inclusion of a relationship perspective when studying teachers' perceptions of moment-to-moment events. When using a relationship perspective, the focus is on teachers' view of the relationship as a whole rather than teachers' view of student classroom behavior. Research from a relationship perspective might prove useful, especially in the prediction of long-term educational outcomes or teacher wellbeing (Pianta, 2006; Spilt et al., 2011).

Given the effect the teachers' the generalized view of a teacher–student relationship can have on the perceptions of moment-to-moment teacher–student encounters, we chose to study these perceptions from a relationship perspective, more specifically in the context of a positive and of a problematic relationship. We focus on teachers' perceptions of their interactions with individual students, namely perceptions of their own behavior and that of the student when interacting with him or her, in the context of these two sorts of relationships.

As a language to describe perceptions of teacher–student interactions, we use interpersonal theory.

### ***Interpersonal theory in the classroom context***

According to interpersonal theory, all human behavior and perceptions thereof can be described along two dimensions: agency and communion (Horowitz & Strack, 2011). The agency dimension describes the degree to which one controls the interaction, exuberates power or behaves independently from the

other. The communion dimension describes the level of affiliation or friendliness one shows toward the other person (Gurtman, 2009). In interpersonal theory, the concepts of agency and communion are referred to as metaconcepts that encompass constructs that are used in other theoretical frameworks describing human relationships. For communion these constructs may entail: immediacy, (Andersen, 1998), teacher empathy (Cornelius-White, 2007), and teacher care (Wentzel, 1997). Teacher agency, on the other hand, encompasses constructs such as influence (Wubbels, Brekelmans, den Brok, & van Tartwijk, 2006), authority (Pace & Hemmings, 2007), and power (Schrodt et al., 2008). The strength of the interpersonal theory lies in the combination of both dimensions. Studying the combination of teacher agency and communion may be especially important in describing teacher–student relationships given their inherent hierarchical nature (as compared to for instance romantic relationships).

Based on interpersonal theory, Wubbels, Créton, and Hooy-mayers (1985) developed the model of interpersonal teacher behavior (MITB). The MITB describes teaching in terms of the relationship between teacher and students, focusing on the interpersonal valence (or standing) ascribed to behavior. Interpersonal valence refers to the meaning of the behavior for the other party in the interaction, thus teacher behavior is measured according to the students' interpretation of this behavior and vice versa. Studies show that teachers as well as students prefer teachers who show high levels of both agency and communion in their everyday teaching and the more students perceive teacher behavior to be high on both agency and communion, the more their learning and motivation are enhanced (Wubbels et al., 2006).

The MITB is presented as a circle with two dimensions, agency and communion, and eight sectors, labeled: directing, supporting, understanding, acquiescing, hesitating, objecting, confronting, and imposing (adapted from Wubbels et al., 2012). These sectors represent eight types of teacher behavior placed in the circle according to their combination of interpersonal valence on the two dimensions (see Figure 1). Thus, students will view both directing and imposing teacher behavior as high on agency, however directing behavior is viewed as more friendly (higher on communion) than imposing behavior. A similar circular model for student behavior has been developed by de Vries (2010). The sector labels for the student behavior are initiating, supporting, collaborating, conforming, withdrawing, objecting, confronting, and demanding (adapted from de Vries, 2010; see Figure 2).

When studying interactions between the teacher and a student, the notion of complementarity proves useful. Complementarity in interactions describes the most probable reaction an action invites (Tracey, 2004). When it comes to relationships, complementarity can be beneficial as individuals seek complementary responses from others because they provide familiar and consistent feedback about oneself (O'Conner & Dyce, 1997). Complementary patterns differ for the two dimensions, with behavior on the agency dimension inviting contrasting responses and behavior on the communion dimension inviting similar responses (Markey, Funder, & Ozer, 2003). Thus a teacher showing behavior high on agency (e.g., setting clear tasks) probably invites a reaction from the students that is

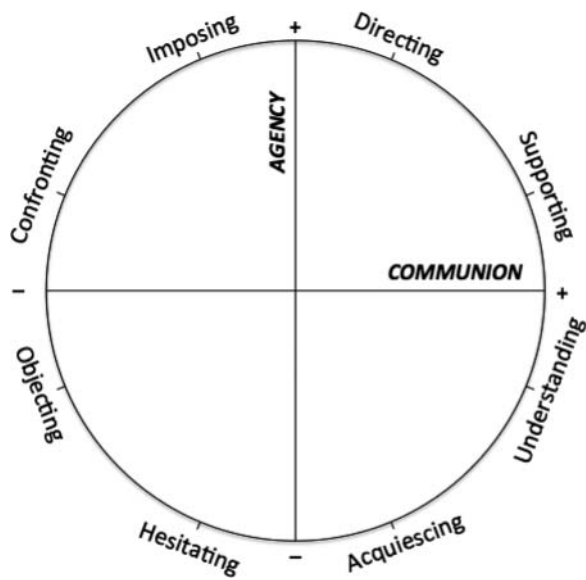


Figure 1. Model of interpersonal teacher behavior (adapted from Wubbels et al., 2011).

low on agency (e.g., engage in class work), but a teacher showing behavior high on communion (e.g., showing interest and empathy) probably invites an equally supportive reaction from the students (e.g., showing interest in the teacher's opinion of class work). Although complementarity anticipates the most probable pattern of behavior, noncomplementary responses may also occur (Kiesler, 1983), as, for example, is the case when a student reacts hostile to a teacher's interest in his personal life.

Besides an interpersonal valence aspect, single units of interpersonal behavior also have a content aspect (Watzlawick, Bavelas, & Jackson, 1967). Whereas the interpersonal aspect describes the positioning of one person toward the other, the content aspect describes what is being said. These aspects influence one another thus the message "let me help you" can be accompanied by a smile or a frown, positioning the speaker differently toward the person addressed.

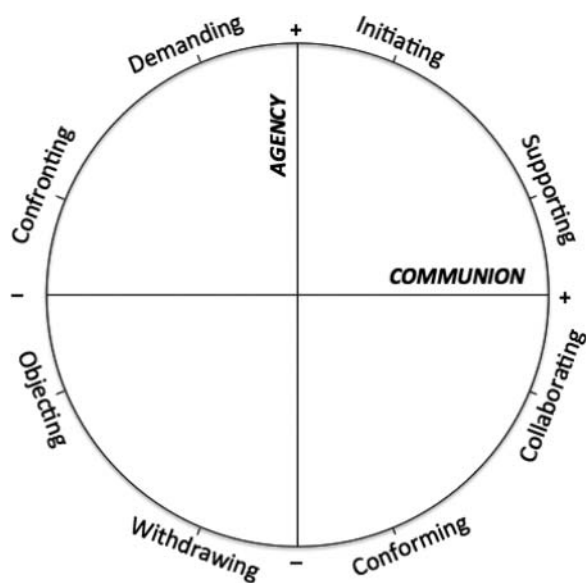


Figure 2. Model of interpersonal student behavior (adapted from de Vries, 2010).

Finally, when investigating teacher and student interpersonal behavior, including the setting in which these behaviors take place, is important to be able to interpret the meaning of the behavior for the participants (Nakamura, 2008). Frelin and Grannäs (2010) showed that to create relationships with students, teachers transcend temporal and physical conditions. In their study on negotiating disagreements between teachers and students, arenas outside the classroom were also contexts of importance.

In the present study we investigated the building blocks of teachers' perceptions of positive and problematic teacher-student relationships. Our main research questions were: How do teachers perceive their own and students' interpersonal behavior in positive and problematic teacher-student relationships? Where does this behavior take place? What topics are covered when this behavior involves talk? Additionally we studied sequences of behavior (action reaction), so-called interactions. By answering these questions we aimed to add to theory on teachers' perceptions of teacher-student relationships.

## Method

To investigate teachers' perceptions of teacher and student interpersonal behavior in positive and problematic relationships, we conducted an exploratory interview study. We studied single units of teacher and student behavior mentioned in these interviews focusing on three aspects: (a) context in which the behavior took place, (b) content of the behavior or topic of talk, and (c) interpersonal aspect of the behavior. Subsequently, we studied sequences of teacher and student behavior, or so-called interactions, to form an impression of possible interactional patterns in positive and problematic relationships.

This study applied a mixed method design in which a quantitative approach to select participants and qualitative approach for data collection complemented each other. Our goal was to present data from a diverse yet representative group of participants. Furthermore, our analyses show a mixed method design in which differences between behaviors in positive and problematic relationships are expressed both quantitatively, using figures, and qualitatively, using quotes from the interviews.

## Participants

We conducted this study in the Netherlands in the spring of 2011. Comparative studies on variations in teaching suggest that differences between teachers are larger than between countries (Wubbels, 2015) and that variance in classroom climate lies at the level of the individual teacher rather than of the nation (Organization for Economic Cooperation and Development, 2014). Nevertheless, Wubbels (2015) proposed that, compared to countries with a more collectivist culture, in individualistic and equality-oriented western countries such as the Netherlands, the focus on individual rights and egalitarian relationships can lead students to take little responsibility for the classroom climate and teachers being preoccupied with intervention and control. This preoccupation may characterize our sample as well.

For this study we interviewed 28 high school teachers in different career phases and of different teacher-class relationships.

This group was a stratified random sample out of a sample of 180 teachers voluntarily participating in a bigger study on classroom social climate. The sample was approached in various ways: (a) calls in local Dutch teacher magazines, (b) distributing flyers at teacher development congresses, and (c) using the networks of the three teacher education programs for secondary education pertaining to our faculties.

In order to attain diversity in our group of participants, we selected 30 teachers using two selection criteria: teacher–class relationship and years of experience. To assess the teacher–class relationship we asked the teachers to administer the Questionnaire on Teacher Interaction (QTI; Wubbels et al., 2006) to the students in the class they considered most challenging from the point of view of the relationship they had with the class. We chose the most challenging class since previous research had shown that data gathered on teacher–class relationships in the most challenging class differentiated well between teachers (de Jong, van Tartwijk, Verloop, Veldman, & Wubbels, 2012). The QTI consisted of 24 Likert-type items, each pertaining to one of the eight sectors of the MITB, thus loading on both the agency and communion dimension. Examples of the items are “this teacher seems uncertain” (sector: hesitating) and “this teacher is someone we can depend on” (sector: supporting). To achieve scores on the two interpersonal dimensions per teacher, scores were averaged over students in a class and transformed to Teacher agency and communion scores.

Of the 180 teachers, 135 returned our questionnaire. We selected 30 teachers based on diversity in years of experience and on diversity in teacher–class relationship measured with the QTI. Therefore we selected teachers belonging to one of three experience categories: novice (1–3 years of experience), midcareer (8–10 years), and experienced (more than 20 years of experience). Within these groups we selected teachers based on teacher–class relationships. In this selection process our aim was twofold: (a) maximum variety thus trying to include teachers from all four quadrants of the model and (b) representativeness of the overall population thus with an overrepresentation of the first quadrant (Breklemans, Wubbels, & den Brok, 2002). For the midcareer group maximum variety was not possible, our sample of 135 teachers who returned the questionnaire did not include a teacher in the quadrant low on both agency and communion. Due to practical difficulties we were unable to interview two of the teachers (see Table 1 for descriptives of the participating teachers).

### Interview instrument

To gather data on teachers’ perceptions of teacher–student interactions, we used a semistructured interview wherein we asked the teachers to describe one or two positive relationships they had with individual students (current or in the recent past) and one or two problematic ones. Teachers were encouraged to choose these relationships according to their own standards of positive and problematic relationships. In the interview we asked them about the relationship in general (“How would you describe this relationship?”) and specific aspects of this relationship, such as a description of the student, of how the student thinks about the teacher, interactions with the student and emotions the teacher experiences when in contact with this student (see the Appendix for complete interview protocol).

**Table 1.** General characteristics of the 28 respondents.

Alias	Gender	Age	Subject taught	Years of experience	Teacher–class relationships	
					Agency	Communion
Nicolas	M	34	Physics	1	.10	.10
Neil	M	28	Biology	2	.15	.53
Nate	M	24	Chemistry	2	.30	.43
Ned	M	29	Social studies	2	.44	.31
Nigel	M	50	Chemistry	1	−.06	.02
Nina	F	28	Chemistry	1	−.17	.22
Nicole	F	39	Physics	1	−.17	.28
Nick	M	43	Physics	1	−.22	.50
Norah	F	29	Chemistry	1	−.29	−.12
Nathan	M	25	Physics	1	.03	−.22
Nelly	F	40	Dutch	2	.17	−.24
Manfred	M	34	History	11	.12	.10
Max	M	35	Arts	11	.16	.35
Molly	F	35	Dutch	12	.16	.56
Mildred	F	50	Dutch	11	.33	.38
Mona	F	42	Biology	9	.40	.18
Mark	M	46	Economics	8	−.06	.00
Michael	M	47	Chemistry	11	−.22	.46
Mary	F	47	French	9	.36	−.08
Linda	F	55	Economics	34	.04	.06
Lester	M	53	Arts	22	.11	.64
Larry	M	59	Technology	35	.20	.20
Loraine	F	42	Physics	21	.33	.48
Laura	F	53	Latin	30	.33	.60
Lawrence	M	54	Geography	26	−.07	.25
Luke	M	50	Physics	25	−.17	−.29
Lucy	F	56	Arts	34	.41	−.16
Lucas	M	56	Geography	28	.27	−.04

Note. Teacher–class relationship is based on analyses of student scores on the QTI in teacher perceived most difficult classroom. Level of agency and communion could vary between −1.0 and 1.0.

Teachers’ were encouraged to elaborate on their answers and provide examples. In addition we asked teachers to describe positive and problematic teacher–student relationships in general (data not discussed in this article). Overall the interview took between 1 and 1.5 hr. The interviews resulted in the descriptions of 52 positive relationships and 40 problematic ones.

### Analyses

When all data were available, we constructed schematic overviews of the data per teacher (Miles & Huberman, 1994). Subsequently, cross case displays were used to identify patterns that were used as a starting point for the analyses. Based on these cross-case displays, we developed the Teacher–Student Interaction Coding scheme (TSIC; see Table 2). The TSIC contains codes on four categories: (a) context in which the interaction takes place, (b) content aspect of behavior (topic of talk), (c) interpersonal aspect of teacher behavior, and (d) interpersonal aspect of student behavior. Of these categories, only the content aspect of behavior was not inspired by concepts from previous research. The category context contains two codes: “occurring during class time in the classroom” (in class) and “occurring at a different time or at a different place” (out of class; Frelin & Grannäs, 2010). The categories interpersonal aspect of teacher behavior and interpersonal aspect of student behavior consist of eight codes based on the sectors in the models of interpersonal teacher and student behavior (Wubbels et al., 2006 ; cf. Figures 1 and 2). The codes of the category content aspect of

**Table 2.** Teacher student interaction coding scheme.

Category	Subcategory	Description of subcategory	
Context	In class	During class time and in the classroom	
	Out of class	Not during class or out of the classroom	
Content aspect of behavior (topic)	Informal	(Mutual) personal life, greeting, joking	
	Student need	Future career, problems in student's personal or school life	
	Subject taught or course work	Course content or subject	
	Classroom management	Lesson procedures, appropriate conduct in class	
	Positive student functioning	Student behavior enjoyed by the teacher	
	Problematic student functioning	Student behavior disrupting the lesson	
	Positive teacher functioning	Teacher behavior enjoyed by the student	
	Problematic teacher functioning	Teacher behavior the student does not agree with	
	Interpersonal aspect of teacher behavior	Directing	Managing the classroom in a clear and formal manner
		Supporting	Helping, complimenting, open, greeting, conversing
Understanding		Asking student, showing understanding, respectful, nice	
Acquiescing		Allowing behavior	
Hesitating		Hesitating, withdrawing, disengaged	
Objecting		Ignoring, objecting, asking to change behavior	
Confronting		Correcting, threatening	
Imposing		Applying rules, talking of norms	
Interpersonal aspect of student behavior		Initiating	Proposing ideas for lesson, high engagement with task
		Supporting	Engaging in contact, asking, active, open, greeting
	Collaborating	Good, respectful, well-behaved	
	Conforming	Listening to teacher	
	Withdrawing	Stuttering, embarrassed, not engaging in eye-contact	
	Objecting	Denying, accusing, doing something else	
	Confronting	Angry, disturbing, disrupting, being a pain	
	Demanding	Being critical	

behavior were constructed in a bottom-up process that was inspired by a grounded theory approach (cf. Corbin & Strauss, 2008). After applying open coding to 14 interviews, this category consisted of 10 subcategories: teacher functioning, teacher personal life, student functioning, student personal life, student need: private life, student need: school, student need: career, course work, classroom management, and mutual interest out of school (e.g., hobbies). A round of axial coding proved overlap between the subcategories teacher personal life, student personal life, and mutual interest out of school. We reorganized these subcategories into one subcategory called informal. Furthermore, the subcategories teacher functioning and student functioning were split into a positive and a problematic subcategory. The emerging coding scheme was tested on the resulting 14 interviews and proved applicable. However, the three subcategories on student need proved rare so we collapsed them into one subcategory, resulting in eight codes for the category content aspect of behavior. For an overview of the final version of the TSIC and descriptions of the codes see Table 2.

After transcribing the interviews, fragments concerning interactions in positive and problematic relationships were extracted. Using event sampling, the fragments were split into units of meaning each time a change occurred in one of the four coding categories. Thus, if a fragment could be assigned to two topics, it was split into two units of meaning (likewise for context and interpersonal aspect of teacher–student behavior). Subsequently each unit of meaning was assigned a code for each category.

To investigate sequences of behavior, so called interactions, we searched for sequences in teacher and student behaviors that involved an action and a subsequent reaction. We paired these actions and reactions and used complementarity as a framework for analyses.

To ensure reliability of the coding process we determined interrater reliability for both the segmentation into units of

meaning and the assigning of codes. For the former, the proportion agreement (number of segments identified) between two coders on two interviews was determined. About 70% of the words in the interviews were assigned no unit of meaning by both coders. The remaining 30% consisted of 137 fragments identified as a unit of meaning by at least one coder of which 88 fragments were identified by both coders. Taking both the unassigned and the assigned part of the data into account, the proportion agreement of segmentation on these two interviews was 89%. For the interrater reliability of the categories from the TSIC, two raters coded two interviews (174 fragments) that were already segmented into units of meaning. Cohen's kappa's for context ( $\kappa = 0.73$ ) and content aspect of behavior ( $\kappa = 0.76$ ) were calculated as well as weighted Cohen's kappa's for interpersonal valence of teacher behavior ( $\kappa = 0.89$ ) and interpersonal valence of student behavior ( $\kappa = 0.82$ ).

All data were collected and analyzed in Dutch. For the results section in this article we translated certain quotes to illustrate our findings into English. This translation was executed by the first author (who obtained a master's degree from a university in the United States) and then checked by two of the other authors.

## Results

We present our findings first for positive relationships, then for problematic ones. For both types of relationships we discuss context, topic of talk, interpersonal aspects of teacher and student behavior, and interactions.

### Positive relationships

#### Context in positive relationships

In most accounts of positive relationships, teachers started their description by mentioning teacher or student interpersonal

**Table 3.** Frequency of topic of talk mentioned total and in number of positive relationships in and out of class.

Topic of talk	In class		Out of class	
	Total instances mentioned	Number of relationships mentioned in	Total instances mentioned	Number of relationships mentioned in
Informal	17	11	74	29
Student need	5	1	31	14
Subject or course work	36	20	12	9
Classroom management	29	18	19	11
Positive student behavior	5	5	8	6
Disturbing student behavior	6	6	20	8
Positive teacher behavior	1	1	5	4
Problematic teacher behavior	1	1	6	3
Other	3	3	6	6

behavior that took place out of class. Overall, most behavior described in positive relationships took place outside the class context (53%). Although mainly situated before or after the lesson in the classroom or in the hallway, teachers also recognized fieldtrips as important opportunities to build and maintain relationships and some even mentioned contact with students outside school life, such as on occasions when they met up to go to a concert or coincidental meetings that occurred due to their living in the same areas.

#### *Topic of talk in positive relationships*

In class, the topic of talk mainly revolved around the subject taught and coursework or classroom management, although informal talk (e.g., joking around with the student) was also mentioned (see Table 3).

In the out-of-class context, the topics of conversation were more diverse. Talk again involved the subject taught or classroom management but here, student need, disturbing student behavior and, mostly, informal talk were also included. When a student's need was the topic of the conversation this mainly concerned problems a student experienced at home, problems at school in general (e.g., bullying) or problems with the student's future career (e.g., what subjects to choose). Informal talk mainly concerned mutual interests (e.g., hobbies) or interest in one another's private life (e.g., how was your weekend?), joking around or greeting each other when passing. Although in some accounts of positive relationships the topics could be highly varied, there were others where teacher and student talk mainly involved one topic (>60% of talk). This especially applied to informal talk, student's needs, and subject as main topics for conversation.

#### *Interpersonal teacher and student behavior in positive relationships*

Teachers' talk revealed that they experienced students with whom they had a positive relationship to be mostly supporting and collaborating in class (see Figure 3). They described these students as being highly engaged during the lesson. They share their thoughts on a subject and volunteer on questions. Sometimes they even take control of their own learning, as Max explains:

He will come to me saying: "I have one of those machines at home to laminate and it would be a hassle to take the machine to school. I want to laminate." "Well, if you're so deeply engaged in the assignment, sure, go ahead." On the other hand, this is also a student who

I can let go. I know that when he really doesn't get it or if he's having trouble [with an assignment], he'll come to me.

Still, even in positive relationships, teachers mentioned objecting or confronting student behavior in class. The intensity of this behavior could vary from occasional low work-engagement to confronting the teacher to the point of being expelled from class.

When observing student misbehavior in positive relationships, it became clear that it is not the mere behavior of the student but the interpersonal valence attributed to this behavior that is of importance for how teachers experience this behavior. As Loraine explained, similar student behavior can be interpreted differently for different students, depending on the interpersonal valence the teacher infers from this behavior:

When he comes to me and leans into me and says something like "hey little missy," he is not trying to be mean. You can feel it, there is no hidden agenda. He's just looking for contact because he needs a certain role figure. And at that moment he will look for this, using language of which you think well if another had said it, he or she would be crossing a boundary. But he is not, he is just looking for contact in a socially awkward manner, but he means something very friendly with it.

This is an example of the perception or mental image of the relationship constraining and determining a teacher's perception of moment-to-moment student behavior. In a positive relationship, the teacher perceived occurrence of student misbehavior may thus be low for two reasons: when in a positive relationship with their teachers, students show less misbehavior, but teachers will also interpret a wider range of behaviors as positive, as the previous example shows.

In class, teachers described their own behavior as mainly directing and supporting when in a positive relationship with a student (see Figure 3). They mentioned instructing students, challenging them, asking them about their progress and commenting on it, and treating their students as equals.

However, teachers also mentioned behaving in a confrontational manner, thus confronting the student with his or her disturbing behavior or sending the student to another seat or even out of class. Teachers mentioned that this behavior may result from the ideal of holding the same standards for all students when it comes to dividing attention and requiring students to abide by the rules. However, when in a positive relationship, teachers also mentioned showing more acquiescing or understanding behavior toward a particular student than to the rest of the class, as did Larry:

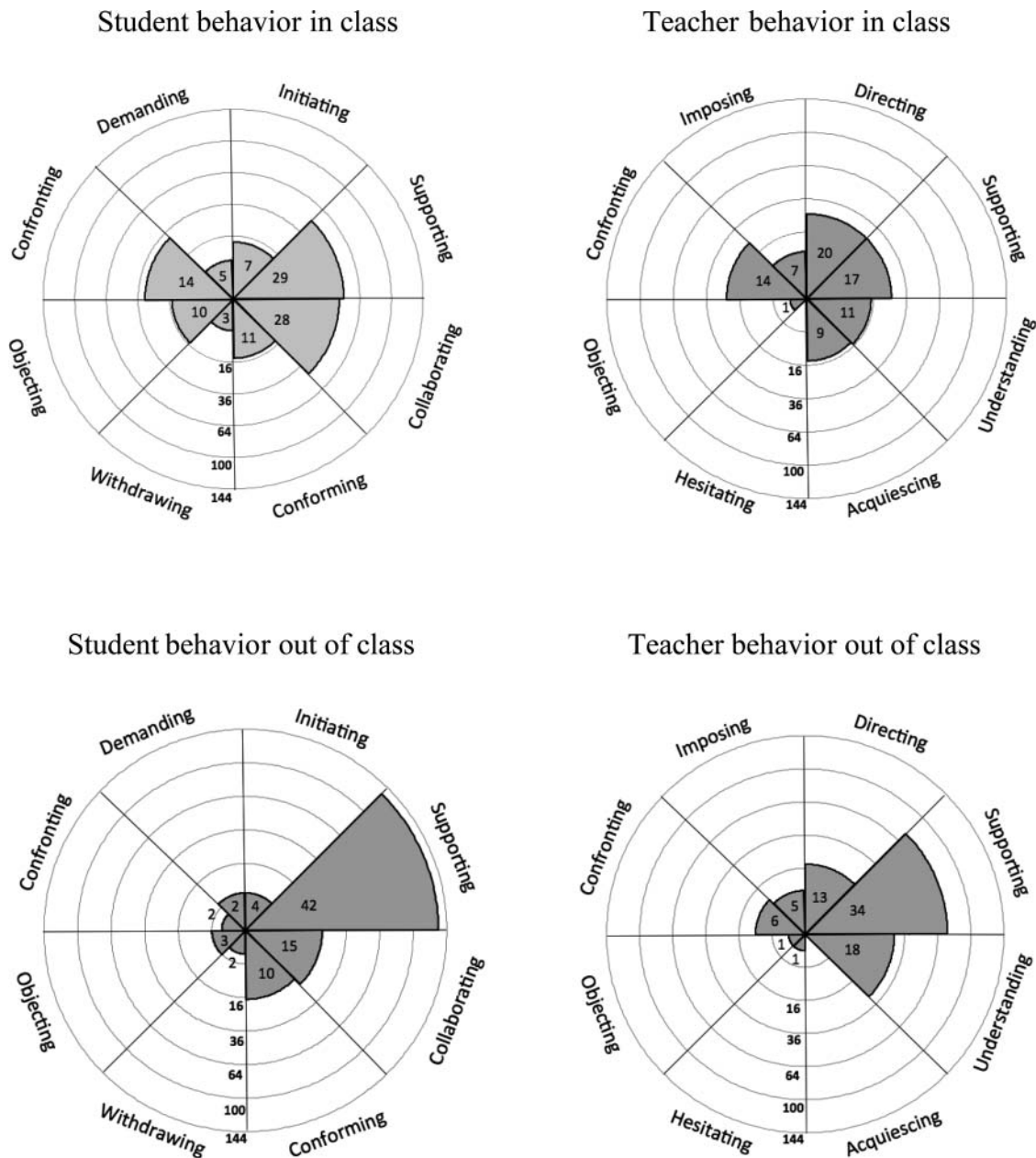


Figure 3. Teachers’ perceptions of student and teacher behavior in positive relationships. Shaded areas show the amount of units coded into a particular sector, the number shows the number of relationships this behavior was mentioned in.

When someone is sitting at a table without doing anything, and I’m talking about behavior in class, well yes I would accept this longer from her than from [another student].

Student behavior out of class was mainly described as less formal and more supporting than in class (see Figure 3). Teachers mentioned students greeting them in the hallway, engaging in informal talk before or after class, and joking around with the teacher. They talked of students seeking contact with the teacher and, for instance, striking up a conversation after class. Even relationships that were more formal during class, were informal out of class.

He has a much more formal relationship with me. But you know, still very supporting and not like there is *the teacher*. And on a school trip to Romania I can also just talk to him [about our personal lives] but here at school it’s all a bit clearer. (Ned)

The teachers described their own behavior out of class as being equally warm as in class, showing supporting and understanding behavior. They mentioned themselves helping the students, complimenting them, having informal talks, and greeting students in the hallway. Although coded in the same sectors, teachers’ remarks on the intensity of their behavior showed differences. Some teachers experienced very close, friend-like relationships with students with whom they had a positive relationship:

But I do think we both treat each other in a way that I recognize from my private life, with people of my own age; sort of, well in a nice way, a relaxed way. She will see me as her teacher, but she also knows that she can play a trick on me. And she’s not afraid to do that. And a bit of teasing each other, and some sarcasm every now and then. But she knows I’ll treat her in a similar manner. (Neil)

**Table 4.** Teachers' perceptions of interactions in positive relationships: Number of mentioned student reactions to teacher behavior.

Teacher action \ Student reaction	Initiating	Supporting	Collaborating	Conforming	Withdrawing	Objecting	Confronting	Demanding
Directing	1	2	4	6		1	1	
Supporting		18	2	2				2
Understanding	1	7	4	1				
Acquiescing	1							
Hesitating								
Objecting					2			
Confronting		1	3	9	1		2	
Imposing			1		1	1		

Note. According to interpersonal theory, hatched cells in the upper left quadrant and in the lower right quadrant represent complementary student reactions on the Communion dimension; grey cells represent student behavior complementary on the Agency dimension.

Others explicitly stated that there must always be a distance:

I am very professional. I'm not their friend. Look this is my 3rd year as a teacher and in the 1st year it wasn't that way. Then I didn't know what my role was and I was more like a friend to them and that didn't work at all. Yes, because I also have to be very clear. I have to be clear and reprimand them when necessary. (Ned)

### Interactions in positive relationships

In their talk on positive relationships, teachers also included sequences of behavior between themselves and a student, or so called interactions. We investigated these consecutive actions using complementarity as a framework and present our findings in Tables 4 and 5. Complementarity in interactions describes the most probable reaction an action invites. On the communion dimension a complementary reaction consists of a similar response in terms of friendliness or hostility; on the agency dimension a complementary reaction consists of an opposite response, thus dominant behavior evokes submissive reactions and vice versa.

In Tables 4 and 5 complementarity on the communion dimension is represented in the hatched cells of the upper left quadrant (a friendly interaction: e.g., a teacher showing supportive behavior and a student reacting in a collaborating manner) and in the hatched cells of the lower right quadrant (a hostile interaction: e.g., a teacher showing confronting behavior and a student reacting in an equally confronting manner). Complementarity on the agency dimension is represented in the grey areas. Cells in the grey areas that are horizontally aligned show teacher behavior high on agency (directing, supporting, confronting and imposing) followed by submissive student behavior. Cells in the grey areas that are vertically aligned show teacher behavior low on agency (understanding, acquiescing, hesitating and objecting) followed by student behavior high on agency.

We found that in positive relationships both their own and their student's behaviors in interactions were experienced by the teacher as high on communion, a sign of complementarity (see hatched cells in upper left quadrants in Tables 4 and 5). Interactions were described as supporting and warm toward

**Table 5.** Teachers' perceptions of interactions in positive relationships: Number of mentioned teacher reactions to student behavior.

Teacher reaction \ Student action	Directing	Supporting	Understanding	Acquiescing	Hesitating	Objecting	Confronting	Imposing
Initiating	1		4	1				
Supporting	4	22	8					
Collaborating	1	2	2					1
Conforming	3	5	1				1	2
Withdrawing	1							1
Objecting	1	2					2	3
Confronting				4		1	3	2
Demanding		2	1	1				

Note. According to interpersonal theory, hatched cells in the upper left quadrant and in the lower right quadrant represent complementary student reactions on the Communion dimension; grey cells represent student behavior complementary on the Agency dimension.

one another: teacher and student would engage in conversations, joke around and help one another. Especially in accounts of interactions outside class, teachers described these sequences of behavior as being highly complementary on the communion dimension. Although students were very often mentioned to initiate contact, once an interaction had begun, teacher and student would alternate positions on the agency dimension.

In class, teachers also mentioned a complementary interactional pattern high on communion. They also mentioned, however, student behavior that measured low on communion. In order to understand how this behavior could coexist with the friendly pattern as described above, we investigated teachers' descriptions of their reactions to student hostile behavior (objecting and confronting). Although teachers sometimes mentioned showing friendly behavior by allowing the misbehavior (acquiescing), they mostly mentioned responding to this complementary on the communion dimension, thus confronting and imposing (see Table 5). When observing the consecutive student reaction to this hostile teacher behavior, we found that teachers perceived students' reactions to be noncomplementary (see lower left quadrant of Table 4). Thus students would apologize after being reprimanded, or come over and look for contact in a positive manner again. These reactions were highly complementary on the agency dimension. Students mostly reacted submissive in response to the teacher's confronting or imposing behavior.

Thus, in positive relationships teachers mentioned both themselves and their students trying to pull the relationship back to more friendly interactions after confronting behavior of the other party. This way they reacted in a manner that was noncomplementary on the communion dimension (showing friendlier behavior than was to be expected) after which they could both assume a positive stance toward one another again, thus restoring the complementary pattern of interactions high on communion.

## Problematic relationships

### Context in problematic relationships

In problematic relationships, in contrast with positive relationships, we found that the behavior teachers described of both teachers and students, mostly took place in class (67%). Examples that took place out of class mostly involved the student returning or staying after class on the teacher's initiative to talk about student

misbehavior. One teacher explained this lack of interaction out of class by a lack of connection on a personal level:

This is something that always occurs with people. There are students who match with you and students who don't. Well, so be it. And this [relationship] certainly surpasses this [mere suiting or not] but I just don't have any connection with her and if she behaves normally in class well fine and if she doesn't well then [she's sent out of class]. (Lorraine)

### Topic of talk in problematic relationships

When asked about behavior in class in problematic relationships, teachers mainly mentioned classroom management as a topic (see Table 6). Examples were a teacher telling the student what to do, telling a student to pay attention, or telling a student to leave the classroom. Besides this, teachers also mentioned subject matter as a topic of talk, with the teacher helping the student with difficulties, or explaining why certain choices were made during lessons. Explicitly discussing disturbing behavior of students was also the subject of talk in class as the interview with Nate shows:

She will just, during my instruction, all of a sudden, wham, put her bag on the table, open it and start readjusting her foundation and mascara. And then I'll say; "what are you doing?" "Well sir, it's recess in a minute." "Yes that's right; it's recess in a minute, so you work on your make-up in a minute." "Well no sir, then I have to go out and have to have a smoke and...."

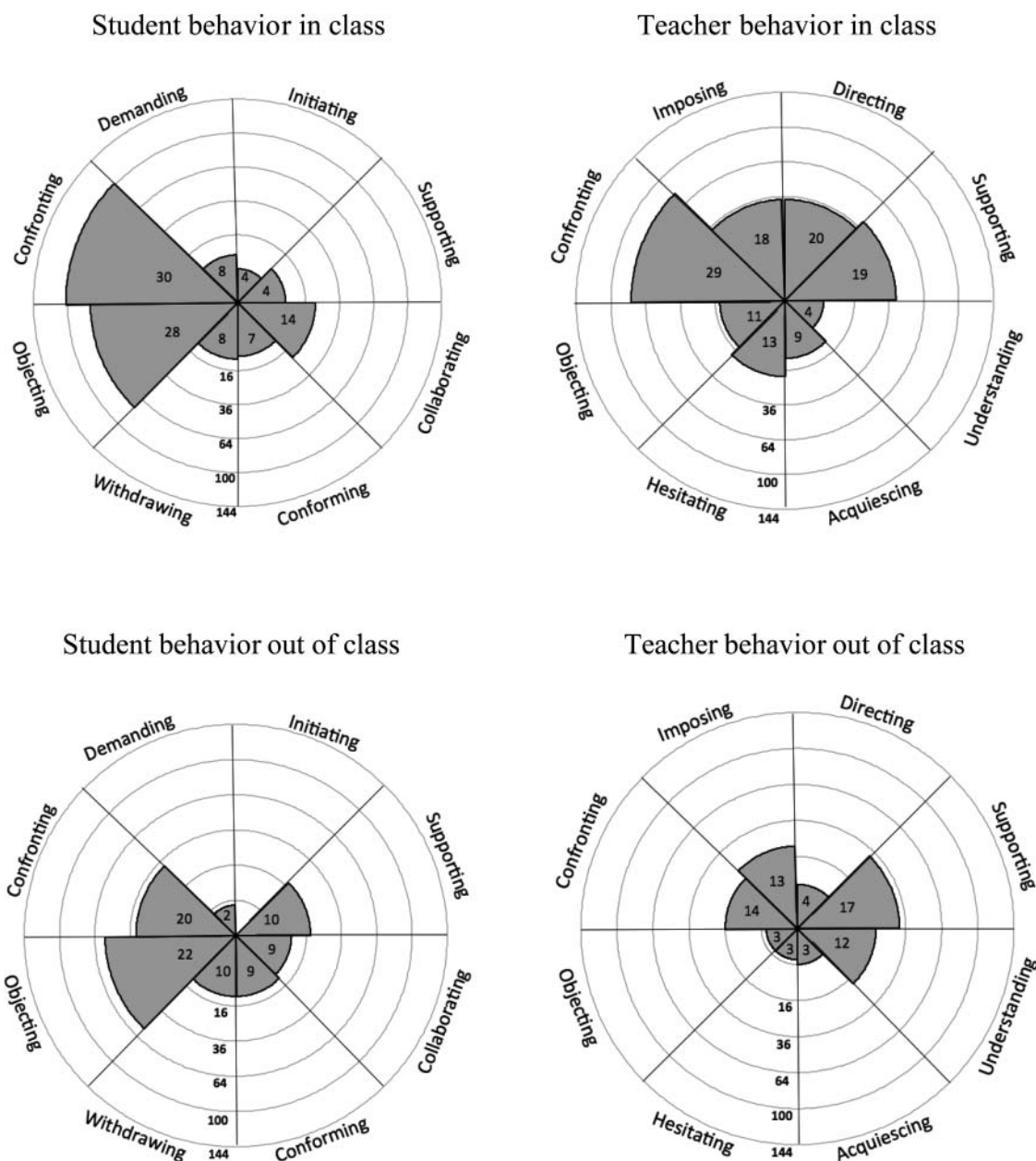
Compared to the diversity of topics discussed in positive relationships out of class, teachers' reports of out of class talk in problematic relationships showed little variety. Meetings took place mostly by appointment and concerned mainly student misbehavior. Teachers also reported, however, comments by students on teacher misbehavior. They mentioned student complaints about the teacher's behavior toward them in particular (You just don't like redheads [Nick]) or about the overall ability of the teacher (I failed the assignment because you can't teach this subject well [Mildred]).

### Interpersonal teacher and student behavior in problematic relationships

As opposed to student behavior in positive relationships, teachers perceived student behavior in problematic relationships in class mostly as confronting and objecting (see Figure 4). When discussing student misbehavior, teachers mentioned (among others): low work engagement, disturbing other students or disrupting the classroom process, not willing to engage in contact

Table 6. Frequency of topic of talk mentioned total and in number of problematic relationships in and out of class.

Topic of talk	In class		Out of class	
	Total instances mentioned	Number of relationships mentioned in	Total instances mentioned	Number of relationships mentioned in
Informal	2	2	7	5
Student need	0	0	12	6
Subject or course work	34	15	13	5
Classroom management	67	31	9	7
Positive student behavior	7	7	2	1
Disturbing student behavior	34	15	49	25
Positive teacher behavior	1	1	2	2
Problematic teacher behavior	13	11	22	13
Other	7	5	10	6



**Figure 4.** Teachers' perceptions of student and teacher behavior in problematic relationships. Shaded areas show the amount of units coded into a particular sector, the number shows the amount of relationships this behavior was mentioned in.

with the teacher, lying, objecting and being rude. Common for students with whom a teacher has a problematic relationship was that the behavior persisted, even after various remarks by the teacher, as Molly explains:

I always have to ask [you] to take your bag of the desk. I always have to ask [you] to get your stuff. I always have to ask [you] to hang your coat. You know, those kinds of things. So I always have to ask and that is negative attention. If I have to ask [you] to take off your coat [at] every lesson again, and I have to ask would you [to] take your bag of your desk every time or would you sit at your own spot, then you already begin in a negative way. But this behavior does annoy me and he knows that. But still every time he lets it come to this, me asking it and commenting on it.

Furthermore, student behavior in problematic relationships was regarded as highly variable, with the student being compliant 1 minute and very angry the next.

Teachers described their own behavior as mainly confronting, trying to get the student to behave correctly (see Figure 4). However the intensity and occurrence of this type of behavior by teachers in problematic relationships could differ greatly, varying from recounting an instance in which a phone was taken away by the teacher, to a student not being allowed in class for several weeks. Besides confronting the student, teachers also mentioned being directing or supporting. In these instances teachers talked about persisting and trying to start on a positive note each time.

Finally, when in a problematic relationship some teachers mentioned hesitating in class toward a student. They talked of giving in and allowing for the misbehavior as long as the class was not disrupted too much. They described this in reaction to a feeling of having tried everything and not finding "a way in":

**Table 7.** Teachers' perceptions of interactions in problematic relationships: Number of mentioned student reactions to teacher behavior.

Student reaction \ Teacher action	Initiating	Supporting	Collaborating	Conforming	Withdrawing	Objecting	Confronting	Demanding
Directing			3	1		2	4	1
Supporting		5	3	1	2	6	6	
Understanding		2	4	1		3		
Acquiescing		1						
Hesitating						1	1	
Objecting			1	1		2	3	
Confronting	1		1	6	5	8	15	
Coercing				4	1	4	3	

Note. According to interpersonal theory, hatched cells in the upper left quadrant and in the lower right quadrant represent complementary student reactions on the Communion dimension; grey cells represent student behavior complementary on the Agency dimension.

Well then I find it very difficult to find an entry. That is where it kind of ends for me. ... Then I ignore someone like that as much as possible, or I ignore his behavior as much as possible because I try to focus as much as possible on the children who do want to [learn] and as little as possible on those who don't. However, there will be a limit at some point and I have such a limit: "as long as I'm not bothered by you and as long as the others are not bothered by you." (Molly)

When in a problematic relationship, teacher and student get-togethers outside class mainly took place in order to discuss student disruptive behavior. In this context teachers experienced student behavior as hostile yet more submissive than when in class (see Figure 4). When alone with the teacher after class, students would mostly complain about classroom processes and the teacher's behavior. Some students, however, would even in these circumstances show confronting behavior, as one teacher reports: "[after class] she'll have an attitude [and respond]: 'well sir, I don't really care.'" (Nate). Other ways students would behave in these circumstances were in a socially desirable manner or showing disinterest.

Teachers described their own behavior out of class as either confronting or imposing, or supporting or understanding. As Figure 4 shows, in some interactions teachers remained stern, also out of class. However, many interactions involved teachers

being more supporting and understanding when alone with the student after the lesson:

Because the few times I have sent him out of class, he will return later and then I still have to make up a penalty. And a lot of the times I am very goodhearted and I'll say "you know what, I'm simply not going to give you a penalty, and I trust you will collaborate next time." And then it's "well superb sir, thanks sir, have a nice weekend sir." Usually he wouldn't say that but at a moment like this he will. (Neil)

### Interactions in problematic relationships

In teachers' descriptions of problematic relationships, interactions between teachers and students were highly complementary on the communion dimension, with both teachers and students reacting toward one another in a hostile manner (see Tables 7 and 8). Teachers mentioned interactional patterns in which the student would misbehave, to which the teacher would react in an objecting or confronting fashion, to which the student would react equally objecting or confronting and so forth. In the classroom this would, for instance, result in discussions with students on the fairness of a teacher's reprimand. Out of class, teachers talked of students not willing to engage in conversation, or objecting about practices of the teachers. Both

**Table 8.** Teachers' perceptions of interactions in problematic relationships: Number of mentioned teacher reactions to student behavior.

Teacher reaction \ Student action	Directing	Supporting	Understanding	Acquiescing	Hesitating	Objecting	Confronting	Coercing
Initiating				2				
Supporting		8	1					
Collaborating	1	5						1
Conforming								1
Withdrawing				1				1
Objecting	3	2			1	3	11	8
Confronting			1		1	3	21	3
Demanding					1			

Note. According to interpersonal theory, hatched cells in the upper left quadrant and in the lower right quadrant represent complementary student reactions on the Communion dimension; grey cells represent student behavior complementary on the Agency dimension.

sequences beginning with student misbehavior and sequences beginning with teacher confronting behavior were found in teacher talk (see lower right quadrants of [Tables 7](#) and [8](#)).

Although teachers reported problematic relationships to be highly complementary on the communion dimension (with hostile reactions on both sides), in seven instances teachers stated that they tried to react in noncomplementary ways in these situations thus showing friendlier behavior (see lower left quadrant of [Table 8](#)). However, further analyses of student behavior, in reaction to this friendly teacher behavior, showed that in the perception of the teachers most students did not reciprocate this friendly behavior (see upper right quadrant of [Table 7](#)). Teachers mentioned students immediately reacting in a hostile way in response to their friendliness, thus ‘drawing’ the interaction back to where both teacher and student behave complementary low on communion. In 21 instances, teachers mentioned students reacting equally supporting to their supporting behavior (see upper left quadrant of [Table 7](#)). However, the stability of this friendly interaction pattern was weak in problematic relationships, as Nathan explained:

I will still try and approach him in a positive way at the beginning of class: “Hey Peter, there you are, good, did you bring your things?” “Yes I brought everything.” “Well that’s really good, okay.” And then slowly this will change into: “Hey Peter, stop doing that!” And indeed you will enter a downward spiral which I sometimes find hard to break.

## Conclusion and discussion

Positive relationships with individual students have been mentioned by teachers as an important source of enjoyment and motivation and problematic ones as causing stress and negative emotions (Friedman, 2006 ; Hargreaves, 2000 ; Yoon, 2002). With this study we have tried to increase our understanding of the building blocks of teachers’ generalized views of relationships by investigating high school teachers’ perceptions of behavior of themselves and students with whom they have a positive relationship and with students with whom they have a problematic relationship. We studied context, content and the perception of moment-to-moment interpersonal behavior as building blocks and uncovered differences between these for positive and problematic relationships.

### *Positive and problematic relationships: Context and topic*

Earlier research suggests that interactions between teachers and students may differ according to the context in which these take place (cf. Doyle, 2006). Our findings confirm this notion: teacher–student interactions differed clearly in teachers’ perceptions, not only according to the quality of the relationship (positive or problematic) but also according to the context in which these took place. In accordance with results by Frelin and Grannäs (2010) and van Tartwijk, den Brok, Veldman, and Wubbels (2009) , we found that arenas outside the classroom context were mentioned as contexts in which teacher–student interactions take place. Frelin and Grannäs (2010) emphasized these out-of-class spaces as relational arenas and argue that students and teachers co-construct in-between spaces where

informal interactions take place. Opposed to predetermined actions and content pertaining to teacher–student interactions during lessons, it is in these spaces that the teacher and the student can renegotiate their relationship. In our study this was especially true for positive relationships, where teachers mentioned both themselves and the students being proactive and looking for contact, more outside than in class. Talk during these interactions involved a variety of topics and in one-on-one outside lesson contact, establishing and maintaining hierarchy appeared to be of less importance than establishing a friendly environment (cf. van Tartwijk et al., 2009).

However, this variety was not the case for problematic relationships. In teachers’ perceptions, contact in both contexts mainly involved student misbehavior. In their perceptions, relationship negotiations seem to be more repetitious when in a problematic relationship. A teacher in our study articulated this perpetuation, stating: “But this behavior does annoy me and he knows that. But still every time he lets it come to this, me asking it [him to behave] and commenting on it [his disturbing behavior].” In future studies it will be interesting to research how out of class contexts can be used to renegotiate problematic relationships.

### *Positive and problematic relationships: Complementarity on the communion dimension*

Our study showed differences in teachers’ perceptions of teacher–student interactions in positive and problematic relationships. These differences mainly concerned the communion or affiliation dimension. As was to be expected, in positive relationships teachers mostly mentioned interactions rating high on communion (e.g., friendly), whereas in problematic relationships, they mostly mentioned interactions rating low on communion (e.g., hostile). On the agency or control dimension perceived behaviors of teacher and student were very similar for both types of relationships, with both the teacher and the student taking turns steering and following. Regarding these differences concerning the interpersonal dimensions it seems that, according to the teachers, relationship quality is determined more by the level of communion, or friendliness, than by the level of agency, or control. In previous studies, complementarity or reciprocity on the friendly end of the communion dimension has been mentioned as a premise for teacher caring (e.g., Gomez, Allen, & Clinton, 2004). Caring on the part of the teacher cannot be considered a one-way characteristic of what teachers do and are, it depends on student complementary responses (Kim & Schallert, 2011). Our research affirms this assertion, showing that in teachers’ perceptions the quality of a relationship with an individual student depends on both the level of communion and the complementarity on the communion dimension. Teachers’ tendency to focus on communion rather than agency, especially when it comes to perceptions and descriptions of others, can also be explained by the primacy effect of the communion dimension. As Abele and Wojciszke (2007) explained: “communion is the most important dimension because close and secure relationships that include friendliness, trust, empathy, and helpfulness are indispensable for survival” (p. 753). Liking another person, or liking a student, thus depends more on the target’s communal rather than

agentic traits and behaviors. Concerning the quality of teacher–student relationships, this means that student obedience may be of less importance than student friendliness. As a result, student misbehavior in class may not threaten the teacher–student relationship as long as (out of class) one-on-one contact between the teacher and student is friendly. Research on teacher wellbeing and stress may thus profit more of a focus on the communal characteristics of teacher–student interactions than on the agentic ones.

### **Positive and problematic relationships: Noncomplementary behavior**

Beyond the often complementary interactions, noncomplementary behavior on the communion dimension was also found. On this dimension, noncomplementary behavior means opposite behavior, thus acting unfriendly in a friendly relationship and acting friendly in a hostile relationship. Our data showed that, in talk on positive relationships teachers mentioned students misbehaving and in talk on problematic relationships, they occasionally described themselves as behaving in a friendly way toward the student. Analysis of our data showed that these noncomplementary behaviors were also met with a noncomplementary reaction of either teacher or student. For positive relationships, teachers mentioned both the teacher and the student showing noncomplementary behavior after hostile behavior on the part of the other (e.g., a student complying after a teacher's reprimand), thus drawing the behavior back toward friendlier areas. Teachers' accounts of interactions in problematic relationships on the other hand were defined by the teacher's inability to steer interactions to friendlier areas of the interpersonal model. In their perception, students would react in a hostile manner, even to friendly teacher behavior. This noncomplementary student reaction would draw the interaction into the hostile regions of the model again. An example is teacher Nathan trying to address student Peter in a positive way with sentences such as "Well that's really good, okay," but after a while, with Peter's consistent misbehavior, finding himself saying "Hey Peter, stop doing that!" as part of a downward spiral.

In dynamic systems theory prevalent behavioral patterns such as these are referred to as attractors (Hollenstein, 2007). Attractors are the most likely state of being or most common behavioral pattern in a particular relationship and most sequences of behavior will eventually return to this state of being. An example would be a teacher and a student usually behaving friendly toward one another and after a brief misunderstanding and some discussion returning to this reciprocal friendly state. Our findings suggest that in teachers' perceptions, in positive relationships an attractor exists at the high end of the communion dimension. Both teacher and student show behavior high on communion and around the center of the agency dimension. Considering our findings it seems that teachers' perceptions of student moment-to-moment behavior may be influenced by the location of the attractor in the relationship. This way, in positive relationships, student misbehavior may be unproblematic in the eyes of the teacher due to the student's willingness to comply to the teacher's demands after a reprimand, thus creating the possibility to return to a more friendly interactional pattern.

Future studies on how teachers' noncomplementary behavior may create an attractor high on communion or steer a sequence of interactions toward an attractor high on communion, may provide insight in how positive relationships are formed or problematic ones can be restored.

### **A relationship perspective**

According to relational schema theory, people interpret moment-to-moment interactions with significant others in the light of earlier interactions with these persons (Baldwin, 1992). As a consequence, generalized cognitive structures, so called relational schemas, influence interpretations of momentary behavior. We have found that this is also the case for teachers' perceptions of student behavior: the relationship a teacher has built with a student over time colors his or her perceptions of moment-to-moment interactions. This means that similar student behavior may be valenced differently for different students depending on the quality of the relationship the teacher has with these students. For instance, when a student addresses the teacher with "Hey, little missy," the teacher might regard it as an attempt to make contact in a friendly way when it comes from a student with whom she has a good relation, whereas she would object to it if it came from a student with whom she has a problematic relationship.

This finding supports the need to include the quality of the relationship as a whole, when interpreting teachers' perceptions of moment-to-moment teacher–student interactions; that is, taking a relationship perspective. This perspective may be especially valuable when interpreting teacher emotional reactions to student behavior. Because a positive relationship buffers against negative emotions following student disruptive behavior (cf. Spilt et al., 2011) including the quality of the relationship in studies on for instance student disruptive behavior and teacher stress is necessary.

### **Limitations and implications for practice**

The research described here has a number of limitations. One limitation is the focus on positive and problematic relationships. Including relationships that are less extreme in future studies might prove useful for improving our understanding of teachers' perceptions of teacher–student relationships in, as well as, outside the classroom context.

We also recommend that future studies include a larger sample of teachers so that differences between groups of teachers can be studied. In this study we aimed for diversity in our sample using years of experience and teacher–class relationship in most difficult class as selection criteria. However, given the limited size of our sample, we did not compare perceptions of groups of teachers based on these two criteria. Future researchers should address differences between groups of teachers according to these teacher variables. Because teacher–student relationships may also differ according to gender and content area of the teacher (e.g., Decker & Rimm-Kaufman, 2008; den Brok, 2001), it may also be interesting to include these variables in future research.

The most important limitation however, is that we only used the perceptions of teachers on teacher–student interactions and relationships. We studied the teachers’ perceptions of teacher–student interactions and relationships because of its importance for the quality of the teacher–student relationship and teacher well-being. Although we thus had good reasons to study teacher perceptions, this also is a limitation of the study. Studying only teacher perceptions implies that we cannot make claims concerning (a) the students’ perceptions and student wellbeing, and (b) the quality of the relationship per se. Positive teacher perceptions of a relationship do not imply equally positive views from the student, nor does a positive perception of the relationship of both parties imply a relationship that is good for student development. One can think for example of a teacher–student relationship that is too intimate and in which a teacher discloses to a student her personal problems; one can argue that such confessions are not beneficial to the students’ learning and school career. Future researchers should thus also include the student’s perspective and use other data than interview data alone. Especially a combination with observational data or data on student outcomes may prove useful in order to be able to draw firm inferences for teacher practice.

Despite these limitations, our comparisons of teachers’ perceptions of interactions in positive and problematic relationships provide some insight in what teachers can do to improve these latter ones, insight that might be useful for both teacher education and teacher professional development.

Our research shows the importance of out of class teacher–student interactions in relationships. In-between spaces outside the realm of regular curricular activities deserve attention in teacher education and teacher development programs. When it comes to building positive relationships with students, teachers and teacher educators might consider deliberately using interactions outside the classroom as a means to help build a positive relationship with individual students that might have an impact on interactions inside the classroom.

However, not all teachers and students have access to these in-between spaces, thus improving relationships within the classroom may be of even more importance. Our findings indicate that within classrooms, escaping set negative patterns or preventing entering into these, seems to be key. This requires a conscious strategy. Teacher education or development programs might help (beginning) teachers develop such strategies, in which acting in a noncomplementary manner may contribute to improvements. During his interview, Lawrence expressed how his persistence in refusing to engage in patterns of hostile behavior with certain students (thus continuously showing noncomplementary behavior), proved a good strategy for improving the relationship in the long run:

I think this battle in them has to subside. And until that time I don’t give in too much and I am explicit and explicit enough but I am as friendly to them as to the others. And then, but it takes a while. And sometimes they will play up and then you have to play along.... I am as friendly to them; I stress being equally friendly toward them.

Teacher–student relationships require effort from the teacher, especially when there is a lack of connection on a personal level with a student (as is the case in some

problematic relationships in this study). More research is needed to investigate the effectiveness of conscious strategies in which noncomplementary teacher behavior is used to improve relationships with students within classrooms. Research has shown the positive effects of teacher programs focused on teacher–student relationships (e.g., Alvarez, 2007; Roorda, Koomen, Thijs, & Oort, 2013). Reflecting on their positive and problematic relationships (as the ones described in this study) may increase teachers’ awareness of their idiosyncratic presuppositions and biases in the emerging of teacher–student relationships. This awareness may help teachers to maintain a professional stance; not to react to student behavior based on biases, and making an effort to connect with all students.

Finally, as shown, perceptions of (the quality of) the relationship influence teachers’ perceptions of moment-to-moment student behavior, thus also influencing teachers’ reactions to this behavior. Student teachers’ learning through observation of classroom interactions between students and (expert) teachers may be confounded by this process. After all, reactions to student misbehavior may be mostly based on earlier interactions with this student (not known to the student teacher), and not so much on the actual behavior of the student. Having (expert) teachers explain their behavior, in light of the relationship they have with the particular student may resolve this issue.

The ability to create and maintain positive one-on-one relationships with students is of major importance for teacher job satisfaction and well-being. Positive teacher–student relationships also have a strong relation with student motivation and learning. Therefore, attention for building positive one-on-one teacher–student relationships deserves a place in the curricula of teacher education and professional development programs.

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## Appendix

### Interview protocol

1. Can you think of a student with whom you have a positive relationship?

- a. Can you give me the first name of the student?
- b. Can you describe this relationship?
- c. Can you describe ...[name of student]?
- d. What do you think ...[name of student] thinks of you?
- e. How do you generally interact with each other in class?
- f. What feeling does ...[name of student] evoke?

I ask this for one student free of choice and for one student the teacher had to choose from a class just observed

2. Can you think of a student with whom you have a problematic relationship?

- a. Can you give me the first name of the student?
- b. Can you describe this relationship?
- c. Can you describe ...[name of student]?
- d. What do you think ...[name of student] thinks of you?
- e. How do you generally interact with each other in class?
- f. What feeling does ...[name of student] evoke?

I ask this for one student free of choice and for one student the teacher had to choose from a class just observed