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Student teachers' practical knowledge, discipline strategies, and the teacher-class relationship

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Chapter 2

2.

Teachers' interpersonal expectations¹

In this chapter it was investigated what student responses teachers expect in particular teacher behaviour vignettes, and whether experience and gender produce differences in expectations.

Teacher behaviour vignettes were presented to teachers ($N= 46$), who described the student responses they anticipated. Anticipated student responses were then rated on their level of control and affiliation.

Results indicated teachers' expectations were indeed complementary except for hostile vignettes, where teachers expected more submissive responses than other populations. There were no significant differences as a result of experience, however, female teachers expected friendlier responses than male teachers in friendly as well as in hostile vignettes.

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2.1 Introduction

The kind of responses teachers expect from their students influences their own behaviour, which in turn influences the teacher-class interaction. Teacher-class interaction is one of the most important determinants of classroom discipline and climate, which is related to teacher attrition and student outcomes (Boer, Bosker, & Werf, 2010; Jussim & Harber, 2005; Rosenthal, 1994). The focus of the study reported below is teachers' expectations of teacher-class interaction.

Worldwide, rates of teacher attrition in secondary education are alarmingly high (Pianta & Hamre, 2009; Walker, 2009) and problems with classroom discipline are the most cited and highest ranked reasons for leaving the profession (Evertson & Weinstein, 2006; Walker, 2009). Of the large number of beginning teachers that report experiencing difficulties in creating positive classroom climate (Brophy, 2006; Doyle, 2006; Nie & Lau, 2009), a substantial proportion apparently do not overcome these difficulties and as a result leave the profession.

Problems with classroom climate are not merely important in view of the fact that they jeopardize the job satisfaction of teachers; they are also related to inferior student outcomes (Woolfolk-Hoy & Weinstein, 2006). In a meta-analysis Cornelius-White (2007) investigated the relation between teacher variables, teacher-class relationships, and student outcomes. Results showed that correlations of teacher variables and teacher-class relationships are substantive and include better cognitive as well as affective and motivational student outcomes.

With teacher attrition and student outcomes in mind, an answer to the question of what constitutes teachers' interpersonal behaviour in the classroom could be valuable information to the field of educational research and practice. For instance, a better understanding of teachers' interpersonal expectations that underlie their interpersonal behaviour could be useful for teacher educators who want to help teachers achieve positive classroom climates.

In this chapter, insights from expectancy research, social cognition and interpersonal theory are used as a framework for an explorative study of

teachers' expectations of teacher-class interaction (e.g., teachers' interpersonal expectations).

2.2 Theoretical Framework

TEACHER EXPECTATIONS AND STUDENT OUTCOMES: EXPECTANCY RESEARCH

A famous and much debated example of the importance of teachers' expectations about their students is the "Pygmalion in the classroom" study (e.g., Rosenthal, 1994). Teachers were told that a number of their students had high IQ scores whereas in fact these students had been randomly selected. The experiment revealed that teachers' expectations about their students' intellectual capacities apparently changed teachers' behaviour, because after a while this group of students did indeed perform better. Ever since, there have been numerous studies on self-fulfilling effects of teachers' expectations (e.g., Jussim & Harber, 2005). Boer, Bosker, and Werf (2010) found that teacher expectation bias accounted for nearly 7% of the variance in student performance, with negative expectation bias being just as harmful as positive expectation bias being beneficial for students' performance. Rubie-Davis (2007) found that teachers with high expectations of their students' learning, compared to low-expectation teachers, provided their students more frequently with regular feedback, asked more open questions, and in their responses to student answers they provided more feedback (in the case of correct answers) or rephrasing of the question (in the case of incorrect answers). Compared to low expectation teachers, they made fewer procedural statements and more positive behaviour management statements.

Brophy (1985) hypothesized that class-level expectations of teachers might be of more importance for student learning than expectations on an individual level. Harris and Rosenthal (1985) found that the relationship between teacher expectations and student outcomes was mediated more by whole class factors such as classroom climate than by dyadic teacher-class interactions. Rubie (2004) showed that teachers with high expectations of their high ability students had similar high expectations of their average and below average students, illustrating that high expectations can be a teacher characteristic that

involves the whole class, not a single group of students. These teacher expectations, even though not interpersonal by nature, did affect teacher behaviour and classroom climate in terms of instructional and in socio-emotional climate (Rubie-Davies, 2007). The existence and effect of teachers' interpersonal expectations has not been explicitly targeted in research, however in a general sense, there is ample evidence that interpersonal expectations consciously and unconsciously guide the perceptions and subsequent behaviour of the people interacting (Baldwin, Kiviniemi & Snyder, 2009; Snyder & Stukas, 1999; Snyder & Klein, 2005).

Based on the evidence for the influence of teachers' class level expectations on student outcomes, this study explored teachers' expectations of their interactions with their class. Social cognition explains how, eventually, these expectations were represented in teachers' cognitions.

EXPECTATIONS AND INTERPERSONAL SCHEMAS: SOCIAL COGNITION

In Western societies, the average student has spent over 10,000 hours in direct contact with classroom teachers by the time he/she graduates from high school. This leads to what Lortie (1975) called 'apprenticeship of observation': beginning teachers' socialization into teaching starts when they are students. Through the process of socialization, experiences with recurring teacher-class interactions, such as classroom discussions or correcting disruptive student behaviour, are internalised in cognitive schemas of both teachers and students and shape momentary expectations (Locke, 2005). Moskowitz (2005) described schemas as cognitive associative networks that not only guide the way new information is processed, but also dictate which information is retrieved from memory. This implies that what we see (and what we think we have seen) is in large part determined by our schemas. Schemas that relate to interpersonal experiences are called relational or interpersonal schemas, consisting of images of self and other, together with a script for an expected pattern of interaction (Baldwin, 1992, 1999). According to Baldwin & Dandeneau (2005):

“... people clearly have scripted expectations on what tends to happen in interactions, and these expectations are represented cognitively as if-then associations.” (p. 53)

Locke (2005) asked respondents to keep an Imagined Reaction Record (IRR) to test the relationship between interpersonal expectations and interpersonal problems and found significant relations, such as expecting negative reactions from others and being controlling or hostile. The comparable concept of if-then expectancies was investigated by Hill and Safran (1994) and Soygut and Savasir (2001) with the Interpersonal Schema Questionnaire (ISQ; Scarvalone, et al., 2005). An example of an item in the ISQ is: *Imagine yourself expressing genuine interest and concern for your _____ . How do you think your _____ would respond to this?* They found a significant relationship between interpersonal expectations and psychiatric symptomatology. For instance, high symptomatic students on depression were significantly less likely to expect friendly, trusting and sociable responses from others than low symptomatic students (Hill & Safran, 1994).

The development of interpersonal schemas through an apprenticeship of observation might explain why many teacher education programmes find it difficult to make a significant difference in the socialization process of becoming a teacher (Grossman, 1991). As Grossmann (1991, p.1) asks the reader: “How can these deeply ingrained lessons from apprenticeship of observation be challenged?”. With regard to interpersonal teacher behaviour, the first step is to know which “ingrained lessons” teachers have learned about teacher-class interaction.

TEACHERS' INTERPERSONAL EXPECTATIONS AND BEHAVIOUR: INTERPERSONAL THEORY

In this study interpersonal theory (Leary, 1957) was used as a framework to better understand the character of teachers' expectations of teacher-class interactions. Interpersonal theorists (Kiesler, 1983; Tracey, 1994; Fiske, Cuddy, & Click, 2007) have consistently identified the two dimensions of control and affiliation that are both necessary and sufficient to describe the

interpersonal meaning of human behaviour. The interpersonal meaning of behaviour can range from submissive to dominant on the control dimension, and from hostile to friendly on affiliation (Dryer & Horowitz, 1997; Moskowitz, Ringo Ho, & Turcotte-Tremblay, 2007; Tiedens & Jimenez, 2003). Behaviour can be plotted in the interpersonal circle (Leary, 1957; Kiesler, 1983, see Figure 1.2) with a position on the y-axis for the value of control and the x-axis for affiliation.

Research has shown that the particular interpersonal significance of behaviour rewards or constrains the reactions of the other person in a specific manner (Tracey, 2004). Generally, behaviour on the affiliation dimension was found to invite similar responses and behaviour on the control dimension on average invites opposite responses (Dryer & Horowitz, 1997). Both patterns are called *complementary* interaction sequences. Sequences of behaviour in interactions are called complementary if they proceed according to these patterns (e.g., the arrows in Figure 1.2).

Wubbels and his colleagues developed the Model of Interpersonal Teacher Behaviour based on interpersonal theory to describe the interpersonal meaning of teacher behaviour (Wubbels & Levy, 1991; Wubbels et al., 2006). They investigated associations between student perceptions of teachers' interpersonal behaviour and student outcomes and motivation. Teachers' behaviour that was high on control appeared to be positively related to student outcomes, while teachers' behaviour high on affiliation was positively related to student motivation (Wubbels & Brekelmans, 2005; Wubbels, Créton, & Hooymaaiers, 1993). Teachers with interpersonal behaviour that was consistently low on control and on affiliation were more likely to have a negative classroom climate (Wubbels et al., 2006). Having said this, it is important to emphasize that people should in principle be able to display all behaviours, depending on the situational demands (Leary, 1957). So even though in people's minds, it might be difficult to combine low control teacher behaviour with the typical teacher role, it is important to keep in mind that sometimes this behaviour could in fact be beneficial for the teacher-class relationship. That is because low control teacher behaviour actually invites or allows students to display high control behaviour. When a teacher wants students to take initiative, for

instance in a group discussion, low control teacher behaviour might be an appropriate strategy.

2.3 Research questions

Our research questions were:

1. What student responses do teachers expect in particular teacher behaviour vignettes, e.g., what interpersonal expectations do teachers have?

Teachers with more teaching experience might hold different interpersonal expectations than teachers with less teaching experience. We therefore investigate:

2. Are there differences in interpersonal expectations for teachers with different levels of experience?

Sex differences in cognitive abilities are well established. Generally it is found that females outperform males in the processing of nonverbal cues (McClure, 2000), and are better than males at the attribution of mental states to others, and in appropriate affective responses to another's affective state (Charman, Ruffman, & Clements, 2002; Rueckert & Naybar, 2008; Walker, 2005). Gender as a possible source of variance on interpersonal expectations was therefore also included in this study, resulting in the final research question:

3. Are there gender differences in teachers' interpersonal expectations?

2.4 Methodology

THE RESEARCH GROUP

Sixty-seven teachers in secondary education were invited to participate in the study. The response rate was 67% ($N = 46$), the teachers' age ranged from 22 to 58, with a mean age of 39 ($SD = 11.9$). Half of the respondents were female. Experience ranged from a couple of months to more than 31 years. All teachers were teaching in schools situated in the western, urban region of the Netherlands. They were asked to keep one of their classes in mind while completing the questionnaire. Twenty-four percent of the teachers imagined themselves interacting with one of their classes in the first two grades of

secondary education; the other 76% of teachers had classes in the higher grades of secondary education in mind. Of all these classes, 15% consisted of classes in pre-vocational secondary education; the other 85% were classes in the higher levels of secondary education. Class size ranged from 7 to 48 students with a mean group size of 23 students ($SD = 7.4$).

RESEARCH METHOD AND PROCEDURE

Research method

Social cognition researchers usually study mental representations and thought processes in laboratory settings; or when the focus is on social cognitive neuroscience fMRI-scanning is used (Moskowitz, 2005). Both methods were beyond the scope and viability of the underlying study, since fMRI-scanning and laboratory sessions with teachers and their classes are either not feasible or not ecological valid. The aim of this study was to attain an empirical method to capture the interpersonal expectations of teachers. To allow for generalisations, this method would have to be quantitative, therefore interviews, observations and videos were ruled out. Clinical psychologists with the same interest in interpersonal schema's and the same aim as we had in terms of applicability of the instrument, had developed a questionnaire (Hill & Safran, 1994). This questionnaire was the starting point of the instrument that was used in the underlying study.

Procedure

In the first month after the start of the school year, teachers were asked to participate in a study about teacher-class interaction and shortly after that they received an email with link to the questionnaire that started with a number of background questions about age, sex, years of experience, educational background etcetera, and continued with the questionnaire itself. Respondents received no payments, credits or other donations for their participation.

Questionnaire

General characteristics

To allow a fluent usage of the questionnaire, both for researchers as well as for respondents, the questionnaire was administered online. The instrument contains questions about anticipated student responses using so called vignettes. This procedure is based on the work of Hill and Safran (1994), who measured *if-then* expectancies (*if I ... , then they...*), with the *if* being a prescribed behaviour (a vignette), and the consecutive *then* the description of the anticipated response to that specific behaviour (e.g., Hill and Safran, 1994). This way the vignettes are standardized, creating the possibility to compare teachers with one another. Unlike the Interpersonal Schema Questionnaire (Hill & Safran, 1994), on which this instrument is loosely based, we decided to ask teachers to describe in their own words the student response they anticipated in a particular class, instead of using a limited number of answering options. The reason is that we wanted to avoid suggesting an answer to the teachers.

Development of the vignettes

The teacher behaviour vignettes are descriptions of classroom situations with teacher behaviour (see Appendix). The vignettes were developed in close collaboration with teachers and teacher educators, and then tested with a small group of teachers. Following a thinking out loud procedure, those teachers reacted to the questionnaire. This procedure was chosen to determine if teachers could actually imagine themselves and their students in the particular situations. Vignettes that raised problems, were altered and tested again, or otherwise omitted.

An example of a vignette was: "Students' results are disappointing. You are quite certain they did not work hard enough and you show you are displeased." (V₂₀). Some vignettes referred to the entire class: e.g., V₁₇: "You explain an assignment that has to be carried out in the lesson. While distributing it, you tell the students they have to work individually and in silence." Others were directed at just one student: e.g., "A student did not perform well. You tell him/her that you expect him/her to try harder next time."

(V₂). In all cases, respondents were instructed to think of the student that, to their perception, was vital for the classroom climate.

2.5 Data analysis

To determine the interpersonal significance of the vignettes, researchers in the field of interpersonal relations in education were asked to score the vignettes on control and affiliation. These researchers were selected based on their expertise on interpersonal teacher behaviour in particular and their prior or current experience as teachers or teacher educators. Thus, besides their theoretical expertise on teacher-class relationships, they were also well acquainted with the teaching practice in everyday classrooms. They independently assigned scores to the vignettes by rating them on control and affiliation (range -4 to +4). With regard to reliability, the five experts had a very high level of agreement (mean squared $k_w = 0.95$), implying their ratings were reliable.

For purposes of analysis, the vignettes were grouped into four categories depending on the rating of the teacher behaviour that is described in the vignette. In line with the literature on interpersonal behaviour we use the labels dominant, friendly, submissive and hostile to name the categories (Baldwin & Dandeneau, 2005; Hill & Safran, 1994; Moskowitz, 1994). Submissive teacher behaviour occurs in situations where the teacher leaves students to take initiative. The category in which a vignette was grouped, was determined by the biggest distance from that rating from zero. A vignette, for example, with a high rating on the control and a neutral rating on the affiliation dimension was categorized as “dominant”.

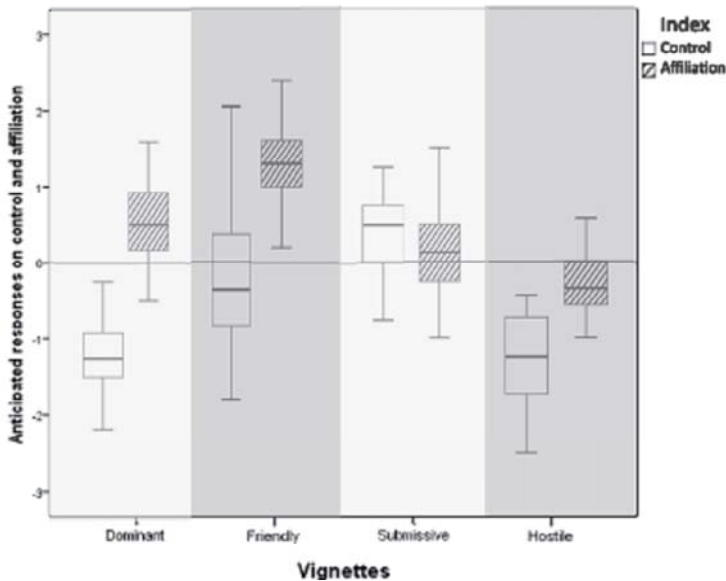
The coding procedure for anticipated responses was similar to the coding of the vignettes: raters assigned scores to the anticipated responses by rating them on control and affiliation (range -4 to +4). Raters were unaware of any information about respondents. To determine interrater reliability, a randomly selected sample of anticipated student responses was drawn from the dataset and independently coded by two trained raters. The level of agreement between the two raters was very high: squared $k_w = 0.87$.

Since the vignettes were designed in collaboration with teachers, the number of missing values was very low. This is of important, since many missing values per vignette, would hold the risk that the anticipated response for that vignette could not be compared with that for the other vignettes, because it would reflect differences between teachers (the ones who described an anticipated response and the ones who did not) instead of differences between vignettes. In our case, more than 10% missing anticipated responses per vignette was in that sense exceptionally, and therefore vignettes with more than 10% missing values were excluded.

2.6 Results

Scores were averaged over the four groups of vignettes describing dominant, friendly, submissive and hostile teacher behaviour. In Figure 2.1, the mean and the distribution of the anticipated responses on affiliation and control are depicted for all four groups of vignettes.

Figure 2.1. Distribution of anticipated responses in Dominant, Friendly, Submissive and Hostile groups of vignettes



It shows, on the x-axis the four groups of vignettes, and on the y-axis the anticipated response for each group of vignettes, with blank boxes representing anticipated responses on control, and the dashed boxes representing anticipated responses on affiliation. The area between the upper and lower limit of the box represents the middle 50% of the data, the line above and below the box indicates the top and lowest 25% of the data. The line inside the box represents the mean score.

TEACHERS' INTERPERSONAL EXPECTATIONS

The answer to the first research question (What student responses do teachers expect in particular teacher behaviour vignettes, i.e., what interpersonal expectations do teachers have?) is presented in the next section, after which distinct interpersonal expectations are described. The second research question (Are there differences in interpersonal expectations for teachers with different levels of experience?) is answered in the section Experience, after which interpersonal expectations for men and women are described.

Complementary interpersonal expectations

The complementarity principle (Tiedens & Fragale, 2003; Tracey, 1993, 1994, 2004) predicts that friendly behaviour invites friendly responses, and hostile behaviour invites hostile responses, whereas dominant behaviour begets submissive behaviour and vice versa (the circular and straight arrows in Figure 1.2, respectively). In figure 2.1, the expected student responses on the affiliation dimension are represented by dashed boxes, with boxes above zero signifying friendly responses, and boxes below zero signifying hostile anticipated responses. As Figure 2.1 shows, complementarity is evident in the anticipated responses to the affiliation vignettes: 100% of the mean anticipated student responses were rated friendly in friendly vignettes, whereas in hostile vignettes 75% of the mean anticipated responses were rated hostile, thus supporting the complementarity principle. In friendly vignettes, the mean anticipated responses were higher than in any other group of vignettes. The friendliest anticipated responses were expected in friendly vignettes. For these

vignettes, respondents described student responses such as “They smile spontaneously”; “They are proud” or “They show their appreciation”. Anticipated responses in hostile vignettes ranged from rather hostile (e.g., “They grumble, try to provoke me”) to friendly (e.g., “Sorry, you are right”), with the mean and median indicating that on average teachers did not expect smiling faces in response to hostile vignettes. In hostile vignettes the average anticipated response on affiliation was lower than in any other group of vignettes. Examples of average anticipated responses to these vignettes were: “They look unhappy”, “Slightly irritated” or “They don’t care”.

In figure 2.1 the ratings of the expected student responses on the control dimension are reflected by the blank boxes. The boxes above zero signify dominant responses, the boxes below zero signify submissive anticipated responses. The average anticipated response in submissive vignettes was complementary, that is dominant. The mean anticipated responses in dominant vignettes were complementary too: submissive responses. Teachers’ anticipated responses in dominant high control vignettes were consistently low on control, i.e. they expected submissive student responses, such as “We’re sorry sir”; “I’ll go for it!”; or “I understand what you mean.” The fact that neither the box, nor the upper whisker are above zero, indicates that 100% of the anticipated responses in this group of vignettes was below zero. Apparently, teachers agreed that in dominant vignettes, students will respond submissively.

The mean anticipated control response (blank box) in submissive vignettes is above zero. In fact, the complete box is above zero. This demonstrates that in 75% of the cases teachers expected that their students would take up control. Examples of student responses were: “You’ve been making more mistakes lately”; or “Is that useful, if we only have ten minutes left?”; both rated as just above zero for control.

Distinct expectations

Compared to the results of Hill and Safran (1994) and Soygut and Savasir (2001), who reported slightly dominant responses in hostile vignettes, in our study average teachers’ anticipated responses clearly pointed to submissive

student behaviour. In fact; there were no high control anticipated responses in hostile vignettes, 100% of the mean anticipated student responses were submissive. There were only two submissive vignettes where some teachers described a more dominant student reaction. To the teacher behaviour vignette “You are a bit ill-tempered today. A student makes the wrong remark at the wrong time. You react somewhat snappily”, responses such as “You are a bit grumpy today”, “That’s not fair!” or “Angry” were also anticipated. In response to “Students' results are disappointing. You are quite certain they did not work hard enough and you show you are displeased”, anticipated responses such as “The test was too difficult” or “We have all kinds of other things to do” were also described. However, on average, in hostile vignettes teachers expected their students to respond submissively, for instance by saying “I’m sorry”, reacting meekly or by being silent.

Experience

To answer the second research question on differences between interpersonal expectations of different groups of respondents, anticipated responses of teachers with little (0-3 years), moderate (4-10 years) and extensive experience (more than 11 years) were compared. The mean anticipated responses for groups of vignettes are shown in Table 2.1.

Analysis of variance with the three experience groups as the independent variable and the control and affiliation ratings as the independent variable did not reveal any significant differences between the three groups.

Table 2.1 shows that indeed, mean scores on control were virtually the same, with the exception of the low control vignettes, where the level of control in anticipated responses seemed to be somewhat higher for very experienced teachers than for beginning teachers. The mean scores of all vignettes taken together show that beginning and experienced teachers had the same slightly friendly expectations (.33 and .35 respectively), whereas the group with 4-10 years experiences tended toward friendlier student responses (.69). The moderately experienced group expected friendly responses in three groups of vignettes, even in hostile vignettes, whereas the other teachers expected hostile student reactions here. But again, differences were not

significant. In submissive vignettes the anticipated responses seem to get friendlier over the years: beginning teachers expected the least, experienced teachers the most friendly student responses.

Table 2.1. Mean anticipated responses for teachers with little, moderate and extensive experience, for Dominant, Friendly, Submissive and Hostile vignettes

Experience		Vignettes and anticipated responses									
		Dominant		Friendly		Submissive		Hostile		All	
		Control	Affiliation	Control	Affiliation	Control	Affiliation	Control	Affiliation	Control	Affiliation
0-3 years	Mean	-1.24	.42	-.33	1.30	.20	.04	-1.30	-.36	-.88	.33
	Sd	.41	.47	.33	.54	.71	.62	.55	.55	.31	.46
	N=21										
4-10 years	Mean	-1.43	.84	-.46	1.50	.25	.25	-1.39	.11	-.99	.69
	Sd	.71	.40	.61	.36	.71	.71	.53	.60	.37	.40
	N=9										
> 11 years	Mean	-1.17	.45	-.40	1.18	.50	.19	-1.15	-.27	-.81	.35
	Sd	.51	.47	.42	.50	.39	.61	.53	.35	.27	.31
	N=16										
Total	Mean	-1.25	.51	-.38	1.29	.32	-.23	-1.27	-.24	-.88	.41
	Sd	.45	.47	.42	.50	.62	.52	.53	.52	.31	.41
	N=46										

Gender

We conducted the same analysis on differences between mean scores of anticipated responses for male and female teachers to determine whether there were any gender differences on interpersonal expectations (research question 3).

The anticipated responses of male and female teachers did not differ significantly for control (see Table 2.2). However, the mean level of anticipated responses on affiliation were significantly different: female teachers expected friendlier student responses than male teachers ($F(1, 41) 4.91, p < .05$). In particular, the vignettes where complementarity is supposed to occur accounted for the significant difference on the overall mean score on affiliation: in friendly vignettes female teachers expected friendlier responses than male teachers, $F(1, 41) 6.01, p < .05$, whereas in hostile vignettes male teachers expected more hostile reactions than female teachers, $F(1, 41) 4.21, p < .05$. In terms of complementarity, both female and male teachers had complementary

expectations in friendly as well as hostile vignettes (friendly and hostile responses, respectively), but female teachers expected friendlier responses in friendly vignettes, and less hostile responses in hostile vignettes.

Table 2.2. Mean anticipated responses for male and female teachers, for Dominant, Friendly, Submissive and Hostile vignettes

		Vignettes and anticipated responses									
		Dominant		Friendly		Submissive		Hostile		All	
Gender		Control	Affiliation	Control	Affiliation	Control	Affiliation	Control	Affiliation	Control	Affiliation
Female	Mean	-1.22	.62	-.43	1.50	.45	.21	-1.40	-.05	-.90	.57
	Sd	.46	.44	.45	.51	.56	.72	.57	.62	.34	.45
	N=21										
Male	Mean	-1.28	.42	-.33	1.12	.20	.06	-1.16	-.40	-.85	.27
	Sd	.46	.51	.39	.41	.66	.54	.49	.37	.29	.33
	N=25										
Total	Mean	-1.25	.51	-.38	1.29	.32	-.23	-1.27	-.24	-.88	.41
	Sd	.45	.47	.42	.50	.62	.52	.53	.52	.31	.41
	N=46										

2.7 Discussion and conclusion

Building upon insights from expectancy research, social cognition and interpersonal research, information was gathered on teachers' expectations of teacher-class interaction. It was assumed that interpersonal experiences would be internalised in interpersonal schemas, more specifically, in if-then expectations (i.e. vignette-anticipated responses).

Complementarity was consistently found in all anticipated responses to the various groups of vignettes. This verifies the assumption that real life complementary interaction sequences are internalised in teachers' interpersonal schemas, as Hill and Safran (1994) and Locke (2005) showed in their studies. Variation increased for anticipated responses in vignettes where the complementarity principle is not applicable, as was the case with control in friendly vignettes and with affiliation in submissive vignettes (the longer whiskers suggest less consensus, i.e. larger spread of data in the upper and lower 25% of scores, see Figure 2.1). This suggests that people are more uncertain as to what to expect in terms of control in friendly/hostile situations, and in terms of affiliation in dominant/submissive situations. This might be

explained by one of the premises of interpersonal theory, which states that control and affiliation are independent dimensions (Wiggins, Philips, & Trapnell, 1989). Acting submissive does not say a lot about what responses on affiliation to expect, because people can act submissive in either a friendly (understanding) or a hostile (dissatisfied) manner. Exactly the same applies to being friendly: as long as the level of control is unknown, being friendly by itself does not have any predictive power for how the other person will react in terms of control. In terms of complementarity, therefore, our sample was comparable to the normal population as reported in Hill & Safran (1994).

Apart from the complementarity, two of our findings are also interesting: firstly, the missing values in the submissive vignettes and secondly, the anticipated responses on control in the hostile vignettes. A number of submissive vignettes were removed because of a large amount of missing values. An explanation for this finding might be teachers' unfamiliarity with this kind of behaviour. Wubbels et al. (2006) found that submissive teacher behaviours are less common than dominant teacher behaviours. This explanation is supported by comments such as: "I can't imagine this would happen in my class", or "I would never do this", which teachers gave to clarify why they did not describe student responses. Due to the hierarchical character of the teacher-class relationship, it might be difficult for a teacher to expect his/her students to take the lead in the classroom. However, the fact that teachers actually described high control student responses, suggests that they do consider the possibility of a high control student response. The submissive vignettes were the only group of vignettes where the average anticipated response was high on control, and this finding again shows that the complementarity principle holds for teachers' expectations, even in unfamiliar submissive vignettes.

However, the anticipated responses in the hostile vignettes followed a distinctive expectancy pattern. In these particular vignettes, teachers expected far more submissive responses from their students than people in general expect from one another (Hill & Safran, 1994). This might be an effect of the nature of the teacher-class relationship. Some researchers (Markey & Kurtz, 2006; Moskowitz et al., 2007) found that complementarity in hierarchical

relationships might follow different patterns. In particular, it was found that in work settings, complementarity on control was even stronger than in non-work settings, but on affiliation it was much weaker (Moskowitz et al., 2007). In their interaction with their students, teachers are *professionals*, and acting in a hostile manner has less to do with being emotional, than acting according to their professional role that sometimes requires them to correct, warn or criticize students, for example when they are exhibiting disruptive behaviour. It is what everyone expects teachers to do, hence, the student response to be expected is not aggressive (hostile and dominant) but slightly hostile, and submissive. Of course students can also moan, nag, grumble, etc, but teachers expect them most of the time to give in and obey.

Somewhat surprisingly, the interpersonal expectations that we measured in the current study seemed to be general, in the sense that they did not differentiate very much between different levels of experience of teachers. In a theoretical sense, this is an interesting finding. It appears that the teachers in our sample shared the same kind of expectancy patterns, regardless of their experience as teachers. This may be proof of Lortie's 'apprenticeship of observation': the socialization process of becoming a teacher is well on its way by the time students enter a teacher education programme. To challenge ingrained lessons on teacher-class interaction, the first step is to know which "ingrained lessons" teachers have learned. Expectancy patterns found in this study describe what teachers in general expect of their students in response to their own behaviour in the classroom. If a teacher does have distinctive expectancy patterns, this might be worthwhile discussing. We did find gender differences in interpersonal expectations: female teachers expected more friendly responses than male teachers. Most theories in social cognition, such as gender schema theory (Bem, 1981), explain that people are biased in their judgement of others, because they process information on the basis of the sex-linked associations that constitute the gender schema. Anticipated responses of others might be sex-linked, in that people expect responses that seem to fit their own gender or gender role. For instance, typical responses to stereotypical feminine traits like expressiveness and warmth could be friendly responses,

whereas stereotypical masculine traits like rationality and competitiveness are more likely to invite competitive responses.

IMPLICATIONS AND FUTURE RESEARCH

That teachers could not identify themselves with the teacher behaviour described in the submissive vignettes is a result in itself. However, expectations in these vignettes are especially interesting, since they force teachers to step out of their comfort zone (e.g., an anxiety neutral condition, White, 2009). Convincing teachers to imagine themselves in these submissive vignettes, could produce interesting and diverse anticipated responses. It would be a change for the better, therefore, if the instrument included appropriate submissive vignettes.

Due to the time-consuming procedure of coding the anticipated responses, the sample size was not very large and as a result findings should be generalised with caution. However, as an explorative study, with findings that are in line with preceding studies with similar instruments (Hill & Safran, 1994; Locke, 2005) and with interpersonal theory in general, we believe we succeeded in our attempt to develop a questionnaire with which we could identify teachers' interpersonal expectations. Of course, ideally, the questionnaire would be suitable for larger sample sizes. The answer categories derived from this exploratory study could perhaps be used for this purpose.

Another issue is that some of the vignettes refer to the class as a whole, and others to individual students. With all vignettes respondents were instructed to think of the same students, the ones that they considered essential for their perception of the classroom climate. That way teachers' representations of the class and of a particular student would not lay far apart. However, this should be further investigated in future research with this instrument.

In the current study, teachers' interpersonal expectations were successfully measured. We regard this as only a first step. Research in social psychology that we referred to in introduction of this chapter (Baldwin, Kiviniemi, & Snyder, 2009; Snyder & Stukas, 1999; Snyder & Klein, 2005), showed how expectations consciously and unconsciously guide the perceptions and

subsequent behaviour of people interacting. Future research will have to validate the relationship between teacher interpersonal expectations and teacher interpersonal behaviour in the classroom.

Another suggestion for future research is related to the cultural background of the teacher. In the present study, interpersonal expectations of *Dutch* teachers were investigated. These expectations are related to teacher beliefs about the teacher role (Lortie, 1975; Pajares, 1992) that are culturally determined. Differences between cultures have been mapped by for instance Hofstede and Hofstede (2005). With the aim to identify dimension on which cultures differ, they gathered data among the employees of a large multinational company in more than 70 countries. One of the dimensions they identified is referred to as *Power Distance*. This dimension describes the extent to which members of institutions expect and accept power to be distributed unequally. The Power Distance Index (PDI) is their measure for the relative position of national cultures of the power distance dimension. High power distance national cultures are for example the national cultures Malaysia (Power index: 104), Guatemala (95) and China (80). Countries like the United States (40), Canada (39), the Netherlands (38), Germany (35) and Great Britain (35) have national cultures with relatively low power distances. National cultures with the lowest power distances are the ones of Denmark (18), Israel (13) and Austria (11). Hofstede and Hofstede discuss the implications and claim that in high power distance cultures teachers are treated with respect and there is supposed to be strict order in the classroom. Another dimension distinguished by Hofstede and Hofstede is Masculinity. In cultures that score high on the Masculinity Index (MAS) men are supposed to be tough and assertive, whereas and woman are modest, tender and concerned with the quality of life. In feminine cultures both woman and men are supposed to be modest, tender, and concerned with the quality of life. National cultures with a high MAS scores are for instance Japan (95) and Austria (79), followed by countries like Venezuela (73) Italy (70), China (66), Germany (66), Great Britain (66), the United States (62), and -at some distance- Canada (52). The national culture of Sweden (5) and Norway (8), The Netherlands (14) and Denmark (16) are the ones with the lowest MAS. Translated to the context of

education, Hofstede and Hofstede write that in feminine cultures teachers will for instance praise weaker students rather than high achievers. Of course it can be argued that measuring “national culture” is not refined enough to identify differences between cultures. Aggregating the various cultures within countries like Canada, China, Great Britain and Indonesia to one national culture may be misleading as Hofstede and Hofstede write themselves. Furthermore, employees of a multinational company are not a representative sample of the population of a country. However, the conclusion that teacher beliefs about teacher roles are likely to be different across cultures is not affected by such comments. This means that generalizing our findings about the interpersonal expectations of Dutch teachers to teachers worldwide is risky. Future research should compare the differences in interpersonal expectations between teachers with various cultural backgrounds. The theoretical framework, the instrument, and the routines we developed in this study can be useful in such research.

Rubie-Davis (2007) and Boer et al. (2010) stress the importance of teachers being aware of the effect of their expectations on their behaviours. If teacher expectations are indeed related to teacher behaviour in the classroom, critically scrutinizing their expectations may help teachers identify dispositions in their behaviour that result in unproductive interactions with their students. The challenge for teacher educators is to develop routines to stimulate teacher and student teacher to reflect on their expectations, and stimulate them to avoid unproductive interactions in order to be able to create a positive social climate in their classrooms. In a global society, in which teachers teach students with various cultural backgrounds, making such expectations explicit may help to avoid misunderstandings between teachers and students.

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